TReeS News No.68 September 2010

2010 International Year of Biodiversity



www.biodiversityislife.org

Hydro-electric power project threat to Madre de Dios

For decades the Peruvian rainforest has been exploited for gold, timber, oil and gas. Now a new potential 'resource' has been identified: hydroelectricity (HEP). In April 2009, President Garcia and President Lula da Silva of Brazil signed a memo of understanding for the construction of six HEP dams (14 were originally proposed) in various locations on rivers flowing down the eastern foothills of the Peruvian Andes. Brazilian companies will construct the dams and much of the electricity will be sold to Brazil to meet its growing demand for energy as the country rapidly develops.

The first dam proposed, and the most controversial, is on the Iñambari river, at the confluence of the departments of Madre de Dios, Cuzco and Puno. It will cost \$4 billion to construct and will be, in terms of energy production, the biggest dam in Peru and the fifth largest in Latin America, inundating an area of 46,000 hectares. There are wide social, economic and environmental issues with any project on this scale.

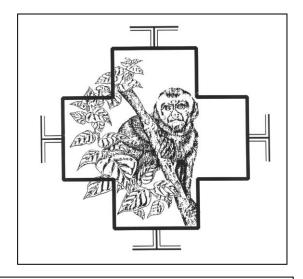
In this case, all the agricultural land, several settlements and the numerous artisanal mining operations in the area will be flooded. The provisions made for the relocation of people to other areas are not appropriate. The long list of environmental consequences includes significant deforestation on the fringes of the Bahuaja-Sonene National Park (BSNP) and Tambopata National Reserve. When filled the reservoir will flood 90+kms of the recently completed Inter-oceanic highway which will need to be rerouted. The new route of the highway along the Iñambari valley will be even closer to the BSNP.

However, the subsequent indirect impacts are likely to be greater - protected areas and indigenous lands are likely to be invaded by displaced farmers, miners and new settlers. This will lead to further deforestation and incidences of diseases such as malaria are likely to increase.

Local people and their representative organisations not been consulted as required by International Labour organisation (ILO) convention 169 to which Peru is a signatory.

There have been widespread protests in Peru about the nature of the agreement and the degree to which Peru will benefit. It is believed that a Brazilian bank is part-financing the project and that Brazilian companies were involved in initial works prior to the signing of the agreement.

A common current sentiment is "what are the benefits to Peru of a hydroelectric programme that, for all we know, will have impact studies conducted by, and be financed, constructed and operated by a neighbouring country, which will also buy the majority of the energy produced?"



Brazil & HEP projects

Brazil's record with respect to HEP projects suggests that the people of Madre de Dios should be very concerned.

Paraguay -

Since 1973 Brazil has had a bi-national HEP agreement with Paraguay. Brazil has paid a low tariff for energy acquired from the dam at Itaipú, but Paraguay claims that it still cannot afford to pay off the construction debt.

Madeira river -

For most of this decade Brazil has been constructing several mega dams as part of its *Accelerated growth programme* most notably on the Madeira river in to which all the rivers of Madre de Dios drain. Two huge dams are nearing completion at a cost of \$15 billion with partial funding from European banks such as Banco Santander. Local indigenous peoples were not fully consulted which goes against ILO convention 169 to which Brazil is a signatory. The new dams pose a serious threat to the environment and livelihoods of the population of Madre de Dios because they will have a major impact on the movement of aquatic species and bird life throughout south-western Amazonia. For example, the migration of catfish, a major source of protein in Madre de Dios, will be greatly affected.

Xingu river –

And now, the Brazilian government is again trying to revive the construction of a \$7 billion mega dam on the Xingu river, a project which instigated vast international opposition in the 1990s. The *Kayapo* 'nation', indigenous inhabitants of the Xingu river basin, has once more expressed complete opposition to the project.



Lago Condenado © W.Ramirez

Becas 2011 - Appeal for Assessors

A couple more TReeS members with appropriate backgrounds are reqired to assist with the review of applications (in spanish) from Peruvian students to receive a TReeS 'beca' (small grant) in 2011.

Reviews follow a set format and need to be undertaken over a 4-6 week period in the New Year. Applications are not lengthy and a review can, probably, be undertaken within an hour. There are usually about 10-12 applications per year but you could chose to review only those that relate to your specialism/field. Most of the applications are from undergraduate students and concern basic taxonomic investigations.

If you are interested, please write with details of your relevant experience to TReeS.

TReeS Library - forthcoming deposits will include the following reports (all untranslated):

- 'Variación geográfica de especies de anfibios de amplia distribución en la Amazonía del sureste de Peru', by Karen Siu.
- -'Aspectos de la biología reproductiva en *Seemannia sylvatica* (Kunth) Hanstein (Gesneriaceae) en el valle del Kosñipata, Cusco', by Lianka Cairampoma.
- -'Comparación de la concentración de los aceites esenciales de hoja e inflorescencía de *Chelyocarpus ulei* (Arecaceae) en la cuenca del río los Amigos', by Carlos Martel.
- -'Comparación de densidad de regeneración natural de *Bertholletia excelsa*, en un área de conservación y un área de aprovechamiento, en Madre de Dios', by Karina Salas.
- -'Diagnóstico básico para facilitar la protección de los pueblos indigenas aislados y en contacto inicial en el ambito del PN Manu', by Daniel Rodriguez.
- -'The Manu Amarakaeri corridor ecosystem services program Phase 1', a bulletin published by Nature Services Peru (in English).
- 'Informe del XV Congreso ordinario de la FENAMAD' (January 2010), report on the FENAMAD Congress.

Neomorphus (www.neomorphus.com)

TReeS members may be interested in the website of the Edward Grey Institute, University of Oxford, which is devoted to research, conservation and exploration in the tropics with a focus on South America. It presents the scientific findings of the Institute, articles and images, especially of birds. The site currently has a special feature on the Royal Flycatcher (*Onychorhynchus coronatus*), a reclusive inhabitant of the understorey, with an intensely coloured head crest unfurled in courtship and defence.

Trees for Life

Trees for Life, a charity based at Findhorn, in northern Scotland, again features images from south-east Peru in its 2011 festive publications. The 2011 Calendar includes a photo of lowland rainforest along the Los Amigos river, in central Madre de Dios, while the 2011 Diary includes a flowering tree in Manu National Park.

More details can be found at: www.treesforlife.org.uk

TReeS Membership

Members are reminded that the basic TReeS membership rate is now £15 / annum.

Membership is due on the 1st of **January** each year.

We would be most grateful if members could amend their bank orders, if still necessary.

All cheques are payable to – 'TReeS'.

TReeS Membership: £15 per annum

TReeS contact details – P.O.Box 33153, London NW3 4DR

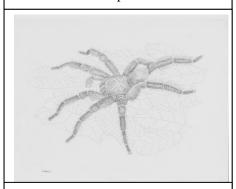
www.tambopata.org

TReeS USA – P.O.Box 842, Shasta Lake, CA96019-0842, USA.

TReeS USA is run by Bud and

Margaret Widdowson.

All members in Canada and the USA are requested to pay their annual membership via TReeS USA.



Bolivian blue-legged tarantula © L.Hanna

TReeS AGM 2010

The TReeS AGM will be held via the internet in early November. If you would like to participate, please send an e-mail to TReeS via our website e-mail or write to TReeS by 22.10.2010.

A review of TReeS activities and the accounts for 2009 will be made available. These can also be obtained by sending a SAE to - The Secretary.

If you would like to join the TReeS committee, please write to the TReeS address stating your reasons and relevant experience for wishing to join the committee, by 15.10.2010.

EU / Peru Free Trade

The Free trade agreement between the EU and Peru was finalised at the EU-CAN (Andean community) summit, in Madrid, in May. The agreement now goes through a legal process taking up to 10 months in which it is translated in to all the languages of the member states and scrutinized by lawyers. It should then, according to EU procedure, be ratified by each of the 27 member states prior to the final signing with Peru in 2011. Consequently, it won't come in to effect until 2012.

In June Chris Bryant MP (Labour) tabled an Early Day Motion (EDM 261) asking: "That this House urges the Government to ensure that the proposed EU FT Agreement with Colombia and Peru contains robust and enforceable clauses on human rights and counter proliferation and, as a mixed agreement, has to be expressly ratified by the Parliaments of each member state, including the UK."

Zac Goldsmith MP (Conservative), more recently, asked the Minister for International Development what support is being given to (a) sustainable forest management projects; and (b) projects to reduce emissions from deforestation and degradation in Peru. Andrew Mitchell MP, responded that DFID is providing £3.7 million (2008-12) to campaign group Global Witness to increase transparency in the management and governance of forests in four countries, including Peru.

At the end of June, the House of Lords debated recent developments in Latin America. There were 13 interventions by Peers from a cross-section of political parties, including Baroness Kinnock of Holyhead (Labour). Lord Avebury (Liberal Democrat) paid particular attention to Peru and focused on coca cultivation trends in

Peru and the Andean region; indigenous peoples, including the Bagua incident and the so-called Consultation Law (*Ley de* Consulta) which would give indigenous communities greater say in the development of oil and mining projects on their lands. He stated that one way to leverage the UK's efforts on human rights and the environment in Peru and Colombia would be to sign a "mixed" agreement. He asked that the Government -

- insists that the FT agreement contains clauses on both human rights and environmental protection.
- asks the UN special rapporteur on the human rights of indigenous people to review progress made in complying with his recommendations following his visit to Peru after the Bagua violence last year.

Many thanks to all TReeS members who wrote to their MPs and sent in copies of their replies to TReeS. The pressure from various sources, including TReeS, would appear to have kept environmental and human rights issues at the top of the agenda across government with respect to the UKs involvement in the EU-CAN FT agreement discussions.



Seemannia sylvatica © L.Cairampoma

Peru News

Presidential elections will be held in April 2011. The current front runner is Keiko Fujimori, daughter of the disgraced and imprisoned former President Alberto Fujimori, with 22%. The respected Mayor of Lima, Luis Castañeda, closely follows on 21% but traditionally Lima Mayor's have not done well with the national vote. The left-wing former Presidential candidate Ollanta Humala is on 13% and ex-President Toledo is on 12%. No candidate from the current President's party, APRA, features in the polls.

In February a proposed government ban on illegal gold mining and the use of mercury in Madre de Dios provoked miners in the Dept. of Arequipa to block the Panamerican highway. In the ensuing clashes, 6 miners died leading the government to agree to set up a commission to study the issue in greater detail and develop a national plan to regularise artisanal mining. Illegal mining produces 10-20% of Peru's gold, Peru is the world's sixth largest producer and 40,000 people are employed in the sector. Local community protests have also led to the start of several new large-scale mining projects across Peru being delayed.

In May the US citizen Lori Berenson, who had spent 15 years in jail for aiding the left-wing MRTA rebels - infamous for their seizure of the Japanese Embassy in 1996 - was released from prison to serve out the last 5 years of her sentence in Peru. Many Peruvians expressed their displeasure at the decision and a few weeks later her parole was revoked and she was sent back to prison.

In July the USA expelled ten Russian spies in a spy swap including a well known Peruvian journalist – Vicky Peleaz. She was married to another one of the spies who, unbeknown to her - it seems, was a Russian citizen.

2008 & 2009 'Beca' Reports

Reports have now been received from most of the students supported with *becas* (grants) by TReeS in 2008 and 2009. In many cases there is a time delay in report submission as the research forms part of an on-going study or the data collected requires lengthy analysis. However, in most cases they are undergraduate research projects and the reports, which vary in length and detail, are submitted within a year. The following is a brief summary of the contents / conclusions of the reports -

2008 Reports

*Carlos Martel, UNMSM, Lima. Comparación de la concentración de los aceites esenciales de hoja e inflorescencia de *Chelyocarpus ulei* (Arecaceae) en la cuenca del río los Amigos'. A comparison of the concentration of essential oils in the leaves and flowers of the *Chelyocarpus ulei* (Arecaceae) palm found in the *río los Amigos* area. Carlos collected palm specimens while staying at the Rio Los Amigos research station (230-270m, Av.annual temperature 24°C / precipitation 2,648mm). The palms grow best on slight slopes above regularly flooded areas. The analysis of the specimens in Lima didn't reveal any significant traces of essential oils in the leaves or flowers nor was there any variation between different ages of specimens.

*Michael Vega, UNMSM, Lima. 'Diversidad y estructura de las comunidades de epifitas vasculares en un bosque montano del valle de Kosñipata'. A study of the diversity and structure of epiphyte communities in the Kosñipata valley. Michael collected his samples in the Wayqecha cloudforest conservation concession at 2,500-2,900 metres, operated by ACCA, on the edge of the Manu Biosphere Reserve. From four plots, each of 500²metres, he located over 8,000 specimens from 24 epiphyte families but, principally, *Orchidaceae*, *Dryopteridaceae*, *Polypodiaceae* and *Piperaceae* greatly adding to the knowledge of epiphytes in the area.

*Lidia Sulca, UNMSM, Lima. 'Estudio de la fauna de la subfamilia Microgastrinae (Hymenoptera: Braconidae) en la Reserva Nacional de Tambopata'. A basic taxonomic study of an ant family: Braconidae, the location of which was switched to the Explorer's Inn. Lidia focused on two of the 36 sub-families and identified five genera of Agathidinae, including one new to Peru, and two genera of Rogadinae. Of the latter, only four of the 14 genera had been registered, including these two, and 10 species in total registered. Lidia collaborated with the National University of Bogota, Colombia, to identify some of her specimens.

*Mabel Alvarado, UNALM, Lima. 'Biodiversidad de las poblaciones de *Pimplinae* (*Hymenoptera: Ichneumonidae*)'. A basic taxonomic study of parasitic wasps, the location of which was switched to the Explorer's Inn. Mabel collected 269 specimens from 15 sub-families, mainly: *Ophioninae, Banchinae, Cremastinae* and *Metopiinae*. Two species of the latter were registered for the first time in Peru. They had only previously been recorded in Costa Rica so this research suggests a much wider distribution across Amazonia. Also, specimens of five genera were registered for the first time in Peru and many other specimens have yet to be described – only 5% of *Ichneumonidae* have been described so far.

2009 Reports

* Lianka Cairampoma, UNMSM, Lima. 'Aspectos de la biologia reproductive en Seemannia sylvatica (Gesneriaceae) en el valle del Kosñipata'. Lianka studied the Seemannia sylvatica bush and the relationship between its flowering and pollinators. She undertook her study in the Wayqecha cloudforest conservation concession where the bush grows in forest openings. Over 1,100 flowers were observed, 75 of which were measured in detail during their 4 day flowerings. Three species of hummingbird visited the flowers, mainly early in the morning, with an average beak length of 18mm. 69% of the flowers turned to fruit.

*Maryori Cubas, UNSAAC, Cusco. 'Estudio de escarabajos coprófagos (Coleoptera: Scarabaeidea)'. A basic taxonomic study researching a family of beetles (Coleoptera: Scarabaeidea) including their abundance, habitats and diversity. The research was carried out at Filadelfia, in the Tambopata National Reserve, off the Cusco/P.Maldonado road. Nearly 1,400 specimens from six genera – there are 70 genera in the tropics - were collected in nine pit fall traps set out along a 400 metre transect indicating a high population density. The specimens were dominated by Canthon (56%) and Delthochilum (20%).

*Wilfredo Ramirez, UNMSM, Lima. 'Estudio de la flora y vegetación de un humedal de la Reserva Nacional Tambopata'. Wilfredo researched the vegetation of the edges of *cochas* (lakes) and *aguajales* (flooded palm forests) around the Condenado lakes, located about 50kms up the Tambopata river. This preliminary study is one of the first to look at the vegetation of *humedales*. Vascular plants from 21 families were identified, covering 33 genera and 35 species from thirty 1x1metre plots. Five of the plants identified are new to Madre de Dios and one is new to Peru. 88% of the plants were firmly rooted, while 6% had submerged roots and just 4 species provided 87% of the vegetation cover, indicating low diversity.

Printed colour copies of the reports are available from TReeS: £3.50 for the first report, £2.50 for each additional report, including postage and packing.

Centenary of Lt.Col.P.Fawcett's visit to Tambopata

It is exactly one hundred years since Lt.Col.Percy Harrison Fawcett, on secondment from the British army to the Bolivian government, undertook his third expedition in to the Amazon. In 1910 he travelled down the Tambopata (Bahuaja) river and up the Heath (Sonene) river to help establish the Peruvian / Bolivian frontier.

'.... preliminary exploration of the river Heath would be necessary,, for here to the course of the river was unknown. It has been ascended from its confluence with the Madre de Dios for a few miles, but the savages made it impossible for Peruvians and Bolivians alike to explore it to its source.'

Fawcett and his party left La Paz, crossed the Cordillera Real and descended the eastern slopes of the Andes. 'We crossed the Iñambari river and came to Santo Domingo constant rain made landslides a serious hazard on the trail above Santo Domingo. Animal trains freighting rubber up from the Tambopata river had broken the surface Conditions remained unchanged all the way to Astillero.' (The trail followed the Tavara river down to Astillero at its confluence with the Tambopata river – remains of the trail can still be located today amongst the dense forest. Astillero has not been inhabited since the rubber boom years. The Tavara river basin is now a core area within the Bahuaja-Sonene National Park).

'We had to wait several days (at Astillero) ... but passed the time with champagne from the medical supplies. News came that the Chuncho Indians were on the warpath below us as a matter of fact the rubber people were generally to blame for these attacks' (Chuncho is nowadays a name associated with one of the larger collpas on the river Tambopata, located just upstream from its confluence with the river Malinowski).

They passed the Bolivian 'military post at the confluence of the Tambopata and Maldonado rivers.' (Nowadays the location of Puerto Maldonado - very much within Peru.) Everyone Fawcett spoke to reported on the ferocity and numbers of Indians living along the Heath river ... 'The first four days up river were not difficult.' On the seventh day they ... 'rounded a bend where on a sandbank stood a large Indian encampment.'

They successfully negotiated their way through and continued upriver '... on the upper river traces of Indians were plentiful, but we saw none ... their villages are probably well away from the river on higher ground. ... They belonged to a small tribe called the Echocas.'

The expedition then branched away from the Sonene (Heath) river and crossed overland to a small rubber tappers base back on the upper Tambopata river. 'We built three balsa rafts, and then embarked for a wild two-day trip down the Tambopata to

Extracts from 'Exploration Fawcett', based on the notes of Lt.Col.Fawcett, written up by his son Brain Fawcett (Hutchinson)(1953).

Astillero – wild, because we shot rapid after rapid.'

Fawcett returned to the upper Tambopata and Heath rivers in 1911 but all his subsequent trips were to Bolivia and Brazil. In total he undertook five further expeditions but disappeared, in 1925, in Brazil, while searching for a 'lost' Amazon city he called 'Z'. Numerous searches over the decades failed to fully establish definitively what happened to him and his small party.

Fawcett was not rated highly amongst his contemporaries as an expedition organiser and leader. To this day many consider him to be vastly overrated as an explorer and that media interest in him has gone overboard.

In recent years he has again become a focus of attention with some claiming his exploits as the basis for the Hollywood character 'Indiana Jones'. His life was certainly eventful. After colonial service in Sri Lanka and Ireland, he was sent as a government spy to Morocco, and his subsequent Amazon explorations were interrupted by spending most of WWI close to the front lines. Fawcett's final expedition has been written up once more in '*The lost city of Z*' by David Grann (See final page of this Newsletter) and it is rumoured that Brad Pitt is to play the lead role in a film based on Fawcett's life to be released in 2011!



Lt.Col.P.Fawcett © Wikipedia

Oil & Gas exploration update

In May the Peruvian state oil company – Perupetro – visited London, New York and Paris to launch the bidding process for 25 new oil and gas exploration lots, all bar one of them in the Amazon region. Over 70% of the Peruvian Amazon will be covered by oil / gas exploration Lots once the new Lots are assigned.

The launch had been postponed from January due to negotiations with indigenous representatives from the affected areas. As a consequence of this the Peruvian government also announced that activity in an already allocated Lot – Lot 110, in northern Peru – would be restricted so as not to overlap with an area of 'uncontacted' indigenous peoples.

In early June President Garcia visited Washington to meet President Obama. Survival International wrote to President Obama requesting that he raise the issue of oil company activities threatening indigenous peoples living in voluntary isolation. However, it is not known if he chose to do so.

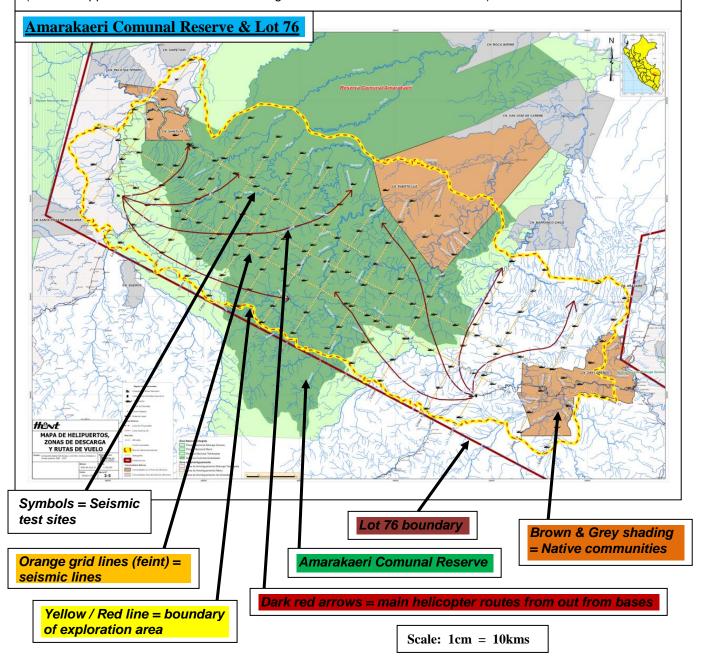
In south-east Peru FENAMAD continues to oppose the activities of Hunt Oil and Repsol in Lot 76 which overlaps with the Amarakaeri Comunal Reserve (RCA), in southern central Madre de Dios. Lot 76 directly impacts on nine native communities of the Harakmbut, Matsigenka and Yine and 100,000 people in total, including the majority non-indigenous population.

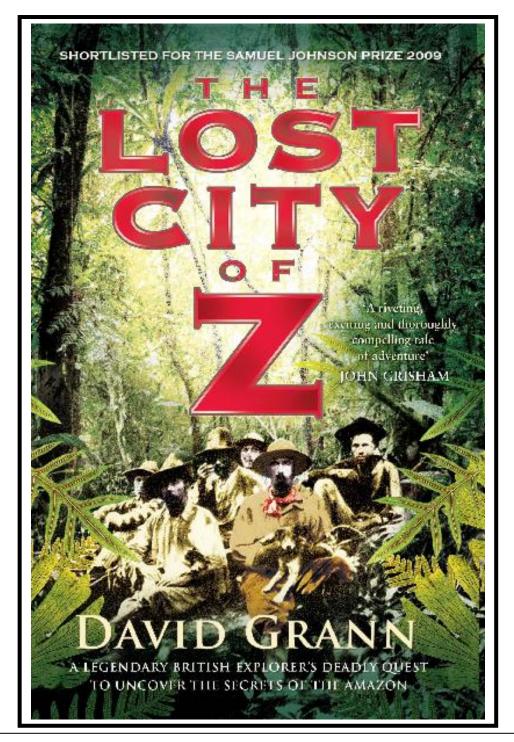
At their XV Congress, in January, FENAMAD –

- denounced staff of the protected areas authority SERNANP (ex-INRENA) shown to have attempted to modify the master plan for the RCA to benefit oil exploration operations;
- declared the Minister of the Environment, Antonio Brack, *persona non grata* for his lack of support for indigenous people in Madre de Dios and the RCA;
- rejected the practices of Hunt Oil and Repsol aimed at dividing indigenous families and communities.

In a strongly worded statement FENAMAD made requests to international, national and regional authorities that UN ILO convention 169 should be fully respected in Madre de Dios.

(TReeS supported a FENAMAD fact finding mission in to the RCA late in 2009).





This edition of the Newsletter is sponsored by the publisher 'Simon & Schuster'

The Lost City of Z

TReeS has a limited number of copies of the new paperback edition available at £8.99 (RRP: £8.99), including free postage and packing, plus a copy of a review of the book from the Times Literary Supplement by Dr John Hemming (ex-Director of the Royal Geographical Society).

Please send a cheque made payable to 'TReeS'.

TReeS Merchandise - NEW

* 'Rainforest Animal' greetings cards — based on beautiful line drawings by Dr Laurel Hanna, seven designs are now available including four new designs: Scarlet Macaw, Puma, Razor-billed Curassow, Bolivian Blue-legged Tarantula*, White Capuchin monkey*, Yellow crowned parrot* and Tree-frog*.

Price: £5.00 for 7 or £1.00 each (including envelopes) (including P & P). (* new designs)

TReeS Supported Projects

- * <u>Programa de Becas</u> (Small Grants program) 2010 Nine applications were received this year from Peruvian biologists planning to undertake research in the southern Peruvian Amazon. Small grants have been awarded to six of the applicants -
- + Junior Chactaya, University of San Marcos (UNMSM), Lima 'Estudio comparativo de la Ictiofauna y estado de conservación de los ambientes lenticos de la cuenca del Río Tambopata (Madre de Dios)'. Junior plans to compare fish populations and the condition of slow moving aquatic environments along the Tambopata river. Amount awarded: \$1,500.
- + Matias Perez, University of La Molina (UNALM), Lima 'Diagnóstico de la transmisión actual del conocimiento ecológico tradicional en el uso de palmeras por dos comunidades Ese Eja, en Madre de Dios'. Matias will investigate the transfer of traditional knowledge about the use of palm trees and their products within the Ese'eja communities of Infierno and Sonene. Amount awarded: \$1,435.
- + Paola Moschella, La Catolica, Lima 'Ocupación y uso del territorio en la quebrada Huacamayo'. Paola plans to study the impact of artisanal gold mining in a small steep sided valley off the Inter-Oceanic highway through field visits, interviews and satellite image analysis. Amount awarded: \$1,070
- + Heydi Canales, UNMSM, Lima 'Dispersión, protección y recompensas entre hormigas y orquídeas que habitan los jardines de hormigas en Río Los Amigos'. Heydi's field work will investigate the relationship between ant and orchid species in ant colonies. Amount awarded: \$1,125
- + Juan Carlos Lara, UNALM/UNSAAC, Lima/Cusco 'Sucesión ecológica del bosque tropical en el trayecto de cuerpos de agua en micro-corredores en la Zona de Amortiguamiento de la RNT'. Juan Carlos will look at ecological succession in proximity to bodies of water, in micro-corridors, in the buffer zone of the Tambopata National Reserve. Amount awarded: \$1,430.

Appeal: £25+ donations towards the cost of the 2011 and future grants programmes.



* HEP workshop –

Many people and organisations in Madre de Dios know very little about hydro-electric power generation, its pros and cons. On the 1st of June several representative organisations, NGOs and interested professionals met in Puerto Maldonado to discuss the Iñambari project and its implications for the region.

TReeS funded the attendance of an HEP technical expert who addressed the meeting about the workings of HEP, and the potential advantages and disadvantages for the lower Madre de Dios.

The meeting ended by drawing up a letter to President Garcia and the Minister of Energy –

- opposing the construction of the Iñambari dam because it will not greatly benefit Peru but the Brazilian government and companies;
- rejecting the export of natural gas from Camisea on the basis that it must be retained for domestic consumption;
- requesting that a fair market price for natural gas is established.

The meeting called on the organisations present to join a two day strike across all regions in southern and eastern Peru, on 17-18th June, with respect to these issues. Amount awarded: \$340

*FADEMAD

TReeS contributed to a request from the Federation of small farmers of Madre de Dios to visit several of their affiliated communities along the Transoceanic highway, located in the buffer zone to the Tambopata National Reserve. They went to discuss issues of land titling, mining activities and impacts of the highway on the area. Amount awarded: \$715

*Tambopata National Reserve (TNR)

TReeS responded to a request to support a visit of the TNR co-ordinating committee to the buffer zone of the TNR to hold meetings with local communities to discuss future management plans for the zone. Amount awarded: \$500

* Aberdeen University Expedition

TReeS has awarded a grant to an undergraduate ecology based expedition to the Manu Biosphere Reserve to assist with funding the Peruvian student participants from UNSAAC, in Cusco. The expedition will be based at the Manu Wildlife centre (MLC), in the upper Madre de Dios, run by CREES Expeditions.

The expedition aims to explore species level interactions and their role in tropical forest ecology. This will include looking at whether aphids influence the composition of their honeydew in order to attract ant symbionts, and to further understanding of leaf toughness within monocot and dicot herbaceous plants and determine its affect on herbivory.

Undergraduate expeditions to south-east Peru were an almost annual event until the late 1990s. It is nice once more to be able to offer small-scale support to such an expedition. Amount awarded: £300.