

TReeS News No.71

July 2012

25th Anniversary year of TReeS

This edition of the TReeS Newsletter reports on the awards made by TReeS to Peruvian students this year to undertake field work in Madre de Dios as well as feedback from several students supported in recent years. It also provides updates on some of the threats and issues currently impacting on the Madre de Dios region of south-east Peru.

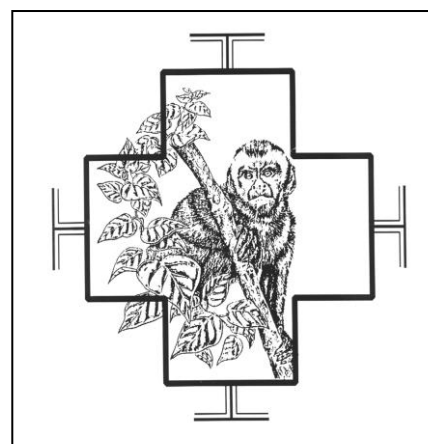
It outlines new government actions with respect to mining in Madre de Dios, and new research and conservation initiatives in the Tambopata area.

Government takes action against illegal mining

As reported in the last TReeS Newsletter, the extent of illegal gold-mining in Madre de Dios has escalated rapidly in the last two years. This has resulted from the completion of the InterOceanic highway which has facilitated the arrival of many itinerant miners from elsewhere in Peru and the continuing high price of gold on world markets as governments invest in gold to safeguard against economic instability.

The latest data for Madre de Dios indicates 30,000+ hectares of forest cleared by 30-50,000 illegal miners, using 4 million gallons of petrol per month, to produce 18 tonnes of gold (9% of Peru's production) a year. A large dredger, costing \$1million to set up, can earn \$30,000 per day but pays almost no tax. Mercury use is estimated at 2.8 grams for every gram of gold, with 40 tonnes of mercury entering the river systems and atmosphere per year, and mercury levels in fish now at over three times the WHO recommended level.

As a result the new Peruvian government took action to try to regulate small-scale illegal mining. The new legislation will guarantee indigenous people the right to be consulted about and in agreement with, any projects that affects them. However, it now seems that



the final decision will remain with the government and indigenous people will not have a right of veto.

This new approach also has to be balanced against the sacking of the head of the state Indigenous Affairs Institute (INDEPA) for trying to prevent Pluspetrol, of Argentina, from exploring in the Kugapakori-Nahua-Nanti Reserve.

The new mining legislation requires all miners to obtain authorisation to mine and to comply with environmental, labour, and health and safety laws, with strong penalties for those that do not comply. The new proposals also define an area along the Madre de Dios river where mining would be permitted. Mining would be prohibited in the buffer zone to the Tambopata Natural Reserve.

However, it sparked a wave of protests across Peru by miners. Some of the largest and most violent were in Puerto Maldonado. Over ten thousand illegal miners came to the city and battled with police over several hours. Three died, including a Shipibo man from San Jose de Karene, who was caught up in the crossfire.

The Federation of native people of Madre de Dios (FEAMAD) participated in the protests because it wants ten indigenous communities to be able to continue to generate a small income by undertaking small-scale mining on their lands.

Itinerant miners complain that obtaining the required authorisation is too time-consuming, costly and weighted in favour of large companies.



Confrontation between miners and police in P.Maldonado (AP Photos: M.Vizcarra)

Other government legislation is likely to require mining companies to make contributions to new Environmental Conservation and Social Inclusion Funds as part of a strategy to reduce social conflicts resulting from mining projects. A new state institution will be set up to handle conflicts that arise with big investment projects. However, none of these proposals are likely to be directly relevant to the small-scale gold-mining taking place across central Madre de Dios.

(The suggested format for a letter to the Peruvian President on this and other related matters appears on the final page of this Newsletter)

Research & Canopy access in Tambopata

Tambopata Tower

Since September 2011, the Ramiro-Chacon tower has been operating at the Explorer's Inn. It is the first permanent CO₂ and methane flux measurement tower in Peru. Its construction is the result of a significant collaboration between *Servicio Nacional de Áreas Naturales Protegidas por el Estado Peruano* (SERNAMP); *Asociación para la Investigación y Desarrollo Integral* (AIDER); *Pontificia de la Universidad Católica del Perú* (PUCP), Explorer's Inn Rainforest Lodge; and the Universities of Leeds, Edinburgh, Oxford and São Paulo.

The tower stands 55 metres high with fifteen scientific sensors supported by solar panels / batteries on the top platform. They continuously monitor the exchange of carbon between the forest and the atmosphere in order to evaluate if the region is serving as a sink or source for that element. Dozens of meteorological variables, such as precipitation, light levels and wind speed / direction are also recorded. A lower platform at 42 metres can be accessed by bird-watchers and tourists.

A second tower has been installed on Bananal island, the largest fluvial island in the world (350 kms x 55 kms), in the Brazilian Amazon.

Inkaterra has improved canopy access in the Tambopata area at their new lodge – Hacienda Concepcion, on the banks of the river Madre de Dios – with the construction of a 50 metre long canopy walkway.

Forest Plots project and website

For over 20 years, eight permanent forest plots, located in different forest types, at the Explorer's Inn, have been some of the most intensively studied in Amazonia. Regular field visits, most recently in 2009 and 2011, have recorded forest growth: tree diameter, taxonomy, distribution, density, etc. There are also four other plots in the Inkaterra Ecological Reserve, on the Madre de Dios river.

The data from 234 plots across Amazonia, including the twelve plots in Madre de Dios, can now be accessed at: www.forestplots.net

The project is associated with RAINFOR:
www.geog.leeds.ac.uk/projects/rainfor

The website gives details of other RAINFOR projects in the Tambopata area, including -

- field work in Madre de Dios to improve estimates of biomass by weighing a variety of trees and palms.
- the JACARE project which collects data on the structure and composition of forest canopies by using lasers to map individual canopy trees through over-flights combined with ground based field work.
- Riverine carbon project measuring dissolved organic and inorganic carbon using data from small streams flowing in to the La Torre and Tambopata rivers.

Tambopata 'Ramiro Chacon-SAGES' Tower



Peru News

In January the leader of the Shining Path in the Alto Huallaga valley, Comrade Artemio, was captured. In March, in the worst incident since 2003, six police and soldiers were killed in clashes with Shining Path members in the remote Apurimac-Eve valley, in the central jungle region. The Shining Path had earlier kidnapped and released 36 gas workers, employed by a Swedish contractor, on the Camisea gas project. The incident led to the resignation of two government ministers.

In a stranger than fiction case, 300 Haitian refugees who had made their way across Peru and Madre de Dios found themselves destitute in the town of Iñapari when they were refused entry by Brazil.

Q'orianka Kilcher, the part *Huachipaeri*, Hollywood actress most well-known for her role as *Pocahontas* (2006) has been actively engaging in Greenpeace campaigns. This led to her arrest in Washington DC and, more recently, during a field protest against illegal logging in the Brazilian Amazon.

The planned official visit of the UK warship HMS Montrose to Peru (Callao) was cancelled at the last minute in a reluctant show of support by Peru for Argentina's renewed efforts to claim the Falkland Islands.

Explorer's Inn

Max Gunther has appointed a new manager and a range of new initiatives are being implemented. There are currently four RNs in residence, in addition to the permanent guides. The latest Resident Naturalist report (May 2012) which includes details of Caiman, *Collpita* and Giant River Otter sightings can be accessed via the Explorer's Inn website.
www.explorersinn.com/peruvian-amazon/reports

New oil & gas exploration threatens uncontacted peoples in south-east Peru

In early 2012 widespread international media coverage was given to the appearance of a small group of indigenous peoples on the banks of the Manu river.

Identified as Mashco-Piro by other indigenous people, they had journeyed south out of the Kugapakori-Nahua-Nanti Reserve – an area that exists to protect some of the 15 indigenous groups living in voluntary isolation, in Peru. They are, supposedly, legally protected by a "Supreme decree" dating back to 2003. Their migration is likely to be a consequence of increased illegal logging activities or gas operations in the area.

However, Block 88 of the vast Camisea natural gas field was allowed to overlap with the Reserve more than a decade ago.

Now it is believed that the Peruvian government may grant the state oil firm, PetroPeru, permission to explore for oil in a new block, to the east of the gas fields, to be called 'Fitzcarrald'. This would create an even larger overlap with the Reserve and would be a further violation of the Supreme decree.

The Federation of native peoples of Madre de Dios (FENAMAD) says ***'there is no doubt the government is attempting to cut up indigenous territories for gas exploration which will be reflected in the genocide and ethnocide of indigenous peoples'***.

Manú National Park, a Unesco world heritage site because it has biodiversity that ***'exceeds any other place on earth'*** - has the Kugapakori-Nahua-Nanti Reserve as its northern buffer zone.

At the end of 2011 the Department for Protected Areas (SERNANP) entered Manu National Park on a two day raid in which they confiscated over 1,000m³ of timber and arrested several illegal loggers. (See *'The Ecologist'*, 19.1.2012).

An additional scandal broke when several Cusco based tour agencies started running *'human safaris'* to view the *'uncontacted peoples'*.

FENAMAD has now set up a guard post upriver from the native community of Diamante to monitor matters.



President Humala meets Sir Mick Jagger in Lima

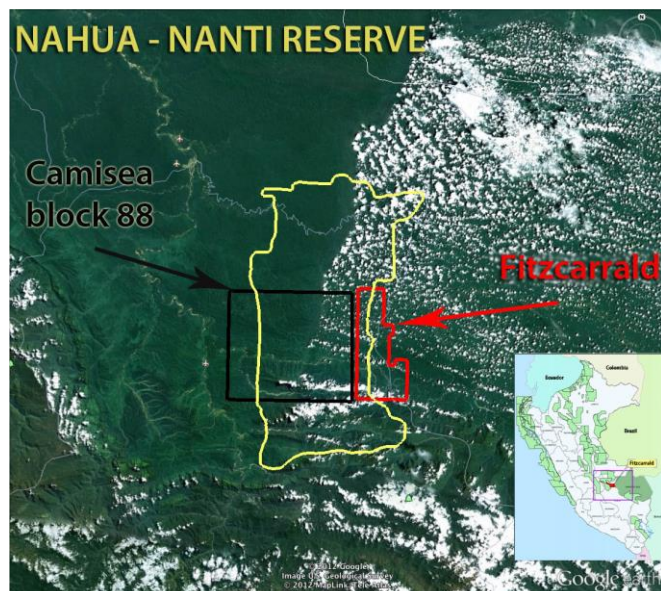
Sir Mick Jagger made honorary 'Peruvian Environmental Ambassador'

The Peruvian government has made Sir Mick Jagger an honorary Environmental Ambassador to provide *'great support in our fight to protect our ecology'*.

Sir Mick's connections with the Peruvian rainforest go back to the early 1980s when he was due to appear in Werner Herzog's film *Fitzcarraldo* about a notorious rubber baron of Irish descent who operated in the Madre de Dios region, in the late 19th century. In the end filming (near Iquitos) was delayed and Sir Mick had to withdraw due to other commitments.

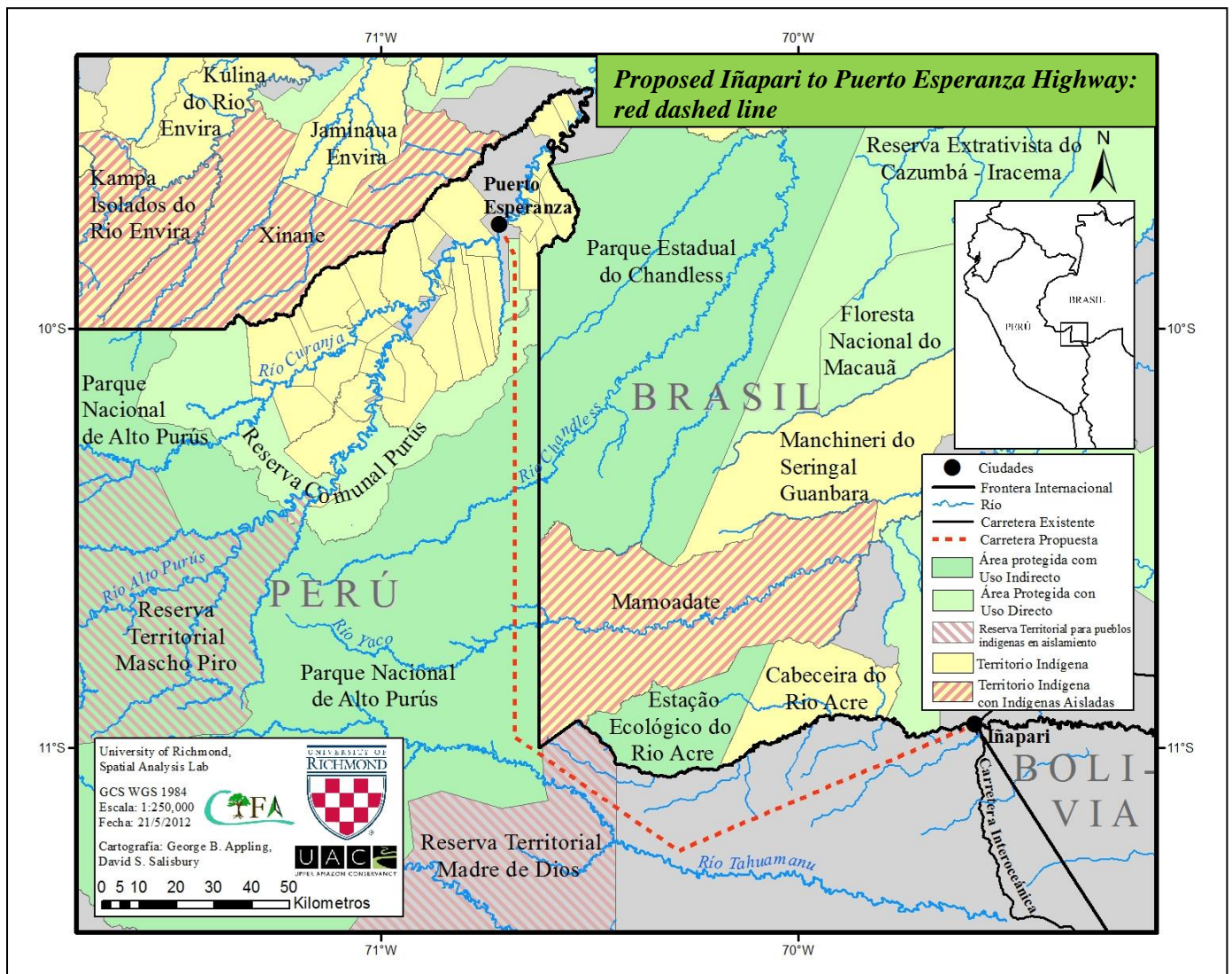
Last year he visited the Manu National Park Buffer zone, where the regional governor of Madre de Dios presented him with a medal, a feather head-dress and bows and arrows. In May he followed up his appointment by flying in to Puerto Maldonado in a private jet to visit a luxury lodge, just downriver from the town, for a brief visit.

Sir Mick has been asked by Survival International to use his influence and new position to help stop the Camisea gas exploration project that threatens some of Peru's last uncontacted tribes.



Some of the Mashco-Piro group that suddenly appeared on the banks of the river Manu

© D. Cortijo/www.uncontactedtribes.org



Controversial new road proposed across northern Madre de Dios to the Purus region

Following the construction of the TransOceanic Highway several new roads linking to it have been proposed. The most controversial would run from the frontier town of Iñapari, in northern Madre de Dios, across the top of the department and then north to the town of Esperanza, in the remote Purus region.

The route would traverse the Nahua-Nanti Comunal Reserve, home to the indigenous peoples of Madre de Dios living in voluntary isolation; the Alto Purus National Park; and the Purus Comunal Reserve.

The road is being promoted by the local Catholic priest in Puerto Esperanza, on the Purus river, to bring development to the region. Opponents have stated that this is just a continuation of an age old patronizing attitude that western development is best for indigenous peoples. However, the priests plan goes against a recent Peruvian church document entitled '*The Catholic church's role in the Peruvian Amazon*' (2010) which warned against promoting economic initiatives to exploit natural resources at the expense of indigenous peoples and the environment.

The road is opposed by both FENAMAD (Federation of native peoples of Madre de Dios) and FECONAPU (Federation of native peoples of the Alto Purus) who have nicknamed the proposed road the '*Highway of the Dead*' in anticipation of its likely impact on indigenous peoples of the region.

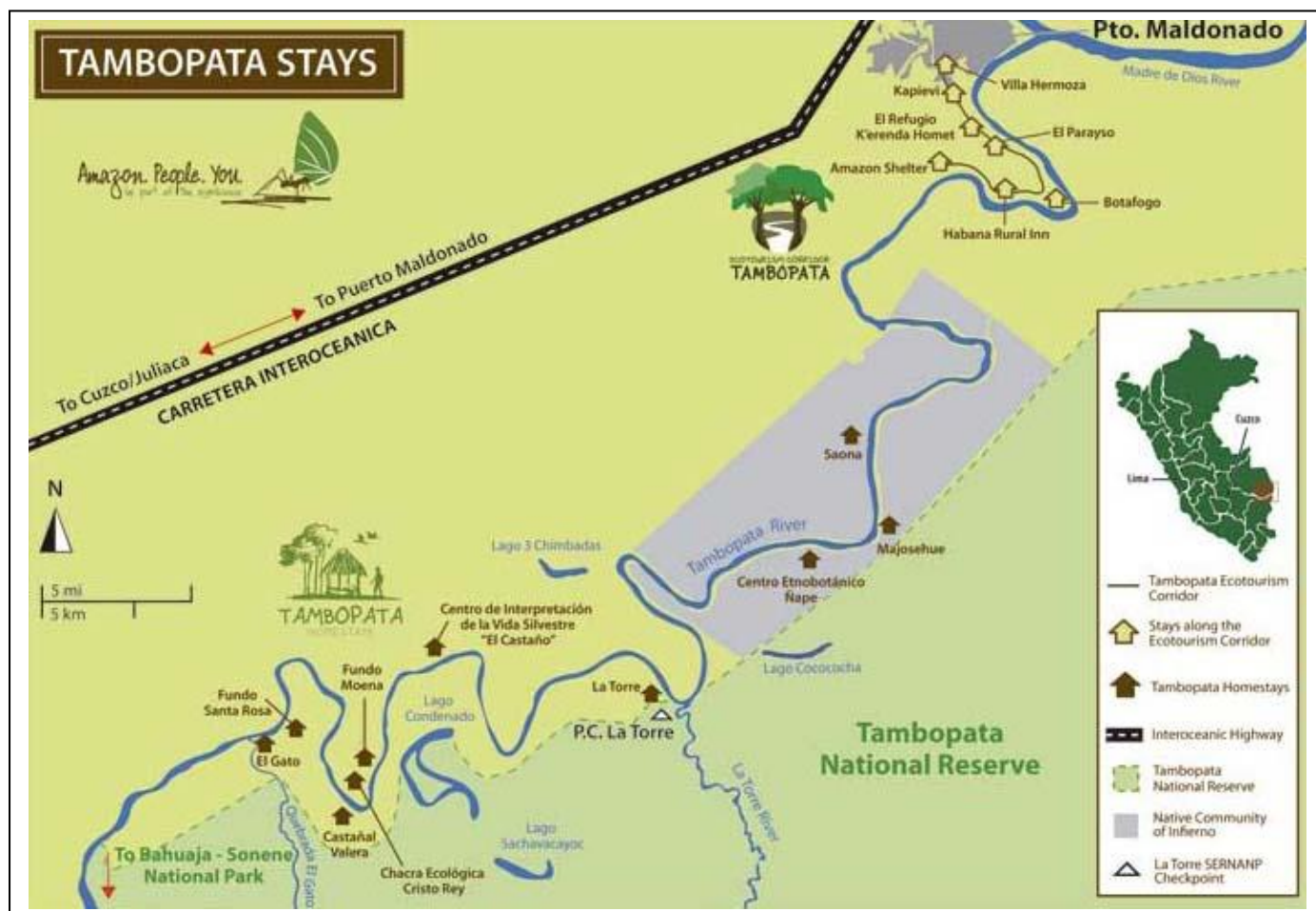
Further details on this issue can be found at the websites of –

- Survival International:
www.survivalinternational.org
- the Upper Amazon Conservancy, a US NGO:
www.upperamazon.org

There are known to be 15 groups of indigenous peoples living in voluntary isolation in the Peruvian Amazon. In the second national census of indigenous communities (2010), 51 out of 60 known ethnic groups were directly registered. The others either live in very isolated locations or have now been absorbed in to other groupings. 1,786 individual Amazon communities were identified, home to over 330,000 native people.

The Ashaninka, in the central Peruvian Amazon, with 26.6% are the largest group followed by the Awajún, in northern Peru, with 16.6%. The Ese'ejá spread between three communities in Madre de Dios, including the community of Infierno on the river Tambopata, account for less than 0.5%. The census noted that nearly 50% of the indigenous population was below 15 years of age and that about 20% were illiterate, especially the older generations.

It also highlighted that in recent years Amazonian issues have attracted far greater media attention and the number of indigenous leaders now elected as local and regional representatives has risen significantly.



New Tambopata Sustainable Tourism initiative

In the mid-noughties TReeS supported the community of Baltimore, on the Tambopata river, to promote small-scale ecotourism and facilitate the participation of local people directly in a business dominated by large lodges owned and operated by outsiders. The joint TReeS / CESVI project operated out of the TReeS office and enabled several families to improve their homes to receive home stay visitors as well as associated initiatives such as medicinal plant gardens and afforestation. The major challenge faced by the project was to establish an effective marketing campaign to attract sufficient visitors.

As a consequence of the building of the TransOceanic Highway funding has been made available for a range of projects in the Highway / Tambopata National Reserve buffer zone that facilitate 'biodiversity conservation and development', including sustainable tourism projects. The tourism project is managed by Rocio Martinez who ran the TReeS / CESVI project.

The new project works with one tourism initiative on the river Madre de Dios and seventeen along the Tambopata river which has been divided in to two sections –

- an *Ecotourism corridor* along the Tambopata loop road, involving seven families living in traditional family homes set within the forest and often overlooking the river, close to Puerto Maldonado.

- *Tambopata homestays* involving ten families living much further up the Tambopata river and requiring at least a two night stay in most cases. In Baltimore, *Casas de Hospedaje* El Gato and Santa Rosa receive guests for overnight stays while other families also benefit when the guests visit their *chacras*. The El Gato lodge has been

enlarged with funding from Rainforest Expeditions (RFE) so their excess clients en route to the *collpa* can be accommodated when Posadas Amazonas is full.

The new project has focused on three areas –

- *Quality control - which ensures that the *hospedajes* meet the standards expected and needs of visitors as well as developing the links between those participating and the local community so there are benefits for all.

- *Operations - a bilingual (Spanish / English) central reservation office: www.tambopataecotours.com began operating in 2011. All the homestays / lodges are slightly different in terms of their location, style of accommodation, facilities on offer, etc and it is hoped that by centralising the marketing and booking visitors can more easily identify where they would like to stay and bookings can be distributed more equally amongst participants.

- *Marketing - to produce materials to market the homes, facilities, etc. There is a link with an agency in Cusco.

Finally, the tourist options in the native community of Palma Real, on the river Madre de Dios, will be assessed and developed.

Centro Nape (originally funded by TReeS), in the native community of Infierno, continues to function as it has done for several years – receiving small groups of tourists from Rainforest Expeditions (RFE)(Posadas Amazonas) and the occasional patient for treatment. A tourist company is being formed by the community of Infierno – Bahauja Expeditions, and a small *casa de hospedaje* built at the Centre. It will also use the central reservations system, in due course.

TReeS Becas - Appeal for Project application reviewers

A couple more TReeS members with appropriate backgrounds as biologists are required to assist with the review of applications (in spanish) from Peruvian students to receive a TReeS 'beca' (small grant) in 2013.

Reviews follow a set format and need to be undertaken over a 3-4 week period in the Spring. 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 e-mail details of your relevant experience to: **treesuk1@gmail.com**

TReeS Library - forthcoming deposits will include the following reports (those in Spanish are untranslated):

- '*Modelamiento de hábitat del río Tambopata*', preliminary report, by Maria Quezada (with WWF) (2011).
- '*Evaluación de la fauna malacológica en la cuenca del río bajo Madre de Dios*', by Andre Ampuero (2011).
- '*Estudio preliminar de coleopteros coprofagos (Scarabaeidae: Scarabeinae) en Tambopata*', by Luis Figueroa (2008).
- '*Frente extractivo, inmigración andina y cambio en la identidad, economía y estructura social communal – el caso de San José de Karené*', by Juan Rodriguez (2011).
- '*Dispersión de individuos con respeto a la distancia del árbol parental de los individuos Cedrelinga catanaeformis Ducke. (Tornillo) y Cedrela odorata L. (Cedro) en el Fundo San Antonio*', by Juan Carlos Lara Rivas (2011).
- '*Los escarabajos longicorneos (Coleoptera: Cerambycidae) asociados a las Sapotáceas (Ericales: Sapotaceae) en CICRA (Río de los Amigos), Madre de Dios*', Sara Carbonel (2011).
- *Manu 2011 Expedition Report*, E.Wadell & P.Lovell, University of Glasgow (2011).
- '*Necromass in forests of Madre de Dios: a comparison between terra firme and lowland forests*', by A.Araujo-Murakami et al (2011); Spanish/English.
- '*The sensitivity of tropical leaf litter decomposition to temperature: results from a large-scale leaf translocation experiment along an elevation gradient in Peruvian forests*', by N.Salinas et al (2010).
- '*Geofile No.653 Rainforest Biodiversity – the management challenges: case study of the Tambopata region*' (Nelson Thornes) (2012)

New TReeS T-shirt (limited edition)

To celebrate 25 years of TReeS a limited edition full colour T-shirt (Large or Medium) reflecting the risks posed if large areas of tropical rainforest are destroyed has been produced (See below).

We are grateful to A-level Geography students for producing the design: Georgia Harries & Bradley Robinson.

Price: £10.00, including P & P.

All cheques payable to 'TReeS'.

***Details of other items of TReeS merchandise can be found at the TReeS website - www.tambopata.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.uk
treesuk1@gmail.com**

TReeS USA –

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

TReeS USA is run by Bud and Margaret Widdowson.

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

TReeS committee 2011-2012

*Sally Edwards
John Forrest
Dr Helen Newing
Huma Pearce
Elizabeth Raine
Daniel Turner
Rebecca Warren*

T-shirt logo

TReeS Supported Projects

*** Programa de Becas (Small Grants program) 2012**

Eight applications were received this year from Peruvian biologists planning to undertake research in the southern Peruvian Amazon.

Six grants were awarded (see below). The total amount awarded was the second largest awarded.

The Becas programme is an important contribution to the career development of young Peruvian scientists who will, potentially, be working in and promoting Amazonia for decades to come. TReeS funding assists them in gaining all important field work skills that may allow them, subsequently, to join other more significant field research projects and conservation organisations.

Appeal: £25+ donations towards the cost of the 2013 and future grants programmes.

2012 Becas awards

***Talia Salas:** University Cayetano Heredia, Lima, investigating hematological values and the presence of hemoparasites in populations of Yellow-spotted river turtles (*Podocnemis unifilis*) in captivity in the Taricaya Ecological Reserve, in Puerto Maldonado.

Amount awarded: \$998

***Gildo Valero:** University of San Marcos (UNSM), Lima, analysing the morphology of the Ese'jea language and its relationship with traditional forest knowledge.

Amount awarded: \$920

***Patricia Mendoza:** UNSM, Lima, investigating and identifying fungi in *quebradas* affected by gold-mining activities, in the lower Madre de Dios.

Amount awarded: \$1,000

***Reif Chavez:** UNSM, Lima, investigating the effects of the InterOceanic Highway on populations of aquatic macro-invertebrates in six *quebrada* tributaries of the river Madre de Dios.

Amount awarded: \$1,000

***Jesus Rojas:** University of Madre de Dios (UNAMAD), Puerto Maldonado, investigating wild and domestic ticks as potential hosts of *Leishmania* sp. in the Province of Tahuamanu, Madre de Dios.

Amount awarded: \$1,475

***Rolando Quispe:** University of San Antonio de Abad (UNSAAC), Cusco, investigating the vertical and horizontal structure of *Couratariguianensis* Aublet (Misa) in the Fundo Noaya, lower Madre de Dios.

Amount awarded: \$1,500



Oxysternon conspicillatum
(L.Figueroa)

Becas Feedback

***Sara Carbonel (2008):** '*Los escarabajos longicorneos (Coleoptera: Cerambycidae) asociados a las Sapotaceas (Ericales: Sapotaceae) en CICRA, Madre de Dios*'.

Sara collected 1,000+ *Coleoptera* individuals from the *Cerambycidae* family, from plants in the *Sapotaceae* family, and to date 35 species have been identified. The study has increased awareness of insect species that attack and damage economically valuable timber species.

***Karina Salas (2008):** '*Comparación de densidad de regeneración natural de Bertholletia excelsa HBK, en un área de conservación y un área de aprovechamiento, en Madre de Dios*'. (Preliminary report)

Karina compared the density of regeneration of brazil-nut trees in a brazil-nut concession on the river Sonene (Heath) and in an area where brazil-nuts are not harvested in the River de los Amigos Conservation Concession, located in central Madre de Dios.

***Juan Carlos Lara (2010):** '*Dispersión de individuos con respecto a la distancia del árbol parental de los individuos Cedrelinga catanaeformis Ducke. (Tornillo) y Cedrela odorata L.(Cedro) en el Fundo San Antonio*'.

Juan investigated the Janzen & Connell model which proposes that the number of seeds/saplings found will rise with increasing distance away from the parental tree, with respect to two tree species. Four individuals of each tree were studied with 57 *Cedro* and 239 *Tornillo* saplings identified surrounding the parental trees. Very few *Cedro* seeds but 3,646 *Tornillo* seeds were also located. In both cases few seeds and saplings were found close to the parental trees in-line with the model. Predators, lower temperature and light levels close to the parental tree were investigated as potential reasons for this pattern.

***Andre Ampuero (2011):** '*Evaluación de la fauna malcológica en la cuenca del río bajo Madre de Dios*'.

Andre looked at the little studied topic of tropical molluscs. He collected specimens from nine sites, in the lower Madre de Dios. The two sites in the Tambopata National Reserve had the most families with six at each of the seven families identified in total. Of the 27 species identified four were new for Peru and another two new for the area. Two of the species found are known to be transmitters of bilharzia in Brazil. Specimens were most commonly found in water in proximity to stems of the plant species *Heliconia* and *Ficus*.

***Juan Rodriguez (2011):** '*Frente extractivo, inmigración Andina y cambio en la identidad, economía y estructura social comunal*'.

Juan spent time in the indigenous Harambut community of San Jose de Karene. It is going through the process of gradual cultural loss as experienced by many other similar Amazon communities. This has resulted from the arrival of illegal miners from the Andes and their new identity as 'native miners'. It also greatly impacts on community cohesion, some members of the community don't believe that San Jose will survive as an indigenous community. However, for now, the Harakmbut language helps to maintain a degree of indigenous identity.