Darwin Project Information

Project Ref Number	**EIDPO024**
Project Title	**Securing the future for Gurney's Pitta and its forest habitat**
Country(ies)	Thailand and Myanmar
UK Contract Holder Institution	Royal Society for the Protection of Birds
Host country Partner Institution(s)	Forest Restoration Research Unit (FORRU), Chiang Mai University, Thailand, Bird Conservation Society Thailand (BCST), Biodiversity And Nature Conservation Association (BANCA), Myanmar
Other Partner Institution(s)	
Darwin Grant Value	£76,776
Start/End dates of Project	1st April 2009 to 31st March 2011
Reporting period (1 Apr 200x to 31 Mar 200y) and annual report number (1,2,3..)	1st April 2009 to 31st March 2010 Annual Report No.1
Project Leader Name	Ian Barber (RSPB)
Project website	http://www.forru.org/FORRUEng_Website/Pages/enggurneyspitta.htm http://www.bcst.or.th/index.php?option=com_content&view=category&id=19&Itemid=89&lang=en http://www.rspb.org.uk/ourwork/projects/place.asp?focus=International&place=Thailand
Author(s) and main contributors, date	Ian Barber (RSPB), Steve Elliott (FORRU), Kritsana Klaewplang (BCST)

1. Project Background

Location: Khao Nor Chuchi including Khao Pra-Bang Khram Wildlife Sanctuary, Krabi, Thailand. **Area:** 20,000ha **Coordinates:** 7° 50' N 99° 22' E

Gurney's Pitta, listed by IUCN as Endangered, is the only bird species endemic to the Thai/Burmese Peninsula. It is threatened by the loss of lowland Sundaic forest, largely to oil palm and rubber plantations. Gurney's Pitta has become a flagship species for the conservation of lowland forest in the region.

The project seeks to address the problems of loss of lowland tropical forest in southern Thailand and gaps in knowledge of the entire distribution of Gurney's Pitta in Myanmar and central Thailand. Habitat loss in southern Thailand, although slowed by the original project, means that a high proportion of the tiny Gurney's Pitta population remaining there exists in fragments, which results in high rates of nest predation particularly by snakes. The capacity to reduce this effect and to increase the population by restoring critical areas of Gurney's Pitta nesting habitat was developed by the original project. This also raised interesting and important questions about the species' altitudinal and latitudinal limits and its possible persistence in central Thailand.

2. Project Partnerships

Project partnerships: The organisations involved in the Post Project have remained the same as for the original Darwin Project which has greatly facilitated the close relationship between the main partners. However, with agreement from the Darwin Secretariat, the Project Leader for the UK Partner (RSPB) was changed at the onset of the project and he has developed a good relationship with the main partners in country. This has not been difficult as he had been involved with the original Darwin project through his role as International Officer with overall responsibility for RSPB work in Thailand and Myanmar.

The shift of emphasis of this Post Project from research to forest restoration has meant that FORRU-CMU have a more significant role to play and are the main country partner in Thailand. Their role is to oversee implementation of the Technical Forest Restoration Strategy, developed under the original project, by supervising the FORRU-Krabi staff to produce enough trees for restoration of critical sites for GP habitat. Dr. Steve Elliott has made quarterly visits to the site to supervise the FORRU-Krabi staff and their nursery activities. The FORRU teams liaise closely with the National Parks, Wildlife and Plant Conservation Department (NPWPCD) staff at the Wildlife Sanctuary and with BCST.

The roles of BCST are to co-ordinate the community support for the reforestation programme and co-lead the research elements of the project in Thailand. They have a Field Coordinator based at Khao Nor Chuchi Wildlife Sanctuary who works closely with both FORRU and the NPWPCD Wildlife Sanctuary and Research Sections. Kritsana Kaewang (Director - BCST) has made biannual visits to the site to supervise progress and plan future work.

In Myanmar, the partner is BANCA and they are responsible for the research and survey work in Myanmar in collaboration with BirdLife IndoChina.

With the project spanning two countries it has been difficult to get all the partners together for a project planning meeting but opportunities have been taken to meet all partners at different stages during the project inception phase. At the onset of the project a Steering Group for Thailand was formed between the RSPB FORRU and BCST and a meeting held in Bangkok in April 2009. The UK partner made one other visits to Thailand in October 2009 to visit the site and hold additional Steering Group meeting to assess progress and plan for future work. In addition, a workshop was held in October involving representatives from appropriate sections of the Thai Govt (Central and Provincial) and local communities. A meeting was also held with Mr Chachwan, Head of the Wildlife Conservation Division (NPWPCD) to seek assistance with the issue of land tenure at the site. In between these meetings, e-mail has been the main form of communication as well as occassional Skype calls between RSPB and FORRU.

For Myanmar, a planning meeting was held in the UK in August 2009 between the Myanmar partner (BANCA), BirdLife IndoChina and RSPB. This meeting discussed the delay in undertaking the survey work in Myanmar and made provisions for commencing the surveys in early 2010.

Other Collaboration: In Thailand the project partners have collaborated with several new partners in the course of their work. The FORRU teams have forged a link with the Elephant Conservation Network in Kanchanburi, Western Thailand. Seven ECN members have visited the Krabi site and took part in an event with local school children and an exchange visit was organised for four of the FORRU Krabi team to visit the ECN site at Kanchanburi.

An Assistant Professor and two students from the Department of Biology, Faculty of Science, Prince of Songkla University, have started a research project entitled “Seed rain in the abandoned grassland of lowland rain forest in Khao Pra Bang Kram Wildlife Sanctury, Krabi, Thailand”. This project is looking at the pattern of seed rain in grassland and how to improve management regime for forest restoration. It is based in the area where Gurney’s pitta is found and will run from September 2009 to December 2010.

Similarly, BCST in the course of their education work have made new contacts. This includes a wetland specialist lecturer at Phuket University with experience in curriculum development for lowland wetlands and an Educational Planner from the Krabi Provincial Govt Education Department.

The CBD Focal Point is based within Office of Natural Resource and Environmental Policy Planning (ONEP) and she has been updated with progress. As a result, in May 2010 ONEP are holding a seminar and outdoor fair to celebrate "International Year of Biodiversity" and BCST have been invited to participate as Gurney's pitta has been selected as one of the focal species.

3. Project progress

3.1 Progress in carrying out project activities

One of the main activities has been to **extend the FORRU-Krabi tree nursery facility** at KNC to ensure a supply of trees for the reforestation programme. This has been achieved by employing a local team of 2 full-time and 2 part-time staff to propagate trees and undertake fieldwork. Kuhn Theerasak Konghor has developed into an effective Nursery Manager responsible for tree production. The part-time staff continue to be primarily responsible for the field plots (organizing planting, maintenance and monitoring) and hosting visiting groups in the nursery.

The nursery seed germination facility was expanded to approximately three times its former area to accommodate increased tree production. A similar expansion of the standing down area was also completed giving a maximum capacity of 20,000 trees.

The phenology study, started under the first Darwin project, has continued. Every 3 weeks, FORRU-Krabi staff scan 68 local forest tree species (1 to 8 individuals per species, depending on availability) with binoculars, and scored them for flowers and fruits. The primary objective of this work is to determine when each species flowers and fruits to optimise seed collection times.

Tree production increased to almost 19,000 trees during the year with 10,500 (of 23 species) growing fast enough for use during the planting season.

Specimens of young seedlings are now also being collected from the nursery, to act as a reference collection for support of surveys of natural forest regeneration in the future. All specimens are lodged at the Chiang Mai University Herbarium. Seedling growth monitoring experiments were completed for 15 species during the current reporting period and started for 7 species.

As part of the routine activities at the nursery, **tree production is closely monitored**. The staff keep records at all stages including initial seed collection, sowing, germinations of tree growth, seedlings and planting out. Reports are submitted to Dr Elliott at FORRU-CMU and he has made four visits to the project area during the year.

Ms. Panitnard Tunjai (Dia) and Dr. Stephen Elliott regularly undertake **nursery inspection and training**. Dia visits the site monthly to help out with staff management, set work schedules and checks on data collection. She contributed to the restoration strategy document (and translated it into Thai) and is undertaking experiments on direct seeding on-site as part of her PhD study.

Dr. Stephen Elliott supervises staff training, reporting and financial administration. He made four site visits during the year to provide on-site project development and supervision and to assess progress with tree production and the site planting preparations.

The nursery has **supplied trees to three local tree planting initiatives**. A total of 1,050 saplings have been provided with 550 going to local villages and 500 for the Natta Waree Hot Spring Resort, Klong Thom, Krabi.

Every opportunity has been taken to **involve local people in aspects of reforestation** from school children participating in the "Treasure Tree" programme (see below) to communities being mobilised to assist with the site preparation and planting programmes (see below). Over 40 people from local communities participated in the first planting event, which is helping to develop a sense of stewardship within the local communities.

In October, a **workshop was held with local authorities and communities to help identify sites for restoration**. Twenty-eight participants from Local Government, Department of National Parks, Wildlife and Plant Conservation, Local Community, FORRU, BCST and RSPB attended. The objectives of the workshop were to bring people up to speed on Gurney's pitta status, identify areas for reforestation and develop a 5-10 yrs plan of restoration. (See summary report in Annex 3).

After presentations on the current status and conservation activities relating to Gurney's pitta with previous Darwin support, the participants were divided into two groups, local communities and conservationists. GIS mapping facilities were provided and the idea was for each group to identify potential areas for restoration based on their interest (ie land ownership and conservation) and then compare the areas selected and see if there was any overlap. The areas selected would then be ground-truthed for potential restoration.

The workshop outcomes were only partially successful with just one site being selected by both groups for possible replanting. Nevertheless, there were ten other sites identified for field inspection as well as two sites to monitor that had previously been replanted.

The site visits to assess the suitability for reforestation revealed an all too common situation in southern Thailand forests. Of the six new sites visited, three have already been encroached and gone under either oil palm or rubber plantation. Two sites (including the site selected by both groups) are showing various stages of natural regeneration and can be enhanced by maintenance planting. Only one site was found suitable for reforestation by enrichment planting with climax species.

Two previously planted sites by the Reserve Forest staff were also visited and one has been lost to rubber plantation while the other is progressing very well and natural regeneration has complemented the planted areas.

The overall conclusion from the workshop was that although it was a worthwhile exercise in bringing various stakeholders together it did not generate the anticipated number of sites to develop a 5-10 year reforestation plan. Subsequent discussions have resulted in an alternative approach that will be developed in the second year. This will focus on identifying the important low lying gullies and streams connecting fragmented forest areas and consulting with local communities and Government staff for agreement on replanting.

Consultation with the Forestry Officials for permission to plant inside the Wildlife Sanctuary was initiated at an early stage and permission was granted for a site to be planted. This permission was unexpectedly withdrawn, and permission granted for a different site. Between May and August, a total of 3 planting plans were prepared, submitted, approved and then cancelled by Government officials. The site finally agreed for planting was authorised in August.

This issue was discussed at the October workshop and appears to have been resolved, as a further site inside the Wildlife Sanctuary has recently been authorised for replanting in the second year.

Under the “Global Warming Tree Planting Project” the Regional Conservation Office in Nakorn Sri Thammarat has a large planting program within the Wildlife Sanctuary of 300 rai (48ha) funded by Sumnakngarn Anuluk 5 Reforestation Section. FORRU participated in the **forest restoration** by providing trees and assisting with the planting of a smaller 10rai (1.6ha) sub-plot. Gurney’s Pitta had been presented in the adjacent forest two years previously.

The planting event was carried out in August 2009, much later than desirable (optimal planting time is late May for Krabi) due to bureaucratic impediments. Despite working closely with Government Officials, the location of the plot was constantly changed. Finally, 3,000 framework trees, (raised over the previous year in the nursery) were planted and a sub-plot of 2 rai (0.3ha), 32 species were selected and labelled for monitoring (30 individuals per species). As well as Wildlife Sanctuary and Reserve Forest staff, local communities were mobilised to participate in the planting activities.

For the site planted in August 2009, **project staff monitored the labelled trees** for baseline height and root collar diameter in September. A further inspection in late September found that weed control operations had been carried out well and surviving trees were growing vigorously and most were in good condition. However, roughly 10-20% of the trees inspected had been severed at the root collar by large, burrowing, beetle larvae (which is currently being identified). This is the same problem that occurred in a plot planted on a similar site (grass-covered with acidic, sandy soil) in 2006.

Further monitoring has shown that the lateness of the planting and shortness of time before the end of the rainy season to do weeding and fertilizer application resulted in an average of 53% mortality of the trees planted. However, the growth of the remaining trees has been reasonably good.

The re-opening of the **Interpretation Centre** has unfortunately been delayed due to shortage of money to complete the construction. It was anticipated that the local community would be awarded a grant from the local government but this was not forthcoming and so alternative sources of finance are being sought.

A very successful “Treasure Tree” programme has been developed involving local school children in seed collection. Along with the involvement of the local communities in the planting programme this is building a sense of “community stewardship” of the nursery and planted plots. Teachers nominate pupils to join activities in and around the nursery, such as tree seed collection, germination and potting. Their participation is recorded on a Treasure Tree Club member card. After five activities the children are rewarded with “treasure” (i.e. a T-shirt). Large labels, advertising the scheme, have been placed on the identified framework species (from the strategy document) and progress with collection of seeds of those species is displayed on a large poster in front of the nursery. Six events have been run in the first year with between 20-25 local school children at each event.

Seven team members from Elephant Conservation Network, Kanchanaburi took part in the October event observing the Treasure Tree event, seed collection methods, seed processing and seedling stands at the nursery. Later the same month four members from the FORRU Krabi team were then invited to go and study with the ECN Kanchanaburi project team, resulting in a nice exchange learning experience between the two teams.

As well as partnering with FORRU on the Treasure Tree activities, BCST have been **developing the school education programme**. The Community Liaison Officer BCST employ is a local person and he has developed his capacity through school visits and liaising with local teachers. Along with a colleague from the Government Department of Parks and Wildlife staff, regular visits have been made to the three schools adjacent to the Wildlife Sanctuary. Talks and activities have been developed relating to the forest and Gurney’s pitta conservation. Each school has been visited 6 times and on each occasion a different class of about 40 children have participated. This gives a total of about 240 children from each of he three schools being involved. In addition, the teachers from each class attend and participate in the activities.

BCST have also been working with local teachers and the first Teacher Training course is planned early in year two to develop ways of incorporating aspects of the project into the school curriculum.

Two weekend youth camps have been organised with 50 children between the ages of 10-14 years. The programme includes participating in the Treasure Tree programme, talks and practical exercises relating to birds and their habitats, bird watching, educational games, painting etc. As a practice to cement what they have learnt, the children play the role of bird guides to other schools. These camps are proving very popular with requests from the schools to hold similar camps in different habitats.

The **fieldwork in Myanmar** was unfortunately delayed largely due to the relatively late announcement of the successful Darwin applications in late February. Survey work for Gurney's pitta is between March and May and so there was insufficient time between receive confirmation that we would receive funding and the start of the survey season. However, plans were put in place to do the survey starting in March 2010 and things were on course to be complete by the end of May.

The analysis of existing data to **identify key sites in Myanmar** was done and sites chosen for survey work. However, the **survey work** was delayed until March 2010 and will be completed by May 2010. All other activities in Myanmar have therefore been put back for completion in the second year.

With the survey work in Myanmar delayed and therefore no new data on which to assess **potential new sites in Thailand** it was agreed with the Department of National Parks and Wildlife Conservation (DNPWC) that they would survey all possible sites within protected areas in southern and central Thailand in the first year. Once we have the data from Myanmar we can reassess if there are other sites worth surveying in the second year of the project.

Distribution surveys were undertaken at 15 protected forest areas in southern and central Thailand by the DNPWC at the start of the first year. Over 60 staff from the 5 Research Stations across the country came together for the survey. An initial training exercise in the methodology was given, representative transects were selected and bird call playback method used to locate the birds up to an elevation of 300m. The sites are distributed across the Central and Southern Regions of Thailand with 5 of the sites bordering Myanmar, adjacent to Lenya National Park. In addition, a population survey was undertaken in Khao Nor Chuchi.

Disappointingly, the distribution survey revealed no evidence of Guney's pitta in any of the 15 protected forest areas although other species of pitta were found. One area which held Gurney's pitta in the past has suffered from encroachment and been converted to a rubber plantation. Other promising areas were adjacent to various plantations and the integrity of the forest compromised.

Four forest areas were considered to have the potential to hold Gurney's pitta and could be considered for forest restoration. These sites will be re-surveyed in year two.

The survey at Khao Nor Chuchi covered 19 transects across all the lowland forest both inside and outside the protected area and found at least 12 individual birds. This figure is slightly down on recent years but not unexpected as it was a particularly dry, hot season and bird activity such as calling would be greatly reduced. 62% of birds were found outside the protected area, all birds were at an altitude below 200m and over 70% within 500m of a stream. (See summary report in Annex 3).

These results are useful and along with information from Myanmar will help to design the survey methods in year two.

3.2 Progress towards Project Outputs

Overall progress towards the project outputs has been good. The tree nursery capacity has been expanded and the production of 19,000 tress in year one is on target to produce 40,000 by the end of the project. Monitoring of the nursery by FORRU has been very effective with good records kept, regular reports and visits by Dr Elliott and Ms. Panitnard Tunjai.

Likewise, the area of regenerating Gurney's pitta habitat has increased with one new area (1.6ha) planted inside the sanctuary and two further areas, one inside and one outside the sanctuary, already identified for planting in year two. These areas amount to 4.2ha which brings the total just short of the project target of 6ha. It is anticipated that further areas will be identified and prepared to enable planting to take place in May 2011 just after the project officially finishes. This will take the total area past 6ha.

The assumption that the Thai authorities continue to support forest restoration is still valid as there were setbacks in gaining authorisation to reforest the initial plot but hopefully this issue has now been addressed.

Leaving behind a legacy is not an easy concept to measure and monitor and it will be difficult to realistically gauge if the communities will continue to protect the restored forest beyond the life of the project. However, community education and participation in events has generally been good although the delay in re-opening the Information Centre has constrained the contact possible with some members of the local communities.

Participation by school children in the "Treasure Tree" programme has been excellent and is something worth expanding to other projects. The school visits and youth camps have gone well and have plugged a gap in the curriculum as gauged by the request by the teachers for more of the same relating to different habitats. Leaders from the local villages participated in the workshop to identify potential areas for replanting and the communities have been enthusiastic participants in the subsequent planting programme. So there is every chance they will not damage the restored areas but whether this will be true of other areas of forest is difficult to say.

The delay in undertaking survey work in Myanmar has caused some problems although a resolution was proposed that has helped the issue. Survey work was underway at the end of the year and the results will help identify site for future survey work in Thailand. In the meantime, new areas in Thailand were identified from existing knowledge although the subsequent survey work disappointingly did not detect any birds outside of the known area at Khao Nor Chuchi.

3.3 Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Year 1 Total	Year 2 Total	Total to date	Number planned for this reporting period
Established codes					
4A	Number of undergraduate students to receive training	2		2	2
4B	Number of training weeks to be provided	5		5	5
4C	Number of postgraduate students to receive training	1		1	1
4D	Number of training weeks to be provided	2		2	2
7	Number of (ie different types - not volume - of material produced) training materials to be produced for use by host country	0		0	0
8	Number of weeks to be spent by UK project staff on project work in the host country	2		2	2
9	Number of species/habitat management plans (or action plans) to be produced for Governments, public authorities, or other implementing agencies in the host country	0		0	0
11B	Number of papers to be submitted to peer reviewed journals	0		0	0
12B	Number of computer based databases to be **enhanced** and handed over to host country	1		1	1
13B	Number of species reference collections to be **enhanced** and handed over to host country(ies)	1		1	1
14A	Number of conferences/seminars/ workshops to be **organised** to present/disseminate findings	0		1	1
14B	Number of conferences/seminars/ workshops **attended** at which findings from Darwin project work will be presented/ disseminated.	0		0	0
15A	Number of national press releases in host country(ies)	1		1	1
15B	Number of local press releases in host country(ies)	0		0	0
15C	Number of national press releases in UK	1		0	1
15D	Number of local press releases in UK	0		0	0
16A	Number of newsletters to be produced	0		0	0
16B	Estimated circulation of each newsletter in the host country(ies)	0		0	0
18A	Number of national TV programmes/features in host country(ies)	0		0	0
18C	Number of local TV programmes/features in host country(ies)	0		0	0
19C	Number of local radio interviews/features in host country(ies)	1		1	1
22	Number of permanent field plots to be established during the project and continued after Darwin funding has ceased	1		1	1
23	Value of resources raised from other sources (ie in addition to Darwin funding) for project work	£16,164		£13,164	£16,164

Table 2 Publications

Type (eg journals, manual, CDs)	Detail (title, author, year)	Publishers (name, city)	Available from (eg contact address, website)	Cost £

3.4 Progress towards the project purpose and outcomes

Progress towards the project purpose has been encouraging. One site within the Wildlife Sanctuary has been planted, although tree survival rate is relatively low due to the lateness of the planting. Two other sites have been identified for planting and it is anticipated that other sites will be found in year two. After the initial disappointment of not generating many sites from the consultation process with local communities and Government staff, a different approach is being developed whereby streamside areas will be identified which might be more palatable to landowners for planting.

The assumption that the political situation in both countries permits work to proceed still holds true. In Myanmar, with elections scheduled for sometime in 2010 the government is being very cautious about granting permissions to survey in remote areas. Likewise, the recent political troubles in Thailand resulted in curfews in parts of the country. It is unlikely that it will have a direct impact on the project in year two but the situation will be monitored closely.

The indicators are still valid for measuring the outcomes.

3.5 Progress towards impact on biodiversity, sustainable use or equitable sharing of biodiversity benefits

The impact of the longer-term Darwin project on biodiversity has already been positive with Gurney's pitta being uplisted from Critically Endangered to Endangered by IUCN. The survey work in Myanmar will reveal more about the species northerly and altitudinal limits which may lead to more birds being discovered or an increase in population estimates in future. However, this is unlikely to happen before the end of this project in 2011.

4. Monitoring, evaluation and lessons

Monitoring and evaluation activities have largely been considered in Section 3. These range from ongoing records and assessment of tree nursery activities to checking of a representative sample of trees after planting out. FORRU nursery staff provide regular reports (in Thai language) and Dr Elliott produces a 6-monthly report on activities, an example of which is appended to this report (see separate attachment).

One area where monitoring and evaluation needs improving is in the educational activities, particularly the formal contact with school children. Several activities are taking place, (Treasure Tree programme, school visits and Youth Camps) but formal assessment of levels of understanding and learning has been difficult. Monitoring during the Youth Camps takes the form of getting the students to demonstrate what they have learnt y acting as bird guides to other students, but a more formal assessment needs to be developed, maybe in the form of a before and after questionnaire.

5. Actions taken in response to previous reviews (if applicable)

Not applicable

6. Other comments on progress not covered elsewhere

The most significant difficulty faced during the first year of the project was identifying good areas to reforest and obtaining the permissions to plant. At the KNC Wildlife Sanctuary several sites were offered for replanting and then subsequently withdrawn resulting in delays in securing a site and a very late planting operation in August. The result has been over 50% mortality of trees although those remaining are growing well.

The October workshop generated several sites outside of the Sanctuary suggested by local communities and government officials but on field inspection most have been converted to plantation and only one proved possible to reforest. As a result we are taking a more proactive role and hope to identify land adjacent to important low lying gullies and streams to reforest. A narrow strip of land could act as corridors connecting fragmented forest areas. The first stage is to establish through GIS mapping and ground-truthing exactly where the streams are and then develop a scheme to reforest targeted areas. Some areas may only require enhancement planting whereas other areas may be under plantation and so some sort of compensation for the loss of crops might have to be established. The areas would be relatively small and so compensation may not necessarily be expensive.

7. Sustainability

In Thailand, the project is now well established and both local communities and Government staff are showing encouraging signs of stewardship towards the conservation of Gurney's pitta. This needs to be further encouraged for the remainder of the project to facilitate an exit strategy. The Thai Government has chosen Gurney's pitta as one of the species to promote during the International Year of Biodiversity and have now taken on the role of monitoring the species. If the nursery and staff can be maintained then it is anticipated that replanting in accordance with a long-term reforestation plan should be successful. It is expected that by the end of the project a long-term reforestation plan and a scheme to generate resources for maintaining the nursery and staff will be in place. The latter could be in the form of an "Adopt a Tree" scheme with corporate funding or public sponsorship.

In Myanmar the picture is less positive with little or no engagement by the Government. It remains to be seen if the ongoing efforts to define the boundaries of the proposed Lenya National Park will be heeded by the authorities. Things will become clearer once the elections are over and the new government in place.

8. Dissemination

The announcement of the success of the Post Project application was made in time to make the annual FORRU-CMU Newsletter in March 2009.

A local Radio station has a one-hour slot per week for staff from the Khao Nor Chuchi Wildlife Sanctuary to talk about wildlife in general and things happening around the Sanctuary. This has proved to be a useful medium to tell people about the Gurney's pitta work and generate support for the tree planting activities. BCST are hoping their Field Coordinator can appear on the programme.

The Darwin logo is prominently displayed at the nursery site on information boards both inside and out. Signboards are also displayed at sites replanted. These local initiatives target communities around the sanctuary.

To reach a wider audience of wildlife and environment enthusiasts, both in-country project partners have sections on their respective websites dedicated to Gurney's pitta and the Darwin projects.

Education materials for local schools and the Interpretation Centre are being developed which will explain the conservation issues around Gurney's pitta and it's forest habitat and will acknowledge Darwin and carry the logo.

9. Project Expenditure

Table 3 Project expenditure during the reporting period (Defra Financial Year 1 April 2008 to 31 March 2009)

Item	**Budget**	**Expenditure**	**Variance**
Rent, rates, heating, overheads etc			
Office costs (eg postage, telephone, stationery)			
Travel and subsistence			
Operation costs			
Capital items/equipment (specify)			
Contribution towards computer equipment for FORRU			
Contribution towards fieldwork equipment for BANCA			
Contribution towards project equipment for BCST			
Others (specify)			
Salaries (specify by individual)			
Steve Elliott (Restoration Leader)			
Htin Hla (Project Leader, Myanmar)			
Jonathan Eames (Project Manager, Myanmar)			
Various - Nursery and Planting Staff, Thailand			
Various - Fieldwork staff - Myanmar			
Various - BCST Project Staff - Thailand			
TOTAL			

Note: above expenditure figures are indicative at this stage subject to project audit.

The project has operated a budget cap policy with regard to expenditure incurred in the project area. Thus, when the budget for a particular budget category has been fully expended, no further costs are charged to that budget category, and instead is funded from other sources. It is for this reason that the above table shows expenditure matching budget for many of the specified budget categories. This policy has been used successfully for other Darwin projects led by the RSPB, so we have chosen to use the same model for this project.

Underspend has been observed on the Travel and Subsistence budget line. This was because the flight ticket for the second project trip of the UK-based project leader to Thailand was not purchased before 1 April 2010

10. OPTIONAL: Outstanding achievements of your project during the reporting period (300-400 words maximum). This section may be used for publicity purposes

I agree for LTS and the Darwin Secretariat to publish the content of this section (please leave this line in to indicate your agreement to use any material you provide here)

Annex 1 Report of progress and achievements against Logical Framework for Financial Year: 2009/10

Project summary	Measurable Indicators	Progress and Achievements April 2009 - March 2010	Actions required/planned for next period
Goal: *To draw on expertise relevant to biodiversity from within the United Kingdom to work with local partners in countries rich in biodiversity but constrained in resources to achieve* *The conservation of biological diversity,* *The sustainable use of its components, and* *The fair and equitable sharing of the benefits arising out of the utilisation of genetic resources*		*(report on any contribution towards positive impact on biodiversity or positive changes in the conditions of human communities associated with biodiversity eg steps towards sustainable use or equitable sharing of costs or benefits)*	*(do not fill not applicable)*
Purpose To restore critical sites of Gurney's Pitta habitat in southern Thailand by planting framework tree species and to clarify the species' status elsewhere	Regenerating forest area in range of species in southern Thailand in t2 is greater than in t0 Population of Gurney's Pitta in southern Thailand in t2 equal to or greater that in t0 Improved estimates of population and distribution fed into conservation assessments and global reporting mechanisms	Progress has generally been good with nursery tree production increasing and one site replanted. Engagement with the local community and schools has been positive. Survey work in Myanmar has been delayed but potential new areas in Thailand were surveyed although new populations were not discovered	Some difficulties have been encountered in identifying and getting agreement for critical areas to replant. A new approach will be tried whereby important streams connecting known Gurney's pitta areas will be identified and agreements sort with communities/landowners to restore these areas. Modelling of data from Myanmar to identify potentially occupied sites in central Thailand and survey.
Output 1. Capacity of tree nursery expanded and supplying saplings for site replanting and community forest restoration activities	Tree production increases to at least 40,000 trees per year by t2	Progress has been good with activities at the nursery running well. It has recently been noticed the indicator has been worded slightly wrongly as the overall production target has always been 40,000 trees for the two year project period and not per year. This needs to be clarified with Darwin.	
Activity 1.1 Expand tree nursery, recruit and train additional staff		Tree nursery expanded to 20,000 capacity and staff recruited and trained. Nursery activities will continue as planned.	
Activity 1.2 Expand seed collection and increase tree production		Phenology study continued from previous Darwin Project. Seedling reference collection housed at Chiang Mai University Herbarium. First year tree production of 19,000 on target and level of effort will be maintained for year two.	

Activity 1.3 Monitor tree production (monthly reports)		Monthly monitoring reports produced and will continue.
Activity 1.4 Undertake nursery inspections and training by FORRU-CMU		There has been regular inspection by FORRU Senior staff and training given as necessary. This will continue in year two.
Output 2. Area of regenerating Gurney's Pitta habitat increased and fragmentation of existing forest patches reduced in the species' range in southern Thailand	At least 6 ha of former Gurney's Pitta habitat planted with framework tree species and undergoing recovery by t2 At least 2 occupied forest fragments re-connected by restoration	Progress is on target with one area of 1.6ha planted and another area of 2.56ha planned for 2010 planting season. The remaining areas to make up a minimum of 6ha will be allocated in year two and preparations for planting will start just as this project is ending. The second indicator has been more problematic and we will put more emphasis on replanting streamside corridors to connect occupied forest areas in year 2.
Activity 2.1 Supply trees to local tree planting initiatives		Three local initiatives have been supported and more are in the pipeline for the 2nd year.
Activity 2.2 Train local people in tree planting and forest restoration		Very successful Treasure Tree programme for school children initiated and good community participation in planting activities. These will be expanded in year 2.
Activity 2.3 Undertake spatial analyses of existing forest cover and consult local authorities and communities to identify key sites for restoration		Analysis done and stakeholders consulted but only one new area suitable for replanting. New approach in year two will focus on streamside corridors.
Activity 2.4 Liaise with local forest authorities to obtain formal permission to restore forest		Some bureaucratic problems were experienced when dealing with areas inside the Wildlife Sanctuary. This has hopefully been resolved but efforts will continue to secure areas for replanting both inside and outside the sanctuary
Activity 2.5 Undertake forest restoration at two critical sites		One site planted this year although tree survival rate was disappointing due to the late planting date. The site will be closely monitored in year 2. A 2nd critical site has been identified and made ready for planting in the May 2010.
Activity 2.6 Monitor recovery of planted sites		Initial site regularly monitored and this will continue in year 2.
Output 3 Legacy of restored forest sites enhanced through community education and participation	Local people involved in site protection and monitoring by t2 Local schoolchildren participate in forest monitoring Local schoolteachers have access to educational material	Local community leaders participated in a workshop to identify areas to reforest and subsequent participation in the planting events has been encouraging. The Treasure Tree programme for school children has been excellent. Both of these give hope that there will be a lasting legacy of forest protection. School visits and Youth Camps have also helped, and educational material will be further developed in year 2

Activity 3.1 Recruit staff for interpretation centre		Reopening of the Interpretation Centre has been delayed which has impacted on the recruitment of staff. Efforts will be increased to find funding to complete the construction in year 2.
Activity 3.2 Develop education and awareness-raising programme for local people		Treasure Tree programme, school visits and Youth Camps have all run well. In addition, local people have engaged in the replanting efforts. The programmes will continue in year 2 but with an increase in children learning about the local tree species, seed collection methods etc.
Activity 3.4 Prepare educational material for local schools		Preparation of materials is in hand and will be developed further after the Teacher Training workshops in year 2.
Output 4 Species' status reassessed after fieldwork in Myanmar clarifies the species' altitudinal and latitudinal limits and results fed into conservation initiatives	Altitudinal and latitudinal limits identified and species' global conservation status reassessed using results Boundaries of proposed Lenya National Park redrafted to include substantial population of Gurney's Pitta Areas potentially suitable for Gurney's Pitta in central Thailand identified from models outputs	Progress on this output has been delayed with survey work in Myanmar only starting towards the end of the year. However, potential areas in central and southern Thailand were identified from existing knowledge.
Activity 4.1 Analyse existing data to identify key sites for surveys in Myanmar		Analysis was done and sites chosen for survey.
Activity 4.2 Undertake fieldwork in southern Myanmar		Fieldwork was delayed but underway at the end of year 1. Survey work will be completed at the beginning of year 2.
Activity 4.3 Analyse data to improve current models of distribution		No progress, delayed until year 2.
Activity 4.4 Redraw boundaries of proposed Lenya NP		No progress, delayed until year 2.
Activity 4.5 Reassess species' conservation status against Red List Criteria		Scheduled for year 2.
Activity 4.6 Write up results for scientific literature		No progress, delayed until year 2
Output 5 Sites identified by models as potentially suitable for the species elsewhere in Thailand searched and if birds are found, appropriate steps taken to conserve them	Sites identified by models as potentially suitable for Gurney's Pitta in Thailand searched and size of any populations assessed Department of National Parks alerted to any populations found	The sites identified from Output 4 were surveyed but disappointingly, no records of Gurney's pitta were found at any new site. The indicators are appropriate and pleasingly the surveys were undertaken by the Governments own Research team with support from BCST. The results from Myanmar will help determine survey areas for year 2

Activity 5.1 Use results of activity 3.3 to identify potentially occupied sites in central Thailand	Activity 4.3 was delayed but sites were identified based on existing knowledge. Data from Myanmar will be analysed in year 2 and any new sites in central Thailand identified.
Activity 5.2 Undertake field visits to potential sites to assess species' presence and assess threats to forest	Survey work was undertaken by Government at 15 sites but no new populations were discovered. Repeat surveys will take place in year 2 at four of these sites and any new sites from activity 5.1.

Annex 2 Project's full current logframe

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Goal: Effective contribution in support of the implementation of the objectives of the Convention on Biological Diversity (CBD), the Convention on Trade in Endangered Species (CITES), and the Convention on the Conservation of Migratory Species (CMS), as well as related targets set by countries rich in biodiversity but constrained in resources.			
Sub-Goal: To clarify and improve the global conservation status of Gurney's Pitta	IUCN Red List categorisation revised in the light of project outcomes IUCN Red List status does not decline from Endangered	IUCN Red List category	
Purpose To restore critical sites of Gurney's Pitta habitat in southern Thailand by planting framework tree species and to clarify the species' status elsewhere	Regenerating forest area in range of species in southern Thailand in t2 is greater than in t0 Population of Gurney's Pitta in southern Thailand in t2 equal to or greater that in t0 Improved estimates of population and distribution fed into conservation assessments and global reporting mechanisms	GIS database of forest area Population survey IUCN threat status assessments	Political situation in both countries permits work to proceed
Outputs (add or delete rows as necessary) 1. Capacity of tree nursery expanded and supplying saplings for site replanting and community forest restoration activities	Tree production increases to at least 40,000 trees per year by t2	Monthly nursery reports, submitted to FORRU-CMU by FORRU-Krabi staff and twice yearly inspection of the nursery by senior FORRU-CMU staff	

2. Area of regenerating Gurney's Pitta habitat increased and fragmentation of existing forest patches reduced in the species' range in southern Thailand	At least 6 ha of former Gurney's Pitta habitat planted with framework tree species and undergoing recovery by t2 At least 2 occupied forest fragments re-connected by restoration	Assessment of field performance of planted trees in restored sites. GIS database of forest area	Thai authorities continue to support forest restoration work
3. Legacy of restored forest sites enhanced through community education and participation	Local people involved in site protection and monitoring by t2 Local schoolchildren participate in forest monitoring Local schoolteachers have access to educational material	Reports of reforestation events Monitoring reports School visits by project staff	
4. Species' status reassessed after fieldwork in Myanmar clarifies the species' altitudinal and latitudinal limits and results fed into conservation initiatives	Altitudinal and latitudinal limits identified and species' global conservation status reassessed using results Boundaries of proposed Lenya National Park redrafted to include substantial population of Gurney's Pitta Areas potentially suitable for Gurney's Pitta in central Thailand identified from models outputs	Scientific paper IUCN categorisation Maps of proposed Lenya NP Scientific paper	Political situation in southern Myanmar permits field visits
5. Sites identified by models as potentially suitable for the species elsewhere in Thailand searched and if birds are found, appropriate steps taken to conserve them	Sites identified by models as potentially suitable for Gurney's Pitta in Thailand searched and size of any populations assessed Department of National Parks alerted to any populations found	Scientific paper Meeting reports	

Annex 3 Supplementary material as supporting evidence

Checklist for submission

	Check
Is the report less than 5MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	Yes
Is your report more than 5MB? If so, please advise Darwin-Projects@ltsi.co.uk that the report will be send by post on CD, putting the project number in the Subject line.	No
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	Yes
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number.	No
Have you involved your partners in preparation of the report and named the main contributors	Yes
Have you completed the Project Expenditure table fully?	Yes
Do not include claim forms or other communications with this report.	