

Darwin Initiative: Half Year Report

(due 31 October 2007)

Project Ref. No.	162/13/030
Project Title	Gurney's Pitta Research and Conservation in Thailand and Myanmar
Country(ies)	Thailand, Myanmar
UK Organisation	RSPB
Collaborator(s)	FORRU, BANCA, BCST, DNPWPC
Project Leader	Paul Donald
Report date	November 2007
Report No. (HYR 1/2/3/4)	HYR 3
Project website	http://www.bcst.or.th/eng/project/pitta.htm

1. Outline progress over the last 6 months (April – September) against the agreed baseline timetable for the project (if your project has started less than 6 months ago, please report on the period since start up).

The project continues to employ a staff of three (2 full time and 1 half time) in Krabi to carry out nursery work and fieldwork for the project. Kuhn Taweesak Polchoo (from the Reserved Forest Office) has continued to be employed by the project full time and has developed into an effective nursery/field officer. Kuhn Teerasak Kongho (who replaced Kuhn Pichet Juntawangso earlier this year) has a diploma in horticulture and is a member of the local community. He is developing well as a nursery technician. Ms. Juthamart Thongtao continues to work half time, whilst also studying for a degree in business. She is responsible for all paperwork related to the project and submits monthly progress reports and receipts etc. efficiently and on time. Khun Cherdsak Kuaraksa and Dr. Steve Elliott (FORRU) worked on-site during April to May 2007 to review nursery data, carry out training for the local staff on data quality control and select a site for field experiments with Kuhn Somprat Polchoo, Reserve Forest Chief. They also held talks with the local administration "Tambon" office, concerning an additional planting event with the local community and with local schoolteacher Ach. Vilaiwan, about involvement of school pupils in nursery and field activities. In late June, Cherdsak returned to the site with FORRU field officer Kuhn Panitnard Tunjai to supervise establishment of field trials to test various treatments for accelerated natural regeneration with enrichment planting with climax tree species. In September, Cherdsak, Panitnard and J.F. Maxwell worked with local staff to carry out a vegetation survey in the experimental plots, confirm identification of trees being grown in the nursery and continue to describe the local tree flora. Steve and Cherdsak will visit the plots again this month (November) to carry out end-of-first-growing-season monitoring for the plants planted this year and end-of-second-rainy-season monitoring for plots planted last year. Taxonomic botanist, Mr. J. F. Maxwell, continued working in the field and at CMU herbarium to i) ensure all trees being studied in this project are correctly identified; ii) to identify as many tree species as possible that comprise the forest habitat of Gurney's Pitta and iii) to identify naturally regenerating plants in the accelerated natural regeneration (ANR) experimental plots established in June. The number of recorded tree species for the area currently stands at 164, of which more than half have been experimented on in the nursery. Voucher specimens of foliage plus flowers and/or fruit are lodged a CMU herbarium. In May, we presented the new sanctuary Chief with professional "botanical garden style" species name labels for trees along the trail to the Morakot Pool (popular tourist attraction in the WS) – to increase the educational value of the trail for visitors. The tree nursery built at the local community centre at the entrance to the WS HQ in Y1 continues to function well. It serves 4 main purposes i) production of trees for experimental plantings; ii) production of trees for planting by other organizations; iii) generation of data on germination and seedling growth and iv) act as an education facility for local people to build capacity for tree planting in the local community and raise awareness of the benefits of forest restoration.

The nursery produced more than enough trees for planting an additional 4-rai experimental plot in June and is currently growing seedlings of more than 80 indigenous forest tree species for assessment of their potential to act as framework tree species and accelerate natural forest regeneration. Excess trees were donated to various local tree planting events to mark the King's 80th birthday, including the local Khlong Tom School which requested 270 trees of around 30 species for planting around the school's extensive campus. Seeds or wildlings of a total of 88 indigenous forest tree species have been collected for nursery experiments on germination and/or seedling growth thus far. Germination trials have now been completed for 41 species. Seedling growth experiments on 23 species are underway (our early growth experiments were destroyed by careless forestry officials!). 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. A study of the phenology of 68 local forest tree species (1 to 8 individuals each, depending on availability) is continuing, with data collection having proceeded for nearly two years for most species. The primary objective of this work is to determine when each species flowers and fruits to optimize seed collection times. This year we expanded the trial plot system by establishing an experiment that investigates accelerated natural regeneration. Most degraded areas in the study site are already undergoing fairly rapid natural regeneration, supporting many species of tree seedlings, saplings and sprouting tree stumps. First we exposed such natural regeneration with weeding in May, marked and measured samples of all naturally regenerating species and then applied 4 mulching/fertilizer treatments to enhance this growth. We also carried out enrichment planting with mostly large-seeded, climax forest tree species, which are usually underrepresented in natural regeneration. The following treatments were therefore applied to both naturally established and planted trees in 4 x 1 rai plots:-

- weeding + cardboard + fertilizer (100 gm in a ring)
- weeding + cardboard + NO fertilizer
- weeding + NO cardboard + fertilizer (100 gm in a ring)
- NO weeding No cardboard No fertilizer (Control)

Weeding was carried out in May to expose naturally established trees in plots 1 to 3. The natural regeneration was inter-planted with saplings of 7 climax tree species from the nursery at the end of June. Local villagers, as well as wildlife sanctuary staff, reserved forest staff, local school children, joined the Krabi project team for planting day. Post-planting monitoring was carried out in July. Monitoring at the end of the growth season will be carried out in November. Mortality in the grassland plots (with low natural regeneration), planted last year, was high, but the trees that survived the first year appear to now be growing well (see photo below). These plots will also be monitored to collect end-of-2nd growing season data in November.

Researchers working for the Department of National Parks, working with staff of the Bird Conservation Society of Thailand, continue to research Gurney's Pitta in its remaining habitats. Reorganisation of the BCST Committee now means that Committee members are more involved in operations than previously, and the BCST Manager, Kritsana Kaewplang, has spent much time at the site. A new Community Liaison Officer, Khun Marut, has been appointed by BCST and is working with local people to help them realise the potential of using the conservation of the forest to generate income. A significant development has been the recruitment to the DNP research team of local villagers, involving them in the conservation of the species directly. Researchers have also been using radio telemetry to track the movements of a closely related species, the Hooded Pitta, generating useful information on how terrestrial insectivores use the forest and training local researchers in radio tracking methods. The new chief of the Wildlife Sanctuary, Khun Bashan, has been provided with a GIS tool to locate all sightings of Gurney's Pitta, allowing him to focus efforts on conserving occupied forest patches and to design a GIS-based system to start to re-connect isolated forest patches occupied by the species. BCST staff are working to obtain permission for a researcher from Myanmar to visit Thailand to take vegetation measurements at the site.

All in all, progress in Thailand exceeds all expectations.

In Myanmar, the unstable political situation and serious internal conflict has prevented much progress, but a report detailing the second season of fieldwork has been completed and some of the data collected have been analysed. It is clear that the range, both latitudinal and altitudinal, of the species is larger than previously thought, but also clear that deforestation, largely for oil palm, is an increasing threat to these

lowland forests. The Burmese researcher who led the work in 2007 will visit Thailand to undertake similar vegetation surveys there, liaising with Thai researchers. Progress in Myanmar has been slow, but given the extremely difficult political situation there, and the fact that the research team contracted both malaria and dysentery during the fieldwork period, this is to be expected.

2. Give details of any notable problems or unexpected developments that the project has encountered over the last 6 months. Explain what impact these could have on the project and whether the changes will affect the budget and timetable of project activities.

The political situation in Myanmar continues to disrupt the project, making it difficult for project partners to move around the country or to visit the necessary regions. However, this did not disrupt fieldwork, which was complete for 2007 before the well publicised clashes with the armed forces started. It is hoped the situation will permit the final season of fieldwork in 2008.

Have any of these issues been discussed with the Darwin Secretariat and if so, have changes been made to the original agreement?

No

Discussed with the DI Secretariat: no/yes, in..... (month/yr)

Changes to the project schedule/workplan: no/yes, in.....(month/yr)

3. Are there any other issues you wish to raise relating to the project or to Darwin's management, monitoring, or financial procedures? No

If you were asked to provide a response to this year's annual report review with your next half year report, please attach your response to this document.

Please note: Any planned modifications to your project schedule/workplan or budget should not be discussed in this report but raised with the Darwin Secretariat directly.

Please send your **completed form email** to Eilidh Young, Darwin Initiative M&E Programme at Darwin-Projects@ectf-ed.org.uk . The report should be between 1-2 pages maximum. **Please state your project reference number in the header of your email message eg Subject: 14-075 Darwin Half Year Report**