

Darwin Initiative: Half Year Report

(due 31 October 2009)

Project Ref. No.	162/15/017
Project Title	Implementing a Recovery Plan for the Critically Endangered Pygmy Hog in Assam.
Country(ies)	India
UK Organisation	Durrell Wildlife Conservation Trust
Collaborator(s)	<ol style="list-style-type: none">1. The Forest Department (FD), Ministry of Environment and Forests, Government of Assam.2. IUCN – SSC Pigs Peccaries and Hippos Specialist Group (PPHSG)3. Pygmy Hog Conservation Programme Research & Breeding Centre (PHCPRBC), Basistha, Assam
Project Leader	Prof. John E. Fa
Report date	31 October 2009
Report No. (HYR 1/2/3/4)	HYR 4
Project website	None at present

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).

Progress in carrying out project activities

The highlight of this period was continued survival of reintroduced hogs in the wild last year and release of nine more captive-bred pygmy hogs in the grasslands of Sonai Rupai Wildlife Sanctuary. Regular field surveys proved that about two-third of the 16 hogs reintroduced in May 2008 had survived even a year after their release and the evidence suggested reproduction among the released animals. Since this critically endangered species was known from a single site in the world, the successful reintroduction had created a second wild population. Other aspects of the project included continued efforts to improve the protection and management of grasslands in the existing (Manas) and the reintroduction (Sonai Rupai) sites. Outreach and capacity building activities of the programme were implemented to strengthen the security of the existing and reintroduced pygmy hog populations. In addition to efforts in Sonai Rupai and Nameri National Park, coordination with the authorities of Orang National Park were initiated for proper protection, scientific management and restoration of grasslands for planned release of hogs in 2011.

Pygmy hog surveys

Rapid field surveys were carried out in the alluvial grasslands of Manas, Nameri and Orang National Parks and the release site in Sonai Rupai Wildlife Sanctuary to determine habitat status and suitability for pygmy hogs and other sensitive species of these grasslands. In addition, surveys in Orang tried to locate the most suitable release sites and to affirm the absence of any existing pygmy hogs. In the light of a couple of unfounded reports of pygmy hog sightings in Orang, it was important to determine the correct status and these periodical surveys indicated that the species does not exist in the Park. As mentioned earlier, the habitat in northern part of Orang appeared eminently suitable and area lies within the known distribution range of pygmy hog. Some parts of Orang suffers from high-levels of anthropogenic disturbances and unless the protection strengthened and sound management practices are initiated, re-establishment of a sensitive grassland animal like pygmy hog may be very difficult. The situation in Manas and Nameri has not changed since our last report and the central (Bansbari) range of Manas and the southern parts of Nameri with alluvial grasslands are still affected by illegal livestock grazing and thatch collection, as well as indiscriminate dry season grass burning.

Conservation breeding and captive population management

Altogether 21 (15♂♂ 6♀♀) babies survived after arrival of nine new litters at our Basistha conservation breeding facility under a planned breeding effort. The unusual male-female ratio was largely due to death of larger number of newborn females. The breeding plan is intended to ensure that only unrelated or distantly related animal are bred and optimal genetic heterozygosity is maintained in captivity. By the end September the captive population stood at 55 (34♂♂ 21♀♀), of which fifty animals were held at Basistha and five at Potasali holding facility. These were in addition to nine hogs released in Sonai Rupai in May.

Maintenance of facilities at Basistha breeding centre and Potasali pre-release centre needed substantial resources. The extended rainy season has worsened the weed problem in the simulated grassland habitat at Potasali.

Preparations for release

Twelve (5♂ 7♀♀) hogs in three groups were prepared for independent survival in the wild in the three large 'pre-release' enclosures densely planted with tall grass to simulate their natural habitat at Potasali, Nameri. The pre-release routine allowed them to become used to the conditions they will face in the wild and minimises contact they have with humans.

Marking and health screening: The hogs were marked for identification using microchip transponders as well through hair clipping. They underwent regular health screening.

Behavioural monitoring: Like in the last year it was encouraging to see that behaviour of the hogs changed quickly after they were shifted from the breeding centre to the pre-release enclosures and they were showing naturalistic behaviour within a few weeks at Potasali.

Habitat restoration and management at the release site: The staff and authorities of Sonai Rupai Wildlife Sanctuary were again advised to manage the grasslands scientifically. Except an accidental fire started by an untrained new staff, the general status of the grassland habitat in Sonai Rupai appeared satisfactory. By the time the hogs were released in May 2009, the burnt grassland too had recovered.

Release and monitoring in the wild

This time it was decided to release each social groups of the hogs in different locations within the same grassland. Suitable sites away from the areas where the hogs released in 2008 lived were identified and temporary release enclosures were erected for each group. These were protected from wild elephants and predators using solar powered electric fence and were kept under round-the-clock vigil from a hide on a tree. The hogs remained in the release enclosures for 2-3 days and then they were allowed to go out to the wild. The food offered to the hogs for these two days in the release enclosures ensured that the hogs kept returning to the release enclosure location for the delicacies and it was easier to monitor them. The hogs however were seen rarely at the release enclosure location after 3 weeks as they foraged profitably in the wild. Although three groups of hogs were prepared for release only two of these groups with 9 hogs could be released as one of the primiparous females in the third group had farrowed in the pre-release enclosure at Potasali and release of this group was postponed

The released hogs were monitored in the wild mostly by indirect method of locating 'field sign' (e.g. nests, forage marks, footprints, droppings, etc) and also directly by using a video camera trap carefully set up near nests. The surveys indicated that 10-11 hogs from the 16 hogs released in 2008 continued to survive in the Gelgeli grasslands of Sonai Rupai. They remained in an area within a radius of 100 to 1,000 m from the release location and kept moving their home nest sites. One of the adult females released in 2008 was seen in a pregnant state in May 2009 while a young male was observed over 2.5 km away from the release location before the 2009 hogs were released.

Training, capacity building and extension

Four frontline protection staff members of Sonai Rupai Wildlife Sanctuary were trained in wildlife monitoring. They along with their two trained colleagues assisted the project in monitoring the released hogs in Gelgeli grasslands. The school teachers and NGO members trained by the project are being assisted in their conservation education efforts around Manas National Park.

The construction of the Manas training centre at Bansbari has been largely completed but poor road access during flood season is delaying some finishing work in the building. It is however being used by the project staff involved in field surveys in Manas.

Meeting in Assam: A meeting was held in Guwahati in April 2009 to review and to prepare and action plan for the project activities. Besides the project personnel (John Fa, Goutam Narayan, Parag Deka) the meeting was attended by Project Consultants (William Oliver and Nandita Hazarika).

Seminar: A presentation on “Challenges for the recovery of the most endangered suiform, the pygmy hog (*Porcula salvania*)” was given by GN in a Symposium: Old World Pigs and New World Peccaries – Conservation Status, Management and Health at the 10th International Mammalogical Congress organised at Mendoza from 9 to 14 August 2009.

Community Conservation Initiatives

The community conservation initiatives in the fringe villages of Manas National Park continued through various activities. The Self Help Groups (SHGs) formed earlier to address economic and human-animal conflict issues were furthered strengthened. The major achievements were:

- Rapid Rural Appraisal was conducted for monitoring of community resource use.
- SHGs are engaged in piggery, weaving, betel nut processing activities, and have received training in beekeeping, betelnut leaf plate making, and tailoring.
- Bamboo plantation established and maintained by SHG members. Plans for setting up a nursery are underway.
- The SHG formed by ex-poachers is engaged in animal husbandry and has established a 2 ha rubber plantation
- Consultations were held community for design of the solar power fence for mitigating human-animal (mostly elephant and wild pig) conflict.
- Meetings held with communities in fringe villages to monitor mitigation interventions such as searchlights, tripwire, etc.
- A handbook on HEC mitigation methods was distributed in project as well as villages suffering from severe HEC.

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.

Floods in Manas area and Sonitpur Districts again caused operational problems and some of the planned activities could not be completed in time. While monitoring released pygmy hogs, risk of attack by wild elephants in Sonai Rupai was always there. One always needed armed guards and lookouts while working in tall elephant grass. The risk of drug resistant malaria in the pygmy hog too remained high.

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

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?

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**