



Assam Haathi Project Update

Quick Points

- Negligible damage caused by elephants in the project sites in a 6 month period.
- We now aim to work in 10 new villages across 7 sites in Assam
- Around 100 more copies of the AHP handbook have been distributed
- Chilli techniques proving popular in deterring elephants
- Light relief: solar lighting and spotlights proving key tools to ward off elephants
- Villagers raising their own funds to maintain their e-fences
- Sumatra team visit the AHP
- Education and training plans show early successes

AHP: successfully progressing into 2011

Both of our project areas have reported negligible loss of crops, property and no loss of lives/injury from October 2010 to March 2011.

The success of the project is set to grow. Human—elephant conflict (HEC) is a problem across most of the state, so we are now scaling up activities.



Wild elephants moving through rural areas in Assam

Human-elephant conflict occurs in almost two thirds of the 27 districts in Assam in varying degrees. We aim to work in 10 new villages across seven sites where HEC is a serious problem.

We achieved much during our first Darwin Project, and earned acknowledgment from other organisations who now come to us for HEC advice.

On achieving a second Darwin Award, the AHP is able to forge ahead into 2011 and expand its activities.

Crop-raiding and damage protection measures are increasingly being implemented in the worst affected villages.

We are doing more work to develop sustainable livelihoods and help communities start up small businesses.

This not only helps those affected by elephants but also provides opportunities for those affected by poverty.

Education events such as workshops, field trips, demonstrations and teacher training are proving popular.

Habitat protection measures are also a focus such a reforestation schemes, fire wood plantations and providing more fuel-efficient stoves.

The project is also continuing with the Assam-wide survey of conflict patterns. This data will be vital in helping us plan for a successful future .

Handbook marches on

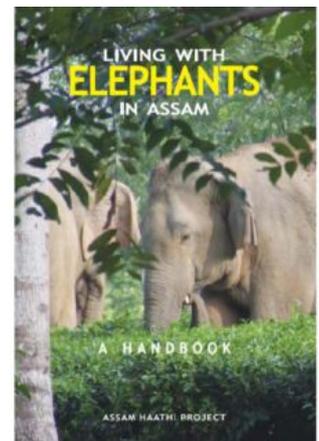
Around 100 more copies of the AHP handbook ‘Living with Elephants in Assam’ have been distributed.

The recipients included villages affected by Human-elephant conflict in areas previously not reached by the project.

Other recipients included educational institutions, youth clubs, Forest Department

officials, tea garden managers, researchers, visiting NGO members and the media.

The handbook is proving a valuable tool in raising awareness of mitigation techniques and confidence that it is possible for people and elephants to live along side each other.





Chilli being grown at one of AHP's project offices

When tested, "chilli-dusted" granaries remained untouched, while others in the same village were broken into by elephants

Chilli proving popular

Chilli has been implemented by the AHP as a tool in mitigating crop raiding since the project began.

Chilli smoke is one method which continues to be used. Recently five villages in Sonitpur and five in Goalpara have used chilli smoke to chase elephants away successfully from their crops and property.

The use of chilli fencing is now becoming more popular. In Nichinta, one of the project villages, a one kilometre long chilli fence has been installed. In November, this fence was successful in protecting 40 hectares of paddy fields belonging to two villages. The fence was re-greased in December. Since then over 1300 metres of new chilli fences have been installed in five locations including project villages and tea estates. Maintenance consists of regular re-greasing of the rope in order to maintain the effectiveness of this method.

The Goalpara team have also trialled a new technique. Designed to protect harvested rice in the granaries, the technique involves sprinkling chilli dust on granary wall ledges, and covering the bamboo storage bins with plastic sheets covered in chilli dust. Old newspapers or a thin cloth sheets covered in the dust also work. When tested, "chilli-dusted" granaries remained untouched, while others in the same village were broken into by elephants.

Since this trial, 10 households split between two different villages have used this method to safeguard their granaries.



Creating a chilli fence by coating ropes with grease and chilli paste

Work to develop chilli growing nurseries continues. In Sonitpur, 450 chilli plants have now been distributed to households. Meanwhile the demo plot in Goalpara is raising 2000 chilli plants of local *garo* variety and about 100 of the *bhot* variety (very hot!). The plants will be distributed and the fruit used as deterrents.

A local branch of the Indian Council for Agriculture Research, in Goalpara has requested assistance from the AHP to establish a chilli nursery (*bhot jolokia*) demo plot in Barigaon village in our project site area.

The successful use of chilli and the development of innovative techniques is set to stay an important part of the AHP.

Solar lighting to ward off elephants



Fixing the solar panels to provide important lighting

A hamlet consisting of 20 households located at the fringe of Hatigaon village, Goalpara, was provided with solar lighting systems to ward off elephants.

Five solar modules (35 Wp each) and a storage battery were provided to power two 9W CFL in each home.

The lights are operational for 2.5 hours in the evening. This will help the village as elephants are known to avoid well lit areas.

The community is also contented as grid based electricity is not likely to reach them in the near future.

Each beneficiary household contributes Rs 20/monthly to the maintenance fund. Families are saving an average Rs 200-300 /month (c.£4), which otherwise was spent on kerosene lamps for lighting.

This is an effective way to assist a community and help manage their HEC.

Spotlights: another key technique

Discussions with villagers reveal search lights to be one of the most popular methods used to deter elephants.

A total of 41 search lights have been distributed to villages throughout Sonitpur (14 lights in 10 villages) and Goalpara (27 lights in 16 villages).

Spotlights were also heralded by a recent study as one of the key techniques to use when guarding from elephants, mainly because they can be used quietly.

The study recently published in Conservation Letters found that when using techniques to move elephants away from crops, approaches which lack noise are more successful.

Spotlights can be used to safely direct elephants, moving them in a calm and controlled way. They are also relatively low cost, easy to maintain, plus easy and quick to use.

Study: Davies.T.E, et al (2011) **Effectiveness of intervention methods against crop-raiding elephants.** Conservation Letters DOI 10.1111/j.1755-63X.2011.00182.x



Silhouette of an elephant in the glare of a spotlight

Funds to maintain e-fences

Villages which the AHP has been working with have been raising their own funds to maintain their electric fences.

Households in the village of Rupajuli, Sonitpur, are raising money as a section of their electric fencing is awaiting repairs.

Bengkanda village, Goalpara had their energiser unit replaced, with inputs from the community managed maintenance fund.

Meetings have also been held with the households of Bamungopa, Goalpara to help establish a fence maintenance fund. Here all the 43 households contributed Rs 500 (c.£7) plus labour and wooden poles towards the installation of the 2 km fence.

A resolution was also passed by the villagers, where each household would contribute RS10 (approx 15p) monthly for maintenance.

This fence will protect homes and 80 acres of homestead gardens.

Plans are also underway to install a 5km solar powered fence in Sourang near Manas National Park. It is hoped when complete this fence will safeguard more than 100 households and their homestead gardens and agricultural fields. This is being assisted by the Pygmy Hog Conservation Programme.

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Exchanging experiences

in December 2010, four project field staff from the fellow Darwin funded elephant conflict project in Sumatra visited Assam and the Darwin funded AHP team.

The Sumatran team spent nine days in Assam visiting the field sites in Sonitpur and Goalpara.

Here they interacted with various stakeholders and learned from demonstrations.

The team also took the opportunity to discuss ideas and challenges with our field teams.

A number of staff from the AHP team are travelling to Sumatra in order to continue exchanging experiences.

We hope to bring you an update and share the outcomes of this experience soon.



Field staff from our fellow Darwin elephant project in Sumatra visit the Darwin AHP team in Assam

Education and Training

Education plans for the next two years are underway. Alongside producing awareness materials (e.g. posters, information cards), the AHP is running workshops and activities with teachers, students and communities.

For example, More than one hundred villagers took part in a one day villagers' motivation and environment awareness education programme in Bamunghopa, Goalpara. In addition, four environment awareness events for rural schools, with limited access to biodiversity information, were conducted in Sonitpur (1, 2). A total of 105 students and 22 adults took part. The event was successful with very positive responses.

2011 has also seen much success with training provided by AHP. The provision of training for chilli mitigation techniques continues to grow, as has the training for new livelihoods. Examples include training for the cultivation of crops and spices, assisting with the development of commercial bamboo and rubber plantations, the cultivation of mustard and turmeric, and training into the raising of livestock.

As part of our increased focus into training for the production of products, a local NGO, *Dhriti*, organised the training of two field office staff in manufacture of environment friendly disposable dishes from betel nut leaf (3). We plan to establish micro-enterprise based on this knowledge in existing and new project villages.

Natures foster also provided training for team members into a scheme which provides 4 hens to households for meat and egg production. Once they breed successfully, the family returns four hens to the scheme. This could be initiated throughout the project areas.

Education and training will continue to grow and is helping to create sustainable livelihoods and raise awareness about elephants and their conservation.



1 Education event



2 Education—learning about elephants



3 Betel nut leaf plate making training

The Assam Haathi Project

A community-based approach to helping people in Assam (Northeast India) live safely alongside wild elephants.

<http://www.assamhaathiproject.org/>

Chester Zoo (UK) and EcoSystems India (Assam) are working together to find ways to make the co-existence of elephants and people possible. The Assam Haathi Project (*haathi* is the Hindi and Assamese word for *elephant*) focuses on mitigating human-elephant conflict to facilitate the conservation of elephants in Assam.