

## **Project Update: December 2014**

2014 has been a big year for the 'Elephants and Bees' project in Sri Lanka. Over the past 6 months spent in Sri Lanka, I've been busy building relationships with the farmers of Dewagiriya village, the village chosen for the first formal beehive fence trial in Asia. I've had the opportunity to learn invaluable elephant identification and data collection skills from renowned elephant researchers and conservationists Dr Prithviraj Fernando and Dr Jenny Pastorini. I've also received valuable beekeeping advice from Sri Lankan expert Dr Wasantha Punchihewa. With collaborators Save the Elephants (STE) and the Sri Lankan Wildlife Conservation Society (SLWCS), our beehive fence trial is progressing solidly and should in months to come make a real difference to the lives of the farmers we work with.

Our first big achievement of 2014 was the completion of social research interviews with 27 households in Dewagiriya Village. With the assistance of my translator Supun Wellappuliarachchi and my local field assistant Supun Herath, we met as many families as possible to learn about the crop raiding behaviour and patterns of elephants frequenting the village, their perceptions of living alongside elephants, and their thoughts on the potential of beehives as an elephant deterrent. Farmers spoke of spending months at a time staying awake at nights to guard their fields from elephants, of never being able to go anywhere as a family as the house also has to be constantly guarded, and of waking during the night to the sounds of an elephant breaking through the kitchen wall to steal rice and salt. Nonetheless most people retain some respect for these giants and want to see a future for elephants, though not necessarily in their own backyards. People are doubtful that an elephant will be scared by bees but are keen to try the idea and excited by the prospect of generating extra income through honey sales. All farmers have been provided with data sheets to log elephant sightings, crop raiding attempts and extent of any damage caused.

The interviews enabled us to get a feeling for which areas of the village are most at threat from human-elephant conflict and who has a genuine interest in participating in the trial.

Furthermore, they provide a useful comparison tool as we will repeat the interviews with a slightly modified questionnaire in another year and then assess if perceptions of living alongside elephants and the potential of beehive fencing as an elephant deterrent have changed.

From information garnered through the interviews and further surveys of the village and individual farms, I selected the first households for participation in the trial, focusing on protection of homes and gardens, and thus aiming to keep families safe at night while the men are guarding the paddy fields. As preparation for the coming paddy season commenced, coinciding with the time of year that crop raiding once again begins to peak, we worked with farmers to build the first beehive fences. Local field assistants Supun and Sarath A.G. were instrumental in coordinating difficult logistics of transporting heavy fence posts from our field base along muddy tracks to Dewagiriya Village, and of translating between the farmers and I so we could plan exactly where to build the fences around their properties. It took many hours and days of preparing beehives, digging holes for posts, hammering and nailing, ferrying posts around farms, making coconut leaf roofs to shade the

beehives and hanging hives. We are proud to say we now have the first four beehive fences complete.

As the monsoon has begun, I am currently at home in Australia working on the logistics and planning for next year. We are ready to hit the ground running in February 2015, building another four beehives and completing the first stage of the trial, beginning beekeeping workshops with the farmers and introducing colonies to the hives, and progressing from the project set up to the scientific data collection of crop raiding behaviour in Dewagiriya Village, nearby water tanks and in Wasgamuwa National park. This data collection will provide us with information on elephant movement patterns, social behaviour and temperament, and enable us to strengthen the beehive fence design specific for the Sri Lankan crop raiding situation.

Enthusiasm from the farmers is building and the families are very impressed with their beehive fences. Mr Somathilaka, our first beehive fence farmer, hopes to continue his leadership by being the first farmer to attract bees to his hives. Just a week ago, two elephants visited the Ariyadasa family home, their footprints clearly visible on the outskirts of the fence. Without bee occupations, elephants will quickly learn the fence represents no threat to them but their initial avoidance is encouraging, and also increases the farmer's interest in the beehive fence technique throughout the village.

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