

Project Update: March 2015

These are exciting times at our beehive fence research site in Sri Lanka, with beehive fences completed and encircling the homes of five households, and plans for two additional fences to be built within the next few weeks. The timing couldn't be better, as farmers have been busily harvesting their acres of paddy field. This is tireless work, not only the physical labour involved in the harvest itself, but the sleepless nights spent guarding the fields from tree huts, making sure they are safe from the hungry bellies of elephants living nearby.

Unfortunately for these farmers, their crops are not yet safe despite being out of the ground and bagged into neat 50 kg sacks. Most families will now store these huge bags of rice inside their home, keeping them until the market price is good. Elephants, being the intelligent beings they are and also having huge daily forage intake requirements, are known to break into people's houses – knocking down walls or tearing off roofs, to access the crops stored inside.

After leaving the field site when the rainy season rendered village roads unpassable, and fence building and elephant observations virtually impossible for a few months, I have returned happy to see the beehive fences being looked after, and the farmers still enthused about using this deterrent technique. I am, of course, not happy to see that the human-elephant conflict is showing no sign of abating and perhaps worsening in the general area. Just a few weeks ago, I watched a large bull elephant, heavily scarred and marred with wounds and abscesses (presumably human-inflicted) meander out of the forest and towards the water tank for a drink. He was minding his own business but had apparently been harassing a farmer's buffalo the night before, hence the farmer chased after him and lit a government issued firecracker that let off a terrific boom to chase him away. The bull barely flinched, and continued on his way. I also spent a sleepless night at my research camp, listening to fire crackers igniting all around me and the sounds of the community yelling and clapping and banging, as families tried for well over an hour to deter elephants from their crops. I finally understood what people mean when they say it is difficult, and sometimes impossible, to scare elephants away. From the safety of my bed, I felt a tiny bit of the intensity and challenges of human-elephant coexistence which reinforced just how serious it is to securing a future for elephants, that we can work with communities to facilitate a more peaceful environment for both species.

A small positive is that the predominant view of the local community also seems to be that elephants should be protected. So long as the people are protected too, nobody wants to see this magnificent animal become extinct. This statement thoroughly emphasises the need to work legitimately with communities to implement community-based crop-raiding deterrents that farmers can use with minimal assistance – of which the beehive fence is a brilliant example. In situations such as here, where government assistance in reducing human-elephant conflict is often insufficient, and a relatively large population of elephants spent a good amount of time outside of protected park boundaries, farmers are desperately keen to find new solutions to protect their livelihoods and families. Farmers are especially excited by the additional income generating opportunity of producing honey, while also protected their homes from elephants.

Right now, we are very close to finishing the first stage of our beehive fence trial in Sri Lanka, which is to establish eight beehive fences around the home and garden areas of farmers, which will be monitored closely, along with unfenced areas, during the coming crop seasons. Already, we have observed, through the presence of their giant footprints, elephants approaching one of the fences and deciding not to break through. However, without bee occupations elephants will soon realise the physical structure of the fence imposes no real threat. We have one hive occupied naturally – showing the potential of this heavily vegetated area for beekeeping, and will be working with local beekeeping expert Dr. R.W.K. Punchihewa to colonise hives at all fence sites in the coming weeks. I look forward to keeping you updated on our progress with both the beehive fences, and our concurrent investigations of elephant crop-raiding behaviour.

For further information on the project, please contact me on Kylie.M.Butler@uon.edu.au.

I extend a huge thankyou to the Rufford Small Grants for Nature Foundation, Chester Zoo Conservation Fund, Elephant Action League and Phoenix Zoo Conservation and Science Grant for their financial support, without which this project would not be possible. Sincerest thanks also go to collaborating partners The Sri Lanka Wildlife Conservation Society, Save the Elephants and Professor M. Wijayagunawardane (University of Peradeniya) for all of their valuable input and assistance.

