

## **Q&A with Rich Reading, VP of Science and Conservation, about Bees for Elephants**

**By Lindsey Hoffman, February 1, 2024**

We sat down to talk with Rich Reading, VP of Science and Conservation at Butterfly Pavilion, to talk about his experience with our Bees for Elephants project, included how it started and where it's headed next.

### **Q: What type of human-elephant conflict does the bee fencing project work to mitigate?**

**Rich:** So the conflict is that elephants would come in to villages at night and raid crop fields and basically destroy people's livelihoods in a single night because they can eat a lot of food. Or they would rip up water sources. They'd pull water pipes out of the ground. They'd suck dry wells and water troughs for livestock. And people would try to scare them away. And sometimes because the elephants there are kind of afraid of people, they might actually hurt or kill people. One woman was even trampled by an elephant that came into the village. In addition, there can be retaliatory killing of the elephants in these communities as well.

### **Q: How do the bee fences work?**

**Rich:** Bee fences were developed in Kenya by a woman named Lucy King. People told her that elephants will never bother a tree where there's a beehive. And she's like, well, that's interesting. And then she started looking into it. And indeed, it was true that wherever there's a beehive, the elephants wouldn't knock down the tree or rip off the bark or take off branches because the bees would swarm. So she got the idea of, boy, if we use bees, because elephants seem to be really afraid of them, we could really mitigate these problems with elephants entering villages. The bee fences are build in strategic areas to surround villages. When elephants approach, they hear or see the bee swarms and are immediately scared and turned off.

### **Q: How did you start the Bees for Elephants project at Butterfly Pavilion?**

**Rich:** Initially it started through a collaboration with the Katie Adamson Conservation Fund. They approached us because they were looking for partners to help mitigate human-elephant conflicts in Nepal.

I had known about bee fencing through some colleagues in Kenya working with the Save the Elephant Fund. So when we were asked about partnering on this, we knew it could be a great fit. And so we went to Nepal and set up the bee fences, but it didn't work that well in Nepal because they're not African elephants and they're not Africanized bees, which we learned is necessary. We also had a problem with a lot of bee eaters hurting our bee hives.

After that, that same group got us involved in Tanzania where we started working with the local conservation group, Tanzanian Elephant Fund in three communities in Tanzania, including Kiswani, where we do the most work.

**Q: How you identify which communities to work in?**

**Rich:** The Tanzanian Elephant Fund and local governments are able to locate where the conflicts are the greatest based on complaints and requests for funding for mitigation. So they lead the efforts to identify which communities need the bee fences the most and are asking for outside support and help.

**Q: What's it like collaborating with the community members and community leaders?**

**Rich:** It's great. They do most of the work by far and are very happy and grateful that we're helping. They definitely welcome us into the culture while we're there, and work hard to put together the fences and then maintain them.

Usually it's a cadre of, or a smaller subset of people that are part of the project. Maybe 30 people help set up the bee fences, and then a smaller group works to maintain them over the years. They often have a sense of community and camaraderie, so they have this kind of bees for elephants group.

Also, there are native bee-keepers that are involved, and then there are a lot of people new to beekeeping that we can help train.

**Q: In addition to reducing human-elephant conflict, how else does this project impact and benefit the community?**

**Rich:** There are so many ways that bee fences benefit the communities. Not only do the bee fences keep elephants out of the villages, but harvest honey from the bee hives provides a new income source. We also focus on empowering women. So a lot of the

women are the ones who are running these programs, or at least intimately involved in them. So now, they can bring in additional money for the family and it gives them a greater say in the community as well as in their home. And we think this is really important for a lot of reasons. We do the same for disabled and disadvantaged people, where we're really focused on making sure they are involved and leaders in these projects.

So, the income from the honey, empowering women and disabled community members, the lack of destruction of the fields and the water, and the reduced incidence of elephants injuring humans are all tangible benefits. And of course, there's less retaliatory killing of the elephants, so the elephants benefit as well. It's a win all the way around.

**Q: What's unique about this approach compared to other approaches to mitigate the human/elephant conflict.**

**Rich:** A lot of the other techniques that people use just don't work, or they only work temporarily, and the elephants figure out a way around them. But in this case, elephants are innately afraid of Africanized bees. They're born with this fear of bees. And so it's extremely effective. **So the first year before we put up the fence in Kisawni, they had 763 instances of human/elephant conflict. And then the year after we put up the fence, they had just 6.** It is truly incredible.

It's just such a win-win. I really don't see any downside to this approach at all.

**Q: What is Butterfly Pavilion's involvement after the bee fences are built?**

**Rich:** We help them with problem solving and with marketing. For example, if they have, like, disease outbreaks or issues with the bees, we troubleshoot with them and try to find solutions. So we're here as a resource. But the idea is we're here as a resource, but once the community is set up with the actual materials and infrastructure, they manage it. Then we can bring this approach to new communities who need it.

**Q: Have we identified any other communities to set up bee fences?**

**Rich:** There's a few communities in Tanzania, but we're hoping to expand into Botswana. I just got back, and I think the situation's good there. It looks like a lot of forage for bees,

and there's a big problem with elephants coming into crop fields in northeastern Botswana. I saw the damage the elephants caused, and, you know, people are looking for a solution, and I think we can offer them one. So I'm hoping we can expand in Botswana.