ANNUAL REPORT 20222

Bring The Elephant Home Foundation For a world where elephants and people can thrive

The Netherlands, Thailand, South Africa Approved by the board: 20/01/2023



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1. INTRODUCTION

Bring The Elephant Home is proud to share our 2022 Annual Report and we hope you will enjoy reading it. One of our biggest achievements in 2022 is that our ambition, inspiration, and outof-the-box thinking, while always embracing collaboration and community engagement, have resulted in the growth of our organization, an increased contribution to a more peaceful relationship between humans and elephants, and innovation in the field of conservation in general and elephant conservation in particular. We believe that community engagement in conservation makes sustainable growth possible, increases resilience, and is essential to creating a just and more sustainable world.

One of the most interesting highlights of 2022 is our collaborative efforts with the farmers in Ruam Thai village and their dedication to finding sustainable solutions for human-elephant



coexistence. Together, we are developing creative methods that help reduce crop damage by elephants. Our research into the effectiveness of this project is showing promising results for elephants, people, and the environment. Together with our colleagues at Trunks and Leaves and the University of Colorado Boulder, we are expanding the project to other human-elephant conflict areas in Asia, in order to reduce violence between humans and elephants and diversify local livelihoods.

The Tom Yum Project, which is part of the Human Elephant Coexistence Through Alternative Agriculture Research (HECTAAR), supports local farmers as they plant alternative crops (crop species that elephants don't like to eat). Not only does the team of local community members plant and maintain plots in pesticide-free farms around the village, but they also purchase the

harvest from farmers that grow alternative crops, turn them into community-based products, and sell them to local shops in Thailand and internationally through our webshop www. elephantandco.org.

To make a switch of crops viable, a reliable market for the new crops is obviously needed. And preferably one that is fair! Through Fairtrade Original, farmers from Ruam Thai village are involved in a capacity-building program to support the transition toward regenerative farming practices that support socio-ecological sustainability and human-elephant coexistence.

In South Africa, through the University of KwaZulu-Natal, we have conducted research on the value of elephants and strategies to align elephant conservation with human well-being and global aspirations. Two scientific papers were published in 2002: Human-elephant coexistence through aligning conservation with societal aspirations was published in Global Ecology and Conservation in September 2022 and The value of elephants: A pluralist approach was published in Ecosystem Services in December 2022. The research was funded by the National Department of Forestry, Fisheries and the Environment of South Africa, under the National Research Strategy for Elephant Management, and will be used in the development of South Africa's National Elephant Conservation Strategy. Our elephant behaviour research in Kariega Game Reserve added tracking elephant movement through LoRa collars to our research methods to gain a better insight into the impact of range expansion on elephant well-being.

Bring The Elephant Home has hosted a number of conservation action events since the Covid restrictions were lifted in Thailand in 2022. Volunteers planted native seedlings in the local tree nursery, helped restore wild elephant habitat, learned about how beekeeping can reduce elephant damage, and got a taste of what it's like to live with wild elephants from local farmers.

In Thailand, we recently initiated a research project on areas with dwindling wild elephant populations, as well as strategies to protect them, such as rewilding Asian elephants. Nationally, we have identified forest complexes with small wild elephant populations and minimum humanelephant conflicts, minimal deforestation, limited human development, and generally positive attitudes of neighboring communities towards elephants. We are now conducting a thorough count of the wild elephants and are gaining insights into their demographics in the location that ranked as the priority area for intervention.

By joining forces across different countries, we have been able to conduct research, initiate conservation projects, and take conservation actions that promote a better future for both elephants and those living alongside them. With the help of our collective efforts, we can create a world where both species are able to thrive. We thank each one of you for your meaningful contributions! We are excited about our upcoming projects and anticipate further success in 2023 with your assistance and support!

Antoinette van de Water **Director Bring The Elephant Home**



2. MISSION AND OBJECTIVES

2.1 Mission: peaceful coexistence of elephants and people

To increase the chances of survival for elephants and work towards a world in which people and elephants can thrive together, benefiting from each other's existence.

2.2 Strategy: integrated community-based elephant conservation

We have devoted over fifteen years to formulating and executing a communitybased conservation strategy, which considers the ecological, economic, cultural, social, and spiritual importance of the elephant. All solutions proposed are designed so that all parties benefit: both humans and elephants as well as their surroundings.

2.3 Goals: sustainable positive change

We are dedicated to creating sustainable positive change for elephants, the communities that coexist with them, the environment they live in, and the wider world of nature conservation. By promoting links between the well-being



of elephants and people, Bring The Elephant Home's projects are transforming the relationship between elephants, humans, and their environments, enabling mutually beneficial outcomes for all. Encompassing shared decisionmaking, ownership, sustainability, equality, pride, and partnerships, we strongly believe that longlasting positive effects will occur and systems on which these parties depend will be restored. In doing this, we aim to contribute to innovative conservation visions and methods in general.

2.4 **Objectives**

- Conserving elephants and restoring, expanding, and protecting their habitat in collaboration with local stakeholders;
- Designing, implementing, testing, and promoting sustainable solutions for humanelephant coexistence that provide socioecological and economic benefits;
- Encouraging local participation in nature conservation and empowering local communities;
- Raising awareness about the importance of elephant conservation and nature in general.
- Contributing to the growing body of scientific knowledge that points towards equitable and sustainable nature conservation

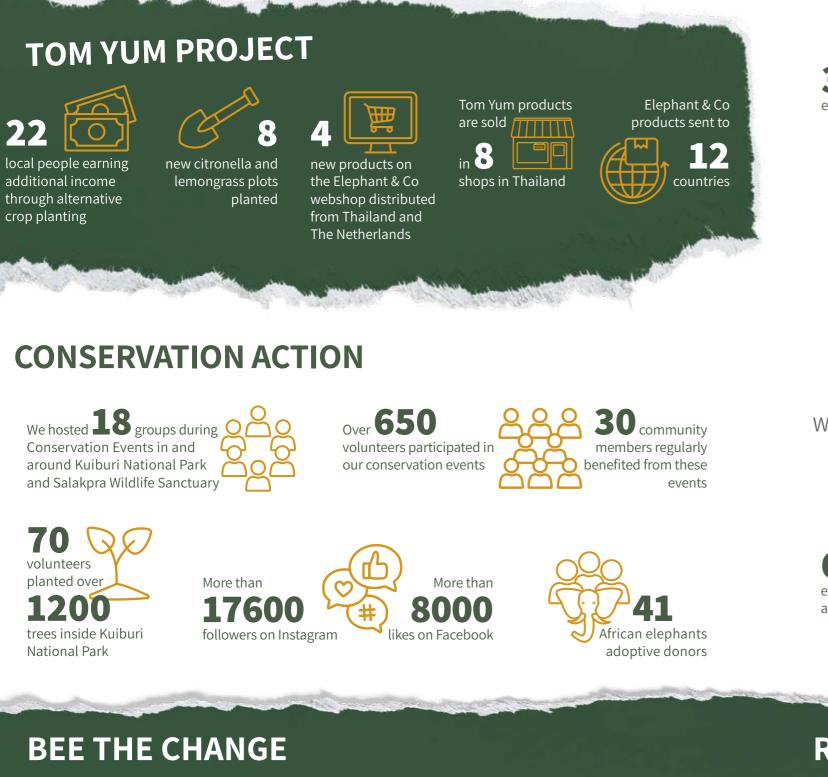
THIS WAS OUR 2022!

ELEPHANT RESEARCH

WILD ELEPHANTS IN KUIBURI NATIONAL PARK, THAILAND

70

5-minute



scan 338 sampling behavioral elephant detections observations CAPTIVE ELEPHANTS IN THAILAND חחחח 6 captive elephants at 3 venues have been observed

WILD ELEPHANTS IN KARIEGA GAME RESERVE, SOUTH AFRICA





GPS points collected with an average home range size and areas of highest occupation estimated



1

beehives managed managed by farmers living nearby Kuiburi National Park



Beeyond Honey sold in the webshop, market fairs and retail partners

4.0 farmers have shown themselves interested in using bees to protect their farms from elephant damage

RESEARCH ON THE POTENTIAL OF REWILDING



Stakeholder meetings









and interviews were C completed

in **3** forest complexes

103 community questionnaires were completed in the North, and



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3. PROJECTS AND PROGRAMS 2022

All our projects are in collaboration with local organizations and include the participation of local communities. In 2022, we have prioritized collaboration, strengthened our network, and securing long-term funding for our projects. We have developed relationships with multi-level stakeholders in Thailand, South Africa, Sri Lanka, and the United States, resulting in international collaboration to realize human-elephant coexistence.

- 4.1 **Tom Yum project**
- 4.2 Bee the Change project
- **Trees for elephants** 4.3
- 4.4 **Research Asian elephants**
- 4.5 **Research African elephants**
- 4.6 **Environmental Education &** Collaboration

Tom Yum project 4.1

BTEH began supporting the local community in designing and implementing experiments with crop species that they believed would be

unpalatable to elephants in 2020. The initial experimental plots contained crops such as lemongrass, galangal, kaffir lime, and chili – all of which happen to be the ingredients of Tom Yum soup. In 2022, the preliminary results of Ave Owen's research illustrate that lemongrass and citronella not only experienced the least damage from elephants, but were also resistant to insect-transmitted diseases, drought, and other environmental factors that impacted the yield of other experimental crop species. Elephants spent very little time in the plot, making their way to the neighboring pineapple plantation. In a household survey conducted by Ave Owen, half of the participants stated to be interested in changing to crop species unpalatable to elephants. However, in order to switch to crops that the elephants don't like to eat, having a reliable and fair market is essential. In September 2022, we connected with Fairtrade Original in the Netherlands. Fairtrade Original closely collaborates with farmers in Thailand, assisting with training and capacity building to aid farmers in getting Fairtrade certified and collaborating



with a factory in Bangkok to export the products to the Netherlands.

As a first introduction to Fairtrade Thailand. representatives of Ruam Thai's pineapple growers visited the Sisaket Fairtrade Farmer Group, part of Fairtrade Original, learning valuable lessons and gaining great inspiration. The farmers in Ruam Thai have experience in growing alternative crops for personal use, but not so much as a cash crop. They were eager to hear more about how the Sisaket Fairtrade Farmer Group grows these crops commercially, and importantly, the value of fair trade, and how this model can contribute to the well-being of individual farmers, as well as the well-being of the community. The Sisaket Fairtrade Farmer Group shared their knowledge and twelve years of experience with Fairtrade with great enthusiasm. The farmers discussed what it takes to become Fairtrade certified, they visited certified farms, and left with invaluable insights and inspiration. This could be a game-changer for Ruam Thai farmers, the Tom Yum project, and in realizing human-elephant coexistence. We are grateful for the hospitality and guidance of the farmers in Sisaket and the guidance from Fairtrade Original. The second step involves a site visit of Fair Trade Thailand to Ruam Thai. During this visit, the farms will be inspected, especially environmental conditions, the availability of water, previous use of chemicals, and the farmers' knowledge and experience in planting alternative crops.

In May 2022, we welcomed Ph.D. researcher Tyler Nuckols of The University of Colorado, Boulder

"Elephants have already pushed over" all the trees in my land and the land of neighboring farmers. If we can plant these crops like how the farmers are doing here, we can all keep farming without worrying about elephants."

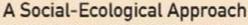
– Khun Noot

Alternative Crops Thailand - 2022 Pilot Study



Tyler Nuckols PhD Student and Researcher The University of Colorado

n Thailand I Study_ human-elephant inte critical social-ecological approach to unpack hidden, visible, ast, and present drivers of "conflict," centering and working oliaboratively with communities in evaluating the use of



Research Question - "Is there a relationship between the percentage of a farmer's edible and non-edible crops on the risk of elephant crop damage, and how does this impact farmer attitudes, perceptions, and behavior toward elephants?"



1. Study and measure the human dimensions

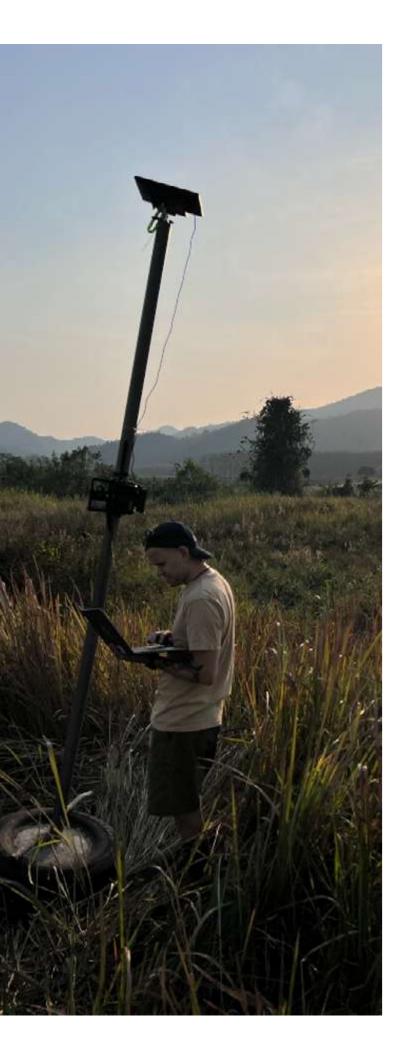
- a. Cropping strategies b. Psychology
- c. Risk & vulnerability
- d. Sociodemographics

2. Study and measure elephant behavior a. Foraging b. Movemen

We hosted focus groups and interviews with key informants to review, trial, and provide feedback on social science methods and tools. We also spent time with community members learning and listening to their experiences, stories, and expertise. To gather baseline data on the wild elephants, we used game cameras and nightly direct observations to capture activity in crops. Work continues ahead in 2023 with our full study and alternative cropping experiment!



in Ruam Thai for a first 4-month pilot study on the potential of alternative cropping as a method to promote human-elephant coexistence, which will contribute to the completion of their Ph.D. dissertation. Together with a research affiliate of Bring The Elephant Home, Tyler first sought to gain firsthand experience with the focal study location, network with community members, listen to local experiences with elephants, and complete a preliminary social-ecological inventory. During this pilot field season, Tyler conducted five semi-structured key informant interviews and co-hosted two focus group sessions to gain feedback on our social science tools and conduct informal interviews with participants. Furthermore, they conducted 30 surveys with randomly selected households in Ruam Thai to gather baseline data and test the instrument. Following the pilot study, Tyler will assess areas of highest elephant presence, activity,



"Our land is different and our weather is different, but I want to try planting these crops and if there is a guaranteed market I think other farmers in our village will want to try too."

– Khun Sak

and crop damage in our focal study location of crop fields and will look at the social and ecological conditions that result in vulnerability to human-elephant conflict for smallholder farmers. This will then be linked to our Tom Yum project, by assessing how the practice of growing mono-crop pineapple compares to a regime of crop species unpalatable to elephants in terms of changes in measurable farmer vulnerability and adaptive capacity. The expected study outcome is a model that combines social, spatial, and ecological data to identify hotspot areas of high human-elephant conflict vulnerability and elephant activity to target management and mitigation solutions.

Community development

Whenever there is an opportunity, the Tom Yum Project community group sells elephantfriendly products and shares stories about their alternative crop planting and beekeeping initiatives to realize human-elephant coexistence. We are always proud to see our local team talking passionately about the project, inspiring other communities by showing that there are sustainable ways to peacefully coexist with elephants that are good for people and elephants.

4.2 Bee the Change project

Bring The Elephant Home and a newly established community enterprise, the Ruam Thai Beekeeping Group held community meetings to establish goals and a shared vision for using native species beehive fences on



farms on the border of Kuiburi National Park. This locally-led initiative seeks to not only use bees to deter elephants, but also to earn alternative income through the sale of honey and bee colonies, increase biodiversity with the presence of native pollinators, and reduce the use of chemical sprays in agricultural areas. Group members came together to help each other prepare their beehive boxes, build hive stands, and participate in a hive maintenance demonstration. Currently, 40 beekeepers are managing over 200 beehives in Ruam Thai village, and once enough colonies are thriving, the group will meet again to build a beehive fence that is suited for this species, and collect



data on the effectiveness of the fence in deterring elephants.

The Tom Yum project, another local group in the village, began using beeswax from the beekeeping group's beehives to create elephant-friendly lip balm, a new product that is now sold alongside BTEH's elephant-friendly honey brand, Beeyond Honey.

Big thank you to Save The Elephants – Elephants and Bees Project for funding this important work, and to KMUTT University's Native Honeybee and Pollinator Research Centre for providing ongoing training and support to the community group.



4.3 Trees for Elephants

In August 2022, Bring The Elephant Home collaborated with a group of teachers from ISB International School Bangkok, a representative from the Bird Conservation Society of Thailand (BCST), and Park rangers. Together, the 70 participants managed to plant over 1,200 trees inside Kuiburi National Park! Huge thanks to the National Park for giving us 6 Rais to reforest and restore habitat for wildlife. The goals of this project are 1. Reforest to enhance the biodiversity of the national park 2. Improve the livelihoods of wild animals 3. Strengthen the collaboration between different parties in Ruam Thai village.

4.4 Research Asian elephants

Thailand currently lacks governmental regulations related to wild elephant tourism and globally, evidence-based research on the impact of tourism is limited. Thailand's annual two-month tourist closure at Thai National Parks provides a unique opportunity to fill in this gap. In Kuiburi National Park, only 30 square kilometers are used for tourism purposes. The park proposed a five-year strategy to increase research-based interventions for wildlife management and elephant welfare within the park, specifically in regard to the newly imposed two-month closure occurring each year. Therefore, Brooke's study is highly relevant, and the results could be applied to other National Parks in Thailand and elephant range countries where tourists have opportunities to encounter wild elephants.

Following an initial five-minute scan sample, takes 14-minute focal observations on randomly selected individuals. Preliminary results show a marked decrease in elephant detections immediately following the re-opening and then a gradual return of elephants to viewable areas.

4.5 Research African elephants

Another highlight of 2022 was the start of a new exciting research project, focusing on range expansion and elephant well-being in South Africa. In August 2022, we collared six elephants at Kariega Game Reserve to track their movement and assist in monitoring their behavior before and after fence removal. In Kariega, our study will be vital in management decisions concerning land use. We have been following the elephants closely and are pleased to report that they are already exploring new territory after the first fence removal! The data collected so far have been very insightful, providing valuable information about behavior and movements, and have supported the reserve in the planning and implementation of management interventions. We are hopeful that this research will help inform the conservation of elephants in the wild.

This research is partly funded through our African elephant adoption program. In 2022, Bring The Elephant Home had 51 African elephant adoptive donors.

4.6 Environmental Education & Collaboration

We maintained relationships with local and international schools to conservation action events in elephant habitats in Thailand and South Africa. At our project site in Kui Buri, we hosted site visits and student groups from International School Bangkok, NIST International School, and several local schools, and ran online lectures with Verso International School. Additionally, we continued with our English Environmental Education curriculum at Baan Ruam Thai School, to connect local youth to conservation issues in their own community, while simultaneously developing English language skills.

Volunteers camped in the community, joined the community homestay program, learned about human-elephant coexistence from local farmers and rangers of Kuiburi National Park, and supported the Tom Yum Project by planting alternative crops, weeding and spreading organic fertilizer in our lemongrass and citronella plots, learning about beehive fences from the Ruam Thai Beekeeping Group and making lip balm from elephant-friendly beeswax. They also joined in birdwatching with local guides, and cooking Thai dishes in a Tom Yum cooking class with the yield from our alternative crop plots.

In November 2022, we hosted a yoga and meditation retreat at Bring The Elephant Home's project site in Ruam Thai village, in collaboration with Happy Hearts Yoga Project. In August 2022, we organised a Human-Elephant Conflict Hackathon through a collaboration between Suranaree University of Technology, Human Elephant Voices, and Bring The Elephant Home.





In this 5-day event, students from SUT teamed up and supported the Ruam Thai community in codesigning innovative solutions to achieve humanelephant coexistence. The community was most interested in the tech-assisted solutions, such as an SMS alert system on the borders of farms and audio systems that could play a range of sounds to deter elephants.

We recently worked with the rangers of Kuiburi National Park to determine critical elephant guarding points in the community where rangers could be stationed so as to prevent elephants from entering plantations bordering the park. With funds generated through hosting conservation action events with the community in Ruam Thai village, BTEH sponsored the construction of a guarding hut so the rangers could have an area to gather with cover from rain while they wait for signs of elephants leaving the national park.

Academic collaboration

In 2022, we supervised 8 students and interns from Utrecht University, Wageningen University, University of Wisconsin-Madison, and King Mongkut's University of Technology Thonburi (KMUTT). The students worked on projects such as elephant identification, analysis and promotion of our webshop Elephant & Co, the potential of rewilding Asian elephants, and elephant educational programs.

4. MEDIA AND OUTREACH

In May 2022, the first chapter of the Ph.D. of BTEH's director Antoinette van de Water was published in the scientific journal Global Ecology and Conservation. In the paper, the authors present the TUSKER framework to balance elephant conservation with human well-being and realise more sustainable and just conservation policies.

In June 2022, Antoinette presented at ShareScreen Africa for a talk about the value of elephants. By bringing together all possible benefits and values associated with elephants, we present a broader conceptualisation of conservation. One that better represents how nature is valued and perceived by all people, and that promotes socially acceptable and mutually reinforcing solutions for people, elephants, and the environment.

In July 2022, Antoinette joined the "Women in Conservation" program to present ways to align conservation with societal aspirations and realise more inclusive conservation approaches. We also



discussed South Africa's recently published White paper that "...adopts a conservation approach that releases South Africa from the shackles of the past, improves the wellbeing of people consistent with the African philosophy Ubuntu, and ensures that benefits to people are fair, equitable and meet the needs and aspirations of present and future generations, while animal well-being is not compromised".

In October 2022, Antoinette and co-authors published a <u>scientific paper</u> in Ecosystem Service about the value of elephants for people and the beautiful planet we share. We identified 90 services, benefits, and values associated with elephants. We specifically highlighted the importance of considering often neglected moral values in conservation decisions, which can lead to more support for conservation and a transition to a just, ethical, and sustainable world.

In November 2022, Antoinette presented her new work on the rights of nature at the Conservation Symposium in South Africa.



6. OUR MISSION CONTINUES!

The future of elephants is heavily reliant on human attitudes and tolerance. As an umbrella and keystone species, their conservation has a positive effect on biodiversity and other threatened species. Unfortunately, land-use changes and other socioeconomic factors can lead to human-elephant conflict, resulting in threats to elephant survival. Mitigating these clashes is one of the most pressing goals in elephant conservation. However, while they suffer direct impact from living near elephants, communities are often excluded from decisionmaking processes. To ensure their interests are accounted for, we strive to work with communities and local organizations nearby elephant habitat, to combine their insight into ecological issues with ours to create sustainable solutions from the ground up.

Fully understanding the consequences of losing a keystone species such as the elephant is a challenge. Besides their ecological importance, elephants have intrinsic values and have meaningful social, cultural, economic, and spiritual dimensions as well. We can make this world better for elephants and people through habitat reconnection, community-based mitigation strategies, and models that help us comprehend the importance of the elephant.

By joining forces across different countries, we have been able to research, initiate projects and take conservation actions necessary to promote a better future for both elephants and those living alongside them. With the help of our collective efforts, we can create a world where both species and their habitat are able to thrive.

Bring The Elephant Home!



7. THANK YOU!

Bring The Elephant Home can only realize its goals thanks to the endless dedication of many people from different nationalities.

BTEH has a board in the Netherlands (board members Berrie Jurg, Liesbeth Sluiter, Dr. Suzan Doornwaard) and a board in Thailand (Antoinette van de Water, Siriporn Sriaram, Supassawan Homchailert, and Dr. Aim Chotirot). Our projects in Thailand are coordinated by our Country Director Ave Owen, Activity Coordinators Chidapha "Bee" Oiumao and Samorn "Som" Sangthong, a freelance local team, two Ph.D. students and one Master's student, and are joined by many Thai and international volunteers. Our projects in Africa and Asia are supported by TeamNL: our growing team of volunteers in the Netherlands and beyond. Special thanks also to BTEH ambassadors Leo and Toni van de Water, who coordinate BTEH's office address in the Netherlands. You can find most of our team members here.

We are very grateful for all our partners and donors who make our work possible! Special thanks to King Mongkut's University of Technology Thonburi (Thailand), Native Honeybee and Pollinator Research Centre (Thailand), FORRU of Chiang Mai University, the Phuluang Wildlife Research Station (Thailand), Elephants and Bees Research Station (Kenya), and the Future For Nature Academy (NL), Project Dragonfly of Miami University (USA), School of Life Sciences of the University of Kwa-Zulu Natal, Elephants Alive (SA), the Elephant Specialist Advisory Group (SA), Kariega Game Reserve (SA), Kariega Foundation (SA), Human Elephant Voices Network (Thailand), Trunks & Leaves (Sri Lanka). We appreciate our membership of GlobeGuards (NL) and the connection this network brings to likeminded organisations.

Finally, a big thank you to all our donors and volunteers who are so important to us. We would not be able to execute our projects and initiatives without the financial support from The U.S. Fish and Wildlife Service, World Animal Protection, Fondation Ensemble, Save The Elephants-Elephants and Bees Project, NIST International School, International School Bangkok, JUMP! Foundation, Stichting Abri Voor Dieren, and Fah Lanna Spa. We are grateful to Capstone for developing and maintaining our website and Flock for their ongoing support of our database.

Special thanks to all our long-term volunteers from all over the world and to everyone else who contributed to the success of BTEH in 2022!