

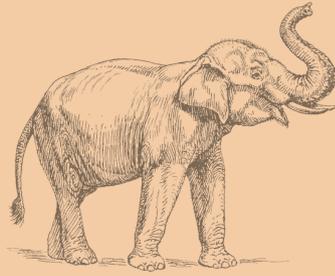


# TRUNKS & LEAVES



2019 ANNUAL REPORT

# A LETTER FROM THE FOUNDER



Dear friends and colleagues,

We are pleased to mark the second year of the **Coexistence Project**, through which we supported 12 more pre-schools in communities living with elephants, double the number we worked with last year. The Coexistence Project was initiated to understand the needs of elephants and people that inhabit landscapes that have no formal protected status. Supporting pre-schools is our way of demonstrating to communities that we care about them, as a basis for building relationships with the farming families with whom we would wish to work with in the long term.

In order to monitor the elephants, which are difficult to see outside protected areas, the Coexistence Project uses camera traps placed in and around the Wetahirakanda Sanctuary in Sri Lanka. Over the past two years we have accumulated hundreds of photos that gradually reveal patterns of activity that elephants and people follow - staying remarkably clear of one another! We've enlisted the help of talented students from the Sustainable Computing Research (SCoRe) Lab at the University of Colombo to train image classification software using Artificial Intelligence.

Beyond Sri Lanka, I've been working with members of Asian Elephant Specialist Group (AsESG) on methods to map the distribution of elephants, as well as on guidelines for the rehabilitation of captive elephants for release into the wild. I've also consulted with the Monitoring Illegal Killing of Elephants program under CITES on the process for updating the network of MIKE sites throughout Asia. I was struck by just how difficult it is to monitor elephants in many locations, so I recruited SCoRe Lab once again to help in developing a mobile smart phone-based app that could be used to crowdsource elephant sightings. We hope to beta test it next year with colleagues from the AsESG and then launch it more widely.

I invite you to follow our work on Facebook, Twitter and Instagram **@TrunksnLeaves**, **#CoexistenceProject** **#UWERP** **#keepthemwild**. We are so grateful to the many sponsors who have enabled our work!

Warmly,

**SHERMIN DE SILVA**  
PRESIDENT & FOUNDER

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# TEAM



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## COULD THIS BE YOU?

We are seeking 2 new Board Members! If you are passionate about Asian elephant conservation and would like help Trunks & Leaves develop further to achieve its vision, we would like to hear from you!



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*SARA GUIDOLIN*  
*Volunteer*



*CHRISTINE MINGE*  
*PHD Student & Research Associate*



All animal populations can only persist so long as they follow a simple rule - *the birth rate must be greater than or equal to the death rate*. For mammals like elephants, a lot rests on the biology of females: how long it takes for her to mature, how frequently she reproduces and the length of her overall reproductive lifespan. It also depends on the mortality rate for individuals of both sexes and all ages.

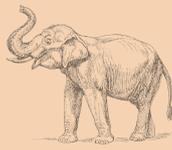
Often these variables are used to create models that attempt to predict the probability that a population might go extinct within a certain timeframe. But for elephants and certain other species with long lifespans, such models can be misleading because populations might not actually go extinct for a long time even if they are breeding too slowly to keep up with mortality (continued on next page).



*Healthy mothers and calves are the basis of healthy elephant populations.*

**Reference:**

de Silva, S., P. Leimgruber (2019). "Demographic tipping points as early indicators of vulnerability for slow-breeding megafaunal populations." *Frontiers in Ecology & Evolution*, 7, 171. doi: 0.3389/fevo.2019.00171



UWERP's research has shown that female Asian elephants in the Udawalawe population breed more slowly than is optimal for elephants, and it is as yet unclear whether it is sufficient to balance the mortality rate. This study offers a different way to evaluate the vulnerability of species like elephants by paying more attention to the population growth rate rather than the probability of extinction, reasoning that any kind of long-term decline

is cause for concern when dealing with slow-breeding species because they can be so difficult to recover. It allows wildlife managers to quickly evaluate which biological attributes are responsible for the population decline, so that interventions can be designed accordingly. The approach could be useful for many species besides elephants, but also highlights the immense lack of data for many threatened animal populations.



## Demographic Tipping Points as Early Indicators of Vulnerability for Slow-Breeding Megafaunal Populations

Shermin de Silva<sup>1,2\*</sup> and Peter Leimgruber<sup>1</sup>

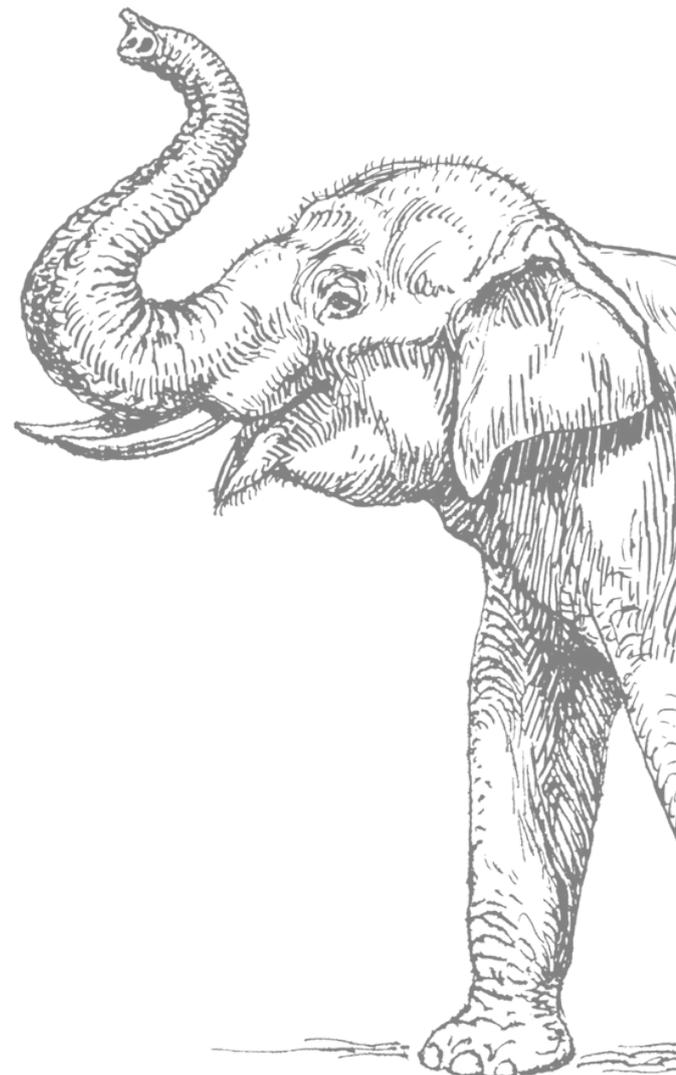
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Decisions based on trends in population abundance and distribution may fail to protect populations of slow-breeding, long-lived megafauna from irrevocable decline if they ignore demographic constraints. For such taxa, we urge that effort be directed at understanding the interactions among vital rates governing population growth rates, rather than on predicting probabilities of extinction. The proximity of a population to demographic tipping points, i.e., where growth rate switches from positive to negative, can signal vulnerability to perturbation long before numbers drop below a point of no return. We define the "demographic safe space" as the combination of key vital rates that support a non-negative growth rate and illustrate this approach for Asian elephants. Through simulations, we find that even with optimal reproduction, Asian elephant populations cannot tolerate annual female mortality rates exceeding 7.5%. If adult mortality is very low (3%/year), populations can tolerate high annual mortality in calves below age 3 (up to 31.5%/year), or slow female reproduction (primiparity at 30 years or average inter-birth interval of up to 7.68 years). We then evaluate the potential impact of current threats, showing that near-optimal reproduction and high calf survival is necessary to offset even modestly increased mortality among adult female age classes. We suggest that rather than rely on simple counts or "viability" assessments, conservation planners for slow-breeding megafauna should consider demographic tipping points and strive to keep populations within their safe spaces.

**Keywords:** mega-herbivores, elephant, population viability analysis, population dynamics, *Elephas maximus*, demographic safe space, extinction risk, alternative stable states

### INTRODUCTION

Large body sizes make megafauna exceedingly influential and vulnerable members of their ecosystems (Campos-Arceiz and Blake, 2011; Haynes, 2012; Ripple et al., 2015, 2016; Doughty et al., 2016; Malhi et al., 2016). Vulnerabilities include extrinsic threats, such as overharvest or habitat loss, as well as intrinsic attributes, such as slower generation times and large area requirements (Purvis et al., 2000; Cardillo et al., 2005). Conservation action is frequently motivated by one of two contrasting yet complementary paradigms: that of declining populations vs. that of small populations (Caughley, 1994). The former focuses on diagnosing and treating the causes of decline,



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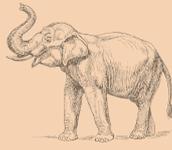
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This research project was led by former UWERP PhD student Mickey Pardo, who spent time recording elephants in Udawalawe. In collaboration with colleagues studying African forest and savannah elephants, which are each different species, this study looked into whether the three living species differed in the way they produced an interesting class of vocalizations known as “combination calls.” As the term implies, combination calls consist of different components. One part is a loud, guttural roar such as one expects of a dinosaur. The other is a low-frequency rumble similar to a truck engine. Because the two African species are more closely related, one might expect their vocalizations to be more similar. In fact this wasn’t the case. In fact this wasn’t the case. Although superficially similar, the different elephant species and even different populations of the same species,

showed certain unique attributes, which suggests that ecological conditions or local contexts are perhaps even more important in shaping communication than the evolutionary history. People have long speculated whether elephants have a language of their own, and combinatorial complexity is a hallmark of human languages. While this study is far from showing that the different populations have their own languages, it opens the possibility that there are regional variations that might qualify as dialects, which occur only in a handful of other species such as birds, cetaceans, and of course humans.

**Learn more on the blog: [asianelephant.wordpress.com](http://asianelephant.wordpress.com)**



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Ecology

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International Society for Behavioral Ecology

Behavioral Ecology (2019), XX(X), 1–12. doi:10.1093/beheco/ard018

Original Article

## Differences in combinatorial calls among the 3 elephant species cannot be explained by phylogeny

Michael A. Pardo,<sup>a,\*</sup> Joyce H. Poole,<sup>b</sup> Angela S. Stoeger,<sup>c</sup> Peter H. Wrege,<sup>d</sup> Caitlin E. O’Connell-Rodwell,<sup>e</sup> Udaha Kapugedara Padmalal,<sup>f</sup> and Shermin de Silva<sup>g</sup>

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Understanding why related species combine calls in different ways could provide insight into the selection pressures on the evolution of combinatorial communication. African savannah elephants (*Loxodonta africana*), African forest elephants (*Loxodonta cyclotis*), and Asian elephants (*Elephas maximus*) all combine broadband calls (roars, barks, and cries) and low-frequency calls (rumbles) into single utterances known as “combination calls.” We investigated whether the structure of such calls differs among species and whether any differences are better explained by phylogenetic relationships or by socioecological factors. Here, we demonstrate for the first time that the species differ significantly in the frequency with which they produce different call combinations using data from multiple study sites. *Elephas maximus* and *L. africana* mostly produced roar-rumble combinations, whereas *L. cyclotis* produced a more even distribution of roar-rumble, rumble-rumble, and rumble-roar-rumble combinations. There were also significant differences in favored structure among populations of the same species. Moreover, certain call orders were disproportionately likely to be given in particular behavioral contexts. In *L. africana*, rumble-roar-rumble combinations were significantly more likely than expected by chance to be produced by individuals separated from the group. In *E. maximus*, there was a nonsignificant trend for rumble-roar-rumbles to be given more often in response to a disturbance. Site-specific socioecological conditions appear more influential for call combination structure than phylogenetic history.

**Key words:** combinatorial communication, comparative, elephant, syntax, vocal communication.

### INTRODUCTION

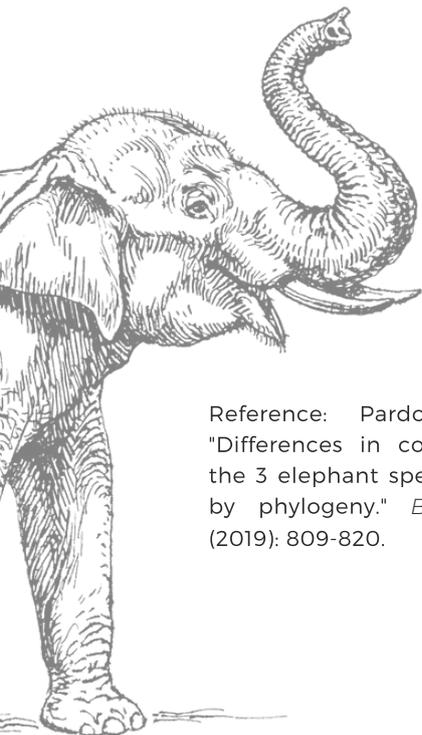
The potential parallels between human language and the ways in which nonhuman animals combine different calls together have led to much interest in the structure and function of such call combinations (Arnold and Zuberbühler 2006; Suzuki 2014; Hedwig et al. 2015; Engesser et al. 2016). Although some species combine vocal elements in multiple orders with different functions (Arnold

et al. 2008; Engesser et al. 2015), others always combine the units in only one or a few of the possible orders (Hallman and Ficken 1986; Suzuki et al. 2016). Still other species produce many different permutations of the same components, but without any change in function (Kroodtsma and Momose 1991). The reasons behind this variation in the degree to which species exploit call combinations remain poorly understood.

As with any behavior, similarities among the communication systems of different species can either result from common ancestry (homology) or from convergence due to similar selection pressures (analogy) (Collier et al. 2014). Social selection pressures

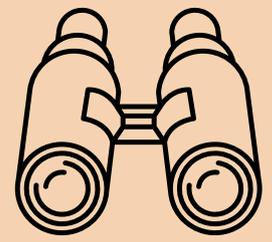
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Reference: Pardo, Michael A., et al. "Differences in combinatorial calls among the 3 elephant species cannot be explained by phylogeny." *Behavioral Ecology*, 30.3 (2019): 809-820.

# FROM THE FIELD



## ELEPHANT 821 - "GATA CHOOTI"

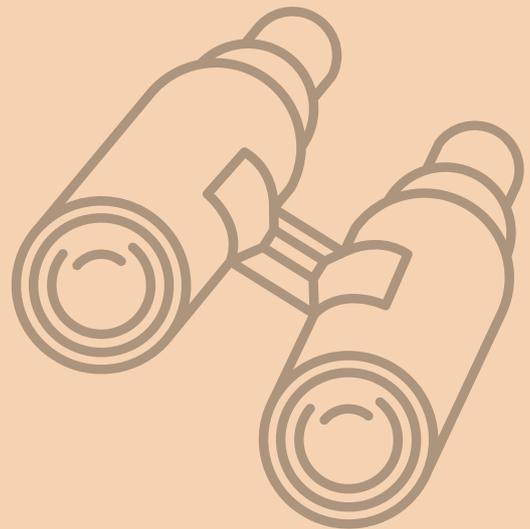
BY RAVI KODIKARA

Most people aren't aware that elephants have different characteristics. Some are playful while others are serious. Elephants in Udawalawe National Park are individually cataloged, but only some of them are named while the rest are assigned numbers or codes. One of my personal favorites is the elephant numbered [821], also known as Gata Chooti ("little lump"). She's strong, playful and above all, she's quite mischievous. She has a lump on her

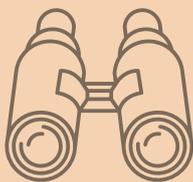
right cheek, just between her ear and right eye, which helps us identify her quite easily. The other elephants in her set, her "friends", were cataloged as "BIG-CLD", "880", "850", "824" and "JVH". This group had previously been released into the park by the Elephant Transit Home, or ETH, so they are not actually related. Gata Chooti is special to me simply because I got to know her a while back. Now it may be hard to believe, but Gata Chooti seemed like one of the most proud elephants I have encountered (continued on next page).



*The lump on her temple is a distinguishing feature of Gata Chooti*

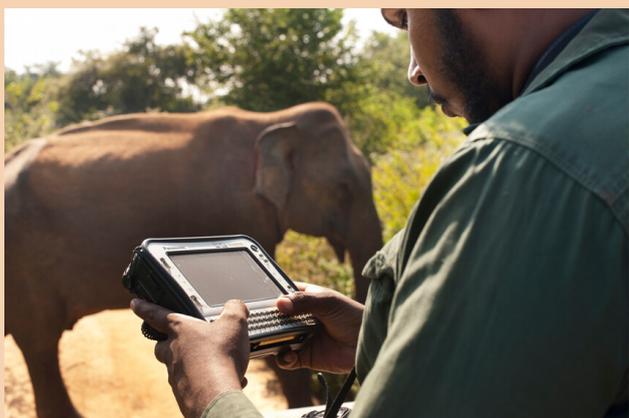


*Sneaking in front of us*



Though she has a masculine and tough appearance, she is equally majestic. One of the most thrilling experiences with her happened a few months ago. Usually, Gata Chooti shows an immense dislike for vehicles and tourists. This is mainly because the tourists and the vehicles, in a broader sense, bully her and disturb her normal routine, especially during the peak tourism season. Naturally she has a tendency to avoid human interaction. However, a few months ago, the research team and I spotted her in the forest. She noticed us and immediately went out of sight. We tried to angle ourselves to see her again, only to our disappointment.

But after a few minutes, she and her friends sneakily stepped in front of our jeep and blocked our path. Her playful and mischievous nature led her to toy around with the vehicle without letting us continue our journey. It was marvelous to see an elephant in the wild, recognizing us and playing together with other elephants. Although, I admit it was a little scary, it all turned out well when she eventually let us drive away. Gata Chooti will always be special to me, I do hope I am able to continuously track her and monitor any changes in her character and behavior, as time goes on. She is but one, and there are many others in Udawalawe National park.

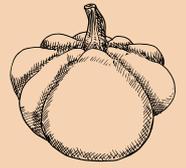


Ravi Kodikara

*Ravi is the newest recruit to the Udawalawe Elephant Research Project and has been with UWERP for one year. He has variously worked as a bus driver, industrial technician and auto mechanic. His skill with vehicles and love of nature make him a great addition to the team!*

# SENADHI AND TOURISTS IN THE PARK

BY T.V. PUSHPAKUMARA



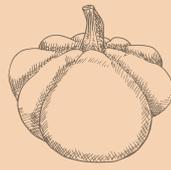
Senadhi, also known as T204, is an elephant that the Udawalawe Research team has regularly seen. He is young, active, and one of the most distinct features he possesses is his tusks. They make him more majestic than the rest. Over the years people gave Senadhi other nicknames too, and he was also known as "Bullet". The loss of Senadhi's mother had forced him to grow in the wild by himself. Little was known about Senadhi's days as a calf but he was eventually looked after by the Elephant Transit Home before being released into the park. In the mid-2000s, the Park staff lost track of Senadhi and couldn't spot him for several years, but at the end of 2006 he reappeared.

During his teenage years, Senadhi roamed all over the park. Every time we spotted him, it was miles from his previous location. It was quite difficult for us to keep tabs on him, since he didn't seem to have preferred location. However since 2011, he lived mainly along the main access road and the edge of the reserve. It was during this time that we noticed Senadhi studying the actions of other male elephants and emulating similar mannerisms - a sign he was growing into an adult (*continued on next page*).



*Senadhi is distinctive for his beautiful tusks, which we worry can make him a target for poachers*



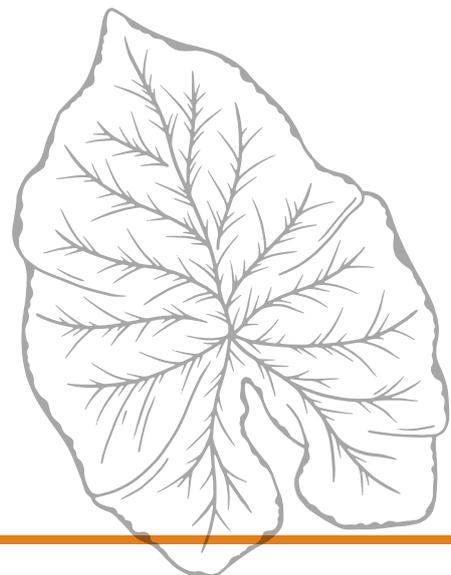


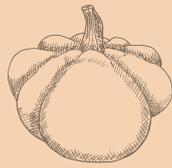
The male elephants in this area had a strong tendency to raid farms, often breaking the electrical barrier; unfortunately, Senadhi picked up this behavior too. Early in 2019, we noticed Senadhi struggling with a gunshot wound. We also saw the broken fence and the neighboring farmer, complaining about his damaged and raided sugar cane crops. Hence we believed that his wound had to come from the locals defending their farms. In 2018 another young tusker, who had grown up in the park, was sadly killed in retaliation. We noticed that elephants exhibited this behavior of breaking and raiding farms, because they were in search of sweet things, which are rarely available in their natural diet. This taste for other fruits and crops seems to be amplified when tourists started feeding the elephants.



*Senadhi accepting fruits from visitors*

Tourists feeding the elephant are one of the key threats to elephant conservation. Many bulls like Senadhi have adopted a predictable routine, where they visit the boundary fences to eat fruits provided by tourists. With time, we have identified these elephants and have updated their details in our catalogue. Feeding fruits to the elephants has many negative effects. These individuals have now acquired a taste for these fruits and often come to the main access road, where there are fruit stalls where tourists buy fruits and feed them to the elephants. This in turn causes them to seek these fruits during the night, and hence enter people's farms and destroy their crops. Moreover, due to negligence or lack of knowledge, some tourists/visitors feed these fruits with the polythene wrap. This can become life-threatening to the elephants by becoming entangled in the digestive tract (*continued on next page*)





The field team and I have often noticed pieces of plastic or polythene, which is indigestible, in the elephant's dung. This whole cycle where elephants are fed and then become ill just disappoints us, and I often wonder what we can do to prevent such actions. I hope in the future stricter procedures can be asserted to control what the elephants eat and what they are fed.

The government and the relevant authorities must make it priority to inform and educate tourists. In addition, they must also establish strict penalties for those who are caught feeding in areas where tourists are not supposed to enter. Elephants like Senadhi don't deserve to suffer by the negligence of people.



*Polythene in the dung*

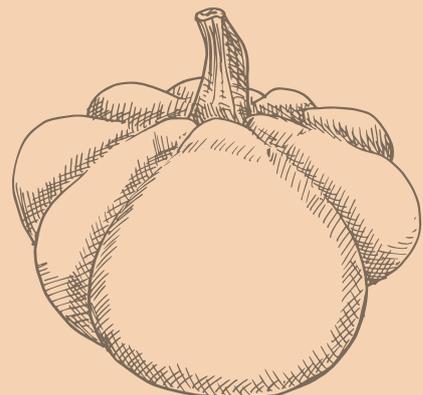


*T. V. Pushpakumara*

*Kumara is the Research Supervisor for UWERP and has been with the project since 2011. He is in charge of maintaining all the long-term data of the project, a task aided by his phenomenal memory for individual elephants!*



*Pumpkin seedlings sprouting from elephant dung. Pumpkin is a cultivated crop, signaling this animal was either fed or crop raiding.*

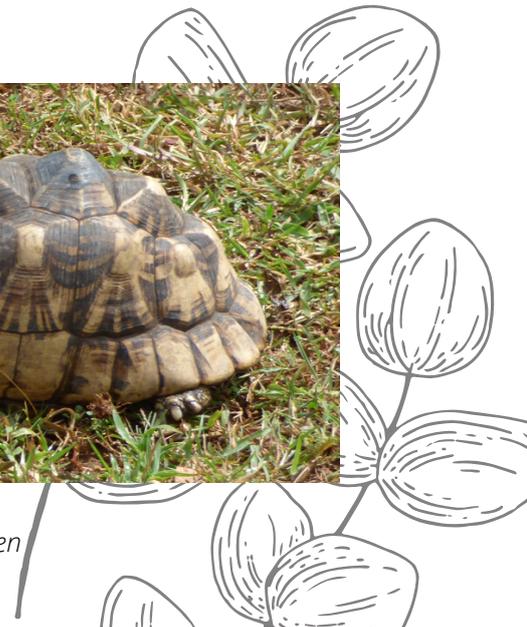




Elephants are flagship species that represent habitats shared with a lot of other species. Here are a few of them...



*These native star tortoises can live for at least a century and grow to enormous size. The largest one on record was documented in Sri Lanka. When young, they are threatened by illegal smuggling for the pet trade.*



*Who's got more impressive teeth?*

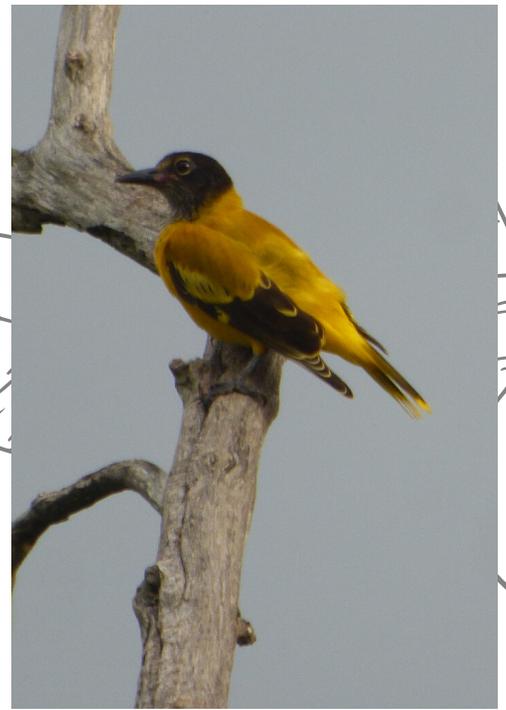


*Lapwings are very dedicated and courageous parents, refusing to abandon their eggs even in the face of elephants and cattle parading by.*





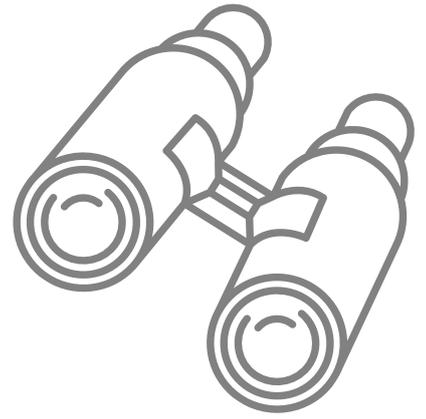
*This stork-billed kingfisher (left) is trying to finesse a fish while the Indian Roller (right) is enjoying a dust bath on the road.*



*Hornbills are easy to spot thanks to their raucous calls, whereas orioles speed by like flashes of feathered sunlight.*



*The Black-Naped Hare is another Sri Lankan endemic, rarely seen sitting still in broad daylight. The only rabbit species on the island, it has many predators to avoid!*



*Want to know where the elephants are? Follow the dung! These elephants are on private land, outside the protected area. Land like this is just as important as the PAs themselves, the main motivation for The Coexistence Project.*



# COEXISTENCE PROJECT

## 2019 PRESCHOOL PROJECT



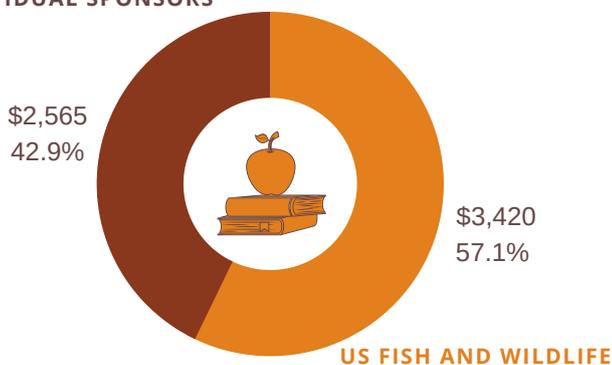
### THE ISSUES

Human-elephant conflicts have increased over the last few years. Male elephants often feed on crops, and many farmers often retaliate, creating an unpleasant situation for both the parties. The Coexistence project was initiated by the Udawalawe Elephant Research Project in a bid to gradually encircle protected areas with community-based conservational initiatives and create conflict-free livelihoods for the farmers.

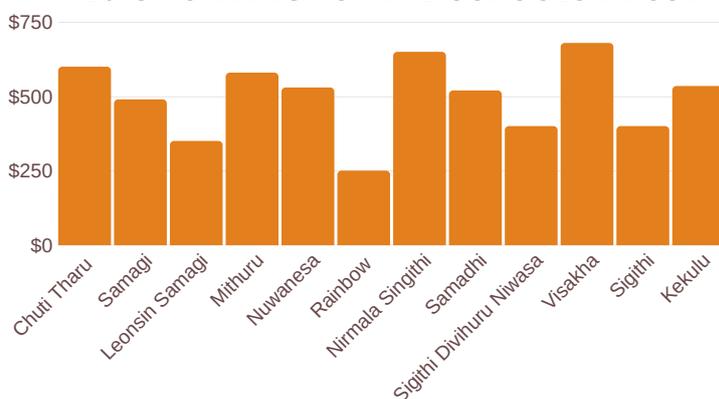


### 2019 DONATION BREAKDOWN

#### INDIVIDUAL SPONSORS



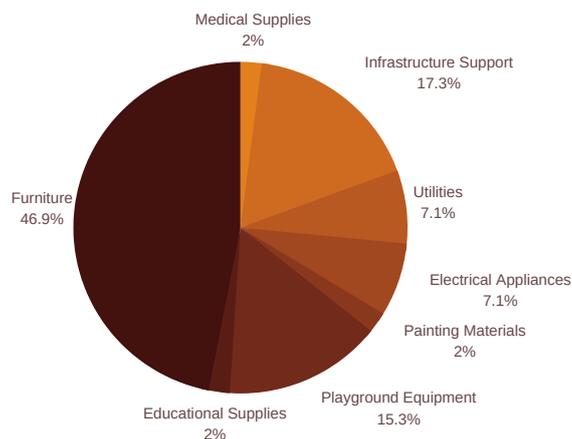
### 2019 FUNDING FOR PRE-SCHOOLS IN USD



### WHERE?

We focus on communities living adjacent to Udawalawe National Park and associated protected areas, in southern Sri Lanka. This area has roughly 1500 families, most of whom are farmers with a median annual household income below \$1200.

### 2019 SPONSORSHIP CATEGORIES



### HOW?

We started the pre-school sponsorship program 2018 in order to build trust with these communities and demonstrate our genuine commitment to their well-being. Six pre-schools were supported in 2018 and 12 were supported in 2019. We know this is only the beginning.

# CAMERA TRAPPING ELEPHANTS

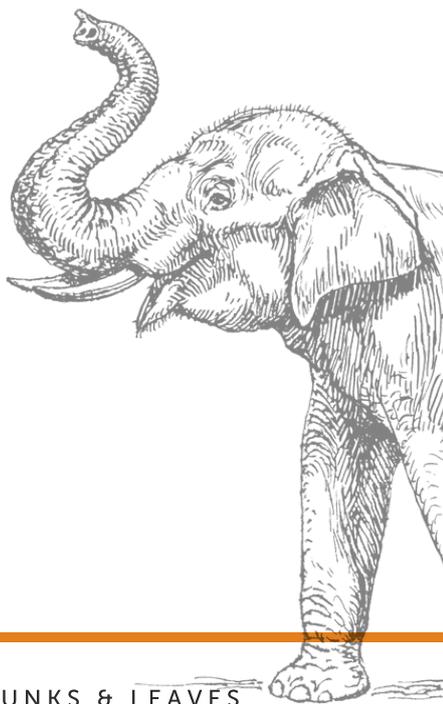
BY SAMEERA WEERATHUNGA

Over the past few years of research in Udawalawe National Park we have achieved great things. By now we have identified most, if not all, the elephants in the area, both male and female. They have been numbered, categorized and catalogued. Each has an individual history that records all the important details of its life. We have found that the National Park, which encompasses just over 300 square kilometers, has around 1000 to 2000 elephants. With such a large area, it is very difficult to see all the elephants at one time, so it is quite a challenge to keep track and regularly update the catalogue!

One of the best new developments was the installation of trailcams around Udawalawe National Park. The National Park is connected to two sanctuaries that are “wildlife corridors”, also known as *ali mankada* or “elephant paths”. The corridor connects Udawalawe to Lunugamvehera National Parks so elephants move between these two areas. Apart from this, the elephants use these corridors to look for food, clean water and special soil (which they eat sometimes). There are about 1500 to 2500 families in the adjacent lands, mostly farmers.



The camera trap is small and runs on 8 batteries.





The farmers in that area often worry about elephants destroying their crops, which undermines their whole livelihood. Because the elephants are difficult to see in these areas, we needed to find a way to monitor the elephants and their activity in the corridor. Hence, the Udawalawe Elephant Research Project started the camera trap program.

It was hard work setting up and maintaining the trail cameras. At first we identified five places where we can set up the camera. The places we chose were places where the locals informed us of frequent elephant sightings. Gradually, after learning from different experiences, we eventually set cameras at 31 different locations (*continued on next page*).





The camera traps were installed in such a way that we can monitor their movement along the corridor. One of the most exciting moments in my life was when we started seeing the results of our work. Elephants were caught on camera nearly every day, giving us new insights about their behavior. The best thing about this program was that the research team and I could finally see what the elephants did during the night time. Moreover, we were very interested in observing how elephants behave when they were in the croplands. We were elated to see results from the hard work we put in setting up the program!

Thanks to the cameras, we were able to even see which individuals' raid crops and when they do it,

which is valuable information that we hope will eventually help us solve the elephant-human conflict in these areas, and help the farmers in some way.

As much as we empathize with the elephants we must do the same with the farmers - it was heart wrenching to see the crops being raided by the elephants through the camera traps. We hope that with time we can focus on this key objective: to find alternative ways to coexist and reduce human-elephant conflict. Personally, I am more intrigued each day to find what more we can learn from the camera traps.



*Sameera is the Field Manager for UWERP and oversees all field activities. Having been with the project since 2007, he has a huge network of connections around the area and is the main point of contact for all community-based activities.*

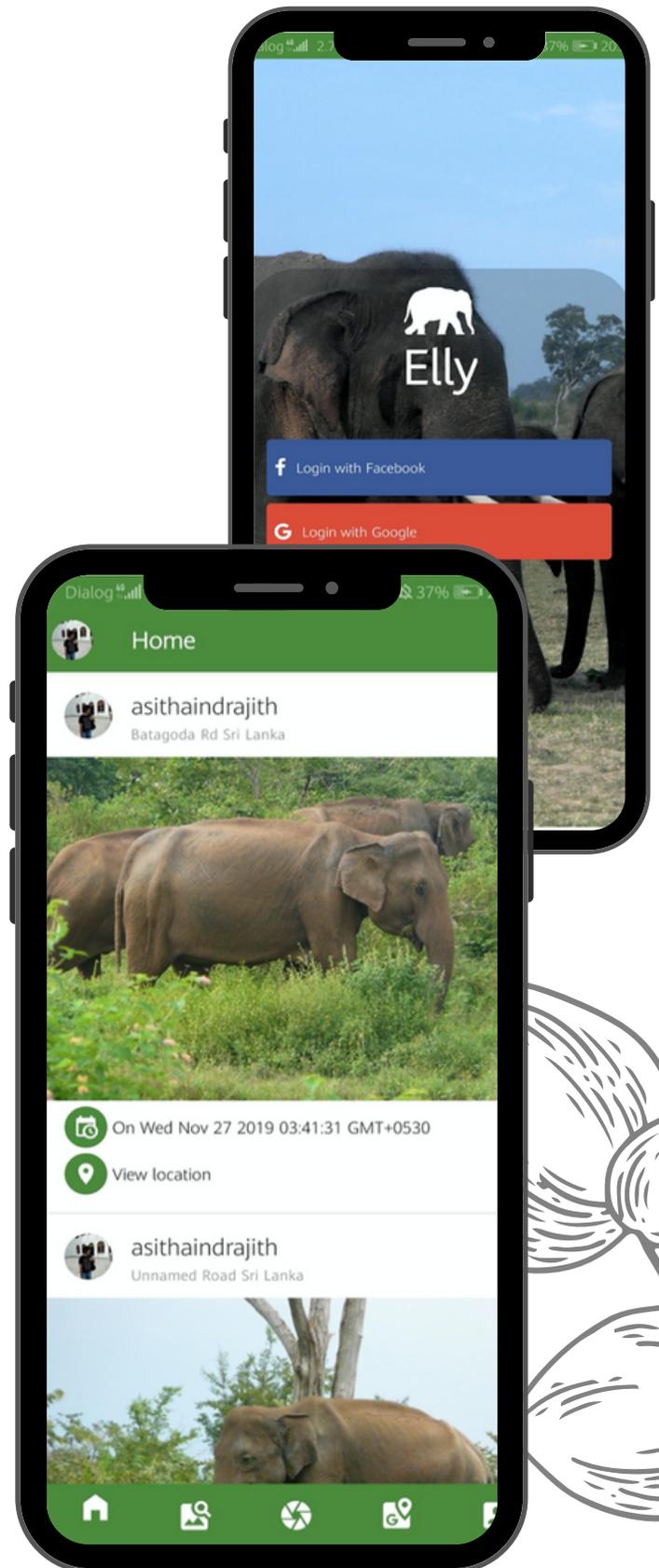
*Sameera Weerathunga*



We continue to work with the SCoRe Lab, founded by two professors at the University of Colombo School of Computing. The group provided an energizer which is going to be used to power an electric fence around a pre-school in need of protection from elephants.

Two students from the lab have also been working on some special projects. The first is in training an algorithm that uses Artificial Intelligence to distinguish elephants, people, and other types of occurrences in the many hundreds of camera trap photographs that we have been accumulating. Once trained, the algorithm runs on a standard laptop computer and will be released to the wider conservation community in hopes that this will make it easier to compile more elephant records from around the world, especially when they are in deep forests.

The second tool is a smartphone app in which users can log and report elephant sightings, along with a photograph. Inspired by the many other citizen science tools out there such as iNaturalist and eBird, the Ap will help document elephants that are outside protected areas and therefore not regularly surveyed. The beta version of the Ap is ready to be shared with testers in 2020.





The AsESG met in Sabah, Malaysian Borneo for the first time. The occasion marked the virtually unanimous agreement among the group's members that the Bornean elephant needed its own entry in the IUCN Red List. Thought to number under 2000 individuals, Bornean elephants are largely threatened by the conversion of natural habitat to oil palm plantations, with a troubling increase in the number of deaths due to poisoning. Inclusion in the Red List will highlight the status of these rare elephants.

Every 10 years, members of the specialist groups conduct reviews of the status of the species they represent. Such a review was conducted in 2019, by a working group we took part in. On the positive side, updated population estimates from various range states suggest that elephant populations overall are stable. However, the situation is critical in some countries in Southeast Asia where many populations are down to double digits.

In the sessions that followed, Dr. de Silva presented the technologies Trunks & Leaves has been collaborating to develop to help monitor elephants. This includes a Mobile Ap to record elephant sightings made by the general public, artificial intelligence to sort through camera traps in forest environments, and use of acoustic recordings.



#### WORKING GROUPS WE ARE INVOLVED IN

- IUCN Red List review of the global status of Asian elephants
- Protocol for mapping the distribution of Asian elephants
- Guidelines for the rehabilitation of Asian elephants as an option for restocking populations in the wild

# SPREADING THE WORD



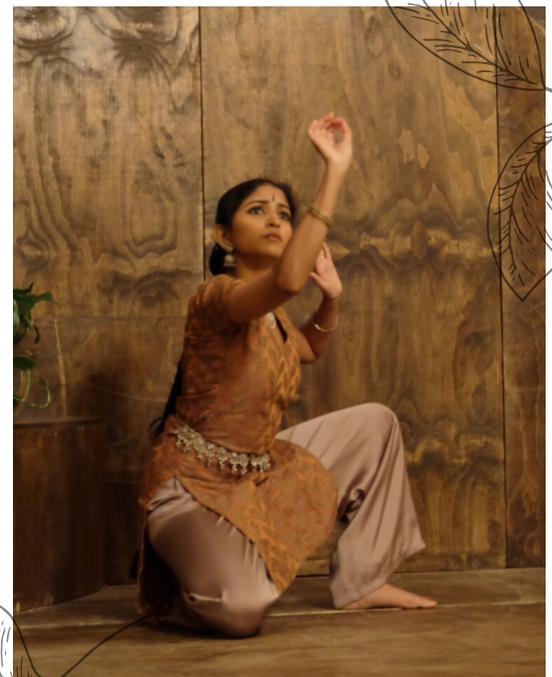
## **LIVING WITH ELEPHANTS** PUBLIC TALK AT THE OREGON ZOO

Shermin de Silva was invited to the Oregon Zoo to speak in their evening public lecture series, and it turned out to be a sold-out event! The Zoo also released a short video highlighting the status of Asian elephants in the wild, viewed over 70,000 times!



## **AN EVENING WITH ELEPHANTS** AT EVE ENCINITAS

Our third Evening with Elephants (#ElephantEvening) was held in November at EVE Vegan Eats in Encinitas and coordinated by volunteer extraordinaire Udarable Abeysekera. The event featured the BBC documentary "Sri Lanka, Elephant Island," filmed in Udawalawe, and was followed by a presentation and Q&A with Dr. de Silva. We were also delighted to feature two specially-choreographed pieces by classical dancer Sukanya Kumar that movingly evoked the spirits of elephants living in the wild and captivity. There was also a silent auction, with various elephant-themed items based on UWERP's photographs, crafts from Sri Lanka, and items contributed by local artists and businesses. Together we raised over \$1100 for pre-schools in Sri Lanka! A great big thanks to our hosts at EVE, volunteers Udara, Guni, and Anuk, sponsors Hera Hub, Naiad Soap Arts, Del Mar Photography, Andy Gros of Facebook for Good and artist Kathy Chin.



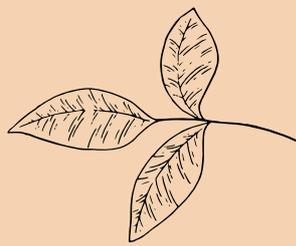


# AN EVENING WITH ELEPHANTS AT EVE ENCINITAS

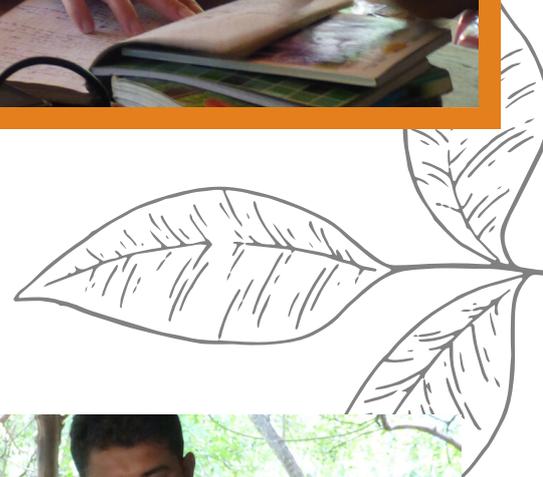


Bring An Evening with Elephants to your town! Contact us at [info@trunksnleaves.org](mailto:info@trunksnleaves.org)





The UWERP team was very pleased to be paid a visit by Anne Marie Gage and colleagues from Idea Wild. Idea Wild supports conservation projects with in-kind donations of equipment and previously provided GPS units to UWERP that are still in use today. This is their first in-person visit and they were able to learn about the ongoing research being done in and around Udawalawe. We thank Idea Wild for their earlier support as well as for providing more camera trap equipment and supplies for the Coexistence Project to use in 2020 and beyond.





## SHAPES IN NATURE

Shapes in Nature is an Oregon-based T-shirt and sticker brand founded by artist-entomologist Jesse Greene. Each limited-release design features wildlife, and for species that are threatened Jesse donates a percentage of proceeds to a nonprofit that is focused on conserving them. He released this beautiful design of an Asian elephant mother and calf in November, generously pledging 30% of all current and future proceeds to Trunks & Leaves! Check out this and other designs at: [shapessinature.com](http://shapessinature.com) or use the QR code.



**GlobalGiving**

## SITE VISIT FROM GLOBAL GIVING FELLOW, UMA THIAGARAJAN

Global Giving is the online platform through which we received support from many individual sponsors. Uma Thiagarajan is a GG Fellow based in India who visited UWERP as part of her due diligence for the platform, which involves making sure that donor funds are being used as intended. Uma was able to visit the schools and observe all the improvements being undertaken at the sponsored pre-schools and thanks to her positive review we are now enjoy a distinguished status on Global Giving as a verified and vetted organization.

## INTRODUCING OUR NEW LOGO!



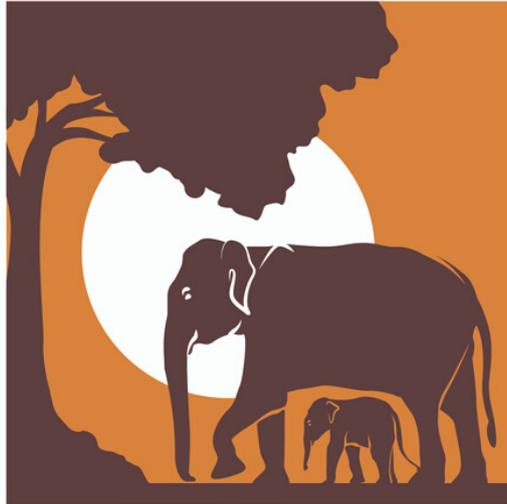
Our new logo symbolizes the fact that the future of elephants rests on the well-being of mothers and calves. And is that a sunrise or sun set? That depends on our actions. We hope that long may the sun rise on them! Our heartfelt thanks to Yoshini G. White for donating her skills to create this fabulous design.

Follow us @trunksnleaves



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