



# ANNUAL REPORT

2023



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## Mission Statement

The Amboseli Elephant Research Project is the world's longest continuous elephant research programme, now into its 51st year. ATE contributes trailblazing knowledge of large mammal socioecology, provides a basis for public understanding and concern for elephants and their ecosystems, and communicates information enhancing conservation in the Amboseli ecosystem and for regional and global elephant populations.



Male elephants playing



ATE team & family and the team at the WRTI Conference in Naivasha

**A note about data:** ATE retains the intellectual property rights to all data used in this report, but we want to enable our ecosystem partners to share the information widely. To request more detailed data, or higher resolution maps, please email us on [info@elephanttrust.org](mailto:info@elephanttrust.org).

## I. Introduction

The start of 2023 saw a continuation of the drought conditions which emerged in 2022. Droughts, which will increase in frequency in the coming years with climate change, have profound consequences for the human, livestock, and wildlife communities of the Amboseli Ecosystem. The first rains in the central Amboseli area were recorded in March, and by April we had had significant rainfall, releasing wildlife, livestock, and people from the terrible drought conditions, and allowing us and our partners to start reflecting on lessons learned. Although it was a difficult time, we were able to assess elephant drought mortality in detail, thanks to the sharing of information across all our partner networks. This shared knowledge will allow the project to closely assess the short and long-term consequences of recurring droughts for the Amboseli elephants.

Also, this year, ATE was excited to participate in and financially support the Wildlife Research and Training Institute's (WRTI) first international conference on wildlife research. This inspirational meeting in Naivasha in September 2023 was attended by delegates from many countries who presented research findings from botany, forestry, ornithology, primatology, as well as on the population ecology and behaviour of small and large mammals of East Africa. ATE was involved in four oral presentations, and we provide details of some of these talks below.

We were able to restart our global training programme for elephant range country biologists and managers. In May 2023 we ran training with the Mara Elephant Project rangers, at the AERP camp in Amboseli. We have also initiated a new mentoring and career development scheme for Kenyan graduates in wildlife management or biology (Nov 2023), which we hope to run quarterly once we have funding in place. Training workshops for Amboseli participants are planned for 2024. We provide details of training events below.

We thank our ecosystem collaborators who have made the project possible over the 50+ years of its existence. Firstly, we thank the Maasai landowners and individuals that have enabled coexistence with elephants, and secondly, our partners: the Wildlife Research and Training Institute (WRTI), the Kenya Wildlife Service (KWS), the Group Ranches and Community Conservancies, Amboseli Ecosystem Trust and Big Life Foundation. Collaboration among the ecosystem partners will be even more crucial as KWS and the County Government of Kajiado navigate their transition in management over the coming months. We also thank our Kenyan and international research collaborators, our Trustees and especially our donors for their sustained interest in our research results and for their support in protecting the elephants and ecosystem of Amboseli.



Male elephants together, led by Tim who died of natural causes in 2020

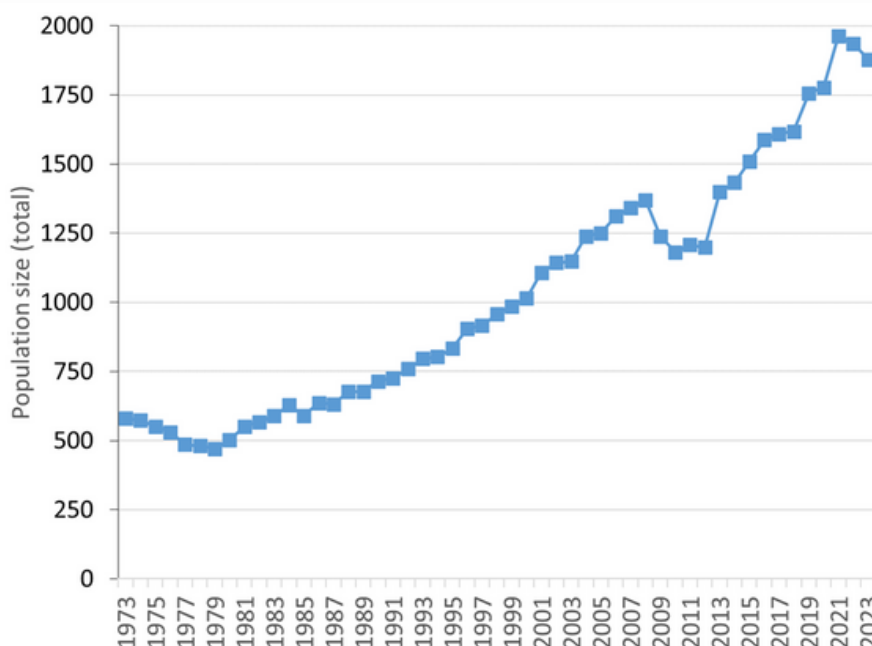
## II. Long-Term Monitoring

### A) Population Dynamics

The Amboseli elephant population has been continuously monitored since 1972, using individual recognition and repeated sightings of individuals as our main methodology. The core known elephant population at the end of 2023 stood at 1878 living elephants. This number reflects identified individuals followed from birth to death. It excludes young males who are thought to have dispersed out of the population (133 to date) and a number (97) of “returning” or immigrating males from Chyulu, Tsavo, Tanzania or elsewhere. These “known, unknown” males are vital to the population since most are of musth / reproductive age, but may only be resident during their brief musth period. We have been able to match some males to historical ID photos, and hope to do this for more of these individuals with time and possibly genetic studies. We also photograph a small number of males who join with females or other males and then are never resighted; all these dispersing and immigrating males emphasize the importance of the unbounded Amboseli population with connections across the international border and to other Kenyan protected areas as we discuss in Section III.

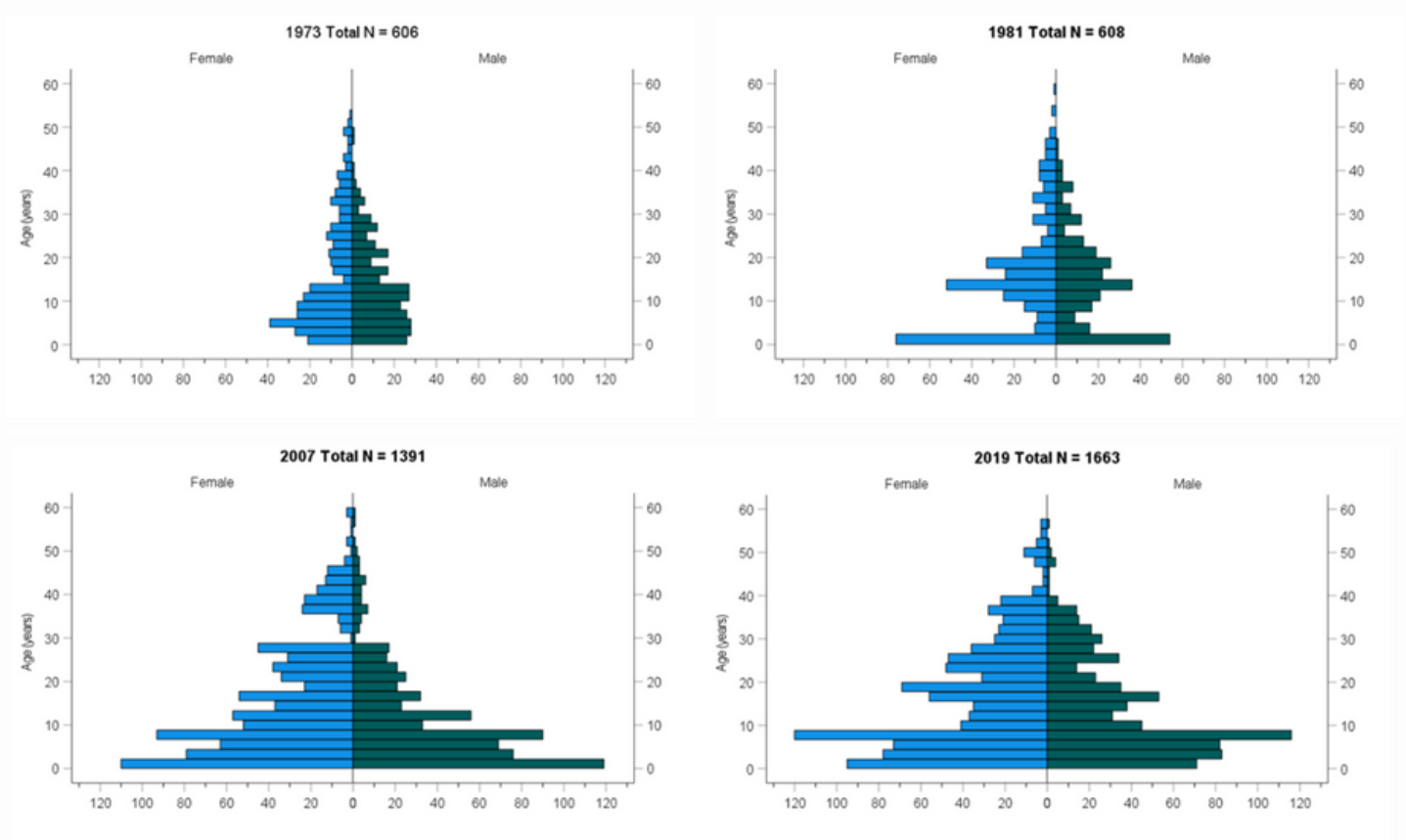
We present here a summary of one of the Sept 2023 WRTI presentations on population dynamics (Moss, Lee, Njiraini & Sayialel: Long term population and demographic trends among the Amboseli elephants of Kenya).

At the time of this analysis we had monitored the individual life course for ~3900 elephants (1936 males, 1971 females). Monitoring is based on monthly re-sighting of individuals, with 100% annual re-sightings for females in ~60 families (0-12 sightings per month, median = 3.25 per month), and 87% annual re-sightings for 405 independent adult males (median = 8.8 sightings per year). Reproductive activity (female oestrus, births; male musth, and consortships) is recorded during sightings.



**Figure 1:** population size over time based on resighted known individuals

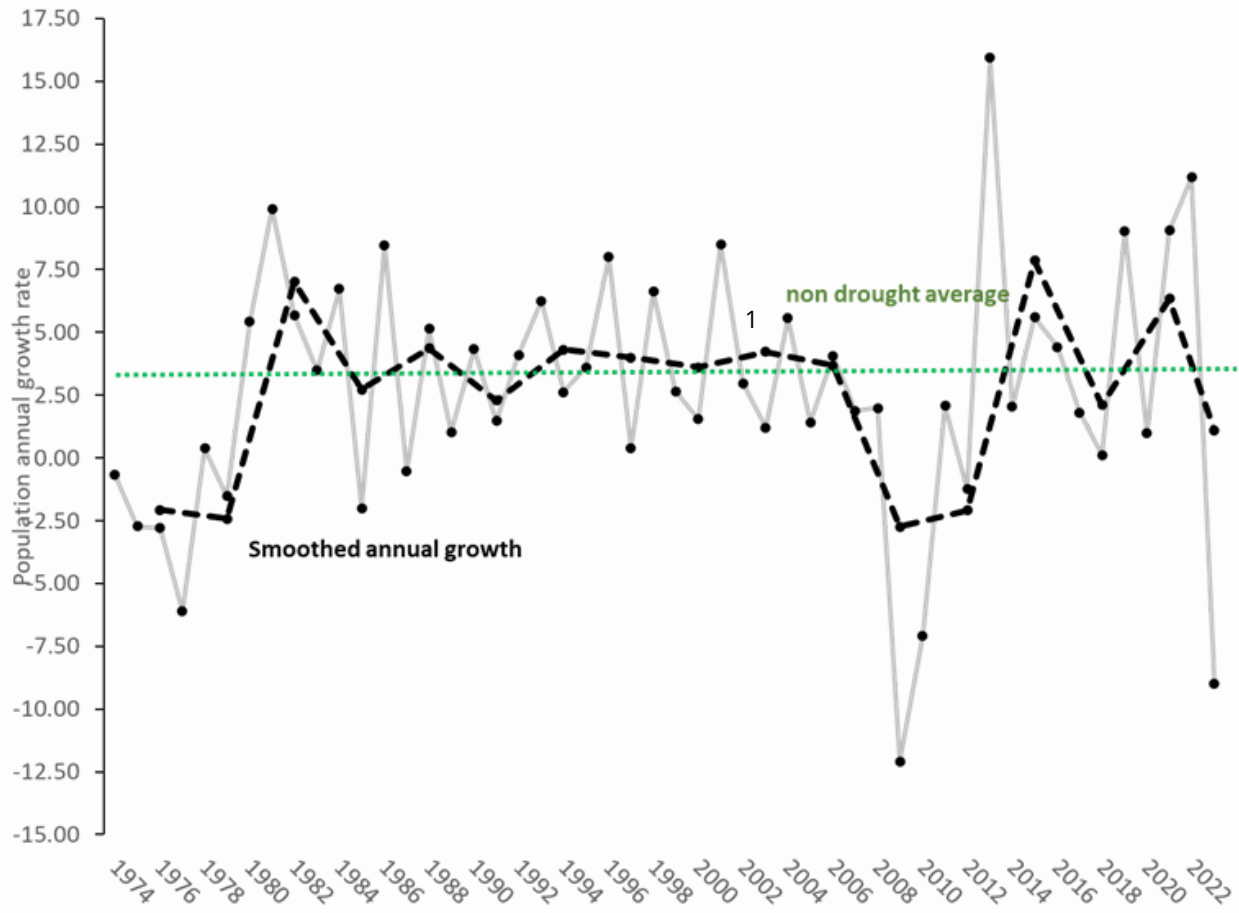
The elephant population has grown in size from the start of the study (Fig. 1; Fig 3) and over this period the structure of the population has changed (Fig. 2) with peak of birth cohorts and troughs of drought deaths that are replicated over time.



**Figure 2:** Age structure of the Amboseli elephants over time (1973, 1981, 2007 and 2019, figure from Lee et al. 2022).



A female elephant with her two calves



**Figure 3:** Annual population growth rate over time (ATE long-term data). Rate is measured as (r) Change in female numbers [births-deaths/Ntotal] per year. Average for non-drought years is +2.68% per year. Variation between years ranges from a low of -12.1 to a high of 15.9%. High and low growth rates are not sustained for more than two years. Figure updated from 2022 to reflect the consequences of two years of drought.



## B) Drought and its environmental effects

What makes a drought year in Amboseli? Over 56 years with monthly rainfall data, we have identified 18 dry or very dry years using an index of the severity and length of the dry seasons. Rainfall is allocated to a “rain year” (October – September) to capture the two typical periods of short (October- December) and long (March-May) rains, and together with total rain mm, the number of consecutive months with <20mm of rainfall is used to produce a Dry Season Intensity Index (DSI). Other common drought indices (Palmer, Standardised Precipitation Index) incorporate temperature which we do not record, as this also affects soil moisture. For the rain year 2022-23, with a total of 278 mm of rain and 8 contiguous months of <20mm rain, DSI was 2.9. Rainfall and DSI influence the potential for secondary vegetation growth. Elephant food, as is true for livestock and grazing wildlife, responds to rainfall with a growth lag of ~30 days and peaks at ~60 days.

We are in the process of correlating our ground measures of vegetation biomass with remote sensing NDVI greenness indicators to better understand the rain/vegetation growth and distribution associations. Rainfall is highly patchy in both time and space, and there can be as much as 30 days between successive rainfall events in different areas of elephant range. Given this variation it is even more critical to be able to assess vegetation growth across the ecosystem. This work is ongoing with Dr Keith Lindsay, an ATE associate and collaborator since 1978.



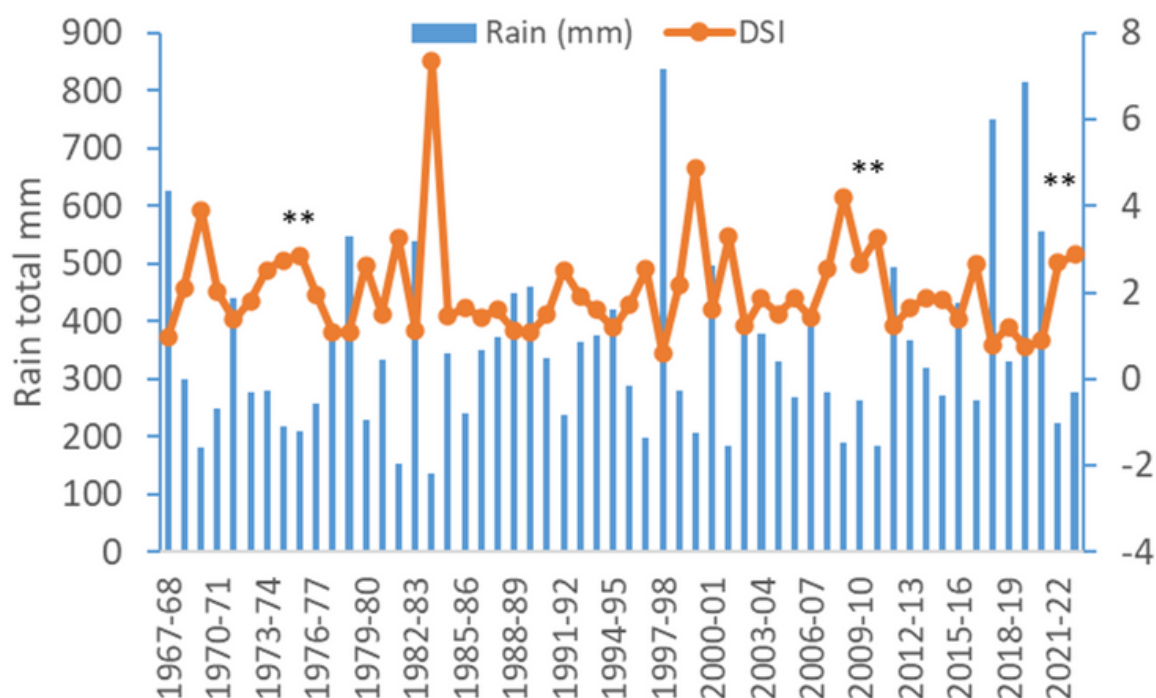
Field team collecting data on vegetation



Harsh drought conditions in Amboseli

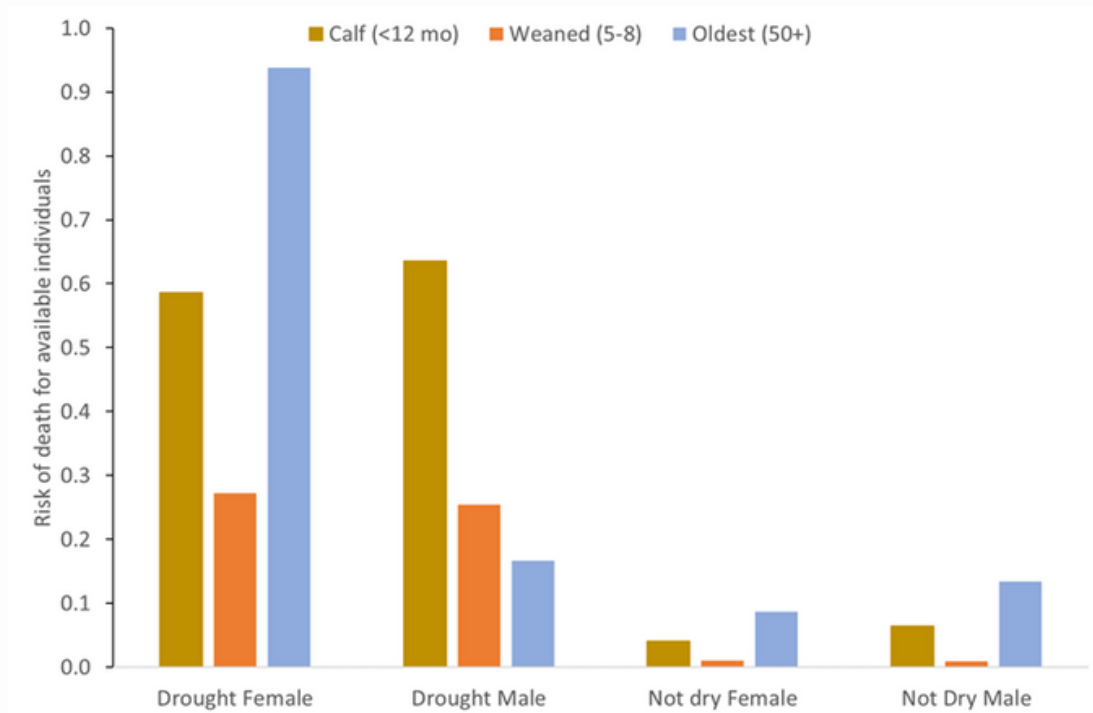


Animal numbers are regulated by food availability, disease, and predators, with some predictable consequences and some outcomes that are hard to forecast. As is typical for non-equilibrium ecosystems such as Amboseli where the response of grasses, shrubs and herbs to rainfall, temperature and soil types varies unpredictably over time, good years of rain in 2020 and 2021 (see Fig. 4) led to a major pulse in the production of wildebeests, buffalos, zebras, and elephants, with many births and few deaths. Cattle, sheep, and goats also thrived over the same period. However, in 2022 and 2023, with reduced production by food plants and many more mouths competing for the same dwindling food stocks, the numbers of grazing animals declined through both death and dispersal, while rare predators including vultures, cheetahs and small cats in turn thrived. Peaks of births and abundance are expected, as are losses during drought periods, especially of the oldest and youngest individuals.



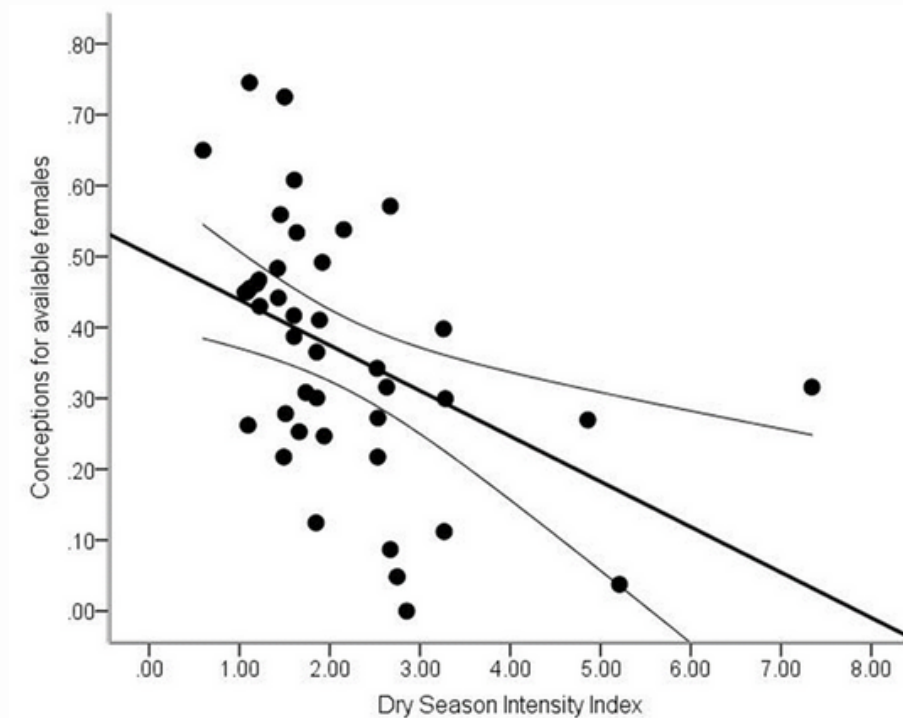
**Figure 4:** Rainfall (Oct-Sept) in each of 56 years, with Dry Season Intensity Index (DSI) for that year. \*\* indicates two consecutive years of DSI > 2.5 (Drought years)

Throughout the years of elephant research, there have only been three periods of two or three years of consecutive drought, two of which have been in the last 10 years (marked with \*\* in Fig. 4). More data are needed, but it appears that alternating wet and long dry periods are expected to become more extreme with climate change. Thus, we predict a slowing of elephant population growth, or alternatively more “boom and bust” cycles over the years with abundant conceptions and births during high rains, followed by deaths during droughts. Drought consequences for the elephant population are typically losses of youngest (<12-month-old calves) and oldest individuals (50+), with an increased vulnerability for the recently weaned and rapidly growing 5-9 year-old elephants (Fig. 5).



**Figure 5:** Risk of death as a proportion of available individuals during drought (2008-10) compared with not dry periods. (Figure modified from Lee et al. 2022)

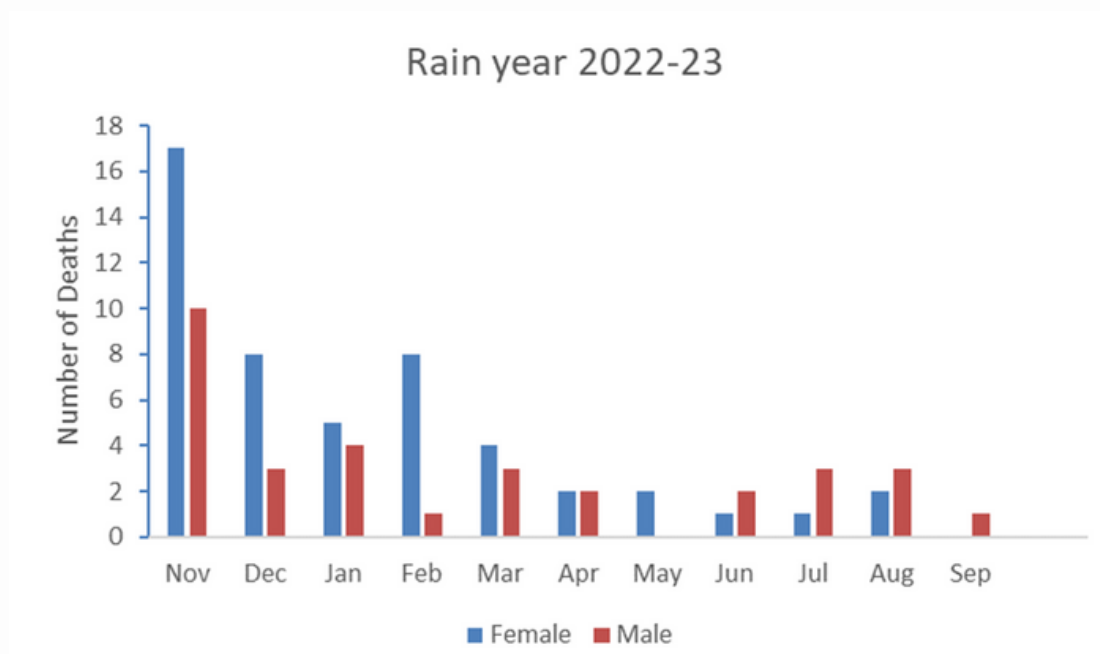
Another significant drought effect is on the ability of females to reproduce (Fig. 6), which produces pulses in age structures that persist over time as in Fig. 2.



**Figure 6:** The effect of drought (high DSI) on the annual probability of conception for females who were not in the first 12 months of lactation or already pregnant (available females) . Average probability of an available female of any age conceiving in a year is ~ 1 in 3. (From Lee et al. 2022.)

### C) Elephant monitoring (births and deaths in 2023)

The two successive drought years of 2021-22 and 2022-23 had major consequences for elephant survival. In common with other prolonged drought experiences and in combination with the high wildlife and livestock population densities, mortalities were common. There were 112 deaths in the rainfall year of 2022-23 (Fig. 7) and 221 deaths over the two drought years. While we observed a number of deaths and thus knew the individuals, for most elephants we detect death through their disappearance from the family. Most deaths due to poor nutrition and/or high parasite loads were observed as normal dry months (July, August, Sept) of 2022 were extended into Nov and Dec. The rain in April and May of 2023 (224 mm or 80.6% of the entire year’s precipitation) lessened the likelihood of death in the subsequent months (Fig. 7).



**Figure 7:** Number of deaths of females and males in the rain year of 2022-23, by month.



The carcass of an elephant during the drought in Amboseli

Even the death of individuals provides us with valuable information when we are able to access the lower jaws. For known individuals, we are able to confirm the association between birth age and tooth age; for unknown individuals we can determine age and sex, which helps with assignments of death to missing individuals. As the photo illustrates, some of our females survived to very old ages, when their teeth had been worn to nothing. This explains some of the vulnerability of old females in droughts, as they struggle with the poor-quality vegetation that is available.



A lower jaw used to age elephants



Young elephants touching an elephant skull

### III. Movements and ranging: the importance of ecosystem connectivity

#### A) Collared young males and ecosystem movements

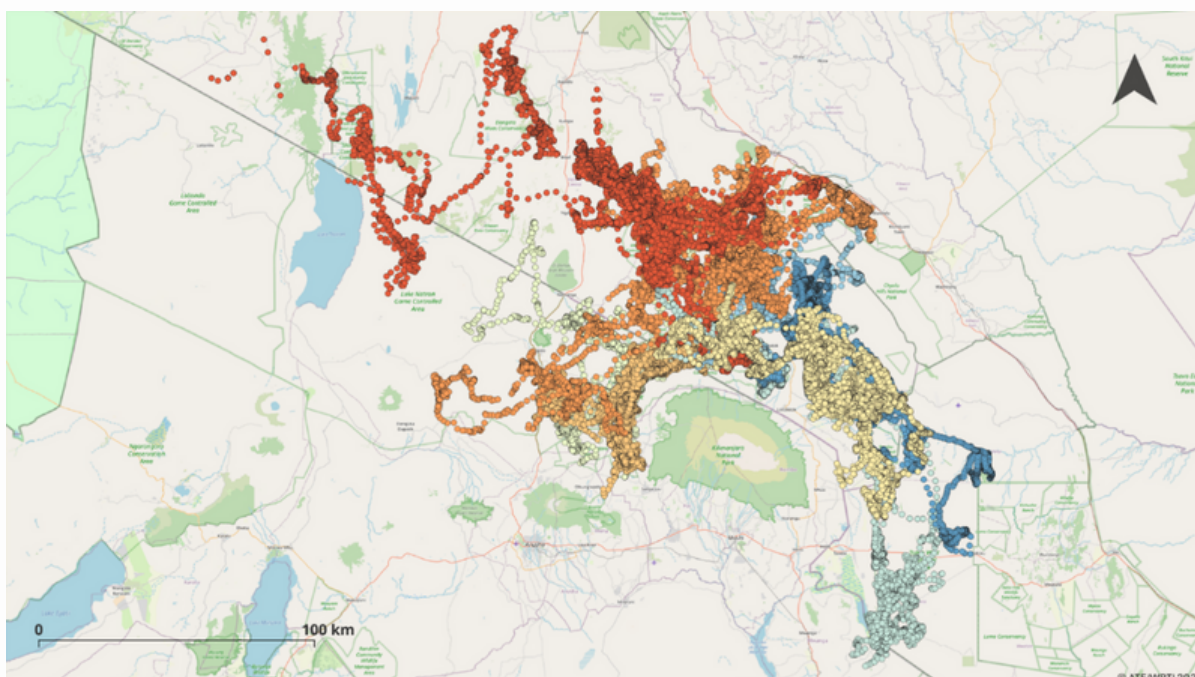
*(WRTI presentation; Fishlock, Tiller, Njiraini, Sayialel, Moss, Ngene, Mukeka, Omondi & Lee: Young male elephants: dispersal and exploration in Amboseli, Kenya)*

In 2024, upon completion of our Prior Informed Consent and Mutually Agreed Terms process (meeting held 25-26th January 2024), we will be working on a new collaring strategy, applying for permission to remove failed and failing units, and considering the deployment of new collars to assist with our overall aims of supporting elephant conservation in Amboseli and the surrounding community lands.

In 2023, the eight collared young males still show no sign of establishing a stable core range even after 3 to 4 years (see Figs 8-15), and are now reaching 15-20 years of age (Table 1).

Elephant ID	Esposito	Garango	Ibadan	Jaeger	Jameson	Lenku	Pakwach	Peet
Natal Family	EA	GB	IAIC	JB	JA	TC*	PA1	PA4
Deployment date	26/07/19	26/07/19	24/07/19	13/08/20	24/07/19	13/08/20	25/07/19	13/08/20
Age at collar deployment	16.17	14.67	15.42	13.33	12.42	11.58	15.33	11.50
Months post independence	41	42	41	4	-7	-4	30	-2

**Table 1:** The collared young male sample



**Figure 8:** Tracks of all collared males over all years showing the breadth of area used across the ecosystem and across the border into Tanzania.

Each male uses different areas of the greater ecosystem at different times of year (Fig. 8). Several males used areas across the International Border, focussing on Enduimet in Tanzania but still ranging widely across the border areas including plantations near Mkomazi. Each male also moved in response to different variables such as rainfall and food, or human risks.



**Figure 9:** Displacement measures (rate of movement between hourly collar fixes) for each of the young males (A. Esposito, B. Jameson, C. Jaeger, D. Ibadan). Higher values show movement away from the original area used. Purple areas show movement through high NDVI or greenness.

### B) Collared females

Two known family females were collared in collaboration with KWS, who aimed to monitor females who ranged extensively outside the park. Indeed, these females only rarely returned to the central swamps during the driest months of July-October. While the importance of water and food in the central swamps has long been recognised, it is vital to appreciate the amount of time spent at a considerable distance from the park on group ranch and community land throughout the year.

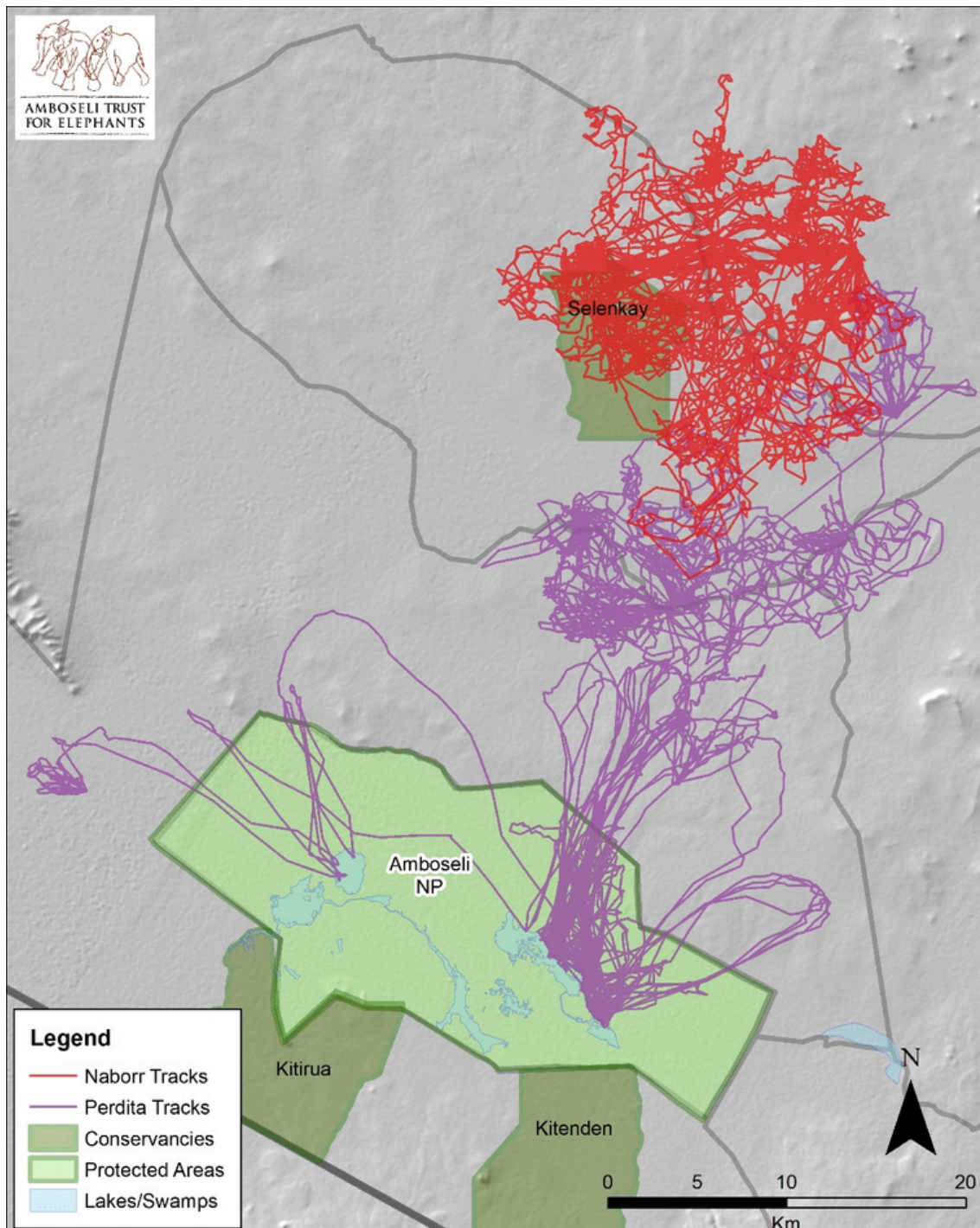
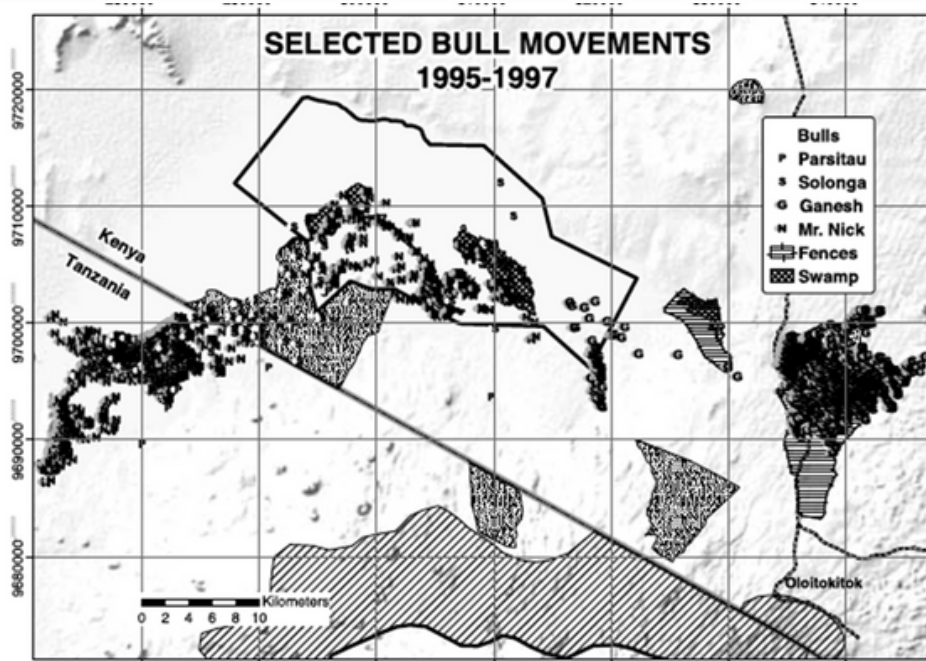


Figure 10: Female ranging map

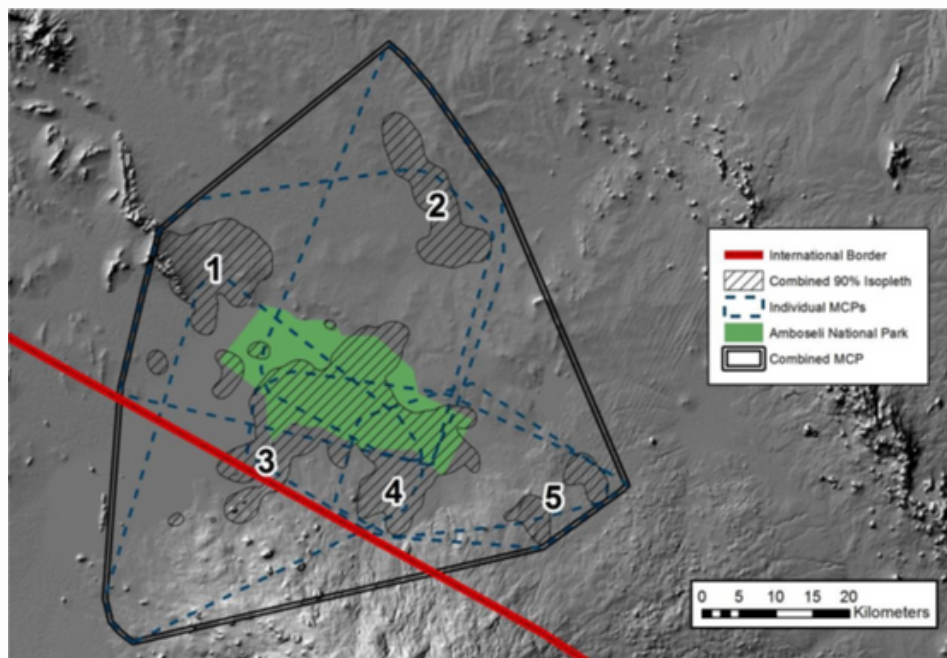
### C) Ensuring cross-border connectivity and conservation

Historical data on collared males (from Moss et al. 2011; Fig. 11) shows the use of cross-border areas by large musth-age males from earlier in the study. These males however have more clearly defined and smaller ranges, and all return to spend time in the central swamps when in musth and searching for oestrous females.



**Figure 11:** Reproduced from Box 7.1 Moss, Croze & Lee 2011: Locations of collared and tracked males in our historical sample.

Females also use the regions across the international border. Radio collars in the 1970s showed extensive female use of areas south of Kitirua Conservancy, and of our ~60 known families, at least 15 (~200 animals) range consistently in these southern cross-border areas.



**Figure 12:** Ranging of five females collared between 2011-2014. These tracks are presented as the combined 90% isopleth home range (= 845km<sup>2</sup>), total MCP (=3,677.8 km<sup>2</sup>), and individual MCPs of the collared individuals. The use of Enduimet and cross-border areas by females is clearly shown.

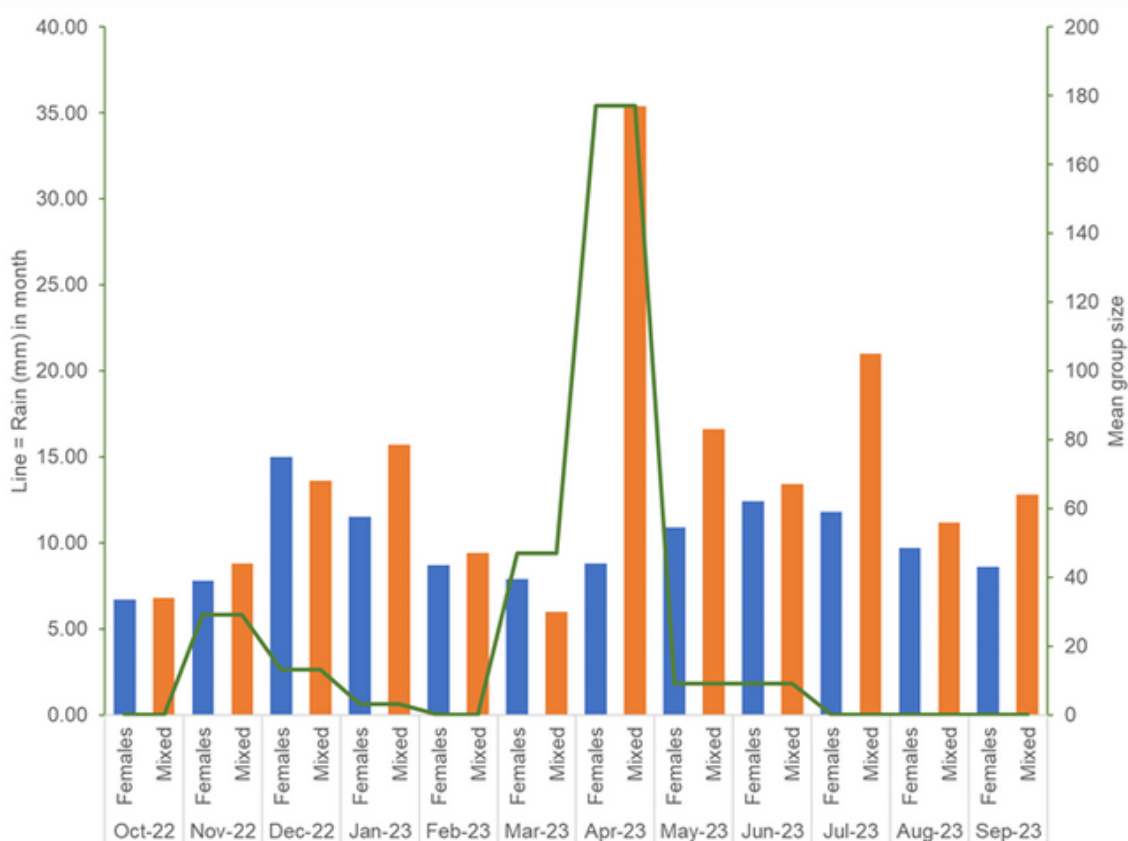


## IV. Elephant Behaviour and Social Dynamics

### A) Female sociality in drought years

Sociality among females is reduced during dry periods, with smaller groups (Fig. 13), greater fragmentation of families and fewer large aggregations of different families together. Large, mixed groups containing a number of males were present in 2023, and were largest in April, when rainfall was high. Of note were the large mixed groups in the three months following the high April rainfall, associated with post-rain increasing grass production.

The proportion of times all the individuals in a family were seen together was low during the dry year of 2022-23 at 12.3% of sightings, unsurprising given that median family size is now 18 while female and mixed group size averaged 12. Which families are cohesive, and when, are questions currently being explored in the long-term data.



**Figure 13:** Female group sizes (Female only and Mixed with males) by month during the rain year of 2022-23.

## B) Male associations and behaviour

Since there are fewer and smaller female groups and only a small number of oestrous females during dry periods, males tended to be more solitary. All male groups were seen, usually consisting of one or more old males with a number of younger males. The typical independent male was found with one other male or on his own, and male group sizes averaged 1.6 males across the year (minimum = 1, maximum = 6).



## V. Research collaboration and dissemination

### A) Overview of collaborative research

#### ***Ongoing collaborations:***

- ATE, KWS and University of Nairobi, Professor Robert Chira. Peter Kimani MSc student: Environmental DNA used to assess elephant diets in a rapidly transforming landscape. ATE Mentor, Dr Vicki Fishlock. To be completed 2024.
- ATE, Wildlife Research and Training Institute: Joseph Mukeka, Dr Shadrack Ngene, Dr Patrick Omondi: Explorer males: the dispersal and movements of young male elephants at independence. ATE Mentors, Dr Vicki Fishlock & Dr Lydia Tiller. To be completed by 2025.
- ATE, KWS and Dr Edward Kariuki (KWS veterinary team): Epidemiological survey of the common elephant disease syndromes in Amboseli National Park and adjacent Ecosystem. ATE Mentors, Dr Vicki Fishlock & Dr Cynthia Moss
- ATE, York University UK (remote collaboration) Prof Colin Beale & Helen Mylne PhD student: modelling social networks for male elephants from 50 years of data. ATE Mentors, Prof Phyllis Lee and Dr Vicki Fishlock. To be completed 2026.

#### ***Planned collaborations:***

- ATE, Southern Tanzania Elephant Project & TAWIRI: investigating the use of the ATE database for other researchers. ATE Mentor, Dr Vicki Fishlock
- ATE & WRTI, University of Nairobi: Population genetics and connectivity (in development for proposal and funding)
- ATE & WRTI Sospeter Kiambi: Using long-term demographics and mortality records to
- assess bias in population monitoring indicators (in development for proposal and funding)
- ATE with partners to be determined: Vegetation and landscape changes assessed from remote and ground based observations. ATE Mentor, Dr Keith Lindsay (in development for proposal and funding); see also Schüßler et al. 2018.

#### ***Historical collaborators with ongoing projects:***

- ATE, Elephant Voices (Dr Joyce Poole): Elephant communication
- ATE, University of Sussex (Dr Lucy Bates): Comparative cognition
- ATE, University of Aarhus (Prof David Lusseau): Demographic modelling over the long term
- ATE (Dr Keith Lindsay): Captive elephants and implications for wild populations

## B) Recent publications (2022-2033)

Fishlock, V., Michelmore-Root, F., Njiraini, N., Sayialel, C., Moss, C., & Lee, P. (2022). Developing a user-centred system for long-term elephant monitoring. *Pachyderm*, 63, 183-189.

Fishlock, V., Tiller, L., Njiraini, N., Sayialel, C., Lee, P., Moss, C., Mukeka, J., Ngene, S. and Omondi, P., (2023). Bridging the Rift: demonstrating large mammal landscape connectivity from Amboseli National Park to the greater Maasai Mara. *Pachyderm*, 64, pp.107-111.

Lee, P. C. (2022). Groups, grouping and networks: dynamic unanswered questions for primatologists. *Primates*, 63(3), 187-193.

Lee, P. C., Moss, C. J., Njiraini, N., Poole, J. H., Sayialel, K., & Fishlock, V. L. (2022). Cohort consequences of drought and family disruption for male and female African elephants. *Behavioral Ecology*, 33(2), 408-418.

Robertson, M.R., Olivier, L.J., Roberts, J., Yonthantham, L., Banda, C., N'gombwa, I.B., Dale, R. and Tiller, L.N., (2023). Testing the Effectiveness of the "Smelly" Elephant Repellent in Controlled Experiments in Semi-Captive Asian and African Savanna Elephants. *Animals*, 13(21), p.3334.

Schapper, A., Hoffmann, C., & Lee, P. (2022). Procedural rights for nature—a pathway to sustainable decarbonisation?. *Third World Quarterly*, 43(5), 1197-1216.

Smit, J.B., Searle, C.E., Buchanan-Smith, H.M., Strampelli, P., Mkuburo, L., Kakengi, V.A., Kohi, E.M., Dickman, A.J. and Lee, P.C. (2023). Anthropogenic risk increases night-time activities and associations in African elephants (*Loxodonta africana*) in the Ruaha-Rungwa ecosystem, Tanzania. *African Journal of Ecology*, 61(1), pp.64-76.

Pardo, M.A., Fristrup, K., Lolchuragi, D.S., Poole, J., Granli, P., Moss, C., Douglas-Hamilton, I. and Wittemyer, G. (2023). African elephants address one another with individually specific calls. *bioRxiv*, pp.2023-08.

Sanare, J. E., Valli, D., Leweri, C., Glatzer, G., Fishlock, V., & Treydte, A. C. (2022). A Socio-Ecological Approach to Understanding How Land Use Challenges Human-Elephant Coexistence in Northern Tanzania. *Diversity*, 14(7), 513.

Wiśniewska, M., Puga-Gonzalez, I., Lee, P., Moss, C., Russell, G., Garnier, S., & Sueur, C. (2022). Simulated poaching affects global connectivity and efficiency in social networks of African savanna elephants—An exemplar of how human disturbance impacts group-living species. *PLoS computational biology*, 18(1), e1009792.

## VI. Stakeholder engagement: coexistence and communities

### A) Community engagement in a changing land-use context

In August 2023, the President decreed that Amboseli National Park, administered by the Kenya Wildlife Service, would be returned to the management of Kajiado County Council, representing Maasai local organisations, Community Conservation areas and other local landowners. The procedures for this handover and the subsequent management of wildlife, livestock, tourism and other activities as well as revenue sharing, are in the process of being negotiated between the different participants. This transition creates new opportunities to manage a coherent area of 8000km<sup>2</sup> rather than an exclusion area of 392km<sup>2</sup> by developing a common management plan. ATE aims to work collaboratively with all our ecosystem partners to ensure that elephants have a voice in these decision-making processes about long-term land use.

### B) Awards and Achievements

ATE and our researchers were specifically recognised in 2023 for continued contributions to conservation in Kenya. Cynthia Moss and the ATE team was presented with a certificate of recognition for conservation from KWS Director General Dr Erustus Kanga in September 2023. Our Assistant Director and Training Coordinator, Norah Njiraini was awarded the first international Diane Skinner award in August 2023, recognising her as a conservation hero who has worked selflessly for conservation, focused on the wildlife and not themselves.



**Above:** KWS Director General Dr Erustus Kanga and ATE Director Dr Cynthia Moss **Right:** Norah Njiraini receiving her award



## C) Coexistence planning and projects

Dr Lydia Tiller joined ATE in January 2023 to act as our Head of Human-Elephant Coexistence. Her roles are to support ATE's ongoing ecosystem connectivity research by assisting with the mapping and collaring studies. She is in the process of developing a coexistence research program in collaboration with Big Life, exploring trends at the human-elephant interface and developing new research ideas to manage and mitigate coexistence challenges. This work involves using camera traps placed along electric fences used as a deterrent to elephants entering farms, to understand when and how elephants break the fence, whether crop foraging is always the motivation for breaks, and what deterrents or additional measures might support the fence investment. In conjunction with our other collaborations on vegetation and habitat work, we also expect a better understanding of when elephants access crops, and which crops are at risk.

Also in 2024 Lydia is leading a new team of Maasai enumerators from local communities developing and implementing an ecosystem wide survey of people's perceptions of elephants. Funded by WWF, this survey builds on extensive previous work of Dr K Kangwana, Prof R Reed, Dr C Browne, and others, and comes at a critical time for understanding coexistence challenges, as changes in land use planning and land ownership alter livelihoods and rangeland available for peaceful coexistence with elephants.

Our aim is to build a programme that actively supports and is accountable to communities living alongside wildlife and also clearly represents the elephant's voice in land use. Understanding the interface between elephants and people depends on understanding needs, behaviour and motivations on both sides.



Installing camera traps

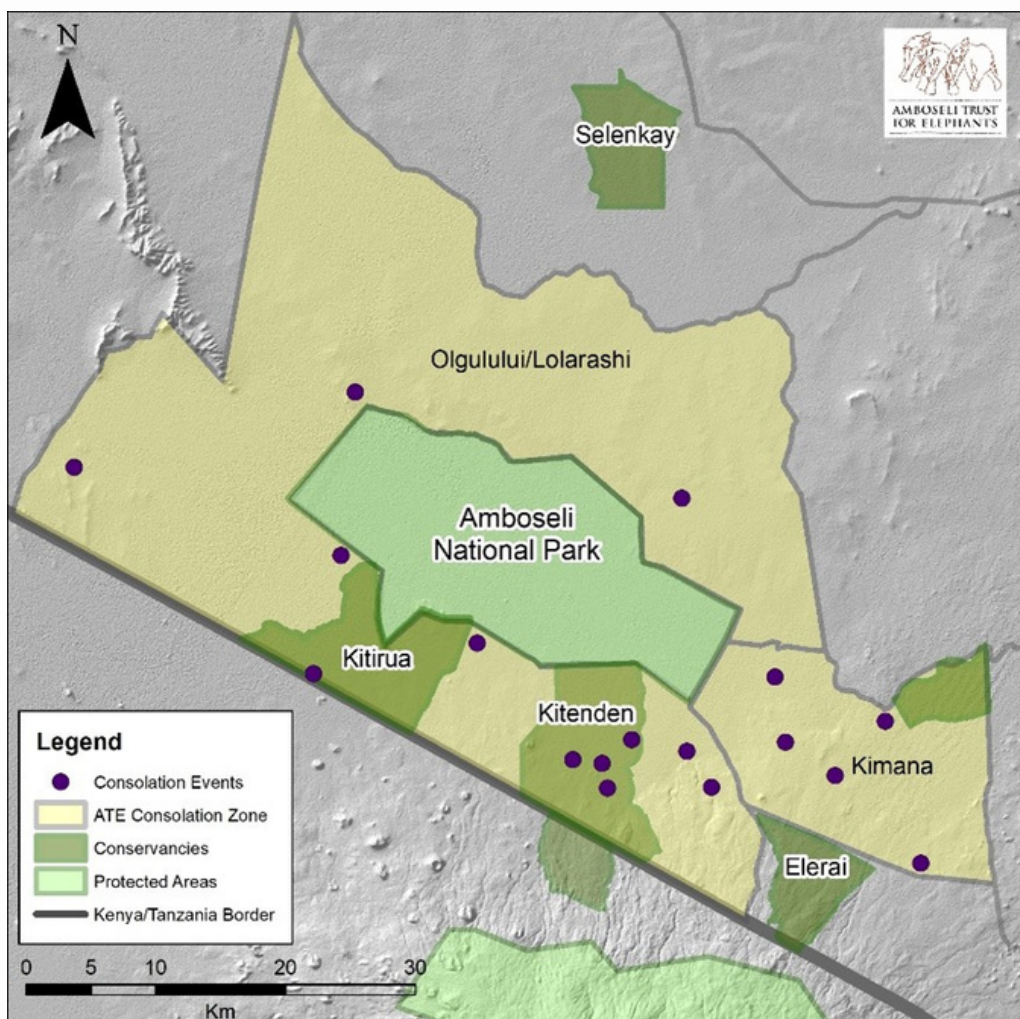


Survey in the community

### D) Consolation

*(WRTI presentation 3: Tiller, Lindsay, Njiraini, Sayialel & Moss: Amboseli Trust for Elephants HECx Program - Learning how to coexist by understanding elephant behaviour)*

ATE has engaged with community members who have lost livestock to elephants outside the protected area since 1995. The killing of livestock by elephants is a rare behaviour, primarily seen in areas where Maa speaking pastoralists overlap with elephants, but not reported from Tanzania or elsewhere outside of Kenya. This behaviour is a highly problematic for both people and elephants. Understanding how many individuals and their characteristics are active in driving conflict scenarios is key to developing effective responses for all participants. ATE's experience shows that coexistence between people and elephants can be improved by targeted interventions, such as our consolation programme. In 2023, especially during the dry months when elephants and livestock were in direct competition for water, we recorded and provided consolation payments for 28 events totalling KSh 580,000. Compared to 2022 and the peak drought period with 62 livestock injuries, elephants and livestock were able to spread out over the ecosystem with fewer hostile interactions. As is apparent from Fig. 14, these events are widely distributed across the ecosystem although there are slightly more in the Kitenden area, illustrating the importance of maintaining the Kitenden corridor to allow for unimpeded elephant movement.



**Figure 14:** Map of consolation events across the Amboseli ecosystem in 2023

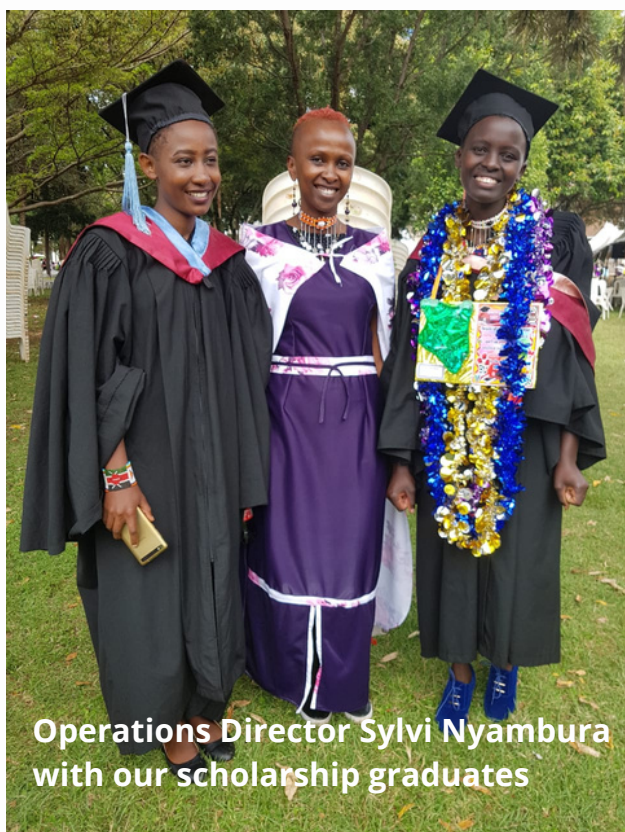
### E) Internships and Scouts

ATE has a training programme for interns from the surrounding Group Ranches; these interns assist Assistant Directors with observations of elephants in the field, help with data input, learn elephant identifications and generally support our monitoring of the ecosystem. Interns benefit from hands-on elephant experiences, as well as computer, video, and photographic training. Issac Letunka acted as an intern research assistant supporting ATE’s field data collection and he was with us for 6 months in 2022 and 2023. Jennifer Nosim was our next intern. She has left to pursue further training in hospitality and we wish her well in her next steps.

Our Maasai Elephant Scout programme is linked with Big Life, and 25 scouts now monitor elephants in areas far from the central swamps, as well as providing information on human-elephant interactions across the broader ecosystem.

### F) Scholarships

ATE fosters livelihood development among young men and women through funding scholarships for primary, secondary and university students from the Group Ranches surrounding Amboseli National Park. In the calendar year 2023, we sponsored 21 students in total (we supported 15 girls and 6 boys). We had three students graduating at advanced levels in this calendar year. Two women graduated, one with a Certificate in Public Health and the other with a Diploma in Community Development. One young man graduated with a degree of Bachelor of Science in Land Resources Planning and Management. ATE’s scholarships build capacity and develop livelihoods in many areas of learning and professional training for young community members who share their lives with elephants, and our ecosystem partners.





## G) Training, mentoring and career development

### ATE field elephant training 2023

Since 1997, ATE has dedicated itself to enhancing wildlife conservation across Africa. Under the leadership of Norah Njiraini, our Training Program Coordinator, we have trained countless wildlife professionals from many parts of Africa. In 2023, ATE was able to restart training, post Covid-19, and we conducted two elephant training courses. The first course, held in March, focused on training 32 Stand Up Shout Out (SUSO) Wildlife Ambassadors. SUSO is a youth activism and education organization dedicated to raising awareness about conservation and human-wildlife interactions, particularly in regions near wildlife habitats. Given the escalating incidents and potential dangers in Kenya, where interactions can result in harm to humans or elephants, ATE collaborated with SUSO to disseminate crucial knowledge on safety protocols and awareness.

The SUSO Wildlife Ambassadors play an important role in reaching out to various communities, schools, and youth across Kenya during their conservation activities. The training covered essential topics such as recognizing safe and dangerous elephant behaviours, differentiating aggression from play, understanding musth in males, and implementing safety protocols in the presence of elephants. The training session took place at the KWS headquarters near Kimana Gate, with support from Amboseli KWS headquarters, which graciously provided their Conference Hall due to the large group size.



Director of SUSO Peter Moll receiving his training certificate from Norah

ATE expresses gratitude to KWS for their invaluable support in facilitating this training, which proved to be a resounding success. The participants gained new and important knowledge about elephants, engaging in discussions, sharing stories, and fostering connections that contribute to the development of future conservationists in Kenya. ATE remains optimistic that these young conservationists will continue to grow in their careers, actively contributing to the welfare of both elephants and communities throughout the country.

In June, ATE conducted another training session lasting four days at its research camp in Amboseli, focusing on four elephant researchers from the Mara Elephant Project (MEP). The comprehensive training covered topics such as field elephant ageing, age determination techniques using jaws, counting and identifying groups, understanding intricate elephant behaviours, and identifying matriarchs in family units. This session further exemplifies ATE's dedication to providing essential knowledge to professionals actively engaged in elephant research and conservation.



**Training MEP researchers**



### Empowering Kenyan Wildlife Conservationists : ATE's Career Development Workshop

Our commitment to mentoring extends beyond school and university scholarships to nurturing the next generation of Kenyan conservation professionals, focusing on supporting young graduates in overcoming employment challenges. ATE recognizes the importance of communication skills and professional CV writing, often underdeveloped among Kenyan youth. This gap hinders deserving individuals from securing opportunities early in their careers. In line with our objective to empower Kenyan wildlife conservationists, two members of our team Dr Lydia Tiller and Tal Manor designed and coordinated a three-day Conservation Career Development Training Workshop. The program equips young graduates with essential skills, covering enhanced CV writing, professional communication, interview techniques, networking, and mindset for job opportunities.

Throughout the workshop, participants engaged with experts from diverse conservation backgrounds, gaining insights into unique career journeys. To offer practical experience and exposure to conservation opportunities, the workshop featured a Networking & Inspirational Talk Expo. Renowned organizations such as SUSO, Kenya Wildlife Trust, Save The Elephants, Luigi Foundation, Giraffe Conservation Foundation, and CHD Conservation Kenya participated. Attendees learned about internship and job opportunities, showcasing their networking skills with organization representatives.



Guest speaker from CHD Conservation Kenya, Collins Busuru



Guest speaker from SUSO, Peter Moll

The workshop has seen some immediate success, with so far 10 of the 16 participants securing internships, expanding their career prospects. The workshop, fully funded by Maniago Safaris and Luigi Footprint Foundation, took place in Nairobi. We express immense gratitude for their support in this important initiative. Our goal is to conduct these workshops quarterly, providing a platform for 64 Kenyan youth each year to enter the job market with enhanced prospects for success at the outset of their careers.



**Above:** ATE team, participants, sponsors, and some of the guest speakers (STE & SUSO) from the November 2023 workshop



**Dr Cynthia Moss, Director**  
**Prof Phyllis Lee, Director of Science**  
 February 2024

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