

Elephants for Africa Annual Report 2014



Elephants *for* Africa

Conservation through research and education





Dear friends,

In the past, conservation methods have included segregating humans and wildlife and these protected lands throughout Africa, play a vital role in conservation. However, many of these areas do not provide all the ecological and social requirements for elephants and migration between different ecosystems is vital for their long-term survival. This becomes more apparent in times of drought when elephants have to leave protected areas. With an estimated 80% of the African elephant population relying on land outside of protected areas for some of the year, human-elephant coexistence is crucial to their long-term conservation and is fundamental to our education and research goals.

Our research on the elephants inside and outside the national park and with the communities bordering the park, has highlighted the need for more focus on human-elephant conflict mitigation and working towards coexistence. The cost to these communities of elephants coming into their land, is not just in ruining their crops, they also inhibit children getting to school and the collection of water for households.

2014 has been a productive year and building on our work, 2015 will see us working more with local communities. We hope to: increase the uptake of conflict mitigation strategies by farmers; improve their understanding of elephant behaviour to enable them to live safely; engage children in wildlife, and expose them to elephants in a non-conflict situation. This will empower them to be the problem solvers for their communities. Pivotal to these education initiatives will be the employment of a local community officer in the village of Khumaga who will focus on the farmers and children initially.

This year we welcomed Dr Jess Isden into the team to replace Mphoeng Oftithile and Dr Emily Bennitt. Jess arrived with a passion for applied science and conservation; I am very much looking forward to working with her as we shape the next phase of our research and education programs.

Elsewhere, the African elephant has come under intense pressure from poaching and many populations have been decimated. We now live in a global community and we all have a role to play in their survival and conservation. Stopping the demand for ivory will stop poaching; developing human-elephant coexistence will stop the conflict.

I want to thank you for the support you continue to give us as we seek solutions to ensure that Botswana remains a strong hold for elephants into the future.

Best wishes, Tlhola sentle,

Dr Kate Evans
Founder and Director of Research and Education
Elephants for Africa



A note from the Project Manager

Dr Jess Isden

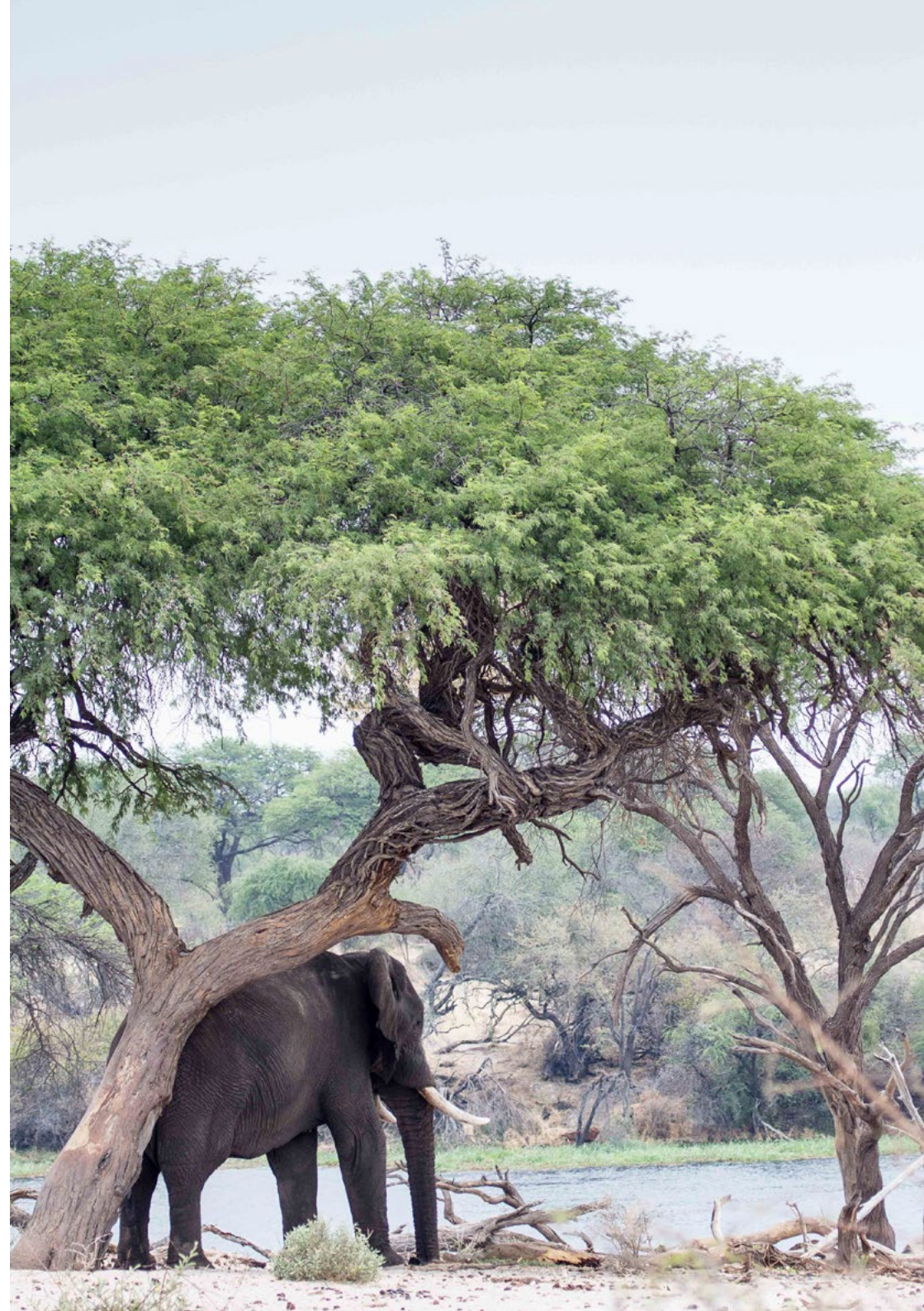


In September 2014 I arrived in the national park to begin my role with EfA. It has been a whirlwind start, with lots to discover about the male elephants that reside here. For the remainder of 2014 I spent most of my time learning how to be around these impressive bulls; how to recognise, photograph and record them, and what the primary issues surrounding their conservation are.

I am excited about the prospect of working here at a stage when we can review our data and plan ahead for the next phase of our research and education. The Makgadikgadi and surrounding region continues to offer an exceptional opportunity for us to increase our understanding of how elephant populations react to changes in physical resources, and the social impacts of such change.

This area has been cited as one of the most significant human-wildlife conflict zones in Botswana, and so it is vitally important that we continue and expand our education programme, developing strategies to combat human-elephant conflict that can be applied to other areas in the future.

I hope that you will continue to support us as we enter this new phase, and that you will enjoy hearing about how we will build on the success of 2014 during this next year.



Research

Social Ecology of Male Elephants

This national park continues to be a stronghold for male elephants, with bulls still dominating our recorded sightings. Males roam further than breeding herds and can be the first to venture into historical ranges. The abundance of males here, coupled with a sustained lack of female herd sightings, has allowed us to collect an extensive dataset on male sociality in this 'bull area'.

Whilst often referred to in the literature, the importance of bull areas is little understood. We hope to help understand what roles they play in elephant biology; is it just for resources where they are not competing with females or are there important social roles to bull areas. We hope this will provide an interesting and insightful contrast to areas where breeding herds are common, and allow us to understand more about male elephant needs, how elephant populations respond to changing environmental conditions and resource availability.

Our long-term monitoring programme has now gathered more than two years of data on the groupings of male elephants we see in the park, as well as information on their age, physical condition and habitat utilisation. During 2014 we spent more than 830 hours collecting data during our research drives, and our database for the national park now contains more than 2000 individually identifiable male elephants.

In contrast to the popular notion that male elephants are solitary, males here are more often seen in small groups than seen alone. At the Boteti River, which runs along the western boundary of the park, males congregate in large groups, sometimes reaching over one hundred, to use it. Such congregations of bull elephants highlight the potential importance of the river not only as a physical resource but also a social resource; it acts as a hub for male interactions and information exchange. Initial social network analyses suggest that males here form loosely connected groups; the nature of male social lives will be a key focus of our analysis in the coming year.



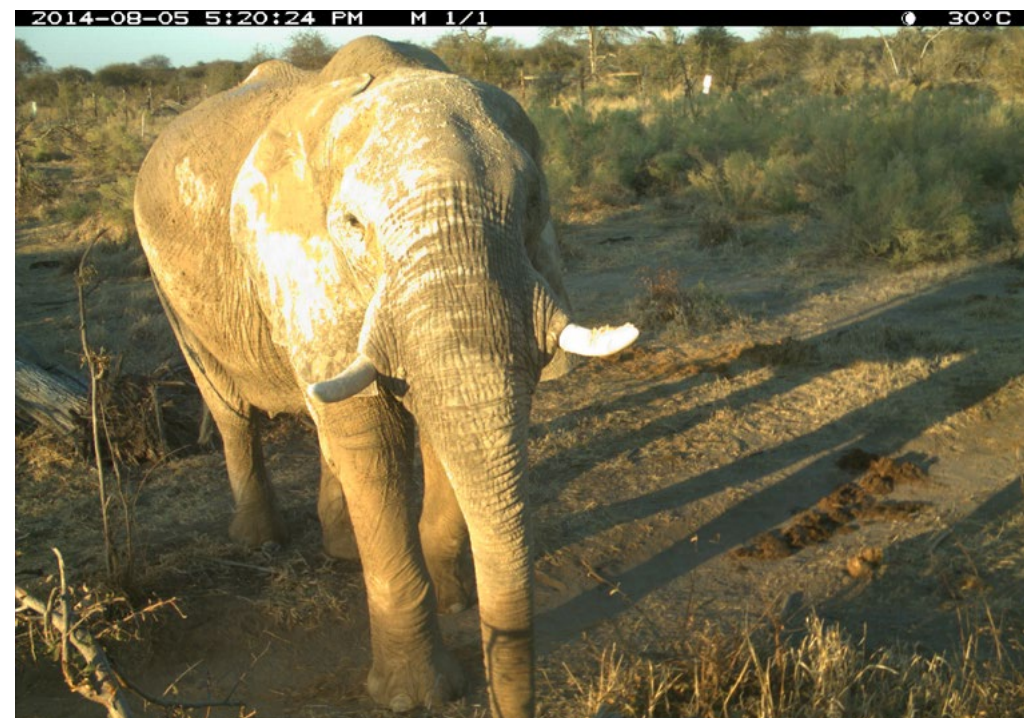
Research

Camera-Trap Project

Throughout 2014, EfA had six camera traps continually operating in the national park. From November onwards (thanks to a donation by Richard & Nicke Hetzel) this number increased to ten. They are located along animal highways; trails that multiple species use to gain access to the river. The camera traps provide us with vital data about the patterns of animal movements in the park.

So far we have collected over 20,000 photographs which await the completion of analysis, but which already suggest that the movement of animals to break points in the wildlife fence that separates the park from the community land is regular, especially for elephants.

The camera traps also capture the more elusive residents of the park, including predators such as lion, leopard and hyena. We now have a better insight into populations of species that were unlikely to have been recorded during daylight surveys. These include aardvarks, caracal, genet and porcupine. This information is shared with other organisations and interested parties, including Botswana's Department of Wildlife and National Parks, to enable more informed management in future decisions about the national park.



Research

Human-Elephant Conflict

James Stevens, PhD researcher, University of Bristol, UK

As poaching continues throughout Africa, Botswana's tough line on poaching, coupled with their effective anti-poaching security units, has meant that more elephants are seeking out the sanctuary of this relative safe haven. Botswana is therefore presented with a different kind of conservation challenge; higher numbers of elephants are coming into contact with human communities, farmland and infrastructure.

Our research camp is situated in one of the highest human-elephant conflict zones in Botswana. It is vital that we develop a strong educational and practical programme to help local communities overcome the challenges of living with elephants and other wildlife, and continue to build on our research into the factors that may encourage males from the national park to raid farmers' fields. For more information about our education program please refer to our education section.

James Stevens has made huge progress with his project looking at crop-raiding elephants in the communities of Khumaga and Moreomaoto alongside the Boteti River. During his first field season James recruited over 70 local farmers (who reported incidences of crop-raiding); they allowed him to access their farmlands in order to collect data. James also conducted interviews with over 140 farmers to gauge their perception and tolerance levels of wildlife. His results were promising, showing that wildlife is generally a valued resource in this region, but highlighting that more needs to be done to support the communities that live alongside the national park.

Building on James' ongoing research, EfA's education program in the local communities is building strength and we have been fundraising throughout 2014 to be able to hire a local community officer in 2015. Their role will be to help us deliver an effective programme of human-elephant conflict mitigation, including the installation of effective chilli pepper fences alongside working with the environmental clubs to develop their environmental education programs.



Research

Human-Elephant Relations in Khumaga

Allie Mayberry, Masters student at University of Guelph, Canada

During June and July 2014, Allie interviewed 60 members of Khumaga village and its surrounding cattle post areas (Bosubeya, Nxwee, Ngamisane, Madiabedible, Menoakwena, Marotobolo, Dikwalo, Tsoi & Magodi). The purpose of these interviews was to gain a better understanding of the ways in which elephants are affecting the lives and well-being of people living along the Boteti river outside of the negative economic effect of crop raiding.

Most participants interviewed saw evidence of elephants every day, typically along the riverbank or in the bush surrounding cattle posts. Most commonly, elephants were sighted breaking trees or drinking water by the river. Fear was strongly associated with elephants when discussed and this was due to their size and unpredictable behaviour. However, a number of participants also believed that “if you do not bother an elephant, it will not bother you”. All 60 participants said that they had never heard of anyone in the area being injured or killed by an elephant.

Nearly everyone felt that elephants threaten their access to food and water because they raid crops and are often at the riverbank. Many people also mentioned that since the elephant population has increased, their freedom of movement and ability to visit relatives at other cattle posts has decreased. 50% of people felt that elephants were important because they bring money for development through tourism, whilst the remainder thought that elephants were detrimental due to crop-raiding.

Most people also said that they are not living a good life because of the problems caused by elephants. Many people believed that elephants should live in the national park and not have access to community lands. Taking on board these findings *Elephants for Africa* will incorporate training on elephant behaviour and awareness of how to act when encountering them (either on foot or in a vehicle) into our education programs in the communities.





Education

Living With Elephants

We feel very privileged to work with diverse community members from the village of Khumaga that borders the national park and to help address issues that living alongside elephants have on their everyday life.

Our work engages us with many local people: teachers and pupils, crop farmers, veterinary officers working with livestock owners and the elders of the villages. This contact has opened up the doors of communication and enabled us to provide applied research and education programs to address some of the issues for these communities.

Our aim is for them to move towards human-wildlife coexistence and improved livelihoods. Whether through working with farmers on mitigation programs or improving the health of their livestock, providing opportunities to school children to see wildlife in non-conflict situations, education and access to information is a powerful tool.

We look forward to expanding this into other villages and working with other NGOs in the area to facilitate villages towards increased sustainability.

Knowledge is the key to many conservation issues and as much as we can inform the community members, we are also learning from them.



Education

The Global Conservation Leadership Program for Youth In collaboration with the Chicago Zoological Society

In 2013 we had meetings with Botswana's DWNP* and the BIUST*. Due to these meetings, we were able to secure funding from *Care for the Wild* to host a Train the Trainers workshop for environmental educators.

The focus of this workshop was to enable attendees to train others in their field in the use of Cycle of Inquiry. This is simple science to engage children in their environment and seek solutions to their environmental problems. Our partners in this program, the *Chicago Zoological Society*, facilitated this workshop.

The workshop was attended by 22 participants, and resulted in nine environmental education plans being drafted. Recent feedback has indicated that attendees would like continued support from EfA to enable them to devise and implement action plans for tertiary and community grass-roots level training.

The aim of our education program was to support and grow local conservation leaders. So it is with great pleasure that we announce that in 2014 Mr Mphoeng Ofithile (who we sponsored for his Masters degree through the University of Bristol) has won a place at BIUST for his PhD degree. He would like to study the impact elephants are having on the wildlife and veterinary fences that separate the national Park and community land.

**Department of Wildlife and National Parks*

**Botswana International University of Science and Technology*



Research & Education

Parasite Management at the Wildlife-Livestock Interface

Josephine Walker, PhD student, University of Bristol, UK

For the past two years, Josephine has been working on engaging and empowering farmers in the communities bordering the national park to improve the health of their livestock.

In spring 2014, she assessed the impact of the targeted selective treatment system for intestinal worm infection in goats and sheep which farmers were trained to use in 2013. The system was found to significantly improve the health of the animals compared to when no treatment was given.

Targeted selective treatment led to equal improvement as when the whole flock was treated – but using only 25% as much de-worming drug. For this work, Josephine and the team were named as Finalists in the collaborations category in the National Coordinating Centre for Public Engagement's 2014 Engage Competition.

The next stage of this research is using climate-based models to predict factors impacting the spatial and seasonal variation in worm transmission risk in the region. In particular, Josephine is interested in examining the role of seasonal differences in shared grazing with wildlife in different areas, as alternative host species may either amplify or mitigate the transmission of intestinal worms.

Overall, the project aims to improve our knowledge of factors affecting transmission of intestinal worms at the border of the national park. Josephine also wants to use this knowledge to develop efficient and sustainable treatment strategies to improve the health of livestock and thereby the resilience of EfA's local communities and decrease the pressure placed on the national park's resources by the livestock.



Publications

Walker, J. & Morgan, E. (2014) Generalists at the interface: Nematode transmission between wild and domestic ungulates *International Journal of Parasitology: Parasites and Wildlife* pp242-250

Mayberry, A. L. Summary of preliminary findings on perceptions of human-elephant conflict in Khumaga village. Written reports provided for Khumaga Village Kgotla & Khumaga Village Development Committee, Botswana. Submitted 15 August 2014

Presentations, Talks & Posters

Evans, K. *Elephant conservation in Botswana and the continental ivory poaching situation*. Education talk at St Mary's Dioscen School for Girls, Pretoria, South Africa. 12th February 2014

Evans, K. *Life as a zoologist*. Educational talk for the Moreomaoto Environmental Club, Moreomaoto, Botswana. 1st February 2014

Evans, K. *Elephants for Africa: Conservation Through Research and Education*. Lecture, Leibnitz Institute for Zoo and Wildlife Research, Berlin, Germany. 12th May 2014

Evans, K. *Elephants*. Educational talk at Misericordia, Chicago, United States of America. 6th October 2014

Evans, K. *Living with elephants*. Lecture for the Chicago Zoological Society Lecture Series, Chicago, United States of America. 9th October 2014.

Evans, K. *Elephants*. Educational talk for the British Berlin Women's Club, Berlin, Germany. 10th November 2014

Evans, K. *Ivory to Ashes*. Educational talk at the opening of Susan Farrington's Art Exhibition. Doongalik Gallery, Nassau, Bahamas. 3rd December 2014

Mayberry, A. & Hovorka, A. J. & Fraser-Celin, Valli L. *The Lives of Animals in Botswana*. Presentation to the Campbell Centre for the Study of Animal Welfare Seminar Series. University of Guelph, Canada. 19 March 2014

Mayberry, A. L. & Hovorka, A. J. 2014. *Examining the well-being of humans and wild African elephants in Botswana: A One Health perspective*. Poster presentation for Global Development Symposium: Critical Links between Human and Animal Health. Guelph, Ontario, Canada. 4-7 May 2014

Mayberry, A. L. & Hovorka, A. J. 2014. *Human-elephant conflict in the Boteti region: A community perspective*. Presentation to the DWP Serowe Office. Central District, Botswana. 14 August 2014

Mayberry, A. L. & Hovorka, A. J. 2014. *Social dimensions of human-elephant conflict: A case study of Khumaga, Botswana*. Oral presentation for Canadian Association of Geographers Ontario Division (CAGONT) Annual Meeting 2014. Toronto, Canada. 25 October 2014

Nett, S. Evans, K & Foitzik, S. *Social behaviour of male African elephants under different environmental conditions in the Makgadikgadi Pans National Park*. Paper presented at Johannes Gutenberg University, Mainz, Germany 19th March 2014.

Stevens, J. *Local farmers' attitudes towards African elephants in the Makgadikgadi region, Botswana*. Poster presentation at University of Bristol, Biological Sciences Postgraduate Symposium. Bristol, United Kingdom. December 2014.

Stevens, J. *Human-elephant conflict in and around the Makgadikgadi Pans National Park*. Oral presentation at the Project Steering Committee Meeting of the Northern Botswana Human Wildlife Coexistence Project, Botswana. August 2014.

Walker, J. *Community-based assessment of nematode infection in goats in a mixed wildlife-livestock system*: Poster at welcome event for new postgraduate researchers at the University of Bristol, United Kingdom. September 2014

Walker, J. *Community-based assessment of nematode infection in goats in a mixed wildlife-livestock system*. Poster at the British Society for Parasitology: Disease Ecology Symposium. University of Salford, United Kingdom. September 2014

Walker, J. *Management of gastrointestinal nematodes of small ruminants in Southern Africa*. Oral presentation to Veterinary Parasitology Discussion Group. University of Bristol, United Kingdom. 4 December 2014

Walker, J. *Predicting seasonal patterns of transmission between wildlife and livestock in Southern Africa*. Poster at the Joint British Ecological Society and Société Française d'Ecologie Annual Meeting 9 - 12 December, Grand Palais, Lille, France

Walker, J. *Food security from the ground up: Livestock health & farmer resilience in Botswana*. Oral presentation at the Cabot Institute Workshop. Bristol, United Kingdom. January 2014

Walker, J. *Quantifying the risk of nematode parasite transmission between wild and domestic hosts*. Poster presentation at the National Institute for Mathematical and Biological Synthesis workshop. University of Tennessee, Knoxville, United States of America. March 2014

Walker, J. *Quantifying the risk of nematode parasite transmission between wild and domestic hosts*. Poster presentation at NSPPS. March 2014

Financial Statement: Year Ending 31st December 2014

	Unrestricted Funds	Restricted Funds	Total Funds Year Ended 31 December 2014	Total Funds Year Ended 31 December 2013
Incoming Resources				
Grants and Donations Received	41,174	23,929	65,104	46,118
Fund Raising Income	1,031		1,031	1,134
Interest Income	44		44	30
Total Incoming Resources	42,249	23,929	66,179	47,476
Resources Expended				
Fund Raising Costs	488		488	3,492
Direct Charitable Activities:				
Education		5,042	5,042	840
Research Expenses	14,709	5,415	20,124	11,026
Equipment and Consumables	4,903	2,257	7,160	3,146
Telephone and Communications	0	870	870	1,235
Travel and Subsistence	3,217	174	3,391	6,578
Wages	32,096	4,443	36,539	18,462
Depreciation	3,803		3,083	3,898
Management and General	1,096		1,096	5,195
Goverence Costs:				
Independent Examiners Fee	0	0	0	0
Accountancy	0	0	0	0
Total Resources Expended	60,312	18,201	78,513	53,872
Net Movement in Funds	-18,063	5,728	-12,335	-6,396
Fund Balances Brought Forward 1 January 2013	34,487	4,159	38,646	45,042
Transfer between funds	0	0		
Fund Balances Carried Forward 31 December 2013	16,424	9,887	26,311	38,646

Trustees

John Graham became a trustee in 2011. He has 34 years of investment experience with major financial institutions. He is Head of Marketing at Rogge Global Partners in London.

Brian Courtenay joined the board of trustees in 2010. Now semi-retired from the family business (SATIB), he brings business experience as well as a deep knowledge of African wildlife conservation issues to the charity.

If you are interested in becoming a trustee for *Elephants for Africa*, please express your interest by sending us an email: info@elephantsforafrica.org

Celebrity Patrons

Nick Knowles is a writer, director and one of Britain's most versatile television presenters. He met Kate Evans whilst filming the BBC television series *Wildest Dreams* and became the charity's patron because of his passion for wildlife.

James Honeyborne is a director and producer of many award-winning BBC TV wildlife documentaries. At the heart of his work lies a passionate belief in the need for conservation.



Donors

Elephants for Africa would not be able to continue its valuable work without support from generous donors. We would like to offer our heartfelt thanks to our main supporters.

For a full list of donors, please visit our website: <http://www.elephantsforafrica.org/how-you-can-help/news/#.VWccblVhBc>

Ivory £10,000+

Chicago Zoological Society
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Pula £500+

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<https://mydonate.bt.com/charities/elephantsforafrica>

Or directly to our bank account -

Account name: Elephants for Africa

Account Number: 65345975

Sort Code: 08-92-99

SWIFT: CP BK GB 22

IBAN: GB07CPBK 089299 65345975

Bank: The Co-Operative Bank PLC

Bank Address: P.O. Box 250, Skelmersdale, WN8 6WT, UK

2. We accept cheques made payable to *Elephants for Africa*.
Please post them to:

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LE10 2SF
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Elephants *for* Africa

Conservation through research and education



Elephants for Africa is a registered charity in England and Wales (no. 1122027) dedicated to elephant conservation through research and education