

CONSERVATION CORNER: Education Beyond the Gates

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“Children need nature for the healthy development of their sense, and, therefore, for learning and creativity” (Louv 2008). As much as children need nature, nature needs children to care enough to make a difference, for the children are the future conservationists of the sparse wildernesses of the world.

Environmental education is becoming more and more important to urban populations to enable people to connect with nature and also as the conservation of many species and habitats rely on a global effort, not least from the populace of the high consumer countries (Ehrlich & Holdren 1971; Blumstein & Saylan 2007). Wild spaces are few and far between in many urban environments, and zoos and aquariums can offer a place for people to connect with wildlife and, at the same time, learn about the animals they see and/or interact with.

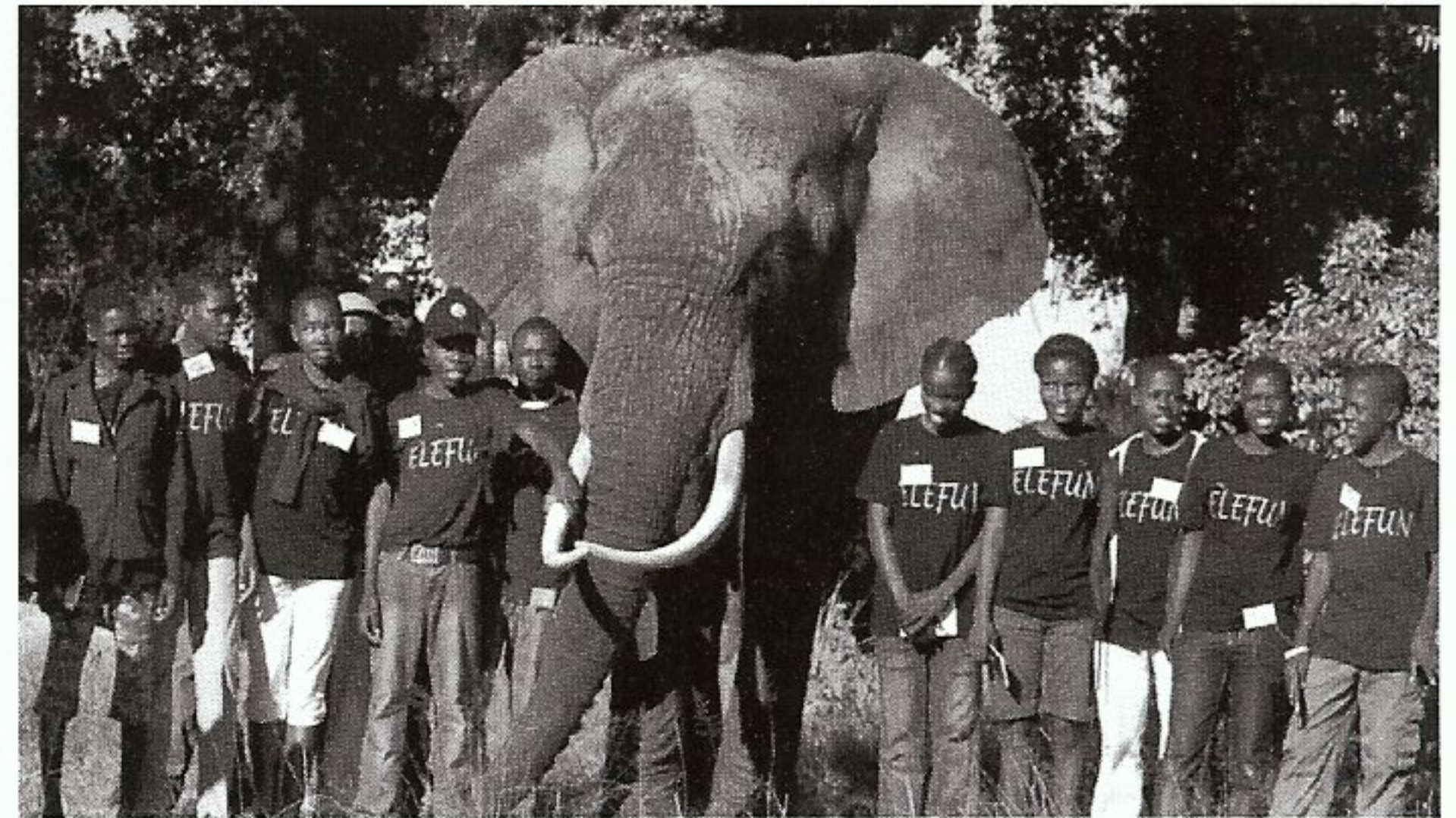
With 700 million people a year visiting zoos and aquariums around the world, there is huge potential for exposure to environmental education and the conservation needs of wildlife and wild places (WAZA). People who go to zoos, especially urban ones, are comparatively wealthy to many of the people living alongside wildlife in its natural habitat. These visitors have the ability to contribute to in-situ conservation by financial means and/or use their influence in lobbying to change policy, as well as make personal decisions about their consumer needs.

However, zoos and aquariums have their limitations as they are mainly based in cities and so are hard to access for rural communities that live alongside wildlife. In many countries, it is these very same rural communities that hold the key to the future of wild animal populations.

Due to increased urbanization and a human population that has grown exponentially over the past century (doubled from '82-'09 and quadrupled from '55-'09 - United Nations) (doubled from '82-'09 and quadrupled from '55-'09 - United Nations), the African continent has seen habitat loss, fragmentation and utilization of wildlife also increase exponentially. Now, more than ever before, is a strong need to actively address the issues of human-wildlife coexistence. Field research often addresses the conservation issues of wildlife through scientific understanding of its needs and requirements, as well as seeking innovative mitigation techniques for conflict resolution (King et al. 2009; Davies et al. 2011). However, scientific research has an emphasis on publication in peer-reviewed journals, and the attendance of conferences to speak to peers. Again the limitations are that rural communities cannot access information and the dissemination of findings to these communities is often lacking.

Africa is home to around 470,000 elephants, most of which are located in southern Africa. The continent wide population is falling at the rate of 38-60,000 animals a year due to illegal killing for ivory (Blanc et al. 2007; Wasser et al. 2008), yet Botswana, unlike many other range states, has elephants in comparatively high numbers and is home to a third of the remaining population.

While the African elephant population is dropping at an alarming rate, the human population in Africa has grown exponentially over the past century with the total population estimated at 1 billion in November 2009. With 34 out of the 53 African countries amongst the world's least developed, poverty is high and subsistence farming a way of life. With 70% of the remaining elephant population surviving outside of protected areas (Blanc et al. 2007), Human-Elephant Conflict (HEC), as well as human wildlife conflict in general, are becoming significant socio-economic problems throughout the continent. This is only likely to increase in the foreseeable future. Therefore the communities living alongside wildlife have a pivotal role to play, but perhaps are least equipped to do so.



All the participants with Cathy, the matriarch of the Abu Camp Herd.



Learning about elephant anatomy with Cathy.

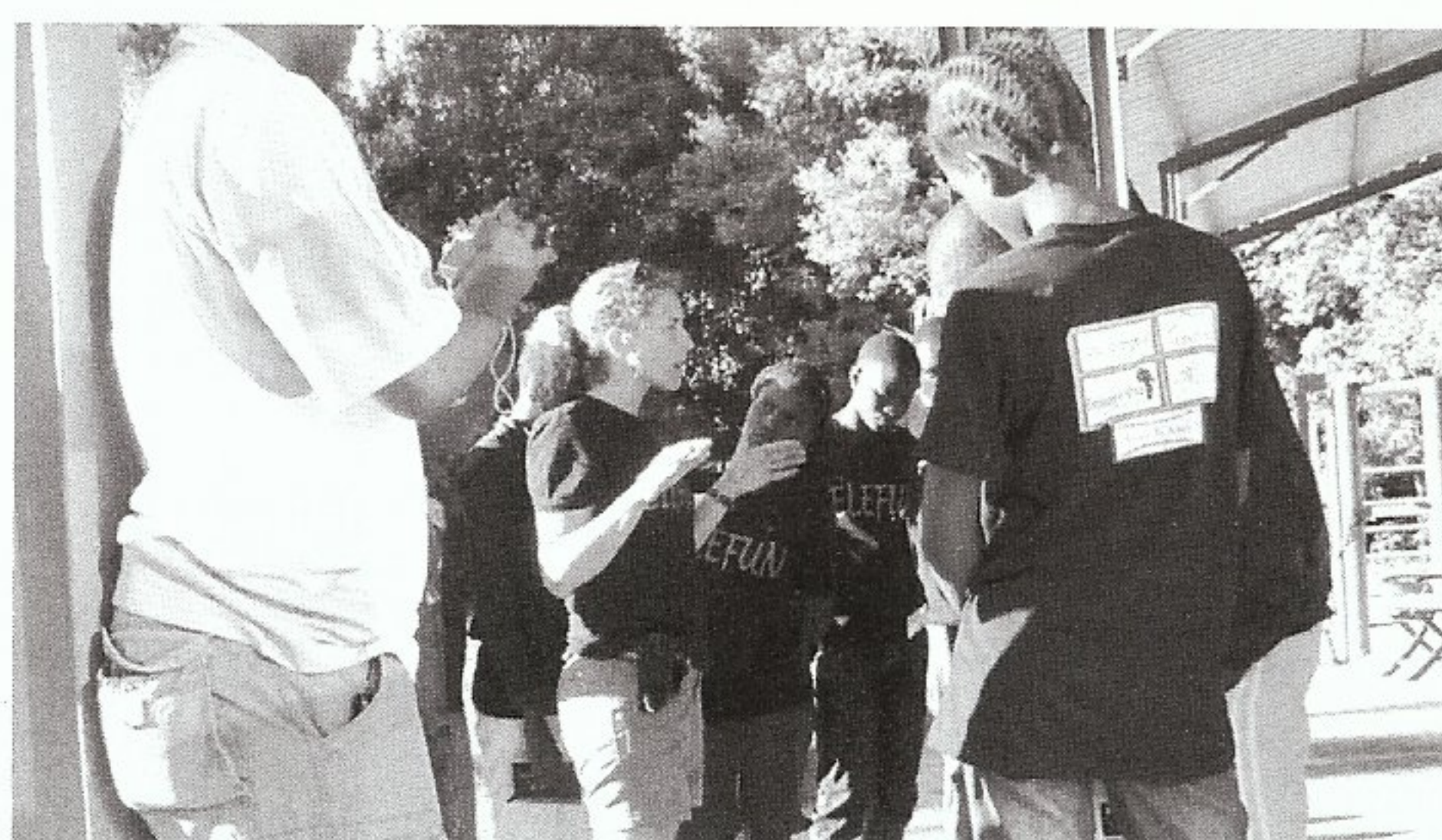
There are four main issues confronting the future of the African elephant: illegal killing (mostly for ivory), habitat loss and fragmentation, HEC and humane population control where local densities are deemed too high. These are all people-led issues and therefore, fortunately, people also hold the solutions.

As well as being home to the largest remaining African elephant population, Botswana is home to a wealth of biodiversity with more than 1/3 of the country set aside for wildlife (Botswana Tourism Board.) It is an education priority to provide awareness of the needs of wildlife and also the key role wildlife can play, through tourism, as the largest sustainable sector contributing to Botswana's economy.

The scenario where game reserves and national parks will provide a safe haven for wildlife and keep them away from humans is simply not sustainable as we face the challenges of climate change and a burgeoning human population (Nicholls 2004). When it comes to conservation education in Botswana there are three main target audiences: 1) The youth, as they can influence adults, are often more receptive to new ideas and are the conservation leaders of the future, 2) graduates to build capacity in conservation and 3) adults as they are the farmers and decision-makers.

Youth and Elefun

There are many different facets that can be included when it comes to the education of youngsters with the power of nature-based learning coming to the forefront of our understanding of education (Louv 2008). Ideally local role models should lead any environmental education activity. Activities should be children-led and give the opportunity for the children to see a different side of the story, i.e. wildlife in a wild situation and their needs and requirements. The value of wildlife is often hard to pinpoint, however, the economy of many African countries rely on wildlife tourism, and this connection is often missed. This, as well as the ecological benefits of



Learning about elephant teeth and eating.

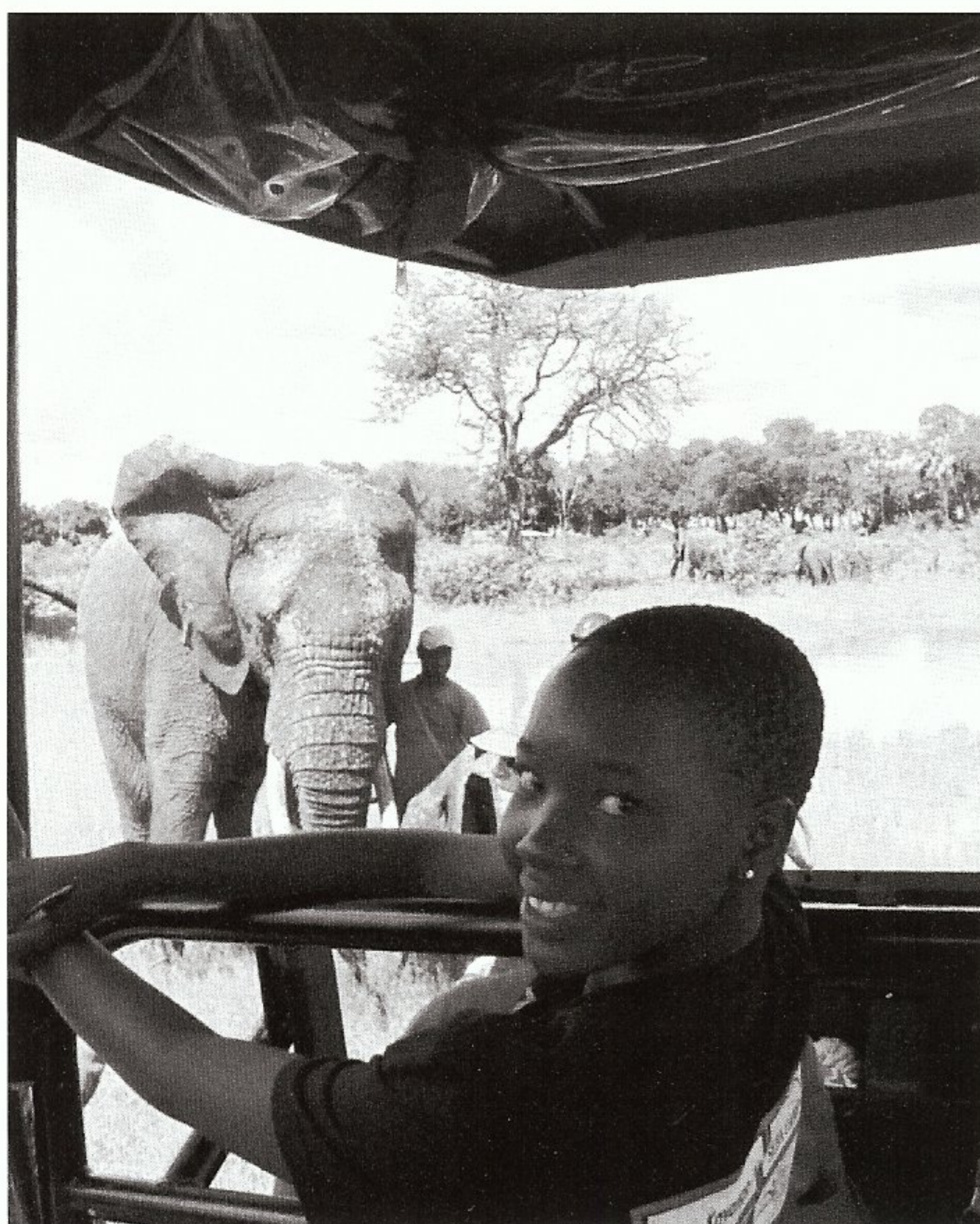
wildlife, should be addressed (Nicholls 2004; Ancrenaz et al. 2007).

While large parts of Botswana are designated for wildlife and host some of the worlds most prestigious tourist destinations, few Motswana have the opportunity to visit these high-cost, low-impact lodges and experience wildlife in a non-conflict situation. Conservation has to come from within and hence researchers and conservationists must share their knowledge and influence the future decision makers. Therefore, Elephants For Africa formed a partnership with Children In The Wilderness (CITW), an established NGO with a similar ethos, to provide an environmental education experience for children to see their wildlife in a wild situation.

The program we have developed focuses on children that have been on a CITW camp and show a keen interest in conservation and are active members of their school environment club. In February 2011 with the help and support of Elephant Back Safaris (PTY) Ltd., Kavango Air, Passage To Africa and the staff at Seba and Abu Camp, EFA staff eagerly awaited the arrival of 12 children from Habu and Tubu villages that border the Wildlife Management Area 26 where EFA is based.

The Elefun weekend is based around nature-based learning and driven by the children's interest, with a focus to give them the basic life skill of understanding all sides of an argument by first gathering the facts and then making their own informed decision. The first evening of games, singing and dancing quickly broke through any awkwardness that often shadows these events and relaxed the children so we could all learn about their understanding of elephants. Myth, fear and misconceptions dominated the proceedings and we knew we had our work cut out.

Activities included tracking elephants through spoor and VHF technology, game drives, discussions and getting up close and personal with the captive herd and their mahouts of Abu Camp. By the end of the weekend, all the children wanted to have their photograph taken with the



Watching the elephants.

matriarch of the Abu Camp herd, Cathy, a huge turnaround for children that had so much fear of the African elephant. One thing we had not contemplated when we welcomed the children into camp was the effect it would have on the EFA and camp staff. We were all very sad to see the children go and look forward to seeing them again when we conduct our follow-ups in their schools later in the year.

Graduate Education – Boyce Zero Scholarship

Making scholarships available to local students has the ability to increase local capacity in the field of conservation, with the focus of education to postgraduate level. Keeping graduates in the field of conservation is a global issue, and in Botswana where the main earner will often support a large extended family, tertiary educated people are often drawn away from a career in conservation due to higher wages in the commercial sector. Working alongside established research programs gives the students opportunities for hands on tuition, to network with international scientists and to perhaps gain a position post qualification. As a result, Elephants For Africa established the Boyce Zero Scholarship Fund to enable local students to carry out postgraduate degrees. Our first scholarship student, Mphoeng Ofithile, commenced his Masters degree at the University of Bristol in September 2009. He is a huge asset to the team and upon completion of his Masters at the



Dr. Evans teaching radio tracking.

end of 2011, we hope to be able to offer him a position within Elephants For Africa as the head of the long-term monitoring program and become a vital part of our education program.

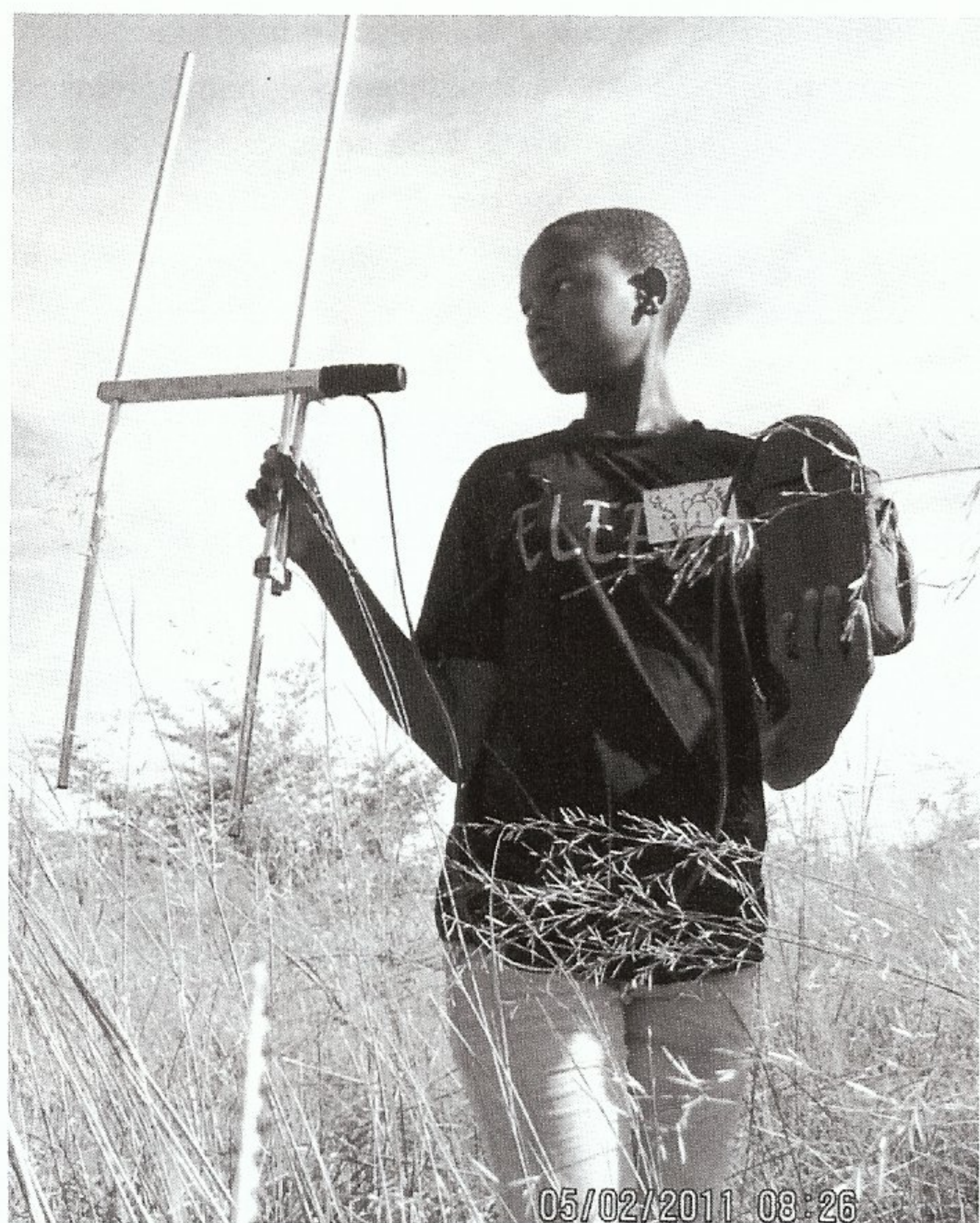
Adult Education

The Okavango Delta is a haven for wildlife enthusiasts and attracts tourists from all over the world. While they come to enjoy the wilderness, it is important that these clients leave with knowledge about the importance of wildlife and their role in the future conservation of wild places. In addition, not only do the tourism camps accommodate the clients that visit, they are also home to the staff that look after these clients. The environmental education of camp staff should be a priority of all camps that operate in wild places.

Elephants For Africa is located in an established commercial tourism camp and so we have excellent opportunities to communicate with the clients that visit the Okavango Delta. This opportunity has seen Elephants For Africa develop a speech that summarizes the conservation needs of the African elephant, highlights the importance of western consumers in the global conservation efforts (Ehrlich & Holdren 1971; Ancrenaz et al. 2007; Blumstein et al 2007) and briefly summarizes what Elephants For Africa is contributing to elephant conservation. This information is offered to every client that comes through the two camps in our vicinity.

For the camp staff, it is important for us to share our findings as well as the findings of others, and so we run lectures, show DVDs (kindly donated by local filmmakers - Afriscreen) and hold discussion groups. These sessions are purely voluntary, open to all and have been well received.

So while zoos and researchers both have their limitations when it comes to environmental education, education can be taken outside the gates through the support of in-situ research and education programs. These programs allow us



Elephant tracking.

to take the next step in environmental education for rural communities that require that knowledge to live in a safe and profitable way through human-wildlife coexistence.

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The mahouts from Abu Camp answer questions about elephants.



Elefun team photo.

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WAZA (World Association of Zoos and Aquariums) Website. www.WAZA.org ❖