

## How many rhinos can you fit in a classroom?

According to Ed Sayer, who, along with his wife Claire Lewis, runs the North Luangwa Conservation Programme (NLCP), 1.8% of Zambia is covered by termite mounds.

That's 5,231 square miles of Zambia's territory – an area slightly smaller than Northern Ireland. You may be wondering what this has to do with rhinos. Quite a lot, as it turns out.

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**T**ermites are an important part of the ecosystem: they decompose dead trees, providing nutrients for living plants. They also clear away dead plant matter, reducing the severity of bush fires, and their mounds provide shelter for a variety of other animals. Rhinos also do their bit for ecosystem maintenance: they create mud wallows, which many animals use as a source of water. Their dung complements the termites' tree-mulching activities as a source of plant nutrition; it may even contain seeds that pass unharmed through the rhino's gut and end up deposited far from the parent plant in a package of their own fertiliser.

If you think this sounds like a secondary school biology lesson, you'd be correct: interdependence between organisms in an ecosystem is one of the messages delivered to schools around Zambia's North Luangwa National Park by Sylvester Kampamba, NLCP's Education Officer. In an activity designed to demonstrate interdependence, Sylvester directs a group of pupils to stand in a ring and place their arms on the shoulders of the person in front of them. He then asks them to bend their knees, as if they were lowering themselves onto a chair. The whole group forms a seated knot of pupils, each one supported by the knees of the classmate behind them. Upon Sylvester's instruction, one child stands up, resulting in the whole group collapsing in a giggling heap. Sylvester explains how, in an ecosystem where everything plays a role, removing one single actor can bring the whole show to an end.

So, rhinos and termites: they're not all that different. Neither are any of the other animals and plants that we saw during

our 10-day field trip to North Luangwa. Every single one fulfils a purpose in keeping the ecosystem in good working order.

North Luangwa's Conservation Education Programme (CEP) has been running for nine years, covering a variety of life science, conservation and sustainability topics. The programme began in 2003 with the creation of a Teacher Training Guide, consisting of 33 lessons to be delivered by a teacher in all participating schools. With the completion of the black rhino reintroduction programme at North Luangwa in 2010, Sylvester's lessons were redeveloped to use black rhinos as a flagship species to engage the children in conservation.

Pupils at one school were able to tell me that in the 1970s there were 12,000 black rhinos in Zambia; by the mid-nineties they were extinct; and that now, through the reintroduction project, there are 24. 'Wait!' interjects Sylvester, before proudly announcing to the class, 'The number has changed – it is now 26.' The importance of the programme is clear as it turns out most of the children have never actually seen a black rhino or many of the animals in the Park. After their lessons they all dream about visiting the Park to see the rhinos themselves.

The programme is so popular amongst pupils that, although it is intended for Grade 5 (11–12 years old), at most schools Grade 6 and 7 also insist on sitting in when Sylvester comes to visit. Many of the kids have walked several miles just to attend this lesson and classes can contain up to 100 pupils. Sylvester's skills as a performer make for an engaging show. Without the benefit of any formal teacher training – in fact, he's only just finishing his high schooling





this year – Sylvester’s natural talent for public performance entertains and educates his audience with a combination of genuine fascination for the natural world and physical comedy. His use of mime to illustrate the relationship between irresponsible toilet use and pollution of water sources is worth the ticket to Zambia alone.

The factual content of the CEP doesn’t just explain the importance of protecting species: it focuses on the relevance to people: people who rely on healthy soil for farming and on clean rivers for their drinking water; people who live in communities can benefit from the income generated by tourism in the National Park; and people who may be employed by tourist lodges or the Zambian Wildlife Authority, jobs that exist thanks to the wildlife that lives within the Park.

responsibility amongst school pupils. By building on the factual content of the lessons through activities that encourage pupils to identify environmental problems in the local area and to take action to solve them, the CEP aims to help pupils develop the awareness, ability and skills to become a part of the conservation process.

The CEP faces many challenges: the logistics of working with 22 schools that have limited communications, no electricity and minimal resources is just the tip of the iceberg. Some of the schools can only be reached during the six months of the dry season. Sometimes, Sylvester can leave home before dawn and arrive home late at night, just to visit two schools in a single day. In order to address the challenges to conservation, first we must tackle the challenges to education.



## Grants & thanks

Our very heartfelt thanks to USFWS RCTCF and the Disney Worldwide Conservation Fund for their grants (US\$20,060 and \$11,800 respectively), and to David James who raised £1,471 to help cover the costs of the CEP for the period July 2012–June 2013. And thank you to ZSL for its invaluable technical support for North Luangwa.

We sent over several grants from our core funds: \$2,000 for emergency vet care and £4,000 to reposition some of the Sanctuary fences. We’d also like to thank Peter Lawrence and other donors, who have made donations to buy camera cases, binoculars and other equipment. Thanks to the Mackintosh Foundation for £2,000 to pay for exchange visits between rhino monitors/scouts working in Zimbabwe and Zambia, to build capacity.



Left: Children learn about the importance of black rhino

Right: Susie, Sylvester and Paul



Despite the efforts of conservationists, wildlife remains threatened in Zambia. As we approached North Luangwa for the first time, flying in the programme’s Cessna 182 over the neighbouring South Luangwa National Park, Ed spotted a poached elephant carcass from the cockpit. Although North Luangwa’s elephant numbers are increasing, it is the only population that is doing so in Zambia; it is feared a new upsurge in poaching for ivory and rhino horn is beginning. Other activities, including charcoal production and poaching for bush-meat are ongoing concerns in the area. To turn the tide, the root causes of these problems need to be addressed. This is where the CEP can really make a difference.

With funding secured by Save the Rhino International and technical support from the Zoological Society of London’s Discovery and Learning Department, the CEP’s curriculum is being redeveloped to deliver a more empowering message in order to encourage environmental

After 10 days at North Luangwa, we are again in the Cessna, leaving the Park. Ed spots a rhino which

he recognises as an old male who’s been in a spot of bother: a stronger male has been trying to move in on his patch. According to Ed, he appears to be moving away from the territory, searching for a quieter neighbourhood. However, he’s making a beeline for yet another male’s territory, which he’ll have to cross before he reaches safety. Like the rhino, NLCP’s Conservation Education Programme has many difficulties to overcome, but with any luck, by putting one foot in front of the other, and tackling one challenge at a time, it will achieve its goal of securing a future for the North Luangwa National Park – not just for the benefit of the wildlife that lives within it, but also for the people that live around its edges.



Ed Sayer and Claire Lewis, who run the North Luangwa Conservation Programme (NLCP)

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