



Big tusk ahead

The Transboundary Elephant Research Programme was in action in Timbavati Game Reserve on Friday. The team collared, measured and recorded details of various elephants. Journalist Mariana Balt had the privilege of accompanying the team. *See article on page 3*

Tuskers collared for science

■ Mariana Balt

KLASERIE - Whether you are a perfect 34-26-36, or boast much less-perfect body measurements, comparing them with the waist measurements, body length, or even just the foot circumference of an elephant, is somewhat overwhelming.

But for Dr Steve and Michelle Henley of the Transboundary Elephant Research Programme, those are the measurements they work with every day and last week I had the privilege of joining them to do just that: take measurements of wild elephant and fit them with GPS/GSM collars to track them and learn more about their movements.

Just after 06:00 on a cloudy and cool Friday morning, our group of supporters and helpers, including staff from the Timbavati and KLASERIE game reserves and Dr Cobus Raath, well-known wildlife vet, gathered at the Tanda Tula airstrip in Timbavati with the Henleys. After Steve had explained to the group what each person's tasks would be and spelling out certain safety measures, the little Robinson R22 helicopter took off to spot the first bull. After an individual was identified, the vet was taken up to dart the animal and minutes later, the ground crew was called to where the elephant had toppled over and was lying asleep.

While Raath monitored the giant's heartbeat and made sure that it was lying comfortably, the team started with the tasks including taking measurements like its body length, shoulder height, tusk length, foot circumference, length and width and pulling some of its tail hairs for laboratory tests, getting blood samples and making a putty mould of one of its molars.

During this activity, the otherwise mighty colossus lay helpless and undignified on its side, the only signs of life being the pulsating arteries behind its ears and the rhythmic snoring (actually more a roaring) sound from the outstretched trunk. I couldn't help thinking how utterly vulnerable even these enormous animals were in the hands of human technology.

After about 30 minutes, the tasks had been completed and the vet delivered the antidote. Within minutes, the animal was on its feet again and wandered off into the bush. We proceeded on to the next elephant and the whole process was repeated. The Transboundary Elephant Research Programme is a Save the Elephants project (STE), working with the Association of Private Nature Reserves and National Parks within the greater Kruger ecosystem. It is sustained by public support and enthusiasm and dedicated to the ongoing growth of man's understanding of elephant ecology. It studies population dynamics and habitat use, and examines the effects of elephant on key tree species. It experiments with methods of alleviating tree damage and provides scientific knowledge to all stakeholders.

This is done by tracking the animals with advanced technology to understand their needs and what motivates their movements. It also provides scientific knowledge for management planning and the restoration of migration routes now that fences are coming down.

"The more research we do, the more we appreciate the complexity of the individuals and their society and the need to conserve these exceptional animals. Our research supports our education and grass-

roots conservation programmes, constantly improving popular understanding. Live tracking and ranging studies help determine effective strategies for the fourth pillar of our work, monitoring and protection," say the Henleys.

"Integral to much of our research are the GPS/GSM collars that enable us to track elephant movement 24 hours a day. The latest GSM (mobile phone) technology has been pioneered by STE in collaboration with Safaricom. Collared elephants send text messages every three hours with details of their location, air temperature and humidity.

"Now we are beginning to understand why the world's largest land mammal does the things it does. The true extent of elephant ranges and migrations is becoming apparent, as is the sensitivity with which they use their environment. Close studies of individuals are shedding light on mating strategies, communication channels and consciousness. This helps to secure a future for the pachyderms and to sustain the beauty and ecological integrity of the places where they live, to promote man's relationship between the two species."

The project is also supported by Wessa Lowveld. For the past two years, it had been funding the tracking of two elephants in that it paid for the collars and the monthly tracking fee. With money from a national fund, Wessa Lowveld has also established an environmental educational programme for children and teachers from local schools, through which learners can participate in similar operations and not only help with the research, but learn more about these magnificent animals.



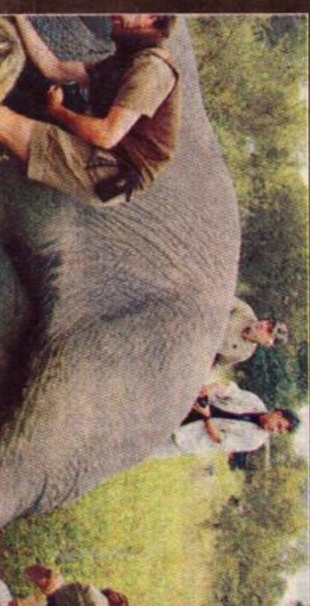
Through the operation, the elephants' deep "snoring" can be heard through the trunk.



The collar has been fitted.



What some people wouldn't do for a good photograph... Dr Steve Henley explains a procedure to a helper.



Messrs Bill Lance and Dave Smith of Wildlife Pharmaceuticals came from America to see how their anaesthetics work.