

## Elephant Identification in South Africa



*Figure 1. Elephant Identification Code and Zoom monitor application where the database is stored of all the elephants within the reserve. Photo credits (Jaco Mitchell)*

'The number of African savanna elephants in nature reserves in South Africa is increasing. Space is limited and the elephants have a great impact on the vegetation,' says master's student in forest and wildlife management Jorian Hendriks. To contain the number of elephants per hectare, park managers need data on the individual

animals, Hendriks explains. 'They want to know, for example, which females they can give contraception to.' But information about an elephant's position on the social ladder is also important. 'For example, an elephant came out of a fight injured with an intruder from another territory. Should you try to rescue that one?'

Existing survey methods with drones or helicopter are not sufficient to collect and record individual traits, Hendriks said. 'With a helicopter you can't see the individual differences, you can only count. So you have to use visual identification of each elephant.'

At Kariega Game Reserve, Hendriks worked on an identification system under the guidance of teacher Ignas Heitkonig and the elephant conservation organization Bring The Elephant Home. 'We mapped individual elephants with codes; numbers that represent special characteristics of an elephant, such as sex and age. But also damages; with these you can estimate the elephant's position on the social ladder. We went into the field for this; I looked with binoculars, mentioned the characteristics out loud and a colleague entered the data into an app.'

In the case of the fighting elephant that had sustained a damaged organ, the system helped determine what measures had to be taken. 'Through our research, we knew the animal was the intended successor to the current leader - the bull - so the elephant had surgery anyway.'

Info: [jorian.hendriks@wur.nl](mailto:jorian.hendriks@wur.nl).

**Note:** Below, you can find the translated text from Dutch to English without any manipulation, additions, or paraphrasing as featured in the Wageningen World Magazine.