

ON WINGS OF SCIENCE

DISCOVERY OF FOUR NEW BAT SPECIES IN AFRICA

Years of research reveals new breeds of horseshoe genus

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STAFF REPORTER

RESEARCH by a group of local scientists has led to the discovery of four new species of horseshoe bats. The bats, which were discovered in eastern and southern Africa, are known for leaf-like, horseshoe-shaped protuberances on their noses. The researchers started their work around 1980 when a team started noticing anomalies in the bats.

The researchers compared characteristics like the bats' sonar calls, skull shape, genitalia and DNA. The team was led by bat experts and evolutionary geneticists including Dr Samantha Stoffberg and Dr Woody Cotterill from Stellenbosch University, Professor Peter Taylor of the University of Venda and Dr Corrie Schoeman of the University of Kwa-Zulu-Natal. The new species are Cohen's horseshoe bat (*Rhinolophus*

cohenae), Smithers' horseshoe bat (*Rhinolophus smithersi*), the Mozambican horseshoe bat (*Rhinolophus mossambicus*) and the Mount Mabu horseshoe bat (*Rhinolophus mabuensis*). Two of the species were named after southern African conservationists Lientjie Cohen and the late Dr Reay Smithers. The scientists discovered the bats after they pieced together clues such as DNA data and the most intense

frequency of sonar calls of each of these species. Previously scientists thought that only one type of large horseshoe bat, Hildebrandt's horseshoe bat (*Rhinolophus hildebrandtii*) was found throughout east Africa, Zimbabwe and Mpumalanga. "We now know that a total of five distinct species of large horseshoe bats occur in central and eastern Africa," said Taylor. Stoffberg, who conducted the

DNA studies, said: "These bats are textbook examples of cryptic species, meaning that they are really very difficult to tell apart just based on their looks and morphology. DNA comparisons have made it possible for us to clearly distinguish between these species." Cotterill said their DNA analyses also revealed that these species were relatively old and had evolved over the past 5.2 million years. neo.maditla@inl.co.za



NEWCOMER
A new species of horseshoe bats were recently discovered by Stellenbosch University scientists

ECOLOGY

Trust aims to conserve rare renosterveld in the Cape

THERE is only about six percent of lowland renosterveld remaining in the Cape province which a new NGO intends to conserve. The Overberg Lowlands Conservation Trust, was formed this week to help conserve lowland renosterveld which is found nowhere else in the world except in the Western Cape. Odette Curtis, director of the trust, said the two biggest threats to renosterveld were the continued, and sometimes illegal, transformation of virgin land and the degradation of the existing fragments of renosterveld.

"With only four to six percent remaining, degradation through overgrazing and incorrect use of fire will result in an even smaller percentage of remnants being ecologically viable. "A critical part of dealing with this challenge is making people aware and showing them what is on their land. One cannot protect what one does not know or understand." She said the trust would create awareness through presentations and field days as well as raising funds to assist landowners to commit to conserving the renosterveld on their land.



CURIOUS
Gladiolus liliaceus (common name Grootbruinafrikaner)
PICTURES: RENOSTERVELD TRUST



ENDANGERED
Gibbaeum haaglenii (commonly referred to as 'Bababoudtjies' or 'Baby Bums')

Curtis said a big part of the work involved getting farmers to see the value in keeping the renosterveld. "I think a combination of understanding the uniqueness of what is actually on their land, combined with tourism and recreational opportunities and a feeling of responsibility has slowly convinced landowners that what they have is worth looking after." Five new species of renosterveld were discovered in the Cape over the past year. For more information on the trust go to <http://www.overbergrenosterveld.org.za/> - Staff Reporter



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CYCLING

200 teams gear up for scenic race

THE PROSPECT of racing around the scenic route that weaves between Swellendam and Montagu proved to be exciting as 200 teams of cyclists snapped up their places in the 2012 Coronation Double Century. Entries for the cycling challenge have been closed, but according to David Bellairs, director of the Cape Town Cycle Tour Trust, organisers of the event, there are around 40 teams on the waiting list hoping that a few of the participants have a change of heart. "There's been a big increase in interest, particularly from people outside of the Western Cape," said Bellairs. "We are seeing a lot of entries from the North." The Coronation Double Century has been going strong since 1993 and the latest instalment will start on November 24. But veterans of the event can expect a few changes. Most notably, teams have only been given 10 hours to tear through the 202km course, 30 minutes less than last year. - Cadet News Agency