



# A BATTLE WE ARE **LOOSING**

*As the year progresses, the number of rhino killed for their horns has reached yet another record level.*

In 2012 a total of 668 rhino were killed. By 18 April 2013 a total of 232 rhino have been killed. To put this killing spree in a different perspective it means that a rhino is killed every 11 hours in South Africa.

At this rate the predicted number of rhino poached in 2013 will probably be close to 760 if things continue the way they are. The largest number of rhino killings has been taking place in the Kruger National Park. This area of more than 2 million hectares has been plagued by poachers coming out of Mozambique.

How is it possible that with all the modern technology we have access to, these poachers can still go undetected from an eye in the sky? It is evident that drastic action is needed, therefore it has been suggested that a shoot on site policy be adopted. On some game reserves people have started to poison the horns on the rhino and thereafter the horn is stained with a red dye. The



problem with this is that the poachers don't always read the newspapers and therefore the success of these kinds of deterrents is questionable.

Nine suspected poachers were arrested on a game farm close to Lephale on Sunday 10 March 2013. They came from Zimbabwe and Mozambique. From 2008 until today a total of 279 Mozambican poachers have been killed by game rangers and the South African Defence Force in Kruger Park alone. Another 300 individuals were arrested.

The question is: What will it take to put an end to this?

## PREHISTORIC CREATURES

Often people ask why prehistoric creatures were so much bigger than the animals we have today. Today most people would consider Goliath beetles and sphinx moths big insects but prehistoric insects would dwarf these evolutionary descendants. During the Paleozoic era the earth had a number of giant insects, such as dragonflies with wing spans

that were measured in feet. While over a million insect species are alive today, truly giant insects no longer exist.

During the Carboniferous and Permian periods, atmospheric oxygen concentrations were significantly higher than they are today. Prehistoric insects and animals for that matter, breathed air that was 31-35% oxygen as to the 21% atmospheric oxygen concentrations we experience today. Atmospheric oxygen has been identified as the most limiting factor affecting insect size.



## WHAT IS THE **LARGEST** INSECT THAT **EVER** LIVED?

Can you imagine what it would be like, if you suddenly encountered a grass hopper or a 'Parktown prawn' that is 6 foot tall and 6 foot wide; I don't know if one can of 'DOOM' would be sufficient! The current record holder for the largest insect that ever lived is a giant dragon fly or *Meganeuropsis permiana*. It measured an impressive 71 centimetres or 28 inches from wing tip to wing tip. This giant invertebrate predator inhabited what is now the central US during the Permian period. Fossils of the species were discovered in Oklahoma.

## WHICH IS THE **BIGGEST LIVING** INSECT?

The answer to this question depends on how you define the term 'big'.

When asking someone who was scared out of their mind by an insect or someone who has some kind of phobia regarding bugs, the answer could vary anywhere from 2-4 feet in size! If you however define the term 'big' in the form of inches measured from the head to the end of the abdomen, then the title of biggest insect belongs to a stick insect species discovered in 2008 in Borneo.

The **Chan's megastick** or *Phobaeticus chain* measures a full 14 inches from head to abdomen, and a full 22 inches if you stretch the tape measure to include its extended legs.



In some insects such as members of the *Lepidoptera* (butterflies) the spread of the wings exceed the length of the body and if this dimension is used to define the term 'biggest' then the **white witch moth** or *Thysania agrippina* (below) is considered the biggest with a wing span of 28 centimetres or 11 inches.

Another dimension used to define biggest, is related to weight. The **giant female weta** or *Deinacrida heteracantha*, also known as the Nieu Zealand wetapunga weighed in at 71.3 grams.



At the end of the day the term biggest insect depends on your definition of 'big'!



A **Bombardier Ant's Guest Beetle** or *Cerapterus lacerates* belongs to the family *Carabidae* and has a very unique way of defending

itself against predators and harassers. When

threatened, a bombardier beetle will spray the suspected attacker with a boiling hot mixture of a chemical containing quinone.

These chemicals can reach a temperature of up to 100° C.

What's even more impressive is that the beetle is capable of aiming the eruption in the direction of the attacker.

The beetle itself is not harmed by the chemical reaction and it uses two special chambers located in the abdomen

where these chemicals are kept separate prior to being mixed. When threatened the beetle produces an enzyme and this enzyme is responsible for the heating and release of the chemical by means of a loud pop. This chemical is not life threatening but it will burn and cause a stain on human skin.

The very common **Ground Beetles** (*Graphipterus spp.*) also known as "Oogpisters" are capable of using the very same defence mechanism. The chemical that is sprayed by oogpisters is a called formic acid.

This **Two-spotted Ground Beetle** is very common and feeds mainly on the red ants found all over Ledibeng. These beetles are mainly nocturnal and hunt for prey at night.



## Wildlife Quiz



1.	A red billed hornbill will eat wild fruits.	True or False
2.	A forktail drongo will eat wild fruits.	True or False
3.	Dendroaspis is the genus name of which very well known snake?	True or False
4.	What is a 'likkewaan' called in English?	True or False
5.	A turtle lives in fresh water or sea water?	True or False
6.	What is the word used to describe the occurrence when a spider sheds its skin?	True or False
7.	A tortoise lives on land.	True or False
8.	All Marula trees bear fruit.	True or False
9.	A Jacaranda tree is indigenous to South Africa.	True or False
10.	There is no fruit eating night living bird species.	True or False



## From your Wildlife Management Team



For information on property sales contact:  
Tel: **012 665 5308**  
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### We would like to hear your story!

Should you have an event or story you would like to share, please send us your photos and a few words to [wildlife@lantic.net](mailto:wildlife@lantic.net)



**Answers: 1.(False), 2.(False), 3.(Black Mamba), 4.(Monitor lizard), 5.(Sea water), 6.(Moulting), 7.(True), 8.(False), 9.(False), 10.(True).**