

# Reviving SA's sable antelope population

This two-part series documents the population decline and genetic decline of sable antelope across Southern Africa. The Gravelotte Sable Study Group, with co-operation between the official conservation authority and private landowners, discusses how it's turning the situation around in South Africa.

**Johan Rabie** reports.

In his book, *The Wild Sports of Southern Africa*, 19th century explorer Captain William Cornwallis Harris describes his first sighting of the sable antelope (*Hippotragus niger*) circa 1852:

*"The horns, which were flat, and upwards of three feet in length, swept gracefully over the back in the form of a crescent. A bushy black mane extended from the lively chestnut-coloured ears, to the middle of the back; the tail was long and tufted; and the glossy jet-black hue of the greater portion of the body contrasted beautifully with the snow-white face and belly."*

**'ONLY 7 QUALIFYING ANIMALS WERE RECORDED BETWEEN 2000 AND 2005.'**

Roughly 50 years later, in 1898, a sable bull was hunted near Tshokwane in the now Kruger National Park (KNP). Its horns measured 55½ inches long (140,652cm), with the tips 21¾ inches apart (55,245cm) and a base circumference of 10¼ inches (26cm).

## FAST FACTS

- SA's sable antelope population in the Gravelotte area alone fell from around 20 000 animals in 1930 to 800 in 1985.
- The Gravelotte Sable Study Group has increased the number of sable in the group members' possession from 400 in the 1980s to over 1 900 today.

This animal still holds the number one spot under Rowland Ward's game records. The book, *Rowland Ward's Records of Big Game*, provides an internationally accepted benchmark within the game industry for what constitutes a trophy animal.

Apart from this magnificent specimen, the 27th edition of the first volume of this book, published in 2006, contains a further 1 157 entries.

To qualify for entry into the record book, a sable must have horns of at least 41½ inches long (106,362cm). Of the total 1 158 entries in the 27th edition, only 34 (3%) exceed the magical 50-inch (127cm) threshold!

However, what is extremely concerning is the almost 10% deterioration in average horn length over the last 100 years, as



**ABOVE:** André Scholtz (left) and Piet Warren, previous and current chairperson of the Gravelotte Sable Study Group, with the horns of the Rowland Ward record sable hunted near Tshokwane in the now Kruger National Park. PHOTOS: COURTESY OF JOHAN RABIE



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illustrated in **Figure 1**. Of all trophies listed in the book, 83% (948) were hunted between 1950 and 2000 at a rate of about 20 animals per annum, as shown in **Figure 2**. But a further cause for concern is the fact that only seven qualifying animals were recorded during the five-year period between 2000 and 2005.

The geographical origin of the registered Rowland Ward trophies is shown in **Table 1**, while the average sable antelope horn lengths for each country is illustrated in **Figure 3**.

It's interesting to note that South Africa is in fifth position as far as average horn lengths go. This is despite the fact that a sable

antelope hunted in South Africa holds the number one Rowland Ward record. The average horn length in South Africa is 1,1 inches (2,794cm) or 2,47% below Zambia's average.

It's also interesting to note that Malawi and Namibia are only represented by a very small number of animals.

## DECLINE AND DETERIORATION

The concern raised regarding the declining number of qualifying trophy animals in recent decades points to the larger problem with the sable antelope's dwindling population.

The sable antelope population in the KNP

and surrounding areas has declined dramatically over the last few decades. The 1986 KNP census recorded about 2 200 individuals. Today, the number is estimated at only 100 to 200 animals. In the 1930s an estimated 15 000 to 20 000 sable antelope occurred in the vicinity of Gravelotte, about 150km north-west of Tshokwane where the record animal was hunted. By 1985, this population fell to about 800 animals.

Following the 1985 census, Dr SS du Plessis, who was Tranvaal's nature conservation director at the time, asked Pieter Vorster, a respected farmer in Gravelotte, to establish a study group with the objective of reversing the declining sable population in the Gravelotte area, which was widely regarded as the bastion of the species in South Africa. Thus, the Gravelotte Sable Study Group (GSSG) was formed with Pieter as its first chairperson.

## REASONS BEHIND SABLE DECLINE

The GSSG's initial focus was on the survival of the species, and it outlined a number of problems that had to be dealt with as priorities. But first, GSSG had to identify the reasons for the population decline.

There were a number of important conclusions:

- Following Dr Siegfried Annecke's successes in malaria control, human settlement on previously vacant Lowveld land had expanded, leading to a dramatic increase in cattle numbers, camps and fences. This reduced the natural territories and home ranges of sable antelope, leading to confinement, inbreeding and genetic deterioration in the species.
- Of the small remaining sable

antelope meta-populations, which were confined to cattle camps where fencing was inadequate as protection against predators, new-born calves fell prey to predation. This led to a further decline in the population.

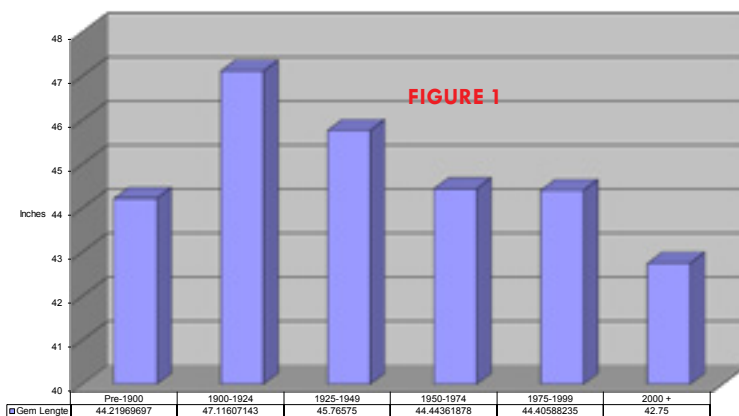
- Oxpeckers, which play an important role in tick control on sable antelope, had practically been decimated by the widespread use of cattle dips containing arsenic and organophosphate compounds.
- The prevention of natural fires and overgrazing by cattle had degraded the habitat to such an extent that, within four or five decades, open long-grass savannah with less than 400 trees per hectare had changed to almost impenetrable woody shrub and invasive bush exceeding 3 000 trees per hectare.
- The tasty meat of the sable antelope was popular for biltong, venison and labourer rations, leading to excessive hunting.

## RECOVERY PLAN PRIORITIES

The GSSG realised that areas once suitable for sable antelope no longer existed, so habitat rehabilitation was the first priority.

Invasive bush was cut down and selectively chemically treated to prevent re-growth. All cattle were removed from suitable areas and the camps were burnt to reduce their massive tick populations. As sable antelope prefer savannah with medium to tall grass, avoiding areas with thick bush as well as overgrazed areas, GSSG members improved the grass and tree composition on their land to such an extent that today it can

Graph 1: Avg. Hornlength over Time



Graph 2: No. of RW Registered Trophies over Time

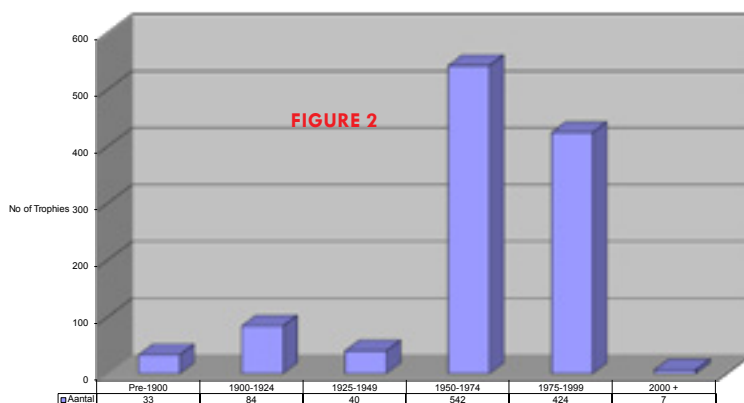
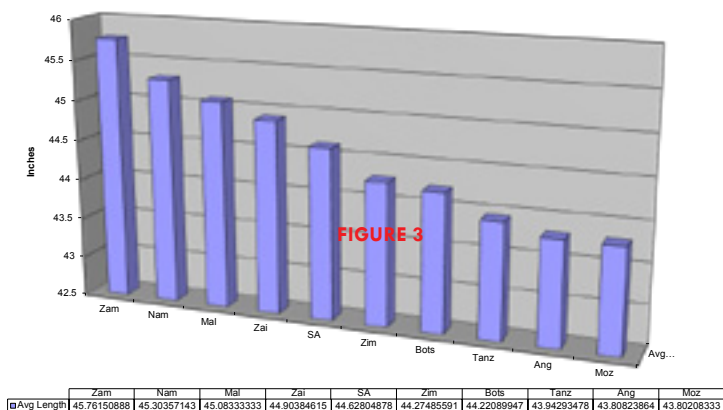


Table 1: Geographical distribution of Rowland Ward (RW) trophies

Country	Number of RW qualifying trophies	Percentage of total
Zimbabwe	348	29,99
Zambia	338	29,21
Botswana	189	16,34
Tanzania	92	7,95
Angola	88	7,61
South-Africa	41	3,54
Zaire	13	1,12
Mozambique	13	1,12
Namibia	8	0,69
Malawi	6	0,52
Unknown/uncertain	23	1,90

Graph 3: Avg. RW Horn Length per Country of Origin



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yet again be regarded as ideal sable antelope habitat. Sable antelope depend on permanent quality drinking water and members spared no effort to provide it. The next priority was to remove competing species including impala, blue wildebeest, zebra, and cattle from the sable camps, which they did. The last priority was to have suitably electrified fences to keep predators out of sable camps. This is because sable calves are very vulnerable to predation. You see, sable antelope calve in February and March

when few newly born animals from other species are available as prey. These interventions upped the number of sable antelope in the GSSG members' possession from 400 to more than 1 900 today. In 2000, the GSSG held its first annual production sale and during the last decade, it sold over 1 000 animals to other sable breeders across the country and in Namibia, contributing significantly to national population growth. The extent to which the GSSG succeeded in the objective to first ensure the species survival is summarised in **Table 2**.

Table 2: Gravelotte Sable Study Group – 2011 census (as at May 2011)

Total sable antelope population owned by members	1 935
Total average number of adult cows in production during the last three years	609
Total average number of calves born during the last three years	509
Calves born as percentage of cows over last three years	90,1%
Calf mortality over the last three years	5,9%
Calves born as percentage of the total population	41,9%
Heifers as percentage of previous year's calves	48,6%

**RIGHT:** Habitat rehabilitation was a priority. Sable antelope prefer savannah with medium to tall grass. GSSG members improved the grass and tree composition on their land to the ideal sable habitat shown here.

## New Rowland Ward edition in 2011

The 28th edition of the book *Roland Ward's Records of Big Game* is expected during 2011 and the most recent trends regarding origin, horn lengths and numbers of qualifying animals will be extremely interesting to note. Sable antelope breeders, game ranchers, professional hunters and outfitters are encouraged to register all qualifying animals, as this information is extremely valuable to breeders, geneticists and the scientific community.

**BELOW LEFT:** A 49-inch (124,46cm) bull currently used by one of GSSG's members.

**BELOW RIGHT:** A typical example of a 38-inch (96,52cm) breeding bull as used in the late 1980's. Note the unsuitable sable antelope habitat.

The group's next challenge, which will be addressed in Part 2, was to restore the genetic decline of the species as shown by the preceding trends. Steps taken include particular attention to the benchmarks applied and the selection criteria for breeding cows and bulls. The progress made is illustrated in the two

photographs of sable bulls (pictured below).
 

- Sources: *Rowland Ward's Records of Big Game*, 27th Edition, Volume 1, 2006; *Guide to Improved Success. Moving the South African Sable from 37' to 53' and Beyond*. Gravelotte Sable Study Group, 2010.
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