Human - Animal Conflict Project

In association with Cologne Zoo, Germany

Cologne Zoo’s 150th anniversary brought with it the unveiling of a new hippo and crocodile exhibit known as the “Hippodom”. Commensurate with this, the Cologne Zoo identified the Kingdom of Swaziland’s Big Game Parks as a worthy conservation partner. Aktiengesellschaft Zoologischer Garten Koln (AZGK) contracted with Big Game Parks for a 5-year in–situ species conservation, infrastructure development and improvement, equipment, wildlife and habitat management or law enforcement, initially focusing on alleviating human-animal conflict with hippos and crocodiles and their conservation in Swaziland. The project commenced in 2010, translating into real conservation value on the ground.

Hippos

Big Game Parks is often called out to attend to a number of hippo problems, with instances reducing in recent years. Oftentimes the hippos are found to be in circumstances which are not conducive to their capture or are non-responsive to being contained by the electric wires.

Catching a hippo takes weeks, restricting its movement from water sources with electricity and enticing it into a crate with hay. A number of attempts to capture rogue hippos have been thwarted by power failures, where hippo have broken out of the restricted area. Once they have learnt to disregard electricity, capture is complicated. During our recent drought, hippos have been found in areas they have not frequented for decades. This in itself creates issues where the people are not used to co-existing with hippo.

River hippos are always very difficult to capture and these hippos are more destructive to crops than a direct threat to humans. In these instances, we team up with the police and advise the local communities and farmers on the adequate erection and maintenance of electric fences as well as appropriate behaviour around hippos.

Where hippos are a persistent problem and capture is not practical due to residency, we have engaged the community project committee. This resulted in a site visit to Hlane Royal National Park, where they received training on effective hippo fencing to protect their commercial crops. Hlane’s Warden visited the area and together fencing requirements and maintenance were planned and agreed. The Association has since harvested an undamaged crop and have further resumed growing sweet potatoes and other side crops which were historically eaten by hippos.
Crocodiles

37 Crocodiles have been captured in rural areas and translocated to protected areas in the past 2 years. Some were captured in the bush away from water, using ropes. Those found in pools and rivers were trapped in cages. A particular case of interest was where a crocodile was reported to have caught an adult cow and dragged it into the Mjoli Dam situated on the Mbuluzi River. Due to the unusualness of this situation, rumours immediately began circulating of witchcraft being involved, and that the crocodile “belonged” to someone and was “working for” him!! When the Hlane rangers set the trap, the local community members openly said that no croc would be caught! This belief strengthened over the next few days as the crocodile evaded capture. When it was finally caught, it measured a massive 4.52 metres! The next largest croc caught in recent times was 4.23 metres and came off the Usutu River about 10 years ago!

Game Capture & Translocation Equipment

A custom built Hippo & Crocodile Recover Trailer was constructed and is often used to move traps to problem animal locations for the capture of crocodiles. Its use has continued to enhance our ability to respond effectively to problem animals around the country, especially in rural areas. It was designed to be a versatile trailer and has also been used for other conservation related activities on and around the parks, including educational displays.

Big Game Park’s 9 metre game trailer was renovated, with new CR12 grade stainless steel sheets floor panels, which are far more resistant to the corrosive action of urine and faeces. To make the trailer more versatile the 3 compartments were reconstructed into 6, giving more options of loading small groups or individual bulls into the truck during a capture operation. This maximises the use of the loading space as well as optimises the use of the helicopter when it is available. Finally, the trailer was sand blasted and re-sprayed ready for the 2015 Game Capture season.

Our Rhino Recovery Trailer was also refashioned, creating a more versatile multi-species trailer. A removable panel now divides the trailer lengthways, allowing for movement of large antelope such as sable, with a double sliding door at the back to contain any animal already loaded. A further 2 drop-doors divide the compartments into 4, for when smaller antelope such as bushbuck need to be loaded individually. The panels can quickly be removed if the trailer is needed for rhinos.
Crocodile Traps - While researching for the best designs for making multi-purpose traps, which would primarily function as crocodile traps, we designed a multi-section trap where each section has an internally swinging door and a drop door at either end. The doors cannot be removed (stolen) and 2 or 3 sections can be joined together depending on the requirements of the crocodile to be captured. The traps are constructed using 304 grade stainless steel, suitable for the expected type of corrosion which would be associated with decomposing baits as well as wet and muddy conditions. 8 trap sections of 1.8m each will be constructed and deployed between the parks.

The Cologne project enabled the replacement of our obsolete GPS unit used by the conservation department. A Garmin Montana set with accessories has a vastly improved set of functions and has already been put to good use.

**NOTE: Project design, professional time, power, labour and consumable costs were absorbed by BGP.

Drought Relief & Water Provision

WATER PROVISION AND DROUGHT RELIEF - Swaziland has experienced a severe 3-year drought with a shortage of both food and surface water, and our partnership with Cologne Zoo came at a critical time. While Hlane Royal National Park and Milwane Wildlife Sanctuary have access to permanent surface water, Mkhaya Game Reserve is entirely dependent on pumped water when we experience droughts. In such years every single drop of water consumed on Mkhaya passes through a pump!!

Mkhaya’s water is supplied through 4 pump stations, with raging pumps and motors. Two new Lister motors and 1 new mono pumps have replaced the older pumps and motors, with one unit always on standby in the event of breakdowns.

Habitat Rehabilitation

The Cologne Zoo collaboration has enabled the rehabilitation of hippo habitat within Mkhaya Game Reserve. This has included construction of spillways, assessing the degree of siltation, strengthening and patching retainer walls damaged by burrowing crocodiles, reducing soil erosion which threatened to breech the dams and excavating and reshaping the floors to optimise water holding capacity. Some excavated material was suitable for surfacing roads and was therefore used to rehabilitate and strengthen roads, while most was used to strengthen the dam walls. A total of 4 dams have been rehabilitated thanks to Cologne Zoo. 6 more dams are to be rehabilitated????

The drought made excavation possible, but also necessitated water provision and drought relief, for which pumping equipment was purchased. Excavating equipment was both purchased and hired for the project.

With the dry conditions, hippos took up permanent residence in a newly excavated dam even before construction was complete, resulting in a winter in the water instead of in the bush, as often happens during periods of low rainfall.

Big Game Parks would like to express her most sincere gratitude to the Cologne Zoo for the confidence which she continues to demonstrate in supporting our conservation work in Swaziland.