

## INTERMEDIATE REPORT: JUNE – AUGUST 2009

### WHITE RHINO NOTCHING AND MICRO-CHIPPING PROJECT AT WEENEN GAME RESERVE (SOUTH AFRICA) THROUGH FUNDING FROM THE IUCN SPECIES SURVIVAL COMMISSION

CONTRACT NO. PSF 2009-022

a) Technical Report

1. **General Project Information:**

More than 50% of the population of 60 White rhinoceroses (*Ceratotherium simum simum*) at Weenen Game Reserve were not identifiable due to being not ear-notched. This hampered the day-to-day field monitoring of this population by our field rangers since they could not distinguish between various individuals or groups of individuals they observed during various patrols, nor could they link any births to individual females in the population. The inability to link calves to their parents also affected the management of genetic diversity of the population as well as the accurate tracking of the population lineage. However, through the funding provided by the **IUCN Species Survival Commission's Kate Sanderson Bequest Fund**, we are hoping to reduce the problem by 50% after implementing the first round of the notching project.

From mid June to August 2009 we hired a helicopter and managed to notch and micro-chip 10 rhinos at Weenen Game Reserve. The use of the helicopter (Figure 1) in combination with ground personnel, worked fairly well in that it reduced the amount of time spent searching for the rhinos, thus resulting in rhinos being located much faster than we anticipated. This led to some savings being made in the flying-related expenditure. As a result of the anticipated savings from the total approved budget of **CHF 23,056.58**, we would like to seek permission to use the savings for the purchase of monitoring equipment because now that the rhinos have been notched, the next critical step is to monitor and collect accurate data on them in order to improve our management of the

population. The monitoring equipment required includes binoculars, a camera and GPS.



**Figure 1:** Hughes D500 helicopter in search of white rhinos during the ear-notching project at Weenen Game Reserve (South Africa) in 2009.

## **2. Activities:**

During the first round of the project, the following activities were carried out:

- Ear-notching of 10 rhinos, which involved cutting off small pieces of tissue from the rhino ear, creating a small v-shaped notch at specific positions on the ear of each rhino such that each rhino could be uniquely identified from other rhinos (Figure 2).
- Micro-chipping of the abovementioned 10 rhinos, which involved the insertion of Trovan Transponders (micro-chips) on both rear and anterior horns as well as the neck region of each and every rhino (Figure 3) . These transponders are very useful for rhino security especially when it comes to law enforcement and successful prosecutions to curb rhino poaching, which appears to be on the increase in South Africa recently.
- Aerial count of rhinos to establish the actual number of rhinos which need to be notched and micro-chipped.



**Figure 2:** Showing recently ear-notched white rhino and the insertion of microchips (Trovan Transponders) in the neck region during the ear-notching project at Weenen Game Reserve in 2009.

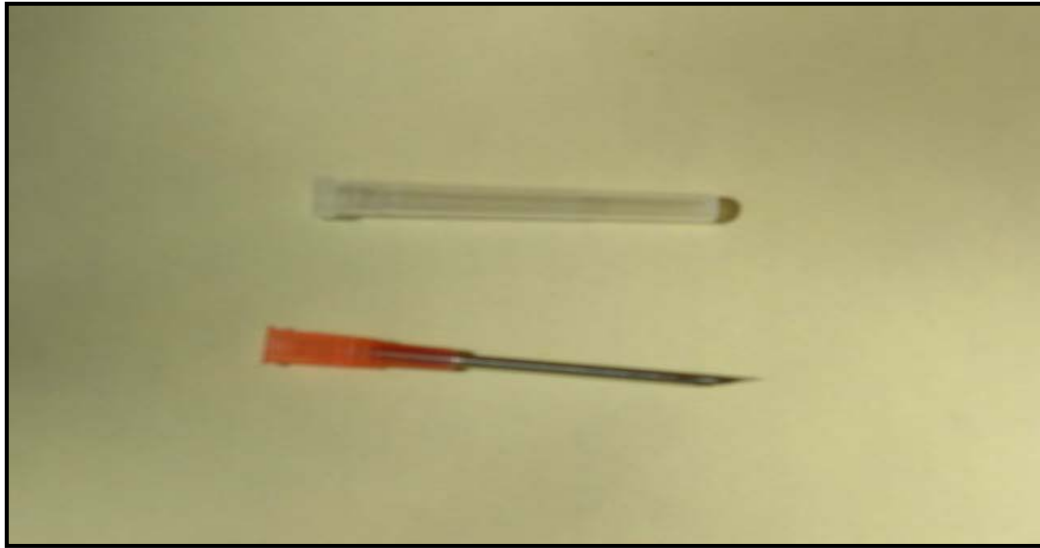


**Figure 3:** Showing the insertion of microchips (Trovan Transponders) into the horns, as well as horn measurements during the rhino notching project at Weenen Game Reserve (South Africa) in 2009.

- Purchase of Trovan Transponders (Figure 4.1 – 4.2)) and a TrovanTransponder Reader (Figure 5) for reading or scanning transponders in order to enable us to read the unique transponder numbers from the micro-chips once inserted into the rhino horns as well as the neck. A quantity of 100 Trovan Transponders were purchased at a unit price of R74.05 whereas a Trovan Reader / Scanner cost an amount of R 11 475.00. The abovementioned pieces of equipment are extremely important for the security of rhinos, especially under the current situation of rising rhino poaching in South Africa.



**Figure 4.1:** Packet of TrovanTransponders purchased for the rhino notching and micro-chipping project at Weenen Game Reserve in 2009.



**Figure 4.2:** Trovan Transponder inside a dispenser needle used in the micro-chipping of white rhino at Weenen Game Reserve in 2009.



**Figure 5:** Showing the Trovan Transponder Reader/Scanner and a Charger purchased for reading transponders once inserted into rhino horns and neck of the rhino during the notching project at Weenen Game Reserve in 2009.

However, due to the fact that quite a large number of females in the population had young calves during the first round of the project, we could not notch them in order to avoid the risk of the calves being separated from their parents which could increase their risk of mortality. Therefore, in addition to the 10 rhinos already notched and micro-chipped, we are planning to ear-notch 10 more rhinos around October 2009. Due to the abovementioned logistical reason, I would like to request that the contract expiry period be extended from September to November 2009 in order to enable us to notch the outstanding rhinos that we couldn't notch during the first round of the notching operation.

**3. Results of the Project:**

- The project was very successful to such an extent that there were no mortalities experienced although immobilization drugs such as M-99 as well as other relevant antidotes were used. The detection rate of the rhinos was much faster than we expected, despite the presence of thick bush in the game reserve.
- Due to the shortened search time for rhinos we anticipate making some savings from the flying budget allocation.

**4. Achievement of the Objectives of the Project:**

Based on the success rate that we achieved during the first round of the project I could confidently say that the objectives of the project were 66% achieved except that we are still waiting for the calves to grow up a bit before we could notch their parents during the second round of the project. Considering that our original objective was to notch 15 rhinos and we have already notched 10 rhinos, it is a clear indication that we could easily achieve the original objective and do more as we are now aiming at ear-notching 20 rhinos in total.

## 5. Unexpected Results from the Project:

There were no unexpected results except for the high detection rate of rhinos in the field, which unexpectedly shortened the time spent by the helicopter searching for the rhinos. Usually, it takes quite some time to detect the rhinos in the field due to the difficult terrain and thick vegetation at Weenen Game Reserve. So, this was a positive unexpected result and I am pleased with the results.

### b) Financial Report:

The financial expenditure incurred during the initial phase of the project is reflected in Table 1. This expenditure is related to both the flying costs as well as the essential equipment, including drugs, which were purchased for the implementation of the project.

**Table 1:** Showing financial expenditure for the implementation of the initial phase of the project.

Activity	Total Budget	IUCN Contribution		Contribution by Others		Total Expenditure
Description	CHF	Rand (local currency)	CHF	Rand	CHF	CHF
	23,056.58	R109,050.00	15 000	N/A		
Flying Costs		R 49,244.90	6773.71	N/A		
Drugs		R 14,840.70	2041.36	N/A		
Transponders (100) & Trovan Reader		R 19,055.00	2621.05	N/A		
Bank charges & Transfer Costs		R 570.68	78.50	N/A		
<b>Total Expenditure to date:</b>		<b>R 83,711.28</b>	<b>CHF11,514.62</b>			<b>CHF11,514.62</b>

**1. Details of equipment and/or materials purchased using project funds and how they are being used to meet project objectives:**

A GR-250 Trovan Transponder Reader / Scanner, 100 Trovan Transponders, drugs and vials for were purchased using project funds. The transponder reader is being used to scan the microchips (i.e. transponders) in order to enable us to read the unique codes of the transponders once inserted into the rhino horns as well as the neck region of the rhino. The drugs are being used to dart and immobilize the rhinos from the air and also to preserve the ear tissue sample from the notched ear of each rhino. The vials are being used to collect the ear tissue sample from ear-notched rhinos for DNA analysis.

**2. Details of changes made to the original budget:**

The only change made to the original budget was the inclusion of the micro-chipping component, the permission for which was sought in writing by the contractee and was granted by the IUCN Species Survival Commission (IUCN SSC).

**3. Balance remaining from the Contractor's contribution and/or interest accrued in the bank account:**

The current balance of funds in the project account is CHF 3,485.38 which is equivalent to R25, 338.71 @ the foreign exchange rate of R7.27 per Swiss Francs out of the CHF 15,000 initial payment of the approved budget of CHF 23,056.58. There is still an outstanding payment of CHF 8,056.58 that make up the full budget and we would like to request that the outstanding funds be released as soon as possible to enable us to implement the second phase of the project early in October. Finally, I would like to seek permission from the IUCN's SSC to allow us to utilize any possible savings from the project funds to purchase essential equipment for rhino monitoring at Weenen Game Reserve into the future.

**For all correspondence on this contract, including the submission of technical and financial reports, please contact IUCN Species Programme at the following address:**

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