

## PROCEEDINGS OF THE LOCORES-K2C RHINO FORUM MEETING / WORKSHOP

**Date:** 30<sup>th</sup> September 2011  
**Venue:** GKNP College: Hoedspruit Wildlife Estate:  
Sustainable Living Festival  
**Time:** 11h00 – 15h30

### AIMS OF THE WORKSHOP:

- To get an overview of current situation regarding rhino poaching in the K2C Region especially.
- To establish what is currently being or could be done in the region with regards to rhino conservation actions.
- To establish possible stakeholders and partners for the Rhino Forum
- To establish a way forward for rhino conservation in particular in the K2C Region.



### APPENDICES:

Appendix 1: Questionnaire –please complete [pg. 8]

Appendix 2: Acronyms & Abbreviations [pg. 9]

Appendix 3: Agenda [pg. 9]

### GENERAL:

The forum was very well attended; with many more than the original RSVP'd people arriving. It is clearly a topic that is of special interest and concern to the people of the region.

The meeting started a bit later than intended and for various reasons it also finished a bit later than intended. As a result more than half the people had left by the time of the discussion (at the end of the presentations). It was also a hot Friday afternoon so people were tired and had commitments they needed to meet. For these purposes it is proposed that this document serve more as a discussion document to further facilitate a way forward, than merely a summary of proceedings and findings.

A special thank-you goes to all presenters for your time and effort in sharing your knowledge with the forum. Everyone found them to be informative and your inputs will surely be put to good use in the steps towards improving the protection of rhino in particular, but also helping with general conservation initiatives.

### SUMMARY MATRIX:

As requested by participants of the forum a basic matrix has been provided as to what is happening, who is doing what and where the gaps exist. Instead of also providing a comprehensive summary of each presentation; the key issues / aspects of the presentations have been included in the matrix (especially for those unable to be present for all the presentations); as well gaps / concerns and comments / questions arising. The summary is presented in table 1.



**TABLE 1: SUMMARY MATRIX OF RHINO FORUM PRESENTATIONS & KEY ISSUES**

Presenters and main focus	Key issues arising / Main services offered	Main concerns / gaps	Comments (& answered questions)
<b>SETTING THE SCENE: KNP's experience with Operation Rhino</b>			
<b>SANPARKS – Ken Maggs</b>	<ul style="list-style-type: none"> <li>White rhino #'s increased on av. by 6.8% /a since 1991 (in Africa).</li> <li>Black #'s on av. doubled in last 15yrs (variations in sub-sp populations)</li> <li>311 (181 KNP) Rhino poached in 2011 in SA (by end Sept 2011).</li> <li>@ current rate projected to be 419 by end 2011 (86 &gt; 2010)</li> <li>Been progressive increase in killed rhino since 2007.</li> <li>SA provinces with international boundaries most at risk. KNP greatest threat from Moz</li> <li>Most arrests made @ Level 1 (poacher)</li> <li>A number of achievements been made e.g.: NWCR &amp; RSS launched, Rhino crime a priority crime; DNA project; Vietnam exploratory visit; arrests &amp; convictions etc</li> </ul>	<ul style="list-style-type: none"> <li>Illegal activities by wildlife industry</li> <li>Rhino horn demand dynamics</li> <li>Uneven flow in investigation process (Levels 1-5)</li> <li>Limited dedicated investigators with right criteria</li> <li>Cumbersome court procedures &amp; slow conviction rate</li> <li>Ineffective info / intelligence management &amp; sharing (lack of trust!)</li> <li>Inconsistent crime scene attendance and investigation</li> <li>Inconsistent provincial CITES permitting system &amp; implementation</li> <li>Focus on high priority threat areas e.g. Moz</li> <li>ID and focus on Levels 3 -4 priority targets.</li> <li>Safety of stockpiles of horns</li> </ul>	<ul style="list-style-type: none"> <li>Demand dynamics Critical</li> <li>Yes politician involvement / support is critical – it is accepted that there is the political will.</li> <li>In the pvt sector De-horn if want to protect rhino – BUT no guarantee.</li> <li>Have intelligence driven security ops</li> <li>Know poacher &amp; their tactics</li> <li>Recruit local knowledge (Levels 1&amp; 2)</li> <li>Info sharing &amp; trust relationships</li> </ul>
<b>COHESIVE COMMUNITY ACTION: potential community services to assist with rhino conservation</b>			



<b>Hoedspruit Rhino Revolution Group – Patrick Jordan</b>	<ul style="list-style-type: none"> <li>• A group of I &amp; A people incl.: police, farmers, game farm owners etc</li> <li>• Immediate goal: “effectively protect &amp; monitor rhino in our region as per 7 pt plan”</li> <li>• 1. Believe de-horning will buy time for deploying technology, media, guards etc</li> <li>• 2. Media use: billboards “Rhino de-horned”</li> <li>• 3. Education: kids – have various partners</li> <li>• 4. Info / intel: 24 hr hotline</li> <li>• 5. Technology: tracking, UAV; cameras etc</li> <li>• 6. Reaction, apprehension &amp; training</li> <li>• 7. Funding – few events planned</li> </ul>	<ul style="list-style-type: none"> <li>• Funding but already have a 10cc concert and a Thomas Aitken Golf day to raise funds to meet their desired goals.</li> </ul>	<ul style="list-style-type: none"> <li>• Have many people already involved</li> <li>• Are an active, dedicated &amp; passionate group</li> <li>• At this stage focus is on Hoedspruit</li> </ul>
<b>Hoedspruit Farm Watch – Andrew Molyneaux</b>	<ul style="list-style-type: none"> <li>• Initiated in 2009, constituted in 2010</li> <li>• Support / re-action unit is established</li> <li>• Purpose &amp; vision: safety &amp; protection of life and property in area of operation</li> <li>• Close co-operation with SAPS</li> <li>• In radio coms with community</li> <li>• Patrol the farm watch area every night of the week by volunteers @ own expense</li> <li>• Trained in areas of law enforcement, weapon handling, community protection etc</li> </ul>	<ul style="list-style-type: none"> <li>• Offer a significant service to area of operation (not just to the members) e.g. at accidents – but all at own costs – so support funding would be welcome.</li> </ul>	<ul style="list-style-type: none"> <li>• Valuable service in terms of Eyes and ears on the ground in area of operation. With visible presence.</li> <li>• Active &amp; supportive of anti-rhino-poaching operations</li> <li>• Good working relationship with Quemic &amp; Protrack</li> </ul>



<b>BATT Airwing collaborating with Air Traffic Control, Hoedspruit Airforce – Wynand Uys</b>	<ul style="list-style-type: none"> <li>• If aviation assistance is required 1. A call to SAPS, who then contact BATT/ Pvt Pilots; SAPS ground forces &amp; Farm watch. SAPS ground force contact SAPS Airwing (Polokwane / Nspt).</li> <li>• Or 2. Assistance may be requested directly from BATT / Pvt Pilots or Commercial aviation assistance.</li> <li>• Objective: “to be a valuable ‘eye in the sky’ for ID of predetermined targets &amp; to report back. Will not become combatant or place lives of crew @ risk.”</li> </ul>	<ul style="list-style-type: none"> <li>• SAAF (Squadron 19) don’t have an <u>official</u> mandate to be involved.</li> <li>• Vulnerable to ground fire</li> <li>• Daytime only</li> <li>• No direct intervention</li> <li>• Not an authorised CASAVAC service provider.</li> </ul>	<ul style="list-style-type: none"> <li>• BATT Contact: 076 376 2512</li> <li>• Volunteer service to community &amp; KNP</li> <li>• Broad geographic base &amp; multiple aircraft</li> <li>• Quick reaction time</li> <li>• Local knowledge</li> <li>• Suppresses movement</li> <li>• Provides situational awareness to ground forces</li> <li>• MOU signed by all part of BATT</li> </ul>
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**COMMUNICATION TOOLS: - tools and resources that can support/ increase/ enable improved communications and information sharing between the various properties, owners and land managers:**

[Eblockwatch – Gert Olivier]	<p>They did not arrive to present. If they would like to still be involved, their input can be submitted and will be further circulated.</p>	
<b>Informing and involving local communities – Spoon</b>	<ul style="list-style-type: none"> <li>• Aim to educate potential “informers” about rhino and other conservation issues</li> <li>• Need to be aware of the value of this resource (the rural &amp; neighbouring communities to PA’s)</li> <li>• Currently working with 60 kids (15 kids from 4 schools).</li> <li>• The people need to be updated on info to get them on board i.e. don’t segregate</li> </ul>	<ul style="list-style-type: none"> <li>• Funding needed to expand operation.</li> <li>• EE should be part of the syllabus.</li> <li>• Combine EE efforts with others operating in the region</li> </ul>

**ANTI-POACHING AND SECURITY SERVICES: - resources that are available to support anti-poaching measures:**



<b>K9 Security – Use of dogs in anti-poaching measures - Henry Holsthyzen</b>	<ul style="list-style-type: none"> <li>Dogs currently used in a variety of different working capacities e.g. assorted detection work, tracking, search &amp; rescue; guiding etc.</li> <li>Different breeds better at specific tasks</li> <li>Dogs can be used for anti-poaching ops (human related) &amp; conservation (animal related) for a number of different reasons e.g. tracking (at night &amp; anti-tracking).</li> <li>Belgian Malinois best breed for the area &amp; job (can handle the heat, intelligent etc)</li> </ul>	<ul style="list-style-type: none"> <li>One dog – one spoor</li> <li>Follow the scent / spoor indicated</li> <li>Is “only” an animal</li> <li>Crime scene contamination</li> </ul>	<ul style="list-style-type: none"> <li>Critical success factors are dog and handler selection.</li> </ul>
<b>Protrack – Training as an important tool - Vince Barkas</b>	<ul style="list-style-type: none"> <li>Have a 30 day training program: Focus on drilling /discipline; bushwork; fitness &amp; endurance; tracking; snare ID; dog handling, crime scene investigation, rhino autopsy etc</li> <li>Partner in the Rhino Revolution Group: each farm / reserve to set own stds; all guards to be trained; all guards to be armed; all need to understand the laws.</li> </ul>	<ul style="list-style-type: none"> <li>Poorly trained guards (if at all);</li> <li>Don't know how to manage a crime scene;</li> <li>Get to scene too late to be effective</li> <li>Guards un-armed</li> <li>Field Rangers / guards too old</li> <li>Bush skills – tracking &amp; spoor interpretation – limited amongst guards</li> </ul>	<ul style="list-style-type: none"> <li>Training must be ongoing – it can never stop.</li> <li>Encourage all parties to work together – through Rhino Revolution Group trying to get everyone under one umbrella.</li> </ul>
<b>Quemic – Latest Quemic Development against Rhino Poaching - Dap Maritz</b>	<ul style="list-style-type: none"> <li>Showed a video clip on rhino poaching</li> <li>Did an overall SWOT analysis of rhino poaching situation</li> <li>Need proper management of security / anti-poaching operations from a pro-active and reactive perspective.</li> </ul>	<ul style="list-style-type: none"> <li>Where is the horn REALLY going? To date no Chinese been arrested.</li> <li>Need to be PRO-ACTIVE not just reactive</li> </ul>	<ul style="list-style-type: none"> <li>There needs to be trust and communication between all those trying to conserve rhinos.</li> </ul>

#### INDIVIDUAL RHINO/ HORN MANAGEMENT: - measures to track down rhino horn and rhino location:



<b>Ajubatus Foundation – Development of tracking collars - John Dyer</b>	<ul style="list-style-type: none"> <li>Involved in Lion, Cheetah and Rhino research &amp; monitoring</li> <li>Partner of SANPARKS</li> <li>Make use of collars on the animals</li> <li>Receiving range up to 25km</li> <li>Makes use of lighter GPS electronics</li> <li>Also do heart monitoring in the field</li> </ul>		
<b>Security Access Solutions (SAS) - Chipping of rhino's in the Greater Kruger area - Stefan van den Borre</b>	<ul style="list-style-type: none"> <li>Come from a vehicle fleet tracking background, which is easier than rhino.</li> <li>Have a variety of options that can form part of the toolbox in anti-poaching ops</li> <li>GPS/GSM or RF or GPS/satellite options</li> <li>SAS platform: cloud software, get username &amp; password. Need PC &amp; internet; signal encrypted. Need high tech to hack!</li> <li>Agorasmart unit = GPS / GSM based: smallest in world, fully programmable; battery size adaptable; can be used as implant (skin /horn or in collar).</li> </ul>	<ul style="list-style-type: none"> <li>The initial out-lay cost fairly pricey, and then monthly maintenance.</li> <li>Need training of manager &amp; staff to use the system</li> <li>Access (to data &amp; system) needs to be limited otherwise defeating the objective</li> <li>Collar (on horn) not aesthetic to tourist / photographers &amp; accidents possible.</li> <li>Skin implant requires vet. Intervention &amp; higher risk for animal.</li> </ul>	



<b>Naturecon &amp; Ansol – development of a tracking chip that can monitor rhino movement, heart rate, etc. – Anton Bakker and Andre Spammer</b>	<ul style="list-style-type: none"> <li>Using RF wireless technology: track military weapons &amp; prisoners</li> <li>Has a 1km range on the hand held receiver</li> <li>Can fit into an arrow (of a bow) to track wounded animals</li> <li>Options used in vehicle tracking – with a beacon.</li> <li>EMI protected (as criminals now use GPS/GSM jammer)</li> <li>Guided by what already have developed: Propose to develop 2 tags for rhino: 1. Monitor heart, &amp; 2. Horn tracking</li> </ul>		<ul style="list-style-type: none"> <li>Operate in area with vehicle tracking but not in rhino yet</li> </ul>
<b>Xmets Security – Rhino Watch Web Camera's – Glyn Crook</b>	<ul style="list-style-type: none"> <li>Specialise in CCTV systems, solar bush cameras and wireless transmitting.</li> <li>IP CCTV – Internet protocol CCTV – security surveillance system.</li> <li>Can be used to: observe game #'s, locations etc; monitor perimeters, fence lines, roads and gates; use day &amp; night; monitor staff etc</li> <li>Cost effective</li> <li>Have off-site monitoring of the footage / images</li> </ul>		<ul style="list-style-type: none"> <li>Can have data encryption to protect against image tampering.</li> <li>Software package can allow for analyzing data &amp; specific "flagged" items to watch out for.</li> <li>Intend to maximise risk to poacher.</li> </ul>
<b>Remote Control Solutions – Full HD video and High Definition photography using autonomous long distance drones – Daniel du Toit</b>	<ul style="list-style-type: none"> <li>Use hobby shop planes adapted to fly by itself &amp; install video / still cameras</li> <li>Ca. R40 – R45 000 for everything</li> <li>Low maintenance</li> <li>Can be used for game monitoring / observing vehicles etc</li> <li>Exact flight path can be programmed and mapped on Google earth.</li> </ul>	<ul style="list-style-type: none"> <li>Would need to discuss with the Military to permit this to be used in the area</li> </ul>	



<b>Onderstepoort Lab - Development of DNA database of rhino's and horns- Cindy Harper</b>	<ul style="list-style-type: none"> <li>Development of DNA database of rhino's and horns to assist with the tracking down of carcasses and poaching movements on horn intercepted while in trade or already at the market in the Far East</li> <li>Single database of rhino (all) DNA profiles maintained at VGL</li> <li>Main function as a forensic tool to assist in rhino poaching investigations</li> <li>Only need 5 – 20mg of horn for profile</li> <li>Profiles from SADC rhino's</li> <li>Have DNA sample collection kits</li> <li>Involved with SANPARKS, provincial and private sector</li> </ul>	<ul style="list-style-type: none"> <li>DNA profile unique to each individual.</li> <li>Both species &amp; Gender specific</li> <li>Can also be a population &amp; pedigree analysis management tool</li> <li>Interchangeable btwn blood &amp; horn profiles</li> <li>Cannot be removed / changed / destroyed (compared to microchips)</li> </ul>
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**DISCUSSION: The following is a summary of comments made by the people who were present at the end of the workshop.**

<ul style="list-style-type: none"> <li>Provide a report back of the discussions and info arising from workshop</li> <li>All Reserve managers / Game farm owners etc undertake to send rhino data to Cindy / RhODIS to be included in the databank</li> <li>Need to be Pro-active as opposed to reactive (e.g. EE, training of staff etc).</li> <li>EE to link with other EE providers operating in region and should not only be Rhino orientated.</li> <li>Believe need to lobby as a group to ensure better and more convictions</li> <li>Share poacher information collected amongst conservationists</li> <li>The K2C region is rich in knowledge and expertise.</li> <li>Need to be able to trust!</li> <li>Get military officially engaged.</li> </ul>	<ul style="list-style-type: none"> <li>Provide summary matrix so know what we have and where the gaps</li> <li>Suggest K2C BR be the facilitator / co-ordinator of the “forum”</li> <li>Decide on a date of when next meeting</li> <li>Agree need a collaboration / forum of sorts (but format needs to be discussed by a wider audience)</li> <li>Rhino Revolution Group is prepared to be the facilitator / co-ordinator of the initiative.</li> <li>A few participants supportive of the Rhino Revolution’s initiative but felt the forum needs to be at higher and more inclusive operating level.</li> <li>Have a trust / similar through which funds can be channelled to support conservation &amp; anti-poaching initiatives. Needs to be credible!</li> </ul>
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## APPENDIX 1: - Acronyms & Abbreviations

### ACRONYMS & ABBREVIATIONS USED IN TEXT

<b>BATT</b>	Ba-Phalaborwa Aviation Task Team
<b>CITES</b>	Convention in Trade of Endangered Species
<b>EE</b>	Environmental Education
<b>I&amp;A</b>	Interested and affected parties
<b>K2C BR</b>	Kruger to Canyons Biosphere Region
<b>LOCORES</b>	Lowveld Group of Researchers and managers in wildlife / conservation industry
<b>NWCRI</b>	National Wildlife Crime Reaction Initiative
<b>PA</b>	Protected Areas
<b>RhODIS</b>	Rhino DNA Index System
<b>RSS</b>	Rhino Security Strategy
<b>SAAF</b>	SA Air Force
<b>SAPS</b>	SA Police Services
<b>UAV</b>	Un-manned aerial vehicle
<b>VGL</b>	Veterinary Genetics Lab. (Onderstepoort)

## APPENDIX 2: - Agenda

- 1. WELCOME AND PURPOSE OF WORKSHOP** – Mike Peel
- 2. SETTING THE SCENE** – KNP's experience with Operation Rhino – Ken Maggs
- 3. COHESIVE COMMUNITY ACTION:**
  - o Hoedspruit Rhino Revolution Group – Patrick Jordan
  - o Hoedspruit Farm Watch - Andrew Molyneaux
  - o BATT Airwing collaborating with Air Traffic Control, Hoedspruit Airforce – Wynand Uys
- 4. COMMUNICATION TOOLS:** - tools and resources that can support/ increase/ enable improved communications and information sharing between the various properties, owners and land managers:
  - o Eblockwatch – Gert Olivier
  - o Informing and involving local communities – Spoon
- 5. ANTI-POACHING AND SECURITY SERVICES:** - resources that are available to support anti-poaching measures:
  - o K9 Security – Use of dogs in anti-poaching measures - Henry Holsthyzen
  - o Protrack – Training as an important tool - Vince Barkas
  - o Quemic – Latest Quemic Development against Rhino Poaching – Dap Maritz
- 6. INDIVIDUAL RHINO/ HORN MANAGEMENT:** - measures to track down rhino horn and rhino location:
  - o Ajubatus Foundation – Development of tracking collars - John Dyer
  - o Security Access Solutions - Chipping of rhino's in the Greater Kruger area - Stefan van den Borre



- o Naturecon – development of a tracking chip that can monitor rhino movement, heart rate, etc. – Anton Bakker and Andre Spammer
- o Xmets Security – Rhino Watch Web Camera's – Glyn Crook
- o Remote Control Solutions – Full HD video and High Definition photography using autonomous long distance drones – Daniel du Toit
- o Onderstepoort Lab - Development of DNA database of rhino's and horns to assist with the tracking down of carcasses and poaching movements on horn intercepted while in trade or already at the market in the Far East – Cindy Harper

## 7. QUESTIONS AND DISCUSSIONS – Mike Peel

## 8. FACILITATED ACTION PLAN – Mike Peel and Jen Newenham

- Do we need an institution that represent us and take joint action to employ above technologies?
- Goals and objectives of a Forum
- Selection of representation and individuals on a Task Team to champion the Forum
- Feedback mechanisms

## 9. WAY FORWARD AND CLOSURE

