

## REPORT OF THE MEETING TO DISCUSS THE USE OF THE HUMAN WILDLIFE CONFLICT TOOLKITS (HWC Toolkits) IN MITIGATING CONFLICT BETWEEN HUMANS AND CHEETAHS (*Acinonyx jubatus*) AND AFRICAN WILD DOG (*Lycaon pictus*)

30<sup>TH</sup> JULY 2010 – Lokuthula Lodge, Victoria Falls, Zimbabwe

### Introduction:

Dr Netty Purchase, the Coordinator of the regional conservation strategy for Cheetah and African wild dog in Southern Africa, opened the meeting explaining the purpose. In April 2010, Netty had met with Dr Czudek, the regional officer for the FAO(SFS) programme for SADC countries, and learnt that the programme had developed a comprehensive human wildlife conflict toolkit (HWC toolkit – Figure 1) for use by field officers to work with rural communities to assist them in mitigating conflict with wild animals.



Figure 1: The Human wildlife conflict toolkit: a) the briefcase for transportation b) the contents

Given that one of the main objectives of the regional conservation strategy for cheetah and African wild dog is to “*Minimise conflict and promote coexistence between cheetah, wild dog and people across southern Africa*”, it was realized that there was an opportunity for collaboration between the regional cheetah and wild dog conservation programme and the FAOSFS office, along with their main partners in the HWC Toolkit project (BioHub; WWF; CIRAD, FFEM and Zimbabwe Parks and Wildlife Management Authority). This collaboration would determine if the HWC toolkit was appropriate to use to reduce conflict between rural

communities and cheetahs and wild dogs, helping achieve one of the main objectives of the strategy, whilst the FAO project would increase the applicability of the toolkit. Hence, it was agreed at the meeting in April that the regional conservation programme would organize a meeting of all projects working to conserve cheetah and wild dog in Southern Africa, where the HWC toolkit could be discussed, and where each project attending would then be given a toolkit to trial in the field courtesy of the FAO sponsored programme.

The meeting was organized to take place in on the 30<sup>th</sup> of July 2010 at Victoria Falls, Zimbabwe, a central location to all projects working on cheetah and wild dog in Southern Africa. It was organized and run by Dr Netty Purchase (Regional coordinator) with input from Mr George Mapuvire (the HWC Toolkit project leader under the BioHub partnership with FAOSFS office) and Mr Mike le Grange (the consultant who developed the HWC toolkit). Unfortunately Dr Czudek was not able to attend. A total of 6 cheetah and wild dog conservation projects from 4 countries in the SADC region attended (with apologies from a further 3 projects in 2 countries that have been involved post meeting):

**Projects represented at meeting:** Namibia – Cheetah Conservation Fund (Dr Laurie Marker); Namibia Nature Foundation (Robin Lines); Zambia – Zambian Carnivore Programme (Alex Liseli – Liuwa Plains National Park); African Parks Network, Bangwelu (Jonathan Chisaki); Zimbabwe – Marwell Zimbabwe Trust (Verity Bowman); Painted Dog Conservation (Dr Greg Rasmussen); South Africa: Endangered Wildlife Trust (Deon Cilliers and Brendan Whittington Jones); Cheetah Outreach (Annie Beckhelling)

**Projects involved post meeting:** Botswana: Botswana Predator Conservation Trust (Dr Tico McNutt); Cheetah Conservation Botswana (Rebecca Klein); Mozambique: Niassa Carnivore Programme (Dr Colleen Begg)



**Figure 2:**  
**Participants of  
the meeting**



## **Background to the development of the HWC Toolkits (Mr G Mapuvire)**

There was a regional workshop held in December 2008 to discuss how to coordinate activities to reduce human-wildlife conflict in the SADC region focused on improving the capacity of field officers to assist rural communities reduce the impact that wild animals have on their livelihoods, recognizing the many rural communities' livelihoods are threatened by the presence of wildlife but that fatal control by humans can have a detrimental effect on wildlife populations.

It was agreed at this workshop that there was a great deal of knowledge already available regarding mechanisms to reduce conflict, depending on the wildlife species involved and the type of farming involved (eg agricultural production or livestock production). It was proposed that all this information be captured in one “toolkit” that would then be made available to field officers working in areas with human-wildlife conflict, enabling them to deal with conflict between a variety of human farming communities as well as a variety of wildlife species. The project also has funding for training courses that are held to teach such field officers to use the toolkit developed. The final toolkit (see Figure 1) was the result of a number of trials (the first being a cardboard box with loose sheets inside) and is designed to be robust enough to withstand use in harsh environments (heavy, waterproof canvas cover and laminated sheets)

In December 2009, the partnership behind the development of the toolkit held its first workshop to present the toolkit and begin training, the workshop including and focusing on Wildlife Authority staff from Zimbabwe, Zambia and Mozambique in conjunction with the Community Based Natural Resource management Forum. A second workshop was then held in February 2010 to include Botswana and Malawi. The purpose of the two workshops was to introduce the toolkit, provide training to heads of field staff sections under the wildlife authorities, who would then trial the toolkits in their respective countries and areas where human-wildlife conflict is known to occur (conflict “hot-spots”). The toolkit developed is a prototype and feedback from field staff is critical at this stage to assess the efficacy of the prototype and the information contained within.

To date, the HWC toolkits project has been presented to the SADC Directors of Wildlife meeting, and 4 countries have received toolkits and the associated training (Zimbabwe, Zambia, Botswana and Mozambique). Approximately 200 toolkits have been distributed for trial since December 2009. They are available in English, French and Portuguese and it is recognised that in time it should be translated into relevant African languages. The toolkit is also available in a digital format, which will make it easy to revise and also available to a wider range of projects and institutions working with rural agricultural communities/farmers.



## Training protocol under the BioHub project.

Field staff are trained to work with a group/individual who has experience human-wildlife conflict, using the toolkit to define the problem, determining what type of conflict has occurred, what might be causing the conflict and what solutions are most appropriate to resolving the conflict from the many methods that have been identified over the years (including fatal control if absolutely necessary). Such a process helps the communities/individuals understand what might be causing the conflict through the HWC toolkit and how then can take steps to avoid conflict in future. Field staff from wildlife authorities are trained using a process that involves role playing and understanding the types of conflict that are most common in their area. The training normally takes about 3 days.

## Brief description of the HWC Toolkits

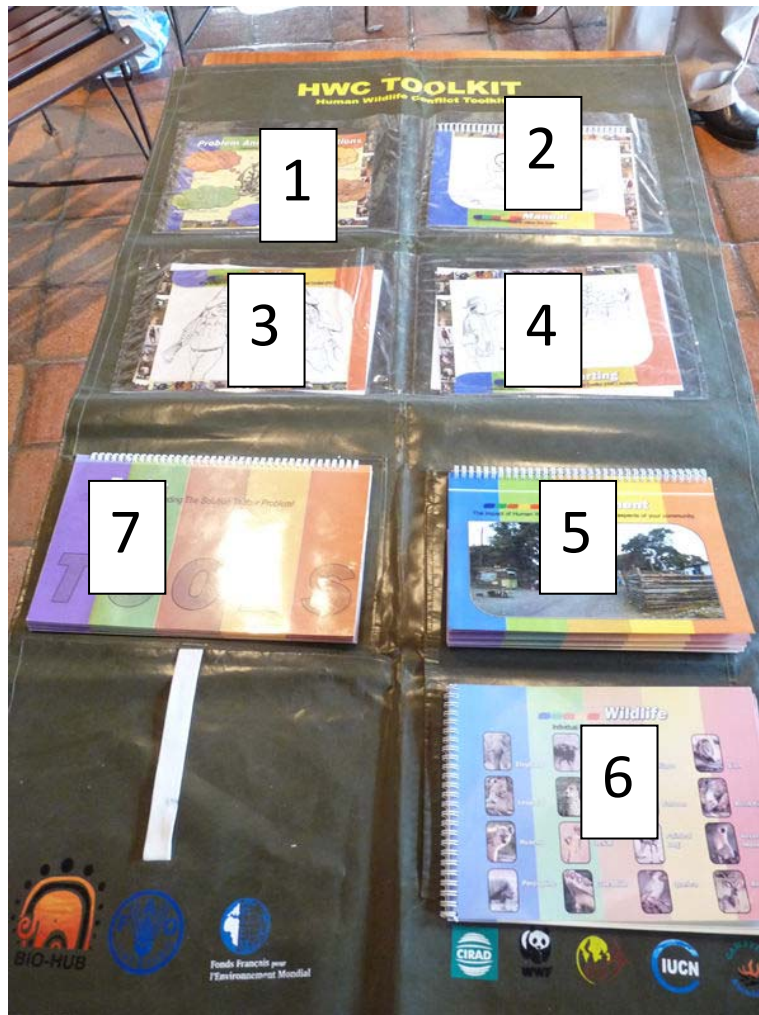
The current toolkit is a prototype divided into different sections (pockets):

- Pocket 1: A definition of problem animal control
- Pocket 2: Manual on how to use the toolkit
- Pocket 3: The policy on problem animal control (this section will be relevant to each country)
- Pocket 4: Forms on how to report on conflict (sometimes referred to as event books)

The next three pockets are linked. The field officer encourages the community reporting the conflict to first decide what environment the conflict is taking place (Pocket 5); what wild species is causing the conflict (Pocket 6) and what can be done to reduce the conflict (Pocket 7)

- Pocket 5 Descriptions of the type of environment within which the conflict is happening. There are 5 possible “environments” included:
  - people – where conflict involve potential loss of life or restriction of movement
  - village
  - livestock
  - access to water
  - crops
- Pocket 6 Descriptions of the behavior of the wild species causing the conflict. This allows the communities to understand the species better and learn how to avoid conflict.
- Pocket 7 The heart of the toolkit. This pocket incorporates all methods currently recorded as being effective in mitigating conflict, with each method cross referenced to the sections in Pocket 5 and 6. Hence, the toolkit is designed as a decision tool.





**Figure 3: HWC toolkit open with different pocket marked.  
Pockets 5, 6 and 7 are linked together as a decision tool**

**Purpose of meeting: Assessment of whether the content of the toolkit in the context of cheetah and wild dog conservation:**

The participants of the meeting were asked to assess the information contained with the current prototype in the context of what is known and understood about the behavior of cheetah and wild



dog, types of conflict recorded between these two species and humans, as well as making sure that all mitigation methods that have been used are included in the toolkit. Hence, this meeting gave each project participating the opportunity to provide information that can be used to update and revise the toolkit (while it is still a prototype). The participants broke up into a “cheetah” working group and a “wild dog” working group to make maximum use of the time available.

**Comments from the cheetah working group (Appendix I):**

**Comments from the wild dog working group (Appendix II)**

**Close of meeting:**

Mr Mapuvire expressed his thanks to everyone who took part, even though the time was limited, as their input was critical to ensuring the efficacy of the toolkit in mitigating conflict between humans and all wildlife species. He emphasized the importance of providing feedback and informed everyone that he is in the process of developing a comprehensive questionnaire that will be sent to everyone who has received a toolkit for them to fill in once they have trialed the toolkit in the field. It was agreed that the regional coordinator for the conservation strategy for cheetah and wild dog would take on the responsibility of ensuring that every project that received a toolkit would provide feedback in 6 – 12 months time using the questionnaire developed.

The meeting officially closed at 12:30



## Appendix I: Comments from the cheetah working group:

1. General notes about the cheetah section: Should read “*Cheetah spoor is easily confused with dog/hyaena/canids because toe nails do not retract*”. Another suggested change is “*Cheetah occupy and hunt in various habitats including open grassland, savanna and densely wooded areas*”. With regard to behavior suggested changes to the text in the toolkit include “*Cheetahs are opportunistic hunters of unprotected livestock, in particular small stock and calves under one month of age*”. Where actions against cheetah are mentioned should read “*Cheetah are protected by legislation and all control actions are dictated through it*”. In the section about trapping of cheetah delete the current explanations and insert “*Cheetah capture requires specialised equipment and expertise*”.
2. Notes under the **Environment** manual pocket:
  - a. On the chart, all columns should be headed either 1 to 5 or have appropriate titles to speed up access to information and eliminate potential errors in understanding.
3. Notes under the **Tools** manual pocket:
  - a. Need to emphasise management of livestock is very inexpensive compared to electric fences. Live stock management(LM) should be the 1<sup>st</sup> level of solutions to implemented, before looking at the expensive ones. Namibia, South Africa, Botswana and Zimbabwe have proven that LM works in majority of cases and have manuals that could be incorporated into the toolkit
  - b. Remove reference to running cheetah down on horseback as this will kill cheetah through overheating and sedation on a compromised animal.
  - c. CAMPFIRE and Hunting Tenders. Integration of areas into utilisation zones per community to minimise potential conflict between enterprises.
  - d. Page 9: It should be noted that for cheetah conservation, wildlife utilisation may be contrary to their survival, causing more conflict if the prey base is hunted and trophy animals protected from predators. In such areas there should be efforts to incorporate the value of cheetah are integral to maintaining good health to their prey populations
  - e. Page 17: Attractants: Should be noted that these are costly and may attract more than the target species. Also may attract the wrong age groups/genders of target species. There is the risk of creating “Trap happy” individuals.
  - f. Training: 2 +3: Communities should be encouraged to ensure that tracking skills are maintained as an honourable occupation.
  - g. Fences: Different countries have different policies so the toolkit should take cognizance of this making it relevant to each country (same as the policy and legislation section); A standard game fence will not deter predators. For predator conservation, game proof fences can create more problems than they solve. Overall, it should be stressed that utilisation of a fence depends on the intended



extent of the fence and its purpose. Suggest that the manual provides a separate section for fencing out predators as distinct from fencing out crop raiders

- h. Compensation programmes should be community driven and designed to encourage appropriate management in the 1<sup>st</sup> instance and only when these have proved to be inadequate against the threat are stronger measures considered along with some mutually agreed proportionate compensation.
- i. Translocations of problem animals (Cheetah). This is not considered the best solution for cheetahs as creates vacuum. Animals may die during translocation. Animals may die at release sites due to territorial conflict with resident animals. Problem (livestock depredation may simply be transferred. If animals have to be translocated then only use crates with rigid square weld mesh, not flexible mesh which has a flat sharp edges and lacerates the animal's feet and legs if it jumps against the side of the crate.
- j. Options of driving cheetahs away from livestock. Participants wanted it noted that pencil flares, bangers etc not suitable for cheetah since they don't hunt at night. Also do not promote stock whips given that cheetah are slight predators susceptible to damage. A gas canister banger installed at kraal can be useful. Techniques that work well include:
  - i. Dogs work well if trained from a puppy and associate with the herd (livestock guarding dogs)
  - ii. Donkeys work well if inserted into the herd when pregnant and after birth protects herd and foal.
  - iii. Baboons have also been reported to be used.
- k. Under "**Awareness**": Participants felt it important to include information about appropriate livestock management to complement the section on crop raiding. Might be an idea if toolkit going to be made available to commercial farmers to include section on game management options that are predator friendly. .





## Appendix II: Comments from the wild dog working group

1. The toolkit needs to include a more holistic approach to managing resources – rangeland management, etc. Start by discussing natural resource management before looking at mitigation methods. There are a number of manuals already developed that could be incorporated here (eg CCF Integrated predator livestock management; Conservation agriculture programmes etc etc)
2. Every pocket in the toolkit should have a number, and preferably a name, which should match the booklets, so that they can be used in the right order and replaced in the pockets in the right order.
3. There should preferably be large posters with summaries in picture format. Ideally this should be based on the first pocket –Problem Animal Control Options. This could be placed on the back of the unrolled kit.
4. Pocket 1: **Problem Animal Control options** the options should be put in order, starting with Awareness in the top left corner, and preferably going clockwise. The order of preference should be changed to:
  1. Awareness
  2. Access prevention
  3. Drive them away
  4. Translocation
  5. Lethal (this being last so that it is seen as a last option)
5. It would be good if the toolkit also had facilities to allow it to be hung up on a wall or tree
6. Writing is a bit too small to read comfortably and there is too much text. Ideally reduce the text and use more pictures where possible.
7. The **Manual** should be simplified – basic pictures with cross-referencing by number to the other booklets.
8. **Wildlife Booklet** -Add domestic dog to list of problem animals
9. **Environment Booklet** – Point out that HWC is often used as a cover up to stock theft and other illegal activities. Humans should always be considered first as a possible cause of livestock loss
10. **Environment Booklet** – Under livestock
  - Include sheet developed and used by a number of projects in the region that allows the farmer to identify the species that has killed his/her livestock through identification of spoor, bite marks, the way the carcass has been eaten, time of day etc.
  - Go through the process of looking for Motive, Opportunity and Method to determine possible cause.
  - Include humans as possible cause.
  - Clearly outline size classes of animals in relation to different predators.
  - Smaller stock like calves, goats, sheep – cheetahs, dogs and leopards



- Preferably layout in picture format, not paragraph format.

Question whether the section on ‘Factors of Risks’ necessary? Could the space be used for more pictorial presentation on diagnostic process

#### 11. Wild Dogs – Livestock - Awareness

- 4 – simplify the title (e.g. communal management)
- 6 – may apply to wild dogs but not very clear
- Add 10 – compensation – applies in some regions
- Add 11 – package compensation - may apply in some regions
- Add 12 – insurance - may apply in some regions
- Remove 17 – attractants
- Add 19 – sensitizing policy decision makers – add policy advocacy – as a means to get to the policy makers to justify what needs to be changed in the policy.

12. Is it possible to make an electronic decision-making tree – go through the various aspects of the specific situation – enter them into the model which results in a limited set of possible solutions.

#### 13. Wild dog – Livestock – Access Prevention

- Remove 3
- Add 4
- Remove 10 – not economically viable
- Add 11 (at least as a temporary measure)
- Remove 13 – and change to high cost
- Remove 14

#### 14. Wild Dog – Livestock – Translocation

- Add 3
- 10 – change title to ‘Boma and Net Capture’ – modify text based on what has actually worked for wild dogs (Painted Dog Conservation has some ideas on this)

#### 15. Wild Dog – Livestock – Drive them Away

- Remove 9
- Remove 11

16. Possibly include issue of wild dogs attacking game on game farms – in environmental booklet

#### 17. Changes suggested not relevant to wild dogs but the whole toolkit

- Access prevention – 15 GPS satellite collar technology – could be moved to Awareness
- Translocation – 2 – alcohol doping baboons - remove the word ‘destroy’ – as the column is about translocation, not lethal methods.
- Translocation – 4 – change to medium cost



- Translocation – 8 & 9 – adjust titles to ‘elephants’, ‘plains game’.
- Drive them away – 4 – needs to be rewritten – with rubber snake, not live snake and remove puff-adder picture



### Appendix III: List of participants

#### Zimbabwe (host country)

Dr Netty Purchase	Regional coordinator	<a href="mailto:cheetah@mweb.co.zw">cheetah@mweb.co.zw</a>
Mr George Mapuvire	HWC Toolkits Project leader (BioHub)	<a href="mailto:biohub@zol.co.zw">biohub@zol.co.zw</a>
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#### Zambia

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#### South Africa

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