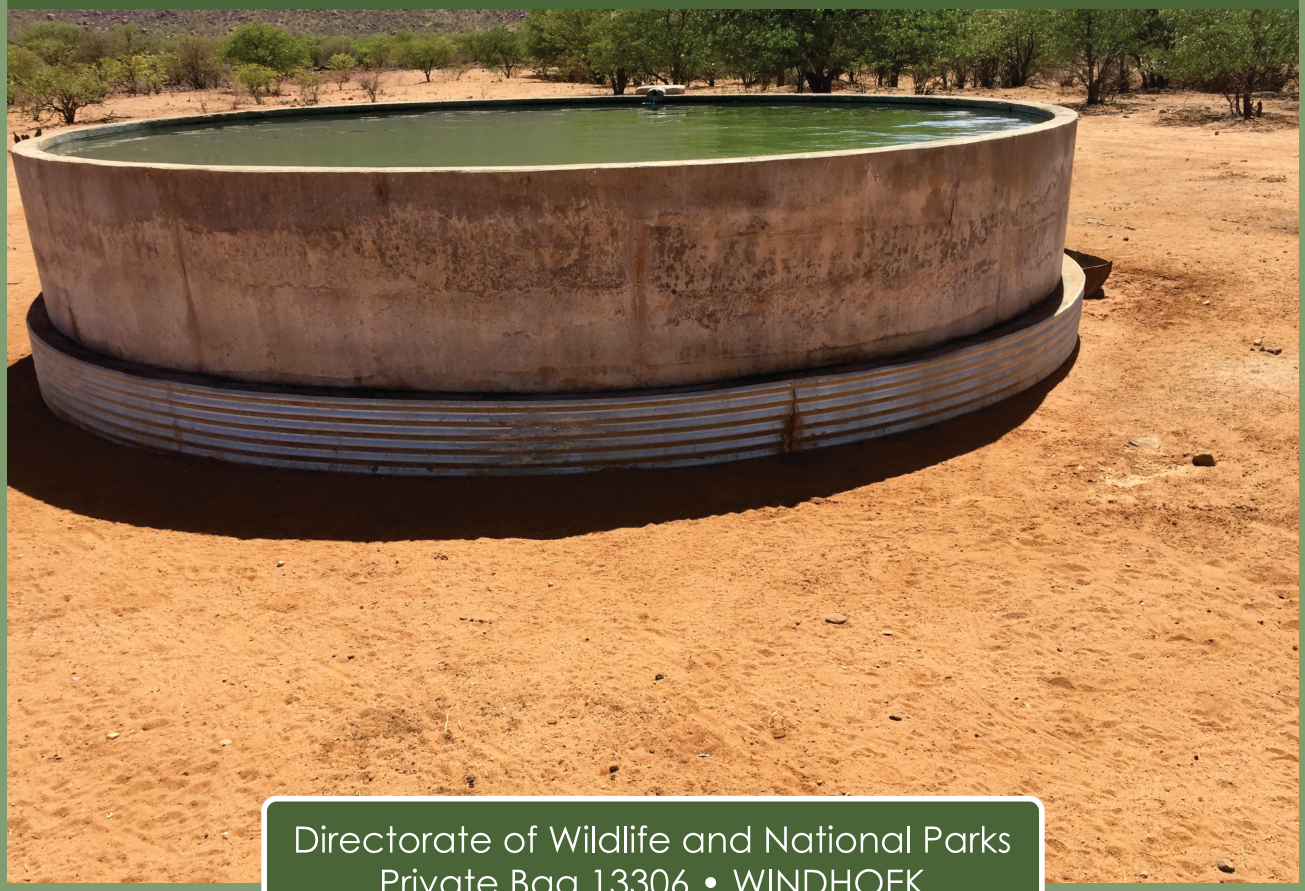
REPUBLIC OF NAMIBIA
MINISTRY OF ENVIRONMENT AND TOURISM

MEASURES AND GUIDELINES FOR IMPLEMENTATION OF THE REVISED NATIONAL POLICY ON HUMAN WILDLIFE CONFLICT MANAGEMENT

November 2018



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FOREWORD

In April 2018, Cabinet approved the Revised National Policy on Human Wildlife Conflict Management (2018-2027). This is a revision of the 2009 National Policy on Human Wildlife Conflict Management which has been updated to reflect changing circumstances, new thinking regarding HWC and the results of experience in addressing HWC management issues on the ground over the past eight years. The revised Policy provides a framework for addressing HWC efficiently and effectively in order to promote both biodiversity conservation as well as human development.

Namibia has adopted a number of innovative approaches to achieve biodiversity conservation within the framework of national development plans including Vision 2030 and poverty reduction strategies. Due to the commitment shown by Namibians, there has been a remarkable recovery and increase of wildlife populations, including key predator species and internationally threatened or endangered species such as elephant and black rhinoceros.

Despite these successes, the Government recognizes that living with wildlife often carries a cost. Increased wildlife populations and the expansion of their ranges within communal and freehold farming areas results in more frequent conflicts between people and wild animals, particularly elephants and predators.

The Government also recognizes that such conflicts have always existed where people and wildlife live together and will continue to do so in the future. This means that it will not be possible to eradicate all conflict, but that conflict has to be managed in the most effective and efficient way possible. It is for this purpose that the National Policy on Human Wildlife Conflict Management was developed in 2009 and revised in 2018. This Policy acknowledges the need to manage HWC in a way that recognizes the rights and development needs of local communities while at the same time recognizing the need to promote biodiversity conservation.

This guideline document is aimed at addressing this Policy framework and describing measures and approaches for the implementation of the Policy. This document was developed through a series of consultations with a broad range of stakeholders and in accordance with the approved revised Policy (2018).

POHAMBA SHIFETA, MP
MINISTER

ACRONYMS AND ABBREVIATIONS

AGM	Annual General Meeting
BNP	Bwabwata National Park
DD	Deputy Director
DWNP	Directorate of Wildlife and National Parks
DSS	Directorate of Scientific Services
DVS	Directorate of Veterinary Services
ENP	Etosha National Park
GPTF	Game Products Trust Fund
HWC	Human Wildlife Conflict
HWCM	Human Wildlife Conflict Management
HWCSRS	Human wildlife conflict self-reliance scheme
HWSRS	Human Wildlife self-reliance scheme
LWMU	Local wildlife management unit e.g. communal or commercial conservancy, game farm, custodian farm, hunting concession etc.
MET	Ministry of Environment and Tourism
NGO	Non-government organization
NP	National Park
PA	Protected Area
PH	Professional Hunter
SOP	Standard Operating Procedure
TA	Traditional Authority

GLOSSARY

For the purposes of this policy, the words or phrases set out below have the following meanings:

Authorized staff member	Regional heads of the Ministry authorized by the Minister to carry such duties, functions and responsibilities.
Capacity building	Transfer of knowledge, information, skills and understanding.
Conservancy	Communal area conservancy Gazetted in terms of the Nature Conservation Amendment Act (No.5 of 1996).
Culling	Lethal removal of wild animals to reduce their numbers.
Director	Director of Wildlife and National Parks
Human-Wildlife Conflict	Any event in which wild animals harm, destroy or damage human life or property (including damage to or destruction of crops), or in which wild animals are injured, captured or destroyed as a result of a perceived threat to hu mans or their property.
Government	Government of the Republic of Namibia.
Ministry	Ministry of Environment and Tourism.
Problem-causing animal	An identified individual wild animal that at any point in time harms, destroys or damages human life or property.
Professional Hunter	A professional hunter approved by MET.
Protected Area	Formal protected area proclaimed in the Government Gazette according to legislation.
Staff member	Person appointed in terms of the Public Service Act (13 of 1995).
Stakeholder	Any individual, group of individuals, organization or government department or agency that is affected by HWC or is involved in research on HWC or implementation of measures to mitigate HWC.
Wild animal	Any wild animal that is included in Schedules 3, 4 and 5 of the Nature Conservation Ordinance (Ordinance 4 of 1975, as amended) or any similar schedules contained in legislation that replaces the Ordinance.

1. INTRODUCTION

Human Wildlife Conflict (HWC) refers to the conflict between people and wild animals and occurs throughout Namibia on communal as well as freehold land and involves a variety of species. These conflicts range from the destruction of crops and water installations to loss of livestock, homes and in some cases, the loss of lives. The main problems occur on the communal land where elephants and predators are found outside protected areas and where people are least able economically to bear the costs of damage and losses.

A variety of approaches can be implemented in order to manage the conflict efficiently and effectively, in line with the strategies set out in the Revised National Policy on Human Wildlife Conflict Management (2018-2027). These include prevention strategies which endeavor to avoid the conflict occurring in the first place and take action towards addressing its root causes, as well as protection strategies that are implemented when the conflict is certain to happen or has already occurred, while mitigation strategies attempt to reduce the extent of impact and reduce resulting losses.

2. AIM

This document provides measures and guidelines for approaches to certain strategies of the Policy and provides further information to guide the implementation of the Revised National Policy on Human Wildlife Conflict Management (2018).

3. IMPACT OF HWC

3.1 Conflicts caused by wild animals

- Loss of human life and injury to people
- Injuring and killing of livestock (cattle, sheep, goats, donkeys)
- Damage to property (water points and boreholes, fences, gates, kraals, houses, etc.)
- Destruction of crops and gardens resulting in lower yields or even crop failure
- Damage to vegetation
- Competition with livestock for forage

3.2 Causes of HWC

- Competition between growing human population and wildlife for the same living space and resources
- Movement of people into areas previously uninhabited for reasons of safety or food security or because of droughts or floods
- Continuing negative attitudes towards wildlife and Protected Areas (PAs)
- Negligent exposure of people to areas with dangerous wildlife e.g. children swimming in the Kavango River
- Modification of wildlife habitats due to infrastructure development, agriculture, green schemes, fishing and other development projects
- Widespread drought condition are aggravating the conflicts between people and wildlife

3.3 Consequences for wildlife conservation

Many wild animals are destroyed in retaliation for incidents of HWC, even when the identification of the real culprit is not possible. This applies especially to predators. These actions could eliminate a species, have impact on its home range and also affect the larger landscape or ecosystem. This also has a broader environmental impact on ecosystem equilibrium and biodiversity conservation.

3.4 Economic and social impacts

- HWC can result in the reduction of cash income to rural households and have repercussions with regard to health, nutrition, education and ultimately development
- The negative impact of HWC on the livelihood activities of rural communities is demonstrated for example by the killing of livestock and donkeys (for transport) by predators
- Ban of hunting of species that are killed in large numbers as problem animals has economic impacts since hunting the animals could generate income for the State, rural communities and farmers if hunted as trophy animals
- The damage caused by wild animals in some cases has financial implications that disrupt the lives of families in rural communities
- HWC can result in exposure of people to wildlife diseases, physical injuries and in some situations, may even result in the loss of human life

4. MONITORING AND RESEARCH

4.1 Monitoring the incidence of HWC

National HWC database

In order to manage HWC effectively and efficiently it is crucial to have adequate data that is available in a usable form for key decision -makers.

It is the responsibility of the Coordination Unit for HWC (Sub-division HWC and Hunting, under the Division of Wildlife Support Services), to establish and maintain on a real time basis a HWC spatial database. This database will provide a detailed overview of the impact of conflict on local populations, and help identify which geographical zones are more vulnerable to HWC and which species are commonly involved in conflict. This will ensure adequate use of resources, identify high-risk areas and the most relevant species, and encourage effective responses to emergencies.

The web-based monitoring system provides the foundation for this database. Annex 5 provides an overview of the fields required in the HWC database.

Activities

- The Director responsible for Wildlife Management in MET will assign a specific person to be the HWC database manager.
- All authorized staff members dealing with HWC (DWNP and DSS) are required to submit completed HWC reports using the prescribed forms (Annexes 1-4) to the HWC database manager, using the web-based monitoring system and database.
- Each incident reported will be automatically given a unique number which will appear on all subsequent reporting for ease of reference.
- The database will be maintained on a real-time basis, and records updated as new information becomes available.
- Regular follow up should be made by the HWC database manager on records that are incomplete (or require follow up information).
- The HWC database manager will provide quarterly reports on the incidents of HWC recorded in the reporting period, and submit to the Director responsible for Wildlife Management in MET.

HWC in communal conservancies

- As the species involved in HWC generally move across landscapes and conservancies, and the problems experienced are not unique to a particular conservancy, it is imperative that action plans for HWC management be aligned and coordinated. Ideally there will be a hierarchy of plans, each informing the lower level. Each plan must have a clearly defined responsible agency to oversee the implementation, even if distinct activities on the action plan are to be actioned by different persons / organizations (Figure 1).

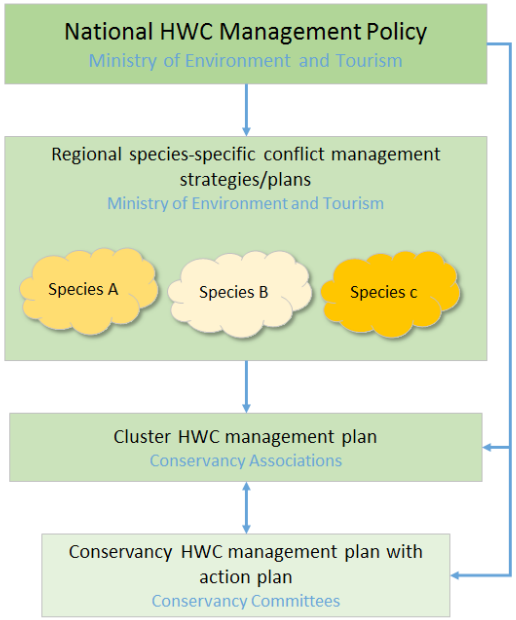


Figure 1 Diagram showing the hierarchy of policies, strategies and action plans, and responsible agencies

- Every communal conservancy that experiences HWC shall have HWC management as a distinct component of their management plan.
- When developing a HWC management plan, the following principles should be considered:
  - It should be simple and practical
  - Be realistic and achievable
  - Actively involve key players
  - Clearly set out roles and responsibilities
  - Be time bound
  - Promote clear open communication
  - Have full ownership of the relevant stakeholders

- Be accessible and understandable
- Have an associated budget
- Have measurable objectives and strategies
- Be monitored
- Promote dynamic and adaptive management
- Be locally relevant
- Apply best available practices
- Be innovative and, where necessary, experimental and pilot new approaches
- Take an integrated approach – i.e. a combination of strategies and actions to achieve objectives and vision

- The HWC management plan must incorporate the requirement to notify every incidence of HWC to MET, whether eligible for off-set payments or not.
- It is the responsibility of the assigned authorized staff member of the MET Regional Office to submit the fully completed HWC incident form through the web-based monitoring system and database to the designated HWC data base manager.

HWC on communal land outside communal conservancies

- It is the responsibility of the assigned authorized staff member of the MET Regional Office to investigate, and submit the fully completed HWC incident form of any incident occurring on communal land outside of conservancies, the web-based monitoring system and database to the designated HWC database manager Reporting of HWC on freehold land.
- It is the responsibility of MET Regional Offices and Permit Office to report all incidents of HWC occurring on freehold land (including as a result of animals leaving protected areas) in the prescribed format, using the web-based monitoring system, to the assigned HWC database manager.

4.2 Research

Research must be geared to providing information and insight that will facilitate the adaptive management process.

The DSS is responsible for overseeing research activities for MET, and must consider the following aspects in relation to HWC:

Species biology
Carry out research on the social behavior and movement of problem species and / or sub populations to inform HWCM. Understanding the behavior of animals can provide insights into appropriate mitigation measures. Responsibility lies with DSS, NGOs and external researchers.

Based on good information, target population levels for certain species or/and sub populations to reduce HWC – should be incorporated into species, park and conservancy management plans.

HWC database analysis
It is the responsibility of DSS to ensure that the information gathered through the HWC database is analyzed on an ongoing basis to understand the impacts and trends of the conflict, in order to inform activities and adaptive management decisions.

Effectiveness of technical solutions
Monitoring and research must be undertaken on the effectiveness of technical solutions applied for reducing HWC. Results must be used to inform best practice guidelines, and to adjust methodology to improve effectiveness.

5. DUTY OF CARE, LAND USE PLANNING AND INTEGRATED MEASURES TO AVOID HWC

5.1 Duty of care

It is the responsibility of every person, organization and organ of state to take reasonable measures to prevent or minimize damage being caused or to be caused by wild animals.

Specific objective
To ensure that every person, organizations and organs of State take responsibility for carrying out appropriate land-use planning (in accordance with the provisions of the Ministry responsible for land matters), taking reasonable measures to prevent or minimize damage caused by wild animals and developing integrated measures that are aimed to avoid and/or reduce HWC.
Revised National Policy on HWC Management

5.2 Land use planning

Integrated land use plans at local and regional level, that take into consideration zonation, plans for wildlife and mitigation measures for HWC must be developed, as a means of reducing the incidence of HWC.

The following approaches and principles can be considered and promoted by MET and other line Ministry staff during land use planning activities, as ways of minimizing HWC:

- **Identifying areas with chronic HWC:** Based on the HWC database, areas with chronic HWC problems should be identified and considered during land use planning exercises.

- **Reducing the conflict interface:** This means using available information on wildlife populations and human settlement patterns, to promote land-use activities that are spatially separated, so that the areas of overlap are reduced as well as possible conflicts. Examples of this would be reducing human settlement encroachment into elephant range; relocating agricultural activity out of elephant range; and consolidating human settlement patterns near elephant range. Relocation of agricultural activities and changing cropping regimes are more likely to succeed if the farmers in particular or the community in general derives significant benefits from the presence of wildlife in the area.

- **Clustering human settlement:** Clustering of human settlement would in many cases result in reduced HWC: firstly because wildlife generally tries to avoid areas with dense human settlement, and secondly, if wildlife does encroach, there are more people available to take action.

- **Facilitating defense:** This approach aims at making it easier to take mitigation measures in the event of conflict. For example, placing crops, gardens, kraals and vulnerable infrastructure close to dwellings where detection and defense tactics can be easily deployed. Other examples include changing the location of crop fields (e.g. to close proximity with dwellings), and kraaling livestock close to homesteads.

- **Minimizing conflicting activities:** This is done by avoiding human activities that attract wildlife species. For example, growing of crops that are less palatable or not palatable to elephants; diversifying into different crops; using intercropping layout; or changing the timing of harvest.
- **Diversification:** Reducing the dependency of people on land uses which lead to HWC. This includes choosing economic land uses that are wildlife-based where wildlife offers a competitive advantage. For example, close to rivers where wildlife is abundant, tourism and wildlife utilization potentially offers economic advantages over traditional subsistence farming, whilst also providing a potential market for small scale commercial production systems.
- **Diverting wildlife:** Modifying problem animal movement by creating or securing movement routes of wild animals; securing elephant and human access to different water points (e.g. by manipulating the water supply to change species distribution, or by using salt licks to facilitate species redistribution); repositioning protected area boundaries; expanding the size of protected areas, and by designating new protected areas.

Figure 2.
2 provides a broad decision support matrix regarding the HWC planning process.

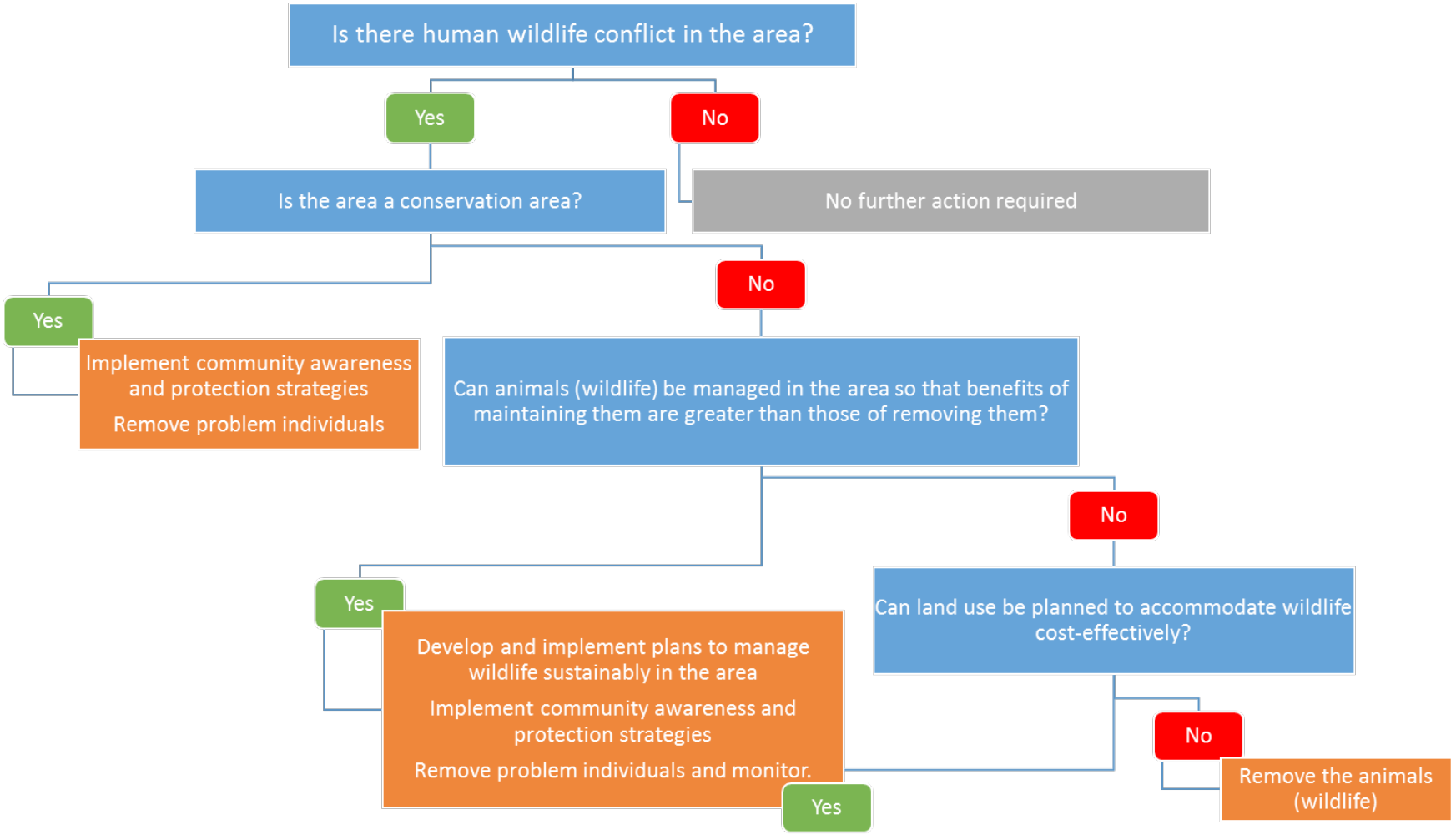


Figure 2: Decision support matrix regarding HWC planning

5.3 Environmental clearance certificates and environmental assessments

In terms of the Environmental Management Act of 2007 (Act No. 7 of 2007), an environmental clearance certificate must be obtained for the following activities which could lead to HWC:

- The establishment of land resettlement schemes
- The abstraction of ground or surface water for industrial or commercial purposes
- Construction of dams, reservoirs, levees and weirs
- The declaration of an area as an aquaculture development zone in terms of the Aquaculture Act, 2002
- Construction of facilities for aquaculture production, where the structures are not situated within an aquaculture development zone declared in terms of the Aquaculture Act, 2002
- Irrigation or green schemes for agriculture
- Forestry activities
- Tourism development activities
- Water resource developments
- Construction of cemeteries, camping, leisure and recreation sites Fencing

When undertaking environmental assessments, due consideration therefore needs to be given to the potential impact of such developments on HWC, such as:

- Restricting migration/movement routes of wildlife;
- Restricting access to water for wildlife;
- Unsustainable use of natural resources on which wildlife depends, or damage to ecosystems;
- Pollution / waste that can attract or negatively impact wildlife and wildlife habitats;
- Abstraction of water which could negatively impact water tables (affecting natural or artificial water points);
- Developments that would attract wildlife (water, crops, livestock) and cause conflict.

Responsible authorities under the Environmental Management Act

The Environmental Management Act (no 7 of 2007) falls under the MET.

Sustainable Development Advisory Council

The Sustainable Development Advisory Council is appointed by the Minister of Environment and Tourism, primarily to promote co-ordination and co-operation on environmental issues amongst Government institutions, NGOs, community-based organisations, the private sector and funding agencies. It advises the Minister on the development of policy and strategy for the management, protection and use of the environment.

Environmental Commissioner

The Environmental Commissioner is appointed by MET to advise Government bodies on the preparation of environmental plans; to receive and record all applications for environmental clearance certificates; to determine whether or not a particular listed activity requires an environmental assessment; to determine the scope, procedure and methods for a particular environmental assessment; to review environmental assessment reports; to issue environmental clearance certificates; to maintain a register of all environmental assessments; to maintain a register of all environmental clearance certificates; to conduct inspections to monitor compliance with the Environmental Management Act; and to perform any other functions assigned to him or her by the Minister of Environment and Tourism.

Competent authority

For every listed activity, there is a competent authority which has responsibility for authorizing the activity. In many cases, the competent authority will already be established by some other law. If there is no competent authority for a listed activity, the Minister of Environment and Tourism will identify the competent authority when the list of activities is published in the Government Gazette.

Procedure to get an Environmental Clearance certificate

- No person is allowed to carry out a listed activity without an environmental clearance certificate.
- No competent authority may authorize a listed activity without an environmental clearance certificate.

Figure 3 provides an overview of the process for obtaining an environmental clearance certificate

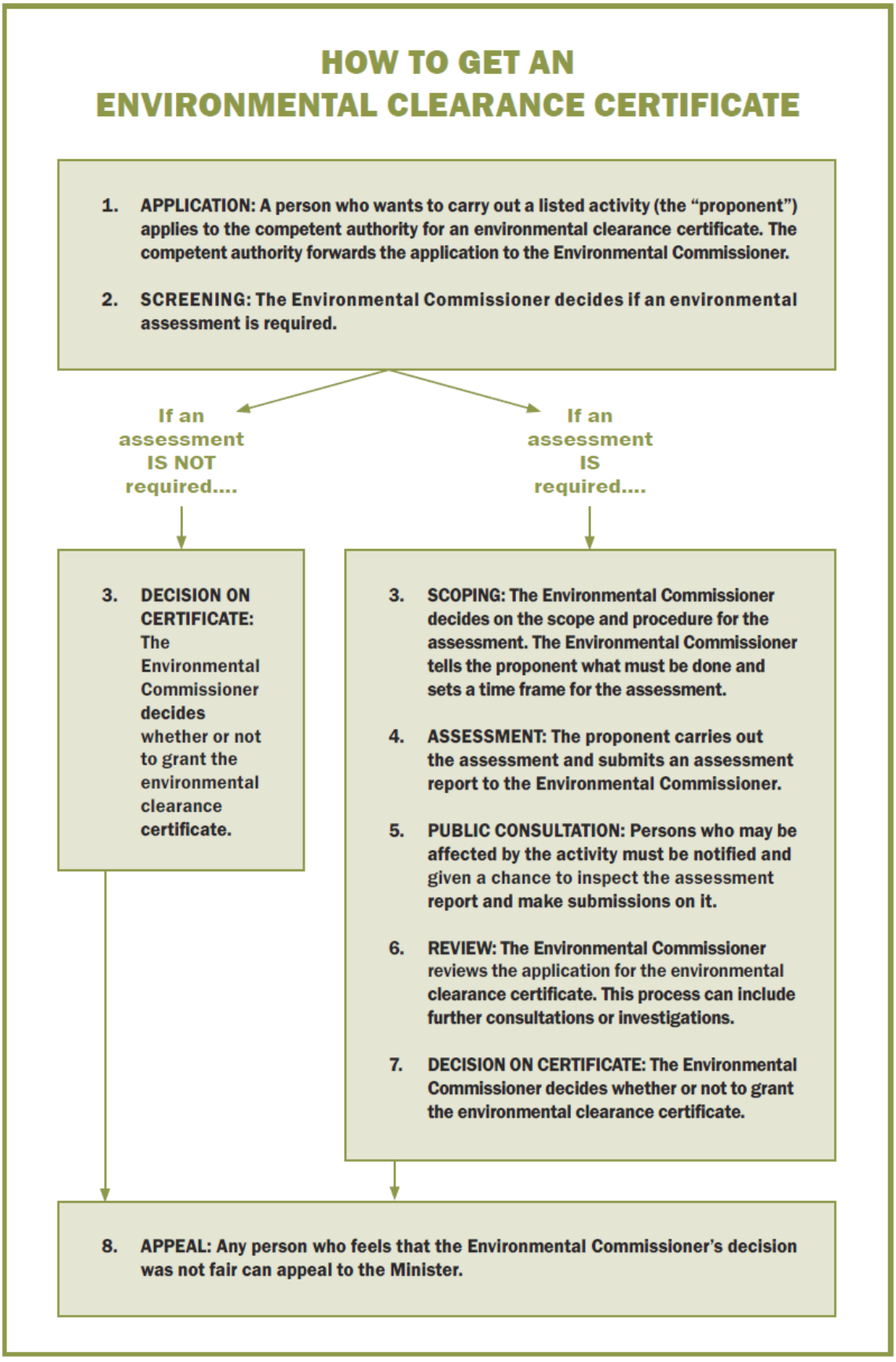


Figure 3: Diagram showing process for obtaining an environmental clearance certificate

6. DEALING WITH PROBLEM-CAUSING ANIMALS

The removal of problem-causing animals can be achieved through several different approaches. Where local wildlife management units (LWMUs) have utilization quotas, consideration can be given to increase these quotas to provide short-term relief. Live capture and sale of problem-causing animals can be a means of relieving some pressure in areas where HWC incidents are high. Small scale culling to reduce problem-causing populations can be used in situations where the numbers of potential problem-causing species are high. However, all of these strategies will require evaluation and planning and cannot be implemented quickly in response to a local level incident. For these reasons, the processes for the removal of individual problem-causing animals will be the focus of this section.

The destruction of individual problem-causing animals will not permanently remove the HWC problem, but in some cases it becomes necessary to destroy a specific animal which persistently causes problems or threatens human life. Individuals should have the right to defend themselves or their property against a wild animal if attacked. However, it is important to ensure that the correct animal is identified and that it is destroyed for a valid reason. When a decision is needed about whether to destroy an animal as a preventative measure, the decision-making process needs to be clear and streamlined. If there is a long delay between the HWC incident and implementing measures to deal with the problem-causing individual, the animal may have moved away or the wrong animal may be removed. For these reasons, it is important to deal with local conflict at a local level.

6.1 Steps to be taken when arriving at a scene of a reported HWC incident

Figures 4 – 9 show the processes to be followed by field staff when attending to investigations of reported HWC incidents of elephant, lion and crocodile, involving livestock/infrastructure and human life/injury respectively.

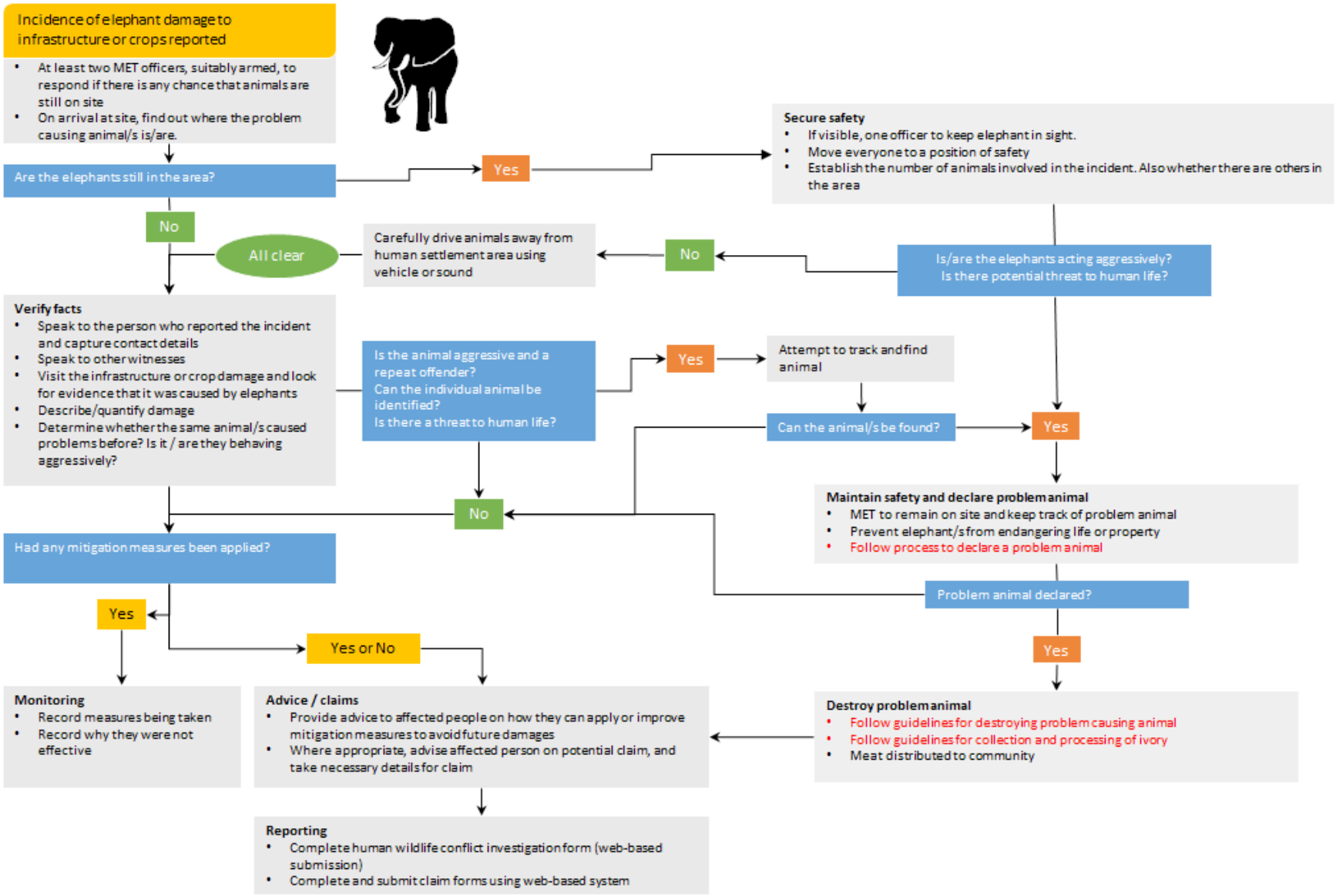


Figure 4: Diagram showing process for investigation of elephant damage to crops or infrastructure

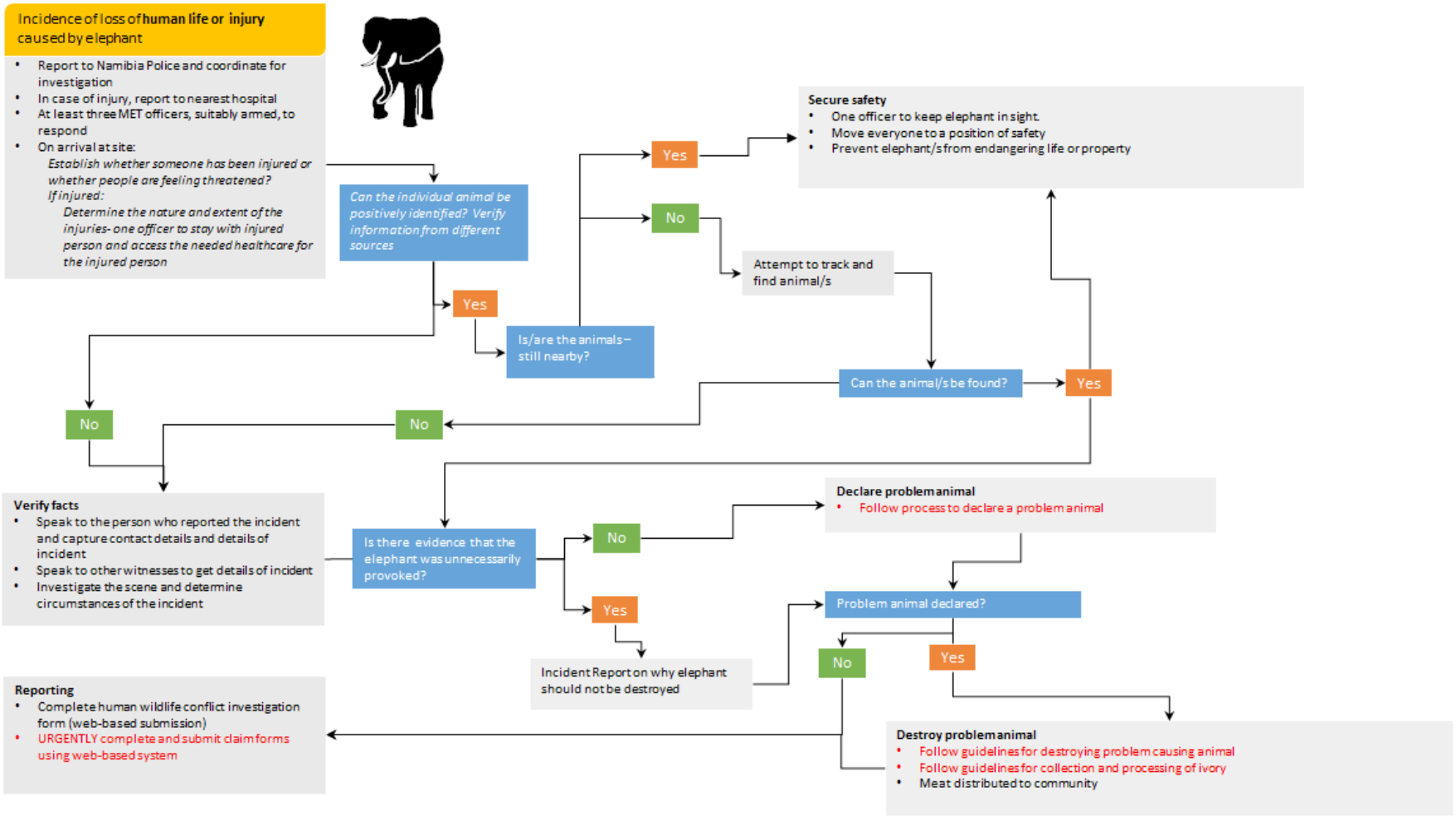


Figure 5 Diagram showing process for investigation of human death or injury caused by elephants

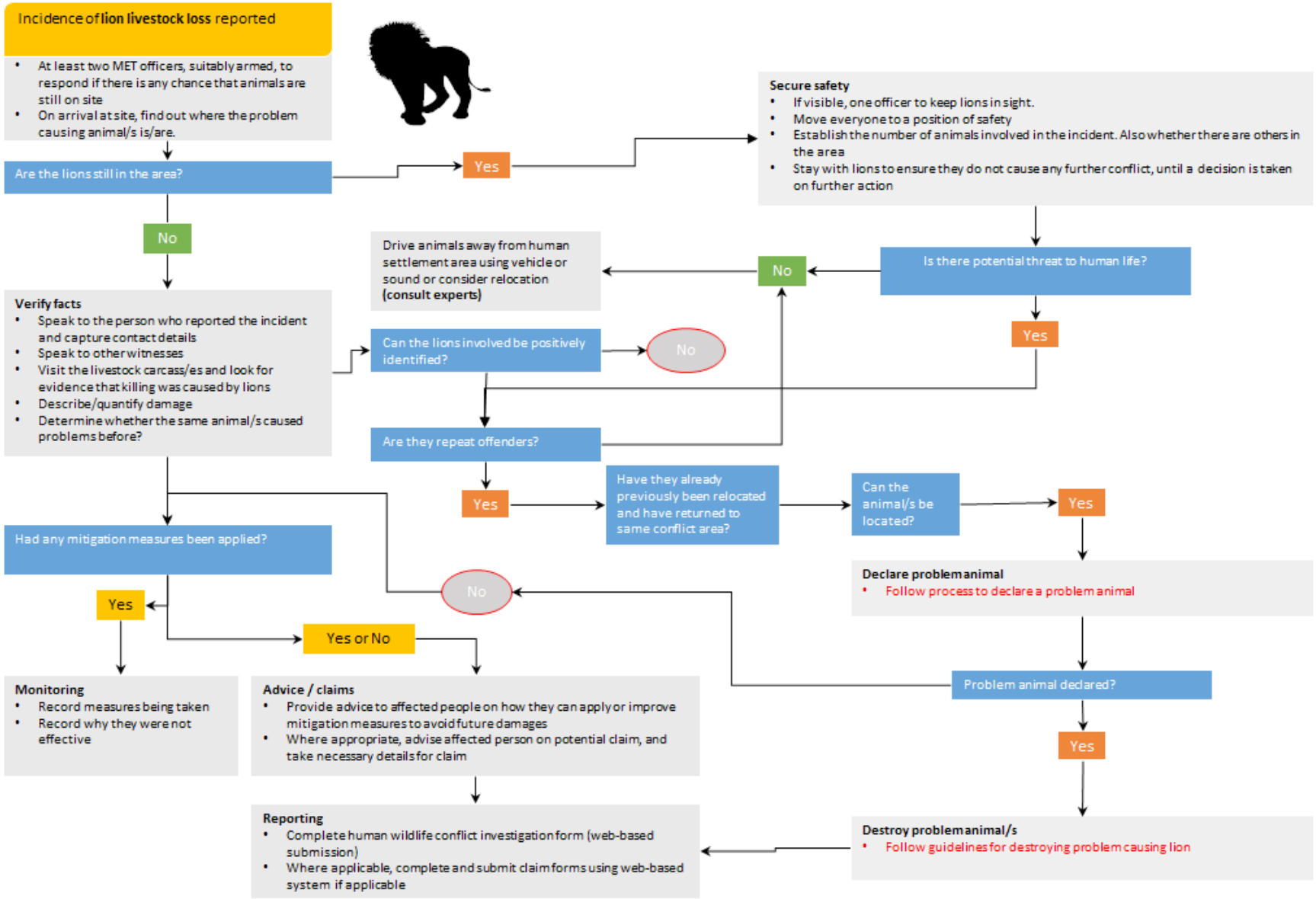


Figure 6 Diagram showing process for investigation of livestock loss by lions

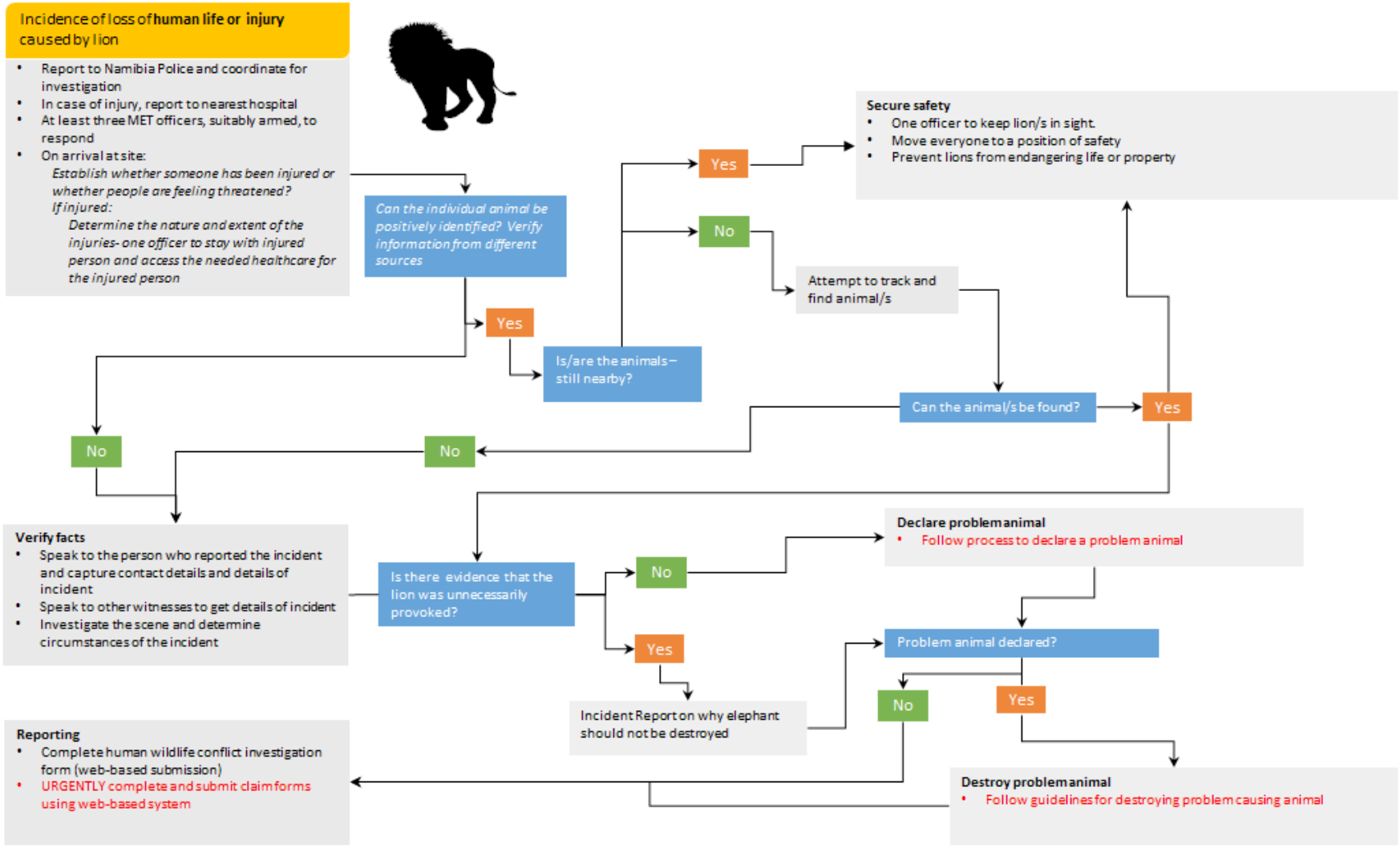


Figure 7 Diagram showing process for investigation of human death or injury caused by lions

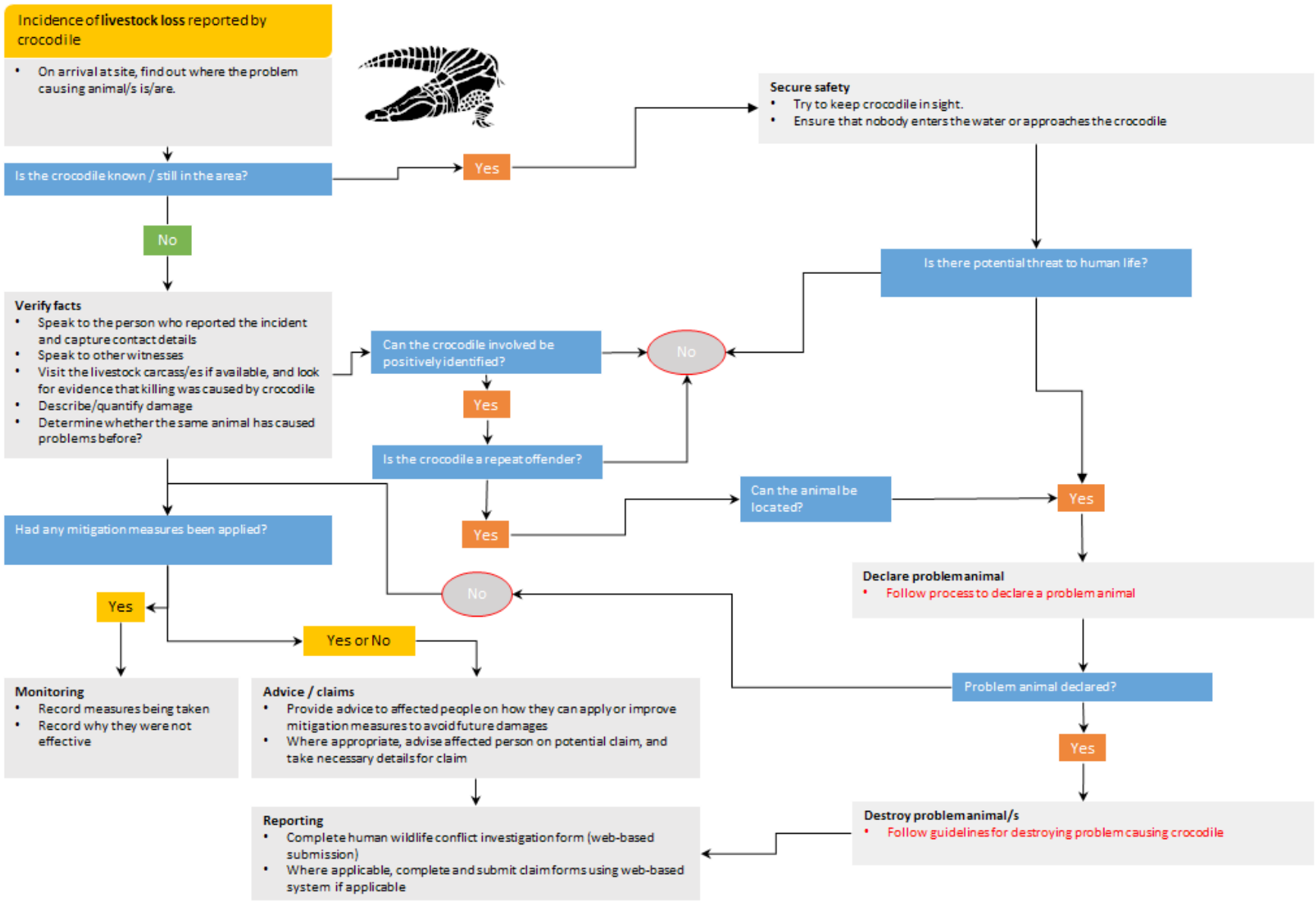


Figure 8 Diagram showing process for investigation of livestock loss by crocodile

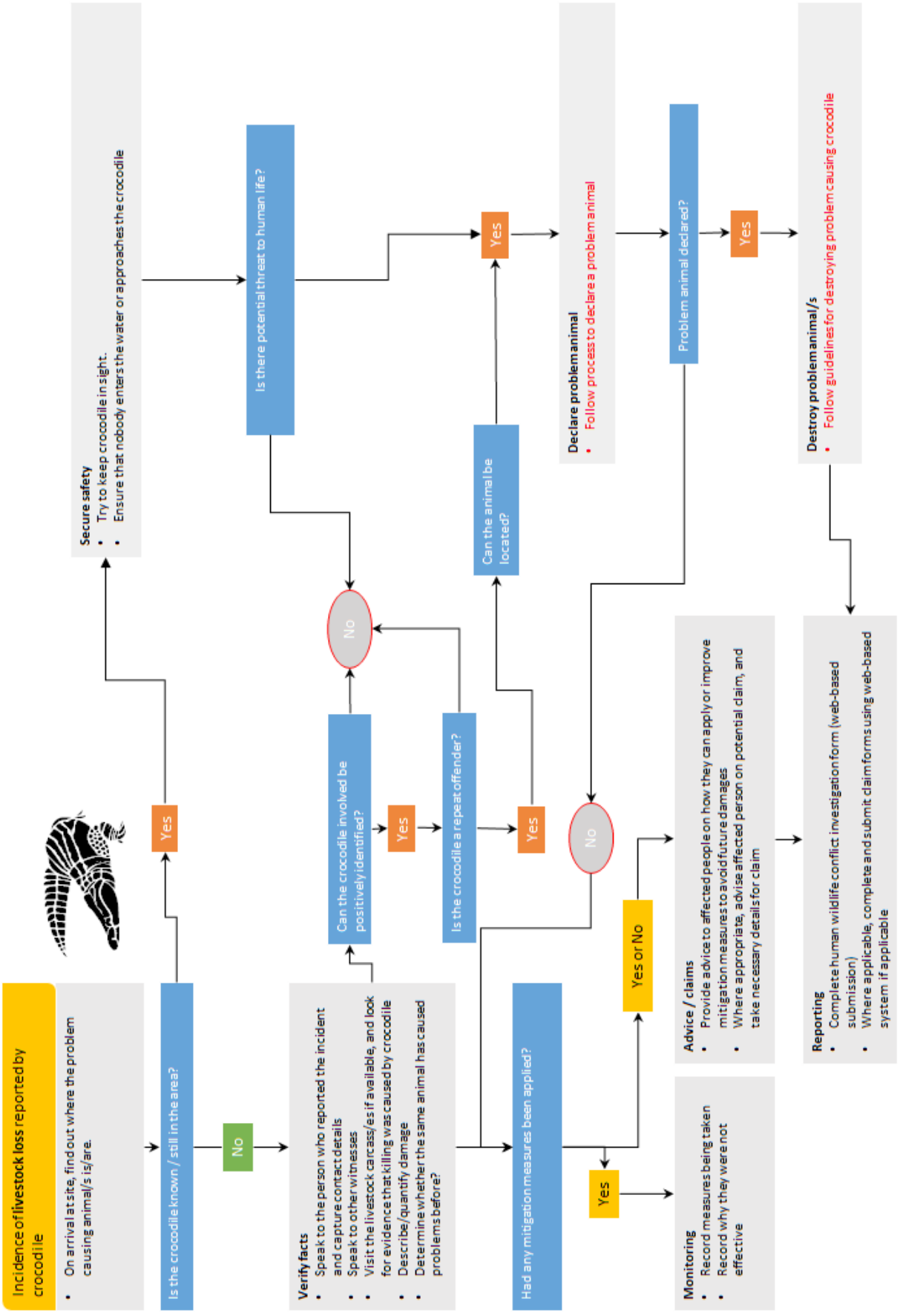


Figure 9 Diagram showing process for investigation of human death or injury caused by crocodile

6.2 Declaration of a problem-causing animal

- Upon receiving information about a HWC incident, an authorized MET official from the appropriate Regional MET Office will conduct an investigation.
- The authorized staff member will submit a report and recommendation through the appropriate channels to the Director for DWNP.
- The Director will review the report and recommendations and if the recommendations are supported, then these will be submitted to the Minister who will make the decision on whether to declare the animal involved in the incident as a problem-causing animal.

6.3 Decision to destroy a problem-causing animal

A framework for deciding when a problem-causing animal should be destroyed is given in Figure

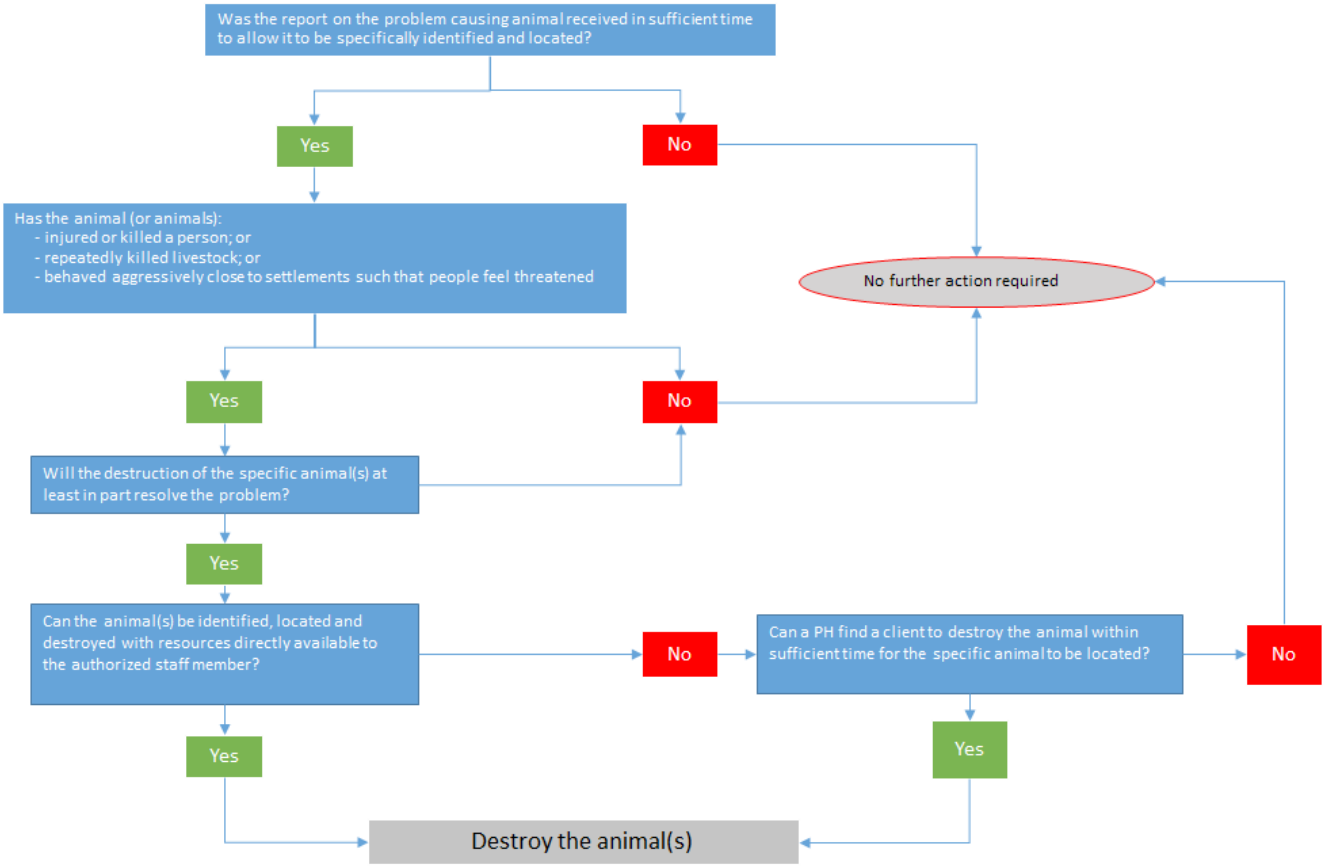


Figure 10 Framework for deciding when a problem causing animal should be destroyed.

6.4 Steps to be taken when an MET staff member destroys a problem-causing animal

- The authorized staff member is responsible for deciding whether a problem-causing animal should be destroyed by MET personnel or whether it should be destroyed by a local management unit to which authority has been delegated by MET.
- The authorized staff member may task other MET staff members who are fully skilled and equipped for the task to assist with destroying a problem-causing animal.
- In the interests of public safety, the designated person should aim to avoid the destruction of an animal in the presence of the public (including the media) wherever possible.
- At no time is any MET staff member allowed to destroy an animal without another staff member present to witness the procedure.
- The authorized staff member must ensure in all cases where an animal is destroyed outside of a conservancy, that all trophies are recovered, prepared and safeguarded for future sale to the benefit of MET (through the GPTF). For elephant skins, DWNP and DSS will advise on recovery methods appropriate to field conditions after consultation with local tanning industries.

- The meat of any edible animal destroyed be made available to the person(s) who were affected, alternatively via the relevant Traditional Authority (TA) if it cannot be determined who should benefit or how the meat should be divided. If so preferred by the affected persons, permits can be issued for the selling of such meat.
- No person will be allowed to film any animal destroyed as a problem-causing animal or any actions or activity being conducted during the course of removing problem-causing animals without the approval of the Minister.
- Authorized staff members must maintain records for all cases reported to them, their assessment, as well as the decisions and actions taken by them, and the outcome of those actions and decisions, the disposal of the meat and trophies of the animal killed. The authorized staff member must provide a written report to the Director of DWNP within 10 days. Reports must include the following information:

  - The species of animal destroyed
  - Where and when the animal was destroyed
  - That there were good grounds in terms of the guidelines for the destruction of the animal and that these conform to the reasons provided in the decision
  - Making framework for the region
  - That there were good grounds for being reasonably confident that the animal causing the problems was the animal that was destroyed and an ex planation of the reasons for this confidence
  - The disposal of the products such as ivory, meat, hide, etc.
  - An account of the operation
  - The costs of the operation to MET if MET destroyed the animal
  - Identification of the staff member that carried out the destruction

6.5 Steps to be taken when destroying a problem-causing animal is delegated to a LWMU

- The authorized staff member may give permission to a LWMU to destroy a problem -causing animal if MET does not have itself have the resources or the opportunity to destroy the animal concerned. The permissionmay only apply to one incident.
- If the authorized staff member delegates this to a LWMU, this delegation will be to an individual who is who has been identified by MET and trained. An autho-rized LWMU may only use a designated person approved by the authorize staff member.
- The delegation of authority by the authorized staff member to a LWMU to destroy a problem-causing animal will also include directions as to how the products derived from that animal may be used by the LWMU or whether it will be retained by MET as State Property.
- LWMUs should establish internal mechanisms to ensure that they can comply with MET conditions for destroying a problem-causing animal so that they can expeditiously assis persons who have been negatively affected. Where appropriate, these internal mechanisms will be documented in the HWCM Plan of the LWMU.
- Where LWMUs are not able to establish such mechanisms, any revenue resulting from the destruction of problem-causing animals must be deposited in the GPTF. MET must be provided with proof of payment of these revenues to GPTF. The LWMU then needs to specify how these funds could be used to address HWC impacts. This proposal will be reviewed and if approved, MET will arrange that the GPTF releases the funds.
- The authorized staff member may authorize another MET staff member to observe the destruction of a problem-causing animal by a LWMU or by a PH with which the LWMU has an existing contract.
- In the interests of public safety, the designated person should aim to avoid the destruction of an animal in the presence of the public (including the media) wherever possible.
- At no time is any designated person from an authorized LWMU allowed to destroy an animal without another staff member present to witness the procedure.

- The meat of any edible animal destroyed by an authorized LWMU be made available to the person(s) who were affected, alternatively via the relevant TA if it cannot be determined who should benefit or how the meat should be divided. If so preferred by the affected persons, permits can be issued for the selling of such meat.
- No person will be allowed to film any animal destroyed as a problem-causing animal or any actions or activity being conducted for removing problem-causing animals without the approval of the Minister.
- Authorized staff members must maintain records for all cases reported to them, their assessment, as well as the decisions and actions taken by them, and the outcome of those actions and decisions, the disposal of the meat and trophies of the animal killed. The authorized staff member must provide a written report to the Director of DWNP within 10 days. Where the destruction was delegated to a LWMU, the relevant part of the report must be signed by the identified individual and countersigned by the staff member from the LWMU who supervised the removal as a true reflection of the incident (or not, as may be the case).

6.6 Trophy hunting of problem-causing animals

If generating income from problem-causing animals is to be successful in addressing problems at household level, then the income needs to be used to provide relief to those persons that suffered the impact and/or to avoid the repetition of the same problems in future. The Policy lists several approaches to the removal of problem-causing animals. These include increasing hunting quotas, live capture and sale and culling. However, trophy hunting of problem-causing animals provides an opportunity to maximize income from problem-causing animals and is also the only option that targets the specific problem-causing individual.

- The approval to a PH to destroy any animal must be accompanied by clear instructions, an appropriate permit issued, and the hunting must be supervised by an MET staff member (but leaving this to the discretion of the authorized staff member in cases where hunting takes place in a conservancy and under the supervision of conservancy members). The approval for such hunting must be on the condition that the revenue from such hunting must be used to alleviate the impact of the problem for those persons affected by the incident/s that gave rise to the animal being authorized to be trophy hunted.
- In the case of an animal legally destroyed by a scheduled client of a PH with an existing contract with an authorized LWMU, the income from the trophy will be accrued as directed by the authorized staff member.
- Where the option of a PH is required outside of a LWMU, the authorized staff member should approach the nearest PH operating in that area. If none exist, or if the PH is not available or interested or able to carry out the task, the authorized staff member should contact the Director (DWNP) who will maintain a list of PH for this purpose.
- A guideline price for trophy hunting of problem-causing animals is determined by the MET and approved by Treasury.
- The current tariffs for problem-causing animals are given in Table 1 below:

Table 1: Current tariffs for hunting of problem-causing animals

Species Price	(N$)
Elephant	20 000. 00
Lion (male)	10 000. 00
Lion (female)	5 000. 00
Leopard	5 000. 00
Spotted Hyena	2 000. 00
Crocodile	10 000. 00
Hippopotamus	10 000. 00
Buffalo	5 000. 00
Sable antelope	10 000. 00
Roan antelope	10 000. 00

However, it should be noted that these tariffs are subject to change.

- The guideline price will make provision for variation in the quality of trophies to avoid that incentives are created for the hunting of animals other than those that caused the problem.
- A portion of the revenue from the hunting of problem-causing animals as above will be deposited into the GPTF.
- In areas where there are LWMU, funds generated by trophy hunting of problem animals will be shared between the GPTF and the LWMU.
- In areas where there are no LWMU, such funds will be shared between the GPTF and the Regional Development Fund of the respective Regional Council.
- Authorized staff members must maintain records for all cases reported to them, their assessment, as well as the decisions and actions taken by them, and the outcome of those actions and decisions, the disposal of the meat and trophies of the animal killed. The authorized staff member must provide a written report to the Director of DWNP within 10 days. Where the destruction was carried out by a PH, the relevant part of the report must be signed by the hunter and countersigned by the staff member who supervised the hunting as a true reflection of the incident (or not, as may be the case).

6.7 MET Firearms Policy and safety rules

- All procedures for control and handling firearms must be carried out in accordance with the Policy Guidelines and Directives for the use of firearms and ammunition in the Ministry of Environment and Tourism 2012.
- According to the MET Policy Guidelines and Directives (2012) either hunting rifles or shotguns will be issued to MET staff members for park management and HWCM.
- Always treat a firearm as if it is loaded when undertaking a patrol or any HWCM activity.
- Always ensure the firearm is pointing in a safe direction.
- Always keep the trigger finger extended along the trigger guard.
- Keep firearm unloaded and only load it when ready to use it.
- Never point the firearm at anything you do not want to destroy.
- Be sure of the target and what is behind it before you destroy a problem-causing animal.
- Learn the mechanical and handling characteristics of the firearm you are using.
- Always use correct ammunition for a specific firearm and appropriate for the animal causing the problem.
- Be sure the barrel is clear of any obstruction before embarking on activities of HWCM.
- If the firearm fails to fire, keep the firing position and unload the firearm.
- Do not rely on firearm safety catch to keep it from firing.
- Firearms to be made safe at least 2kms before approaching a town, village or homestead.
- Avoid alcoholic beverages before or during activities of HWCM.
- Never climb a tree, fence or jump a ditch or cross an obstacle with a loaded gun, even in cases of emergency.
- Be aware of your surroundings when handling the firearm so you do not trip or lose your balance and accidently point or fire the firearm at anyone.
- Care must be taken when transporting firearms – if possible in a holster or any other protective container that is suited for the purpose.
- Transportation of firearms must be accompanied by a document authorizing the specific firearm to be in possession of a specific staff member and permission for that staff member to transport the specified firearm.
- The firearm should be made safe before boarding a vehicle.
- When transporting a firearm, point it in safe direction, never at the passengers or the driver.
- Store firearms and ammunition separately and according to the MET Policy guidelines and directives (2012).

6.8 Firearm familiarization and practice

- MET staff members must be trained and tested for the specific firearm they will be issued with and for the purposes it will be used for i.e. HWCM
- Regular training and shooting practices must be held, under the control of the designated Firearms Officer. This training will include:

- Demonstrating safety precautions on the firearm.
- Stripping and assembling the firearm
- Cleaning the firearm using appropriate methods.
- Correct filling of the magazine.
- Loading the firearm.
- Explaining and demonstrating aiming and firing procedures.
- Live fire grouping exercise at 50m.
- Application exercise – 70 % of the target points should be successfully achieved.
- Correct unloading and making the firearm safe.
- Declaration regarding the possession of ammunition.

- A staff member will be trained to fire the firearms accurately from standing, kneeling and lying down positions. They should demonstrate the ability to execute rapid fire exercises and execute reloading and stoppage drills quickly and correctly.
- All staff members who have to use, carry or handle firearms must be re-evaluated annually by participating in practical firearm handling and shooting practices and knowledge pertaining to the safety aspects must also be tested.
- Staff members to be issued with authorization for possessing and transporting a firearm which fire arms he/she has the competency to use. The date of the testing will also be indicated.
- Results from testing competency in use of a firearm, obtained by a staff member, must be forwarded to the MET National Firearm Officer as well as placed in the staff member's personal file.
- A register that specifies the firearm practices, participation, and results obtained must be kept by the designated Firearm Officer.

7. TECHNICAL SOLUTIONS FOR MITIGATING HWC

This chapter provides a range of technical solutions that can be considered for mitigation, protection and preventative measures that can be implemented by the MET, conservancies, line Ministries, individual farmers and other stakeholders in order to reduce or avoid HWC. Approaches and methodologies will depend on the area and circumstances in question, which must be considered before a technical solution is selected. It should also be kept in mind that most times, a combination of two or more approaches may be more effective than one alone.

The single species that accounts for the highest number of recorded incidences is elephants, which in the north west of the country are responsible primarily for water infrastructure damage, whilst in the north-east of the country, the primary damage is to crops. The highest financial losses however relate to livestock predation, caused by the cumulative effects of a number of large predators. Although lions attract the most attention, other species such as hyena, cheetah, jackal and leopard actually account for higher financial losses. The diversity of problem-causing species in the wetter north-east is higher – including buffalo, crocodile and hippopotamus.

7.1 Responsibilities for HWC management within MET

The Director responsible for Wildlife Management in the MET will ensure that:

- A Coordination Unit for HWC at National Level has been appointed
- HWC management units are established in each region, through the reorganization of the staff structure of the DWMP.

It is the responsibility of these units to oversee the effective management of HWC throughout the country, and to monitor incidence accordingly. This includes advising affected parties, stakeholders and implementation partners on appropriate technical solutions for mitigating HWC.

7.2 Technical solutions for mitigating HWC

Table 2 provides a range of technical solutions that can be applied for reducing the incidence and/or mitigating the impacts of HWC. For ease of reference, the Table is organized according to problem species, and type of conflict.

Table 2: Technical solutions for mitigating HWC

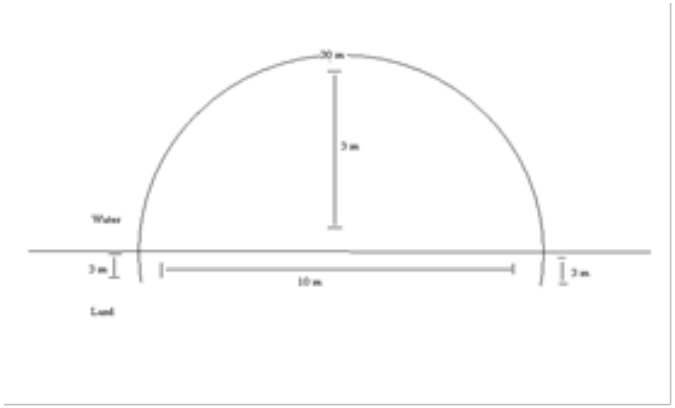
Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
Lions	Cattle predation	Lion proof kraals used at night	High	Lion predation of cattle most often occurs in the evening or overnight, and can be greatly reduced by placing livestock in lion-proof kraals at night. Kraals must be of suitable standard and maintained, to avoid lions being able to access. Materials to be used will depend on the area and natural resources available. In the north east, wooden poles can be used as support structures, whilst in the north east (where poles are not readily available) and in flood plains (where wooden poles will quickly perish) steel poles will be required. Diamond mesh wire should be used. Height at least 1.8 meters, with an overhang to the outside. The area should allow for approximately 5.5 square meters per animal.   Lions do not like to climb into kraals they could not see into, so solid walls are more effective in keeping lions out than fencing. Where possible, the kraal should be surrounded by shade-netting as a visual barrier. Kraaling at night should be used in combination with herding during the day, especially when it is known that predators are in the area.

Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
		Mobile kraals	Initial tests indicate high effectiveness	Mobile kraals can be used when cattle are being grazed far from fixed kraals, or when being used in combination with conservation agriculture principles. Mobile Kraals are constructed using PVC/canvas sheets and can be erected on fields where crops are to be grown. Cattle housed in mobile kraals during the night then trample dung and urine into the substrate, providing a natural fertilizer. 
		Herding	High	Herding of cattle ensures that animals are protected through the presence of herders and dogs, and the principle of safety in numbers. However, herding is dependent on reliable herders – who may not necessarily be motivated due to low wages.
		Early warning system	Still being tested	The Early Warning System for lions uses technology that would be installed in "hot spots" in proximity to a community / kraal, allowing the community to be alerted of approaching lions, so that they can take precautionary measures related to the safety of their livestock. It involves an "Early Warning Logger" mounted on top of a 4m pole adjacent to a corral at settlements with high incidents of lion conflict. This unit consists of an antenna, electronic logger unit, four powerful LED floodlights and a siren. The unit is also fitted with a solar panel and a 12 Volt battery to provide sufficient power throughout the night. The system depends on the detection of collar signals and therefore requires the potential problem lions to be suitably collared. 
		Lion rangers	Still being tested	The deployment of dedicated lion rangers in conservancies aims to provide sufficient information on the locality and movements of lions, so that conflict can be averted before it occurs, through advance warning and precautionary measures being applied.
		Rapid response unit (MET)	Untested	The MET will create a rapid response unit for HWC. A suitably equipped rapid response unit within the Ministry of Environment and Tourism serves to be able to investigate and address conflict soon after it is reported, in order to avert an escalation of conflict, or citizens taking the law into their own hands. A well-functioning rapid response unit also serves as a good public relations tool to appease those affected by conflict, as they will know that their problems are being given due consideration and attention.

Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
		Relocation	Medium	Re-location can be very effective for lions that can be described as "occasional raiders" rather than "problem animals" that habitually prey on livestock. When translocating a lion, careful prior consideration must be given as to where the animal is to be released, as serious repercussions can result if it is released in an area already inhabited by other prides, or where livestock is ranched. Experience has shown that lions translocated very often return to where they were taken from in a short period of time. Translocation must be considered when lions originate from Protected Areas, and must include the collaring of key animals to allow for close monitoring post translocation. Lions that repeatedly return to the problem area must be considered for destruction. Translocation of lion requires immobilization, and can therefor only be undertaken by somebody suitably qualified (Veterinarian or someone otherwise qualified and authorized to use the necessary drugs)
	Small stock predation	Lion proof kraals used at night	High	As with lion-proof kraals for cattle, the use of kraals for small livestock is considered an effective method for reducing conflict. Kraals must be of suitable standard and maintained. The most effective kraals are covered in canvas or shade cloth so that lions cannot see the animals inside, and consider the barrier to be solid.
		Predator proof living fences	Being tested	Living fences, or "living wall" kraals refers to kraals that are surrounded by growing shrubs that forms a thick, impenetrable barrier which, unlike chain link alone, cannot be scaled by leopard and small lion, and their root system prevents hyenas and other animals from tunnelling in from below. Trial "living wall" kraals are being piloted using pollarded Commiphora cuttings to avoid depletion of resources. Predator- proof living fences would only become effective after at least two years (Hanssen *et al* 2017). However this could be a method of reducing the maintenance cost of fixed kraals over the long term.
		Relocation	Medium	As above for cattle.
Spotted hyaena	Livestock predation	Kraaling at night	High	If cattle/livestock are put in strong predator-proof enclosures at night then hyaena won't get in there and cattle won't break out. Once the opportunity is not presented, the number of conflict incidents decreases. A good understanding of where spotted hyaena clans exist and their home range size can assist in identifying where conflict is likely to occur.

Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
Leopard	Small livestock predation	Livestock guardian dogs	High	The use of livestock guardian dogs (herd dogs) to protect small stock from predation is considered a highly effective measure (80% to 100% reduction in livestock kills by cheetahs and other predators has been reported). Availability of suitable dogs can be a challenge – although traditionally local dogs have been used by communities effectively. Livestock guardian dogs (LGDs) stay with the group of animals they protect as a full-time member of the flock or herd. Their ability to guard their herd is mainly instinctive as the dog is bonded to the herd from an early age. LGDs blend in with them, watching for intruders within the flock/herd. The mere presence of a guardian dog is usually enough to ward off some predators, and LGDs will confront predators by vocal intimidation, barking, and displaying very aggressive behaviour. The dogs are generally introduced to livestock as puppies (4-5 weeks) so they "imprint" on the animals. A guardian dog is not considered reliable until it is at about 2 years of age. Up until that time supervision, guidance and correction is needed to teach the dog the skill and rules it needs to do its job. Having older dogs that assist in training younger dogs streamlines this process considerably.
		Kraaling at night and during lambing season	High	Kraaling at night, and during the lambing season, as well as ensuring that lambing takes place near the homestead helps to reduce the likelihood of leopard predation.
		Protective collars on small stock	High	Placing protective collars on small stock can reduce the success of leopard predation (but is expensive compared to other approaches).
		Relocation	High/Medium	Capture in live traps and translocation out of the conflict area normally works well, but should be accompanied by collaring in order to allow monitoring of the animal movements.

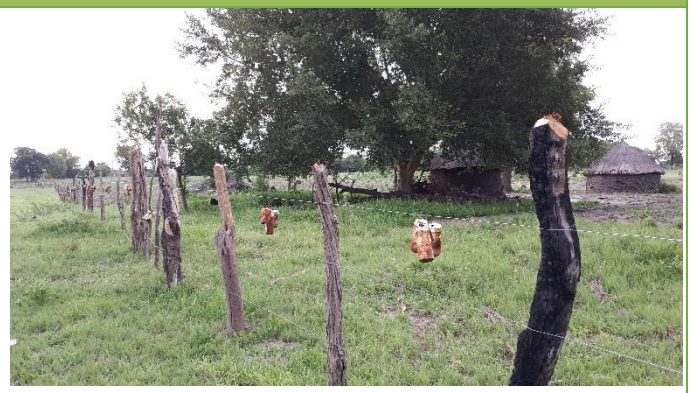
Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
Cheetah	Small livestock predation	Livestock guardian dogs	High	The use of livestock guardian dogs (herd dogs) to protect small stock from predation is considered a highly effective measure (80% to 100% reduction in livestock kills by cheetahs and other predators has been reported). Availability of suitable dogs can be a challenge – although traditionally local dogs have been used by communities effectively. Livestock guardian dogs (LGDs) stay with the group of animals they protect as a full-time member of the flock or herd. Their ability to guard their herd is mainly instinctive as the dog is bonded to the herd from an early age. LGDs blend in with them, watching for intruders within the flock/herd. The mere presence of a guardian dog is usually enough to ward off some predators, and LGDs will confront predators by vocal intimidation, barking, and displaying very aggressive behaviour. The dogs are generally introduced to livestock as puppies (4-5 weeks) so they "imprint" on the animals. A guardian dog is not considered reliable until it is at about 2 years of age. Up until that time supervision, guidance and correction is needed to teach the dog the skill and rules it needs to do its job. Having older dogs that assist in training younger dogs streamlines this process considerably.
		Management: Kraaling, lambing season	High	Kraaling during the lambing season, as well as ensuring that lambing takes place near the homestead helps to reduce the likelihood of cheetah predation.
		Protective collars on small stock	High	Placing protective collars on small stock can reduce the success of cheetah predation (but is expensive compared to other approaches).
		Relocation	High/Medium	Capture in live traps and translocation out of the conflict area normally works well, but should be accompanied by collaring in order to allow monitoring of the animal movements.
African Wild Dog	Livestock predation	Herding	High/Medium	Simple steps, such as shepherding / kraaling livestock at dawn and dusk when the dogs are most active has proved extremely successful at reducing livestock losses to African Wild Dogs.
		Kraaling	High	Kraaling livestock at dawn and dusk when the dogs are most active has proved extremely successful at reducing livestock losses to African Wild Dogs.
Jackal	Small livestock predation	Livestock guardian dogs	High	Livestock guardian dogs are extremely effective against Jackal predation.
		Kraaling at night and during lambing season	High	Kraaling at night, and during the lambing season, as well as ensuring that lambing takes place near the homestead helps to reduce the likelihood of jackal predation.

Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
		Protective collars on small stock	High	Placing protective collars on small stock can reduce the success of jackal predation (but is expensive compared to other approaches).
Crocodiles	Livestock predation and threat to human life	Crocodile fences	High	Creating secure fenced areas along the river for use by people and livestock can protect against crocodile attack. However, the infrastructure needs to be suitable and maintained. Correct placement (in hot spots / drinking spots) is a priority so that they are used – and there need to be sufficient secure places along the river for it to be practical.   Siting of crocodile fences needs to consider the varying levels of water in the river through the season.
		Alternative water for people and animals away from river	High	Providing alternative water for people and their livestock away from the river will ensure that there is no opportunity for crocodile attacks. However livestock may still be vulnerable when they graze close to a river, and people may be vulnerable when fishing.

Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
Hippopotamus	Crop damage	Guarding fields	Medium	This involves guarding fields and crops when there are crops planted, and using tactics to scare away animals (firing weapons near raiding or approaching, shooting to scare them away, use of thunder flashes, driving away by shouting, cracking whips, beating drums and/or tin cans, blowing vuvuzelas, throwing stones, lighting fires and keeping them burning at night close to arable lands and clearing areas of woodland around fields to enable farmers to see animals before they get too close).
	Human life	Avoidance	High	The best/only way to avoid loss of life or injury caused by hippopotamus is to avoid coming in contact with them. This will involve being very vigilant when on the water, and avoiding walking at night where hippo frequent.
Buffalo	Crop damage	Fencing	High	Buffalo do not jump so they are easily contained by a good stock fence. Even wooden fences with four wooden horizontal poles can work, as long as they see the fence and it is quite strong they will usually respect it.
		Guarding fields	Medium	This involves guarding fields and crops when there are crops planted, and using tactics to scare away animals (firing weapons near raiding or approaching, shooting to scare them away, use of thunder flashes, driving away by shouting, cracking whips, beating drums and/or tin cans, blowing vuvuzelas, throwing stones, lighting fires and keeping them burning at night close to arable lands and clearing areas of woodland around fields to enable farmers to see animals before they get too close).
	Human life	Avoidance	High	The best/only way to avoid loss of life or injury caused by buffalo is to avoid coming in contact with them, especially the bulls. Cow/calf groups are normally not aggressive.

Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
Elephant	Water infrastructure damage	Elephant proof walls around water installations	High	Building elephant proof walls around water installations prevents access by elephants, and therefore reduces damage. Walls need to be at least two large rocks in width, and be 1.8m high, to prevent elephants knocking the wall down or climbing over. The walls need to be a sufficient distance from water tanks and pumps to prevent elephants reaching the installations from outside the wall. If well-constructed it is possible to erect a wall without cement that can still keep elephants out. Leaving a small gap in the wall for human access can work if the wall is sufficiently strong, but if the wall is weak elephants will enlarge the gap and gain entry. Alternative water needs to be available for the elephants otherwise they will find a way to get water, which may include digging up the pipelines leading in or out of the water installation.
		Trenches around water installations	High	Digging trenches around water installations or other areas to be protected from elephants is a deterrent. Trenches need to be approximately 2 m wide and at least 1.5 m deep, and should be reinforced with. Trenches must be maintained, as erosion of trench side walls into the trench can impact the effectiveness of the trench.
		Elephant block barriers	undetermined	Surrounding the water infrastructure with cement- and-metal grid structures (block barriers) to deter elephant from getting close enough to water points or other infrastructure to cause damage. The pointed metal pieces make it uncomfortable for the elephant to step on. These grids are constructed on site. This mitigation measure is currently being trialled in Namibia but has been used extensively in Botswana. 

Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
		Alternative water for elephants at a distance from homesteads	Medium	Providing alternative water for elephants at a distance from homesteads means elephants do not need to approach homesteads and other water infrastructure. However, this is only effective as long as there is water at the water point, which can result in increased costs for diesel to keep the pumps going. In addition, water infrastructure for people needs to also be protected, otherwise elephants will use both water points.
		Elephant friendly water points with storage tanks and solar pumps – and overflow going to communities	High	Water infrastructure developed using solar energy result in less recurrent costs to communities. By creating water points for wildlife, but which benefit communities, an intrinsic value for the wildlife is created, and communities are likely to become more tolerant. Such infrastructure requires resources which are most likely to come from donor funding.
		Rapid response unit (MET)	Untested	The MET will create a rapid response unit for HWC. A suitably equipped rapid response unit within the Ministry of Environment and Tourism serves to be able to investigate and address conflict soon after it is reported, in order to avert an escalation of conflict, or citizens taking the law into their own hands. A well-functioning rapid response unit also serves as a good public relations tool to appease those affected by conflict, as they will know that their problems are being given due consideration and attention.
		Early warning system: tracking of herds, known individual identification	Medium/Low	This is done where elephant populations are low and herds quite distinct – and for example with the help of volunteers. It requires the necessary technology and resources, and will generally depend on donor funded projects. This strategy could be implemented in NPs to track when herds leave NPs so that neighbouring communities can be informed.

Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
	Crop damage	Wire with tins around crop fields	Medium/Low	Hanging tins along the fences around crop fields or homesteads serves to deter elephants entering the area, due to the noise emitted when the wires are disturbed. The noise will also alert people of the presence of animals. However, this system needs to be used in combination with other methods, and it is likely that elephants will become habituated, making the system less effective. 
		Chilli pepper buffer crop	Medium	Chillies can be planted on the periphery of other crops as the first plants elephants will encounter as they move towards arable land. Although other mammals will eat chillies, they are avoided by elephants.
		Chilli pepper fences	Unknown	Engine grease or old oil is mixed with chillies, and smeared on strings placed around the fields which should be between 1.5 and 2.0 meters above the ground. The strips of mutton cloth impregnated with chilli grease are placed on these fence strings about 8 meters apart. The fences with chilli pepper grease are not physical barriers and can be made of no more than string strong enough to carry the impregnated chilli strips. CARE MUST BE TAKEN TO USE PROTECTIVE GLOVES AND GOGGLES WHEN HANDLING CHILLIES
		Chilli bombs	Medium/High	Ground chilli (hand full) is mixed with elephant dung and compacted into a brick mould and dried. A hot coal is placed in the chilli bomb, and depending on its size and shape, each bomb burns slowly for 2 to 8 hours, producing noxious smoke which drives elephants away (for 3 – 4 hours), depending on wind strength. The chilli bombs are placed 5 – 8 meters apart, but several factors can influence the optimum placing including the number of elephants, their direction of movement and wind direction. There is a chance that elephants will become acclimatized. Supply of sufficient chillies is required and bombs are only effective when elephants close by, so it means that fields must be attended and bombs lit at the right time. CARE MUST BE TAKEN TO USE PROTECTIVE GLOVES AND GOGGLES WHEN HANDLING CHILLIES

Problem animal	Type of damage	Prevention measure	Effectiveness	Comments
		Chilli darts	High/medium	Harvested chillies are processed into a potent distillate that can be delivered via a drop out dart system to deter small elephant herds and elephant bulls that are destroying fields and homesteads. Chilli darts can be highly effective in deterring single elephant bulls. Requires the necessary darting equipment and expertise.
		Fencing (electric / cable fencing)	High	Electric fences can successfully deter elephants from entering a specific area. However, electric fencing fails mainly due to the inability to maintain such fences. There is a chance of elephants becoming acclimatized to electric fencing as well.
		Traditional methods – drums, whips, loud noises	High/Medium	Effective but relies on crop guards being present. It has also been reported that elephants can become acclimatized and even more aggressive towards people.
		Night guards (solar flashing lights)	Not fully tested	Night guard lights are solar powered lights that are put around the area to be protected, and flash at night. They have not yet been widely tested – and there would be a chance of elephants becoming acclimatized
	Human life	Human-elephant co-existence techniques and safety skills training	Medium	This involves teaching people to better understand elephant behaviour and the do's and don'ts in elephant areas to protect own life.

8. STANDARD OPERATING PROCEDURES FOR ANIMALS LEAVING NATIONAL PARKS

These standard operating procedures (SOPs) are applicable to elephant and predators since these species are most likely to leave the boundaries of the NPs and move through areas of human habitation where HWC could potentially occur.

8.1 Etosha National Park

The large size of Etosha National Park (ENP), its long boundary fence (857 km in length) and the abundance of large mammals contribute to the risk of HWC with neighbouring communities. The socio-economic costs to the neighbouring communities must be considered when managing HWC. The large size of ENP presents logistical challenges to the ENP management and the Regional MET teams who must continually strive to find means of managing and mitigating these conflicts.

If a pride of lion or an individual lion leaves ENP, there are two possible outcomes depending on whether or not a HWC incident occurs:

- A pride of lions leave ENP and catch livestock.
- These lions should be captured, marked by branding and a satellite collar fitted on a mature lioness.
- The lions are then transported back to ENP and released.
- The movements of the pride (as indicated by the collared lioness) should be monitored daily.
- If the pride leaves ENP again and moves into in a non-conflict area, they should again be captured and brought back to ENP.
- If the pride leaves ENP and again kills livestock, the whole pride should be euthanized. The authority for this management decision is delegated to the DD ENP.

However, if a pride of lions leave ENP but do not cause any HWC, then the following should be implemented:

- Lions should be captured, marked by branding and a mature lioness fitted with satellite collar.
- The lions should then be transported back to ENP and released.
- The movements of the pride (as indicated by the collared lioness) should be monitored daily.
- If the pride leaves ENP and enter a possible HWC area, they should be captured and brought back to ENP.
- If the pride leaves ENP again and kills livestock the whole pride should be euthanized. The authority for this managementdecision is delegated to the DD ENP.

Recent research and monitoring in ENP indicates the need to reinstate the protocol for branding lions. If lions causing HWC are shot and they are branded, this incident provides information on where the lion originated from and gives a better understanding of the conflict. Also, branding (in the absence of collars) can be used to better monitor animals brought back to ENP. A protocol for using CVI branding irons is available and has been successfully implemented.

Elephants leaving ENP usually break the fence in the process. Elephants leaving ENP will not be pursued and no attempts at retrieval will be made. However, when an elephant is responsible for triggering a HWC incident, then the appropriate authorized staff members will be tasked with responding to the HWC incident. Since this will no longer be within the ENP boundaries, the authorized staff member from appropriate Division of MET will be responsible for responding to and reporting on the outcome of the HWC incident.

Hot spot areas for breakages will be identified and reviewed and revised regularly by the ENP management. In the inspection and maintenance schedules, these areas will be visited more often than other areas. Maintenance teams from the Technical Services Sub-division will respond effectively and promptly to directives for emergency fence repairs. However, patrol teams should affect immediate emergency repairs as far as is possible. The required fencing tools and materials need to be available at all times to both the patrol teams as well as the fencing teams.

8.2 North-east National Parks

The north-east NPs include Khaudum NP, Bwabwata National Park (BNP), Mudumu NP and Nkasa Rupara NP. Unlike ENP, the north-east parks are not completely fenced.

These NPs form crucial transboundary links for wildlife migration and seasonal dispersal between Angola, Botswana, Namibia and Zambia Fencing is only undertaken in selected strategic locations to achieve specific goals but always with due regard to animal movement patterns. For example, part of the southern boundary of BNP has a veterinary standard fence while the northern boundary is demarcated only by a cut-line.

BNP has over 5000 residents in the multiple use area of the NP. The large multiple use area is zoned for community-based tourism, trophy hunting, human settlement and development by the resident community. The unrestricted movement of wildlife within the multiple use area and between the BNP and surrounding areas leads to serious conflicts between humans and wildlife. MET recognizes the importance of the contributing role of NP residents, neighbouring conservancies and community forests and other stakeholders in HWCM and mitigation.

Consumptive resource utilization is recognized in the management plans of the north-east NPs as one of the strategies for contributing to the livelihoods of NP residents and neighbouring communities and also as an economic incentive for communities to support conservation. Trophy hunting of problem-causing animals and in particular an elephant, provides an opportunity to maximize income from problem-causing animals and is also an option that targets the specific problem-causing individual.

Elephants leaving any of the north-east NPs will not be pursued and no attempts at retrieval will be made. However, when an elephant is responsible for triggering a HWC incident, then the appropriate authorized staff members will be tasked with responding to the HWC incident. If this is within the boundaries of the NP, for example within the multiple use area of BNP, then a staff member from BNP will be authorized to respond to and deal with the HWC incident. If the HWC incident occurs outside the boundaries of one of the NPs, the authorized staff member from the appropriate regional Division of MET will be responsible for responding to and reporting on the outcome of the HWC incident.

When a management decision to translocate problem-causing predators is made, these animals will be translocated to a different area where the possibility of them causing further conflicts is minimized.

The spread of disease can also be considered to pose a threat and this is especially applicable to buffalo. DVS has declared the areas west of the Okavango River a "disease surveillance zone" and the area east of the Okavango River a "disease infected zone". Any buffalo moving beyond the boundaries of a NP will be destroyed.

8.3 Waterberg NP

Due to the perceived threat of the spread of disease, any buffalo leaving Waterberg NP will be destroyed.

9. HUMAN WILDLIFE CONFLICT MANAGEMENT PLAN

- HWCM plans should be developed and implemented for LWMUs experiencing significant levels of HWC. This should be done in collaboration with MET staff members. Several conservancies have already initiated this process and have HWCM plans at various degrees of development and implementation.

- MET will support park neighbours to develop and implement joint HWC management and mitigation plans and provide advice and technical support in applying mitigation methods. MET will also ensure that HWC management is part of the Park Management Plans for NPs where HWC is an issue or a problem. The MET will enter into collaborative management arrangements (e.g. specific agreements or MOUs) with PA neighbours in order to carry out joint HWC management and support the implementation of local HWC management plans.

- HWCM plans should clearly describe the LWMU's internal mechanisms for complying with MET's requirements for hunting of or destroying problem-causing animals and should also indicate the steps the staff and management will take in promptly assisting members or individuals who have been affected by problem-causing animals.
- The HWCM plan should demonstrate how land-use planning and zonation have been considered as a means of mitigating HWC within the LWMU and outline strategies and actions for ensuring the implementation and monitoring.
- The HWCM plan should also consider various strategies for the removal of problem-causing animals including: adjusting hunting quotas in the short-term for certain species, live capture and sale, small scale culling, trophy hunting, destroying problem-causing individuals.
- The content of the HWCM plan should include the following:

  Introduction and background
  Problems and Issues (identification of areas most affected and responsible species)

  - How the plan was developed and approved
  - Authority of the plan
  - Vision and Objectives
  - Strategies (integrated land-use planning and zonation, technical solutions, etc.)
  - Zonation plan (including a map and characteristics of the various zones)
  - Processes for responding to HWC incidents; removal of problem-causing animals; administration of the HWC self-reliance scheme etc.
  - First phase of planned activities
  - Action plan and budget
  - Monitoring, reporting and adaptive management

- Once drafted and approved by the management and membership of the LWMU, the HWCM plan should be submitted to the regional office of the MET.

10. HUMAN WILDLIFE CONFLICT SELF RELIANCE SCHEME

10.1 What it is

- The Government of Namibia does NOT provide compensation for losses caused by wild animals, however the Human Wildlife Conflict Self Reliance Scheme (HWCSRS) was developed to provide the means to partially off-set the losses of communities and individual.
- Farmers caused to livestock and crops on communal land.
- The HWCSRS also provides support to a family who has lost a family member to certain species of wild animals under conditions where the affected person could not reasonably have been expected to defend himself/herself or to avoid the incident, and where the family has to incur costs for a funeral and related costs.
- It is expected that conservancies and LWMUs should generate their own income to support their members.
- Donors as approved by Government can also support the HWCSR Scheme.
- Private land is not covered under the HWCSRS, but nothing prevents private landowners, to utilize their game through the permit system to generate revenue to insure their property.

10.2 Conditions for payment Livestock

- No payments will be made for livestock killed in a NP or conservancy exclusive wildlife zone, provided that payment will be made in a Multiple Use Area of a zoned NP.
- Livestock death must be reported within one day of the incident occurring, unless a valid reason of not doing so as stipulated is provided and the evidence thereof is still visible.
- The cause of death must be verified by a MET staff member or a community game guard where such structure exists.
- No payment will be made if the livestock was killed without reasonable precautions being put in place.
- Ownership of livestock must be provided with ear tag number from the Directorate of Veterinary Services, Ministry of Agriculture, Water and Forestry.

- MET staff members together with conservancy staff (where it is inside the conservancy) will inspect livestock enclosures and advise where strengthening is required.

Crops

- Only damage caused by elephants, buffaloes and hippopotamus are eligible for HWCSRS off-set payments.
- Eligible crops include maize, millet, sorghum and vegetables.

Human life

- The wildlife involved is an animal defined as specially protected game, protected game or huntable game in the Nature Conservation Ordinance (Ordinance 4 of 1975, as amended).
- The deceased or injured person was not engaged in poaching, illegal fishing or any other illegal activity.
- The deceased or injured person was not engaged in recreational activities in the water (e.g. swimming) or bathing.
- It can be ascertained as far as possible that the attack by the wild animal was not provoked.
- The deceased or injured person has no insurance coverage elsewhere or is not eligible for receiving costs from another organization.
- No payments will be made if the deceased or injured person was an illegal immigrant.
- A Ministry official or member of the Namibian Police has investigated the incident and verified the circumstances as meeting all relevant requirements for the application of the Policy.
- Payment for accidental death and injuries caused by wild animals shall apply throughout the country provided that the above conditions and any other conditions set up by the Minister are applied.

10.3 Source of funding

- Conservancies earning income from trophy hunting, tourism or other wild life-based activities will allocate funds from these income sources to funds claims. The Ministry will, when issuing quotas for trophy hunting in conservancies, make provision that the quota allows for funds to pay for the livestock and crop damages to members of such conservancies.
- Where there are no registered conservancies, the source of funding for the HWCSRS shall be a contribution from trophy hunting concessions on State Land outside registered conservancies, trophy hunting of problem animals, tourism concessions and permit fees from trophy hunting through the Game Products Trust Fund.
- Donors as approved by the Government may also contribute to the HWCSRS.

10.4 Approved amounts to be paid

Payment for loss of life and injuries to person will be made from the GPTF through the HWCSRS as follows:

Human death:

Funeral expenses and related costs	N$ 100 000

Injuries to persons:

Type of injury *	Amount (N$)
Injury with no loss of body part	N$ 10 000
Injury with loss of body part or loss of function of body part	N$ 30 000
Permanent Disability	N$ 50 000

* The terms used in the tables below, can be defined as:

- Injury with no loss of body parts: damage that can lead to body dysfunction and sometimes can develop into diseases. Body injuries include conditions such as fractures, sprains, strains, dislocations, concussions, compressions and wounds.
- Injury with loss of body part or loss of function of body part: this is when a limb is lost i.e. an arm or leg is removed from the body or when the injury results in the loss of function of a body part e.g. loss of vision or hearing.
- Permanent disability: due to an injury, a person is never again able to work in their own or any occupation for which they are suited by training, education, or experience.

Livestock:

Livestock	Amount (N$)
Cattle (cow or bull)	N$ 3 000
Goat	N$ 500
Sheep	N$ 700
Horse	N$ 800
Donkey	N$ 500
Pig	N$ 700

Crop damages:

Hectares	Amount (N$)
One quarter of a hectare	N$ 250
One hectare	N$ 1 000

- The Minister shall adjust the amount for payment from time to time as may be deemed appropriate, in consultation with relevant stakeholders.
- This amount should be paid either by bank transfer if the farmer or community member has a bank account or by post office telegram if there is no bank account.

- The Ministry is exploring possibilities for payment of damages to properties such as fences, water points, etc. by wild animals. This is highly dependent on the availability of funds by the conservancies and the GPTF to make the scheme sustainable.

10.5 Claim process for conservancies

- HWC incidents will be reported to MET immediately. MET will conduct an investigation, using the HWC Investigation form (Annex 1). The results of the investigation must be entered onto the web-based monitoring system.
- If the incident involves the loss of human life, disability or injury to a conservancy resident, a Ministry official or member of the Namibian Police must respond promptly and investigate the incident and verify the circumstances as meeting all relevant requirements for the application of the Policy. The investigating officer will ensure that the claim form is completed and submitted.
- If the incident involves crop or livestock losses and it is not possible for an MET official to immediately travel to the conservancy to investigate the incident, the staff and management of the con servancy should conduct an investigation.
- The person conducting the investigation and verification of the loss, will assist the conservancy member who has experienced the loss to complete and submit the claim to the review committee.
- Conservancies will follow their own procedures of payment provided that all requirements in terms of the Policy are complied with. This includes a review of claims but the appointed conservancy HWCSRS review panel.
- Each conservancy will have a HWCSRS review panel that will review, recommend and approve payments to their members. This panel will consist of representatives from the conservancy committee, the MET, the support NGO, and any other representative that the conservancy committee chooses to appoint.
- The MET representative will ensure that the data relating to all HWC incidents investigated by the conservancy are captured in the respective forms and entered onto the web-based monitoring system.
- Once the review committee has approved the claim, the conservancy will make payment to the member who submitted the claim.

10.6 Claim process for areas outside of conservancies

- Any incident of HWC must be reported to the nearest MET office, who are responsible for ensuring that a HWC Investigation is conducted, using the HWC Investigation form (Annex 1). The results of the investigation must be entered onto the web-based monitoring system.
- Once the investigation has been conducted, the relevant claim forms can be completed and submitted, using the relevant forms on the web-based monitoring system:
  - Funeral Assistance Claim Form (Annex 2)
  - HWSRS Claim form: Livestock Loss (Annex 3)
  - HWSRS Claim form: Crop Damage (Annex 4)
- Once these claims are approved, payment of will be done by the GPTF.

10.7 Guidelines for use of GPTF funds for HWC

Conservancies

- Conservancies that have trophy hunting quotas and funds from other sources are expected to manage the scheme and ensure its sustainability by generating their income and pay their members accordingly.
- Only when MET has made an assessment and concludes that conservancies are not financially ready, for example if a conservancy has no trophy hunting utilization quota or where there are too many incidents of HWCs compared to the income generated, shall the Ministry consider further allocation of funds through the GPTF for this purpose, provided that the conservancy provides a detailed report of the funds allocated in the beginning with proof of payment.

- The off-set value amounts described in the Policy are indicative, and reflect the component that can be covered by GPTF where applicable, but conservancies can decide (and are encouraged) to pay a greater amount, provided that such amounts must be approved at the AGM, and applied consistently.
- In the case of conservancies receiving funds through the GPTF, conservancies should provide quarterly reports to MET on the utilization of the funds and request for the new allocation. Such reports should be directed to the Director of Wildlife and National Parks.
- Quarterly reports should also indicate how the conservancy will put mitigation and preventative measures in place to avoid or reduce incidents for payments.
- Should the conservancy misuse the allocated funds or use the funds for other activities of the conservancy, no further allocation will be provided until such a case has been resolved to the satisfaction of MET.
- MET will provide the GPTF Board with the report on the utilization of funds on an annual basis.

Outside conservancies

- Claim forms must be submitted on a case by case basis, using the web-based monitoring system, for consideration and approval through the Director of Wildlife and National Parks, who will forward valid claims to the GPTF for payment.
- The GPTF will make payment accordingly, and record the necessary payment details using the web-based monitoring system.

ANNEXES

Annex 1:
HWC Investigation Form

Annex 2:
Funeral Assistance Claim Form

Annex 3:
HWCSRS Claim Form: Livestock Loss

Annex 4:
Structure of National HWC database

Annex 5:
Structure of National HWC database

Annex 6:
HWC Decision-making frameworks.

Annex 1: HWC Investigation Form

Human Wildlife Conflict Investigation Form

Background

REGION *

DATE OF REPORT *

yyyy-mm-dd

NAME OF COMPLAINANT *

CONTACT NUMBER

DATE OF INCIDENT *

yyyy-mm-dd hh:mm

COMPLAINT RECEIVING OFFICER *

INVESTIGATING OFFICER *

DATE OF INVESTIGATION *

yyyy-mm-dd

LOCATION OF INCIDENT

Nature of incident

DESCRIPTION OF INCIDENT *

NUMBER OF PROBLEM ANIMALS INVOLVED

GROUP COMPOSITION OF PROBLEM ANIMALS

» Livestock injured/killed

SPECIES	NUMBER	VALUE (N$)
◯ Cattle (cow or bull) ◯ Goat ◯ Sheep ◯ Horse Donkey ◯ Pig		
TOTAL LIVESTOCK DAMAGE (N$)		

» Description of damage to property (estimate cost)

» » Fences

DESCRIPTION	VALUE(N$)

» » Water installations

DESCRIPTION	VALUE(N$)

» » Kraals

DESCRIPTION	VALUE(N$)

» » Crops

DESCRIPTION	VALUE(N$)

» » Other

OTHER DAMAGES	VALUE(N$)

» » Total Property Damage

VALUE (N$)

» Total Damage (N$)

VALUE (N$)

Action

ACTION REQUIRED
ACTION TAKEN
DATE OF ACTION yyyy-mm-dd
SIGNATURE: OFFICER
DATE yyyy-mm-dd
SIGNATURE: COMPLAINANT
DATE yyyy-mm-dd

Annex 2: Funeral Assistance Claim form

Funeral Assistance Claim Form

A. Details of the Deceased and claimant

NAME OF THE DECEASED *

ID / PASSPORT / BIRTH CERTIFICATE NUMBER

DEATH CERTIFICATE NUMBER

NAME OF CLAIMANT *

ID / PASSPORT NUMBER

RELATIONSHIP TO THE DECEASED *

- ◯ Parent
- ◯ Child
- ◯ Sibling
- ◯ Grand Parent
- ◯ Uncle
- ◯ Aunt
- ◯ Cousin
- ◯ Other

SPECIFY OTHER

POSTAL ADDRESS

TELEPHONE NUMBER

B. Details of Incident

SPECIES (PA) RESPONSIBLE FOR THE DEATH *

DESCRIPTION OF INCIDENT *

AREA OF INCIDENT *

CONSTITUENCY *

REGION *

AMOUNT CLAIMED (N$) *

C. Investigation

NAME OF INVESTIGATING OFFICER *

RANK *

DATE OF INVESTIGATION *

yyyy-mm-dd

DATE OF INCIDENT *

yyyy-mm-dd

DOES THE CLAIM MEET THE CRITERIA (IF NO, EXPLAIN)

- ◯ Yes
- ◯ No

EXPLAIN WHY THE CLAIM DOESN'T MEET THE CRITERIA *

D. Approving Authority

THIS FORM MUST BE APPROVED BY THE DEPUTY DIRECTOR AND THEN THE DIRECTOR.

E. Attachments (Check Attachments are Included)

PROOF OF NAMIBIAN CITIZENSHIP FOR THE DECEASED AVAILABLE

- ◯ Yes
- ◯ No

ATTACH PROOF OF NAMIBIAN CITIZENSHIP FOR THE DECEASED *

PROOF OF NAMIBIAN CITIZENSHIP FOR THE CLAIMANT AVAILABLE *

- ◯ Yes
- ◯ No

ATTACH PROOF OF NAMIBIAN CITIZENSHIP FOR THE CLAIMANT *

DEATH CERTIFICATE AVAILABLE *

- ◯ Yes
- ◯ No

ATTACH DEATH CERTIFICATE *

EXECUTOR LETTER AVAILABLE *

- ◯ Yes
- ◯ No

ATTACH EXECUTOR LETTER *

WHERE THE BODY HAS NOT BEEN FOUND (E.G. CROCODILE ATTACKS), A POLICE DECLARATION MUST OBTAINED AND ATTACHED. POLICE DECLARATION AVAILABLE *

- ◯ Yes
- ◯ No

ATTACH POLICE DECLARATION (WHERE THE BODY HAS NOT BEEN FOUND (E.G., CROCODILE ATTACKS)) *

FULL INVESTIGATION REPORT AVAILABLE *

- ◯ Yes
- ◯ No

ATTACH FULL INVESTIGATION REPORT *

F. Details of Cheque

HAS CHEQUE BEEN ISSUED *

- ◯ Yes
- ◯ No

CHEQUE NUMBER *

DATE ISSUED *

yyyy-mm-dd

FORM VERSION

Annex 3: HWCSRS Claim Form: Livestock Loss

HWSRS Claim Form: Livestock Loss

A. Details of applicant

NAME OF OWNER *

ID / PASSPORT NUMBER

POSTAL ADDRESS

CONTACT NUMBER

NAME OF CLAIMANT *

ID / PASSPORT NUMBER *

RELATIONSHIP TO OWNER *

- ◯ Owner
- ◯ Manager
- ◯ Foreman
- ◯ Tenant
- ◯ Other

SPECIFY OTHER.

POSTAL ADDRESS

CONTACT NUMBER

Details of incident

TYPE OF LIVESTOCK KILLED *

- ◯ Cattle (cow or bull)
- ◯ Goat
- ◯ Sheep
- ◯ Horse Donkey
- ◯ Pig

NUMBER OF ANIMALS KILLED *

SPECIES (PA) RESPONSIBLE FOR THE DAMAGE *

◯ Lion	◯ Cheetah	◯ Leopard
◯ Jackal	◯ Brown Hyaena	◯ Spotted Hyaena
◯ Elephant	◯ Crocodile	◯ Hippo
◯ Python	◯ Caracal	◯ Wild dog
◯ Baboon	◯ Bat-Eared Fox	◯ Other

SPECIFY OTHER.

DESCRIPTION OF INCIDENT/DAMAGE *

AREA OF INCIDENT

CONSTITUENCY

REGION

AMOUNT CLAIMED (N$) *

CERTIFICATION OF TRADITIONAL AUTHORITY OR HEADMAN (WHERE APPLICABLE)

C. Investigation

NAME OF INVESTIGATING OFFICER *

RANK *

DATE OF INVESTIGATION *

yyyy-mm-dd

DATE OF INCIDENT *

yyyy-mm-dd

DOES THE CLAIM MEET THE CRITERIA(IF NO, EXPLAIN BELOW) *

◯ Yes

◯ No

EXPLAIN WHY THE CLAIM DOES NOT MEET CRITERIA
REGIONAL HEAD NAME
REGIONAL HEAD RANK

D. Approving authority

THIS FORM MUST BE RECOMMENDED BY THE DEPUTY DIRECTOR AND THEN APPROVED THE DIRECTOR.

E. Attachments (Check Attachments are Included)

PROOF OF NAMIBIAN CITIZENSHIP BY THE OWNER AND CLAIMANT *
WHERE ANOTHER PERSON MAKES A CLAIM FOR THE OWNER, PROOF OF AUTHORIZATION MUST BE PROVIDED *

Details of Cheque

CHEQUE NUMBER
DATE ISSUED. yyyy-mm-dd

Annex 4: HWSRS Claim Form: Crop Damage

HWSRS Claim Form: Crop Damage

A. Details of applicant

NAME OF OWNER *

ID / PASSPORT NUMBER

POSTAL ADDRESS

CONTACT NUMBER

NAME OF CLAIMANT *

ID / PASSPORT NUMBER *

RELATIONSHIP TO OWNER *

- ◯ Owner
- ◯ Manager
- ◯ Foreman
- ◯ Tenant
- ◯ Other

SPECIFY OTHER.

POSTAL ADDRESS

CONTACT NUMBER

B. Details of incident

TYPE OF CROP DAMAGED *

- ◯ Maize
- ◯ Millet
- ◯ Sorghum
- ◯ Pumpkin
- ◯ Watermelon
- ◯ Beans
- ◯ Groundnuts
- ◯ Peas

SIZE OF THE DAMAGE (HA) *

SPECIES (PA) RESPONSIBLE FOR THE DAMAGE *

DESCRIPTION OF INCIDENT/DAMAGE *

LOCATION OF CROP *

CONSTITUENCY *

REGION *

AMOUNT CLAIMED (N$) *

CERTIFICATION OF TRADITIONAL AUTHORITY OR HEADMAN (WHERE APPLICABLE)

C. Investigation

NAME OF INVESTIGATING OFFICER *

RANK *

DATE OF INVESTIGATION *

yyyy-mm-dd

DATE WHEN DAMAGE OCCURRED *

yyyy-mm-dd

DOES THE CLAIM MEET THE CRITERIA (IF NOT, EXPLAIN BELOW) *

◯ Yes

◯ No

EXPLAIN WHY THE CLAIM DOES NOT MEET CRITERIA

REGIONAL HEAD NAME

REGIONAL HEAD RANK

D. Approving authority

THIS FORM MUST BE RECOMMENDED BY THE DEPUTY DIRECTOR AND THEN APPROVED THE DIRECTOR.

E. Attachments (Check Attachments are Included)

PROOF OF NAMIBIAN CITIZENSHIP BY THE OWNER AND CLAIMANT	*
WHERE ANOTHER PERSON MAKES A CLAIM FOR THE OWNER, PROOF OF AUTHORIZATION MUST BE PROVIDED	*

Details of Cheque

CHEQUE NUMBER
DATE ISSUED. yyyy-mm-dd

Annex 5: Structure of National HWC database

	Data field required	Comments
Background	Unique incident number	Generated by the system
	Date of report	yyyy-mm-dd
	Station reported	MET station
	Region	
	Constituency	
	Name of complainant (affected party)	Head of household / farm owner
	Contact number (complainant)	
	ID/passport number of complainant	
	Relationship to owner / injured / deceased	
	Owner name	
	ID/passport number of owner	
	Owner postal address	
	Owner contact number	
	Date of incident	yyyy-mm-dd hh:mm Approximate in cases where exact date is not known
	Complaint receiving officer	
	Investigating officer	
	Date of investigation	yyyy-mm-dd
	Location of incident	Conservancy name / farm name / village name
	GPS coordinates	
Nature of incident	Description of incident	
	Type of damage	Predation – what livestock / crop loss (type of crop) / infrastructure
	Problem species	
	Number of problem animals involved	Number of individuals of problem animals if known, or estimate
	Group composition of problem animals	
Livestock injured/killed	Cattle (cow or bull) - Number	
	Cattle (cow or bull) – Value (N$)	Calculated field – lookup table with values?
	Goat – Number	
	Goat – Value (N$)	Calculated field – lookup table with values?
	Sheep – Number	
	Sheep – Value (N$)	Calculated field – lookup table with values?
	Horse/donkey – Number	
	Horse/donkey – Value (N$)	Calculated field – lookup table with values?
	Pig – Number	
	Pig – Value (N$)	Calculated field – lookup table with values?
Crop losses	Type of crop	
	Area affected (ha)	

	Data field required	Comments
	Value of loss (N$)	
Infrastructure	Type of infrastructure	
	Description of damage	
	Value of loss (N$)	
Actions	Action taken	
	Date action taken	
	Claim form/s submitted	
Livestock loss claim	Claim number	
	Amount of claim (N$)	
	Does claim meet criteria (Y/N)	
	If not, reason	
Crop damage	Claim number	
	Amount of claim (N$)	
	Does claim meet criteria (Y/N)	
	If not, reason	
Injury / loss of life	Claim number	
	Injury / loss of life	
	Name of injured/deceased	
	ID of injured/deceased	
	Death certificate number	
	Extent of injury	
	Amount of claim (N$)	
	Does claim meet criteria (Y/N)	
	If not, reason	
Payments	Submitted to GPTF (Y/N)	
	Offset paid (N$)	
	Date of payment	
Problem animals	Declared problem animal (Y/N)	
Destroyed	Animal destroyed	
	Number destroyed	
	Date destroyed	
	Location destroyed	
	GPS coordinates	
Trophy hunted	Animal trophy hunted	
	Date hunted	
	Hunting guide	
	Location hunted	
	GPS coordinates	
Relocated	Animal/s relocated	Species involved
	Number relocated	
	Locality captured	
	GPS coordinates	
	Locality released / held	
	GPS coordinates	
	Collar frequency	Where an animal is collared, the frequency must be indicated
	Animal identification	Where a known animal is involved, the identification must be given

Annex 6: Contact details for assistance in HWC

MET offices in the regions			
Region	Place	Designation	Number
Erongo	Omaruru	Ranger	+264 64 571 194
	Swakopmund	Control Warden	+264 64 404 576
	Uis	Ranger	+264 64 504024
	Walvis Bay	Warden	+264 64 205 971
Hardap	Mariental	Control Warden	+264 63 242 427
	Rehoboth	Chief Warden	+264 62 523 202
	Maltahohe/Naukluft	Chief Warden	+264 63 293 245
Karas	Keetmanshoop	Control Warden	+264 63 223223
	Luderitz	Warden	+264 63 202 811
	Oranjemund	Warden	+264 63 230 009
	Rosh Pinah	Chief Warden	+264 63
	Karasburg	Ranger	+264 63 683 650
Kavango East	Rundu	Control Warden	+264 66 255403
Kavango West	Rundu	Control Warden	+264 66 255403
Khomas	Windhoek	Control Warden	+264 61 2842525
Omaheke	Gobabis	Warden	+264 62 562 428
Omusati	Ruacana	Chief Warden	+264 65 270 299
Otjozondjupa	Otjiwarongo	Chief Warden	+264 67 302 639
	Okakarara	Ranger	+264 67 317 088
	Okahandja	Ranger	+264 62 502 295
	Grootfontein	Warden	+264 67 242 548
	Tsumkwe	Warden	+264 67 244 019
Oshikoto	Omathiya	Warden	+264 65
	Tsumeb	Chief Warden	+264 67 229 206
Kunene	Khorixas	Warden	+264 67 331 029
	Opuwo	Warden	+264 65 273 003
	Outjo	Control Warden	+264 67 313 436
	Sesfontein	Ranger	+264
Oshana	Ondangwa	Chief Warden	+264 65 232130
	Ongwediwa	Control Warden	+264 65 230295
Zambezi	Katima Mulilo	Chief Warden	+264 66 253027

Organization	Regions active	Number
CCF	Otjozondjupa	067 306225
IRDNC	Kunene Opuwo	065 273257
IRDNC	Kunene Wereldsend	067 697055
IRDNC	Zambezi	066 252108
LAC	All	061 233356
NDT	Karas Keetmanshoop	063 223572
NDT	Otjozondjupa Okakarara	067 317132
NDT	Oshikoto Okashana	065 285312
NNDFN	Otjozondjupa	061 236327
NNF	Erongo Walvis Bay	064 204044
NNF	Windhoek	061 248345
NNF	Kavango East & West	No landline
SRT	Erongo and Kunene	064 403829
TOSCO	Erongo & Kunene	0814535855
WWF in Namibia	All	061 239945

NOTES

NOTES

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