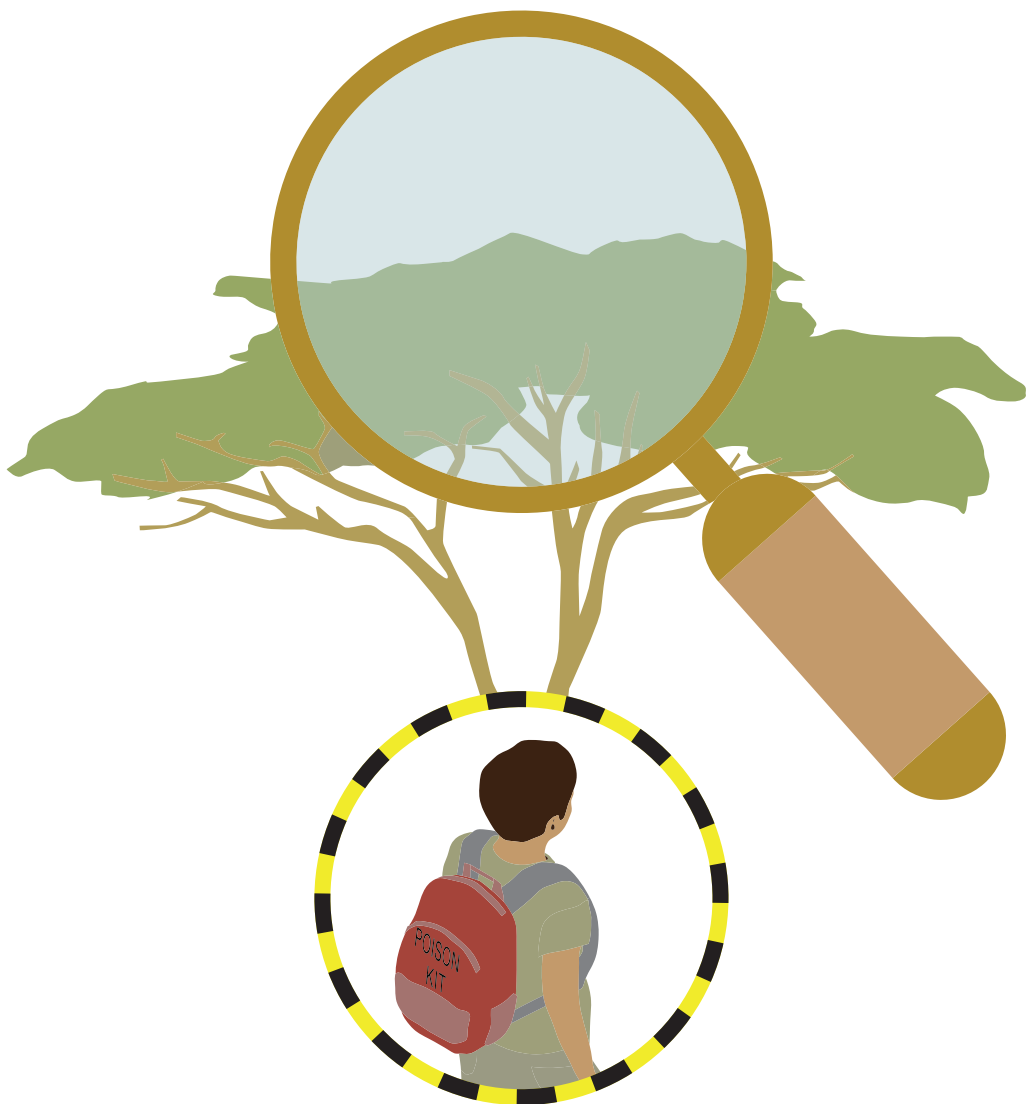


WILDLIFE POISONING CRIME SCENE PROTOCOLS



This Wildlife Crime Scene Protocol Manual serves as a resource for national and local level law enforcement engaging with wildlife crime scenes. This manual provides the standard operating procedures for officers responding to wildlife crime scenes with a special focus on poison mitigation and handling. This manual is intended for use in conjunction with official poison crime scene training provided by mitigation agencies. The manual covers crime-scene management, evidence collection, victim management, chain of custody maintenance, personal protection and decontamination procedures required for successful prosecution following a wildlife crime. This manual was created by NARREC - Namibia Animal Rehabilitation and Research Center & humaneLABS wildlife praxis.

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INTRODUCTION - POISON CRIME SCENE INVESTIGATION

MITIGATION AT A POISON SCENE

- A poison response team is best prepared for the mitigation of a poison scene with a rapid response using a Standard Operating Procedure (SOP)
- Rapid Response at a Poison Scene limits mortalities and rescues live victims

THE POISON SCENE LOCATION

- Poison scenes may be on farm-land, on town-lands, in a protected area or a national park

THE POISON SOURCE

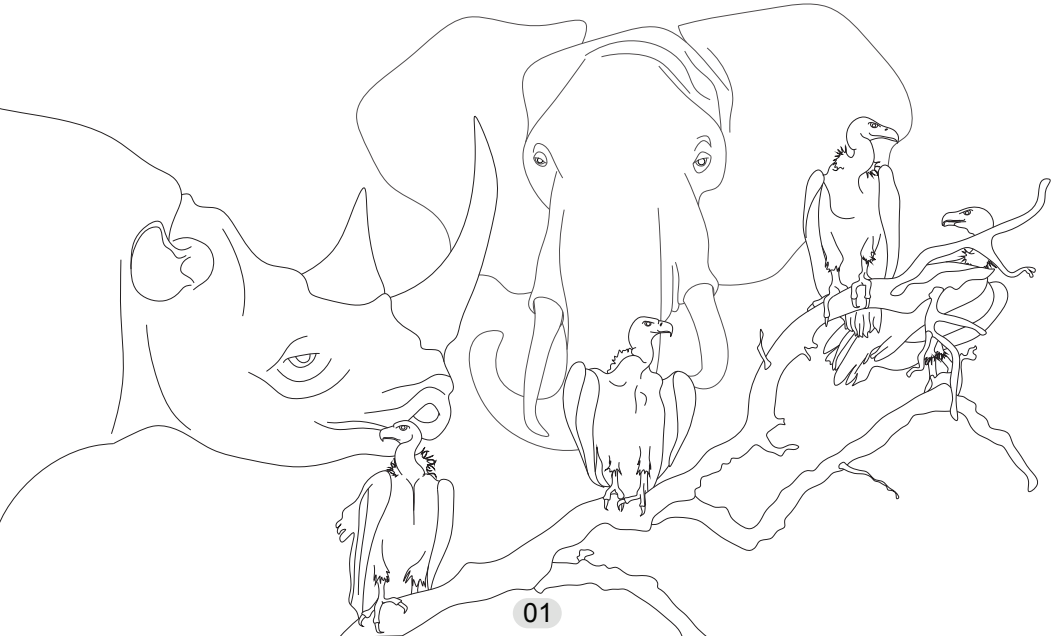
- Pretreated seed or a crop sprayed with agricultural pesticide
- Poison put in a fruit such as a melon
- A small, single bait of poison-contaminated meat
- A part of or whole carcass contaminated with a poison
- A dead animal that has already succumbed to a poison and is consumed by other animals, this is called secondary poisoning
- In water at a drinking point for domestic livestock or for wildlife

THE POISON SCENE VICTIMS

The affected species will depend on the location, source and chemical used.

Note that poisoning can be primary, secondary or even tertiary.

- Victims may be a single dead mammal or bird or 10s or 100s of dying or dead birds and mammals
- Herbivores and water-birds are most often primary victims of poison-laced fruit and water contamination
- Resident or migrant bird species including the seed-eaters, insectivores, falcons and eagles are most often victims on pesticide-treated agricultural land and pre-treated seed
- Scavenging mammals, including leopard, lion, hyena, jackal, fox and mongoose and especially scavenging bird species, mostly vultures, can be victims of poison-laced meat and carcasses



INTRODUCTION - POISON CRIME SCENE INVESTIGATION

STANDARD OPERATING PROCEDURE

The Standard Operating Procedure (SOP) is an essential tool to work safely, save live victims and prevent further mortalities

The Standard Operating Procedure allows the Poison Response Team to investigate the crime, collect evidence, keep the chain of custody and prepare a case for prosecution

The Standard Operating Procedure created for a smooth flow of events from First Observation through to Full Decontamination

THE POISON RESPONSE TEAM

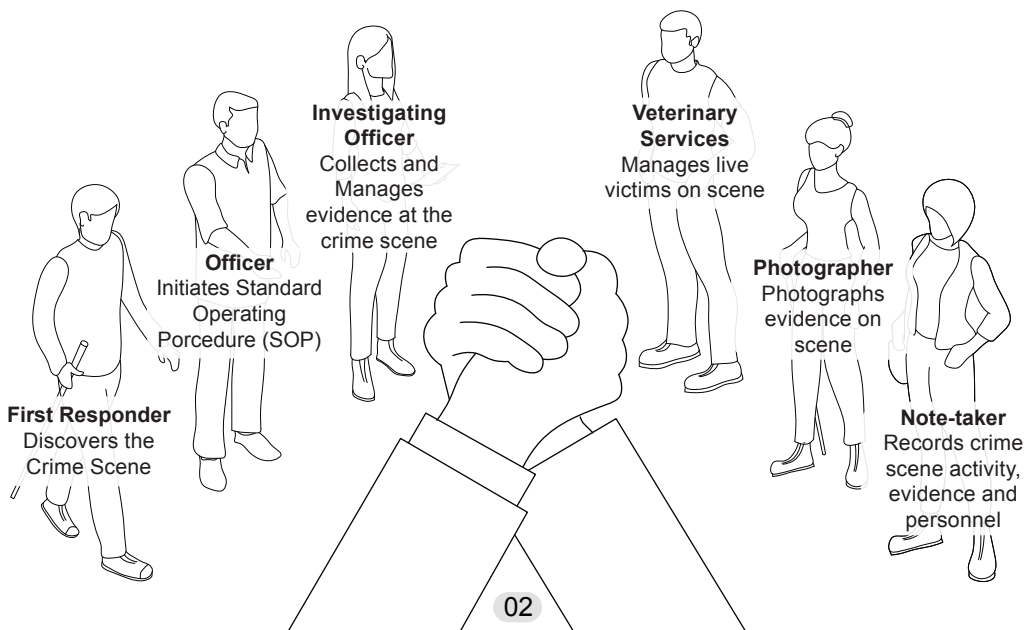
- Includes, but is not limited to, a first responders, officers, veterinary specialists and crime scene investigators
- Understands the hazardous nature of poison and pesticides
- Collects and labels evidence and writes reports with due diligence.
- Remains on site until the poison scene is thoroughly decontaminated

THE OFFICER SHOULD ASK THE FIRST RESPONDER TO

- Not approach the scene
- Not walk onto the scene
- Not touch any object or dead animal
- Remain on site if possible to avoid any other person or animal approaching the poison site

A POISON CRIME SCENE IS A DANGER TO ALL UNTIL IT IS COMPLETELY DECONTAMINATED

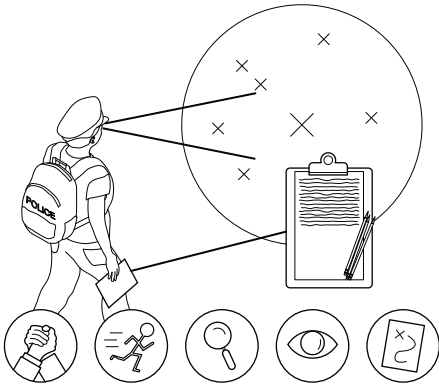
FIND, SECURE AND PROTECT A CRIME SCENE – POISONING WILDLIFE IS A CRIMINAL OFFENSE



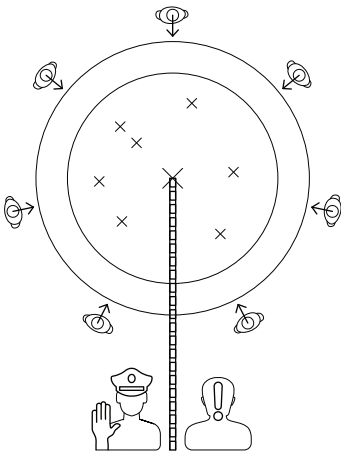
FIRST OFFICER DUTIES



HAND OVER SCENE TO FIRST OFFICER



IMMEDIATE ACTIONS



SECURE THE SCENE

THE FIRST OFFICER

The First Responder at a poison scene may be a member of public who then contacts an officer from the police or from an environmental agency.

The First Officer at a poison crime scene may not be an Investigator but must initiate the SOP and approach the scene as if there will be no other opportunity to recover evidence.

IMMEDIATE ACTIONS

1. Act calmly and methodically
2. Make a preliminary survey and evaluation of the incident
3. Maintain overall management and safety of the poison scene and the surrounds
4. Protect the scene and any potential evidence from disturbance
5. Limit all persons from entry onto the scene
6. Make a list of resources needed for rescue of live animals, investigation of the crime scene and final decontamination

CALL FOR ASSISTANCE

1. Contacts a crime scene investigator or detective
2. Requests a Poison Response Kit
- **SEE PAGE 5 & 6**
3. Requests other equipment needed – boxes, blankets, water, shading devices, relief officers and vehicles
4. Requests an additional back-up team and any other persons needed, for example a veterinarian
5. Refers any media requests to the investigator

ASSIGN OFFICER DUTIES

1. Take responsibility to assign responding officers to duties until a supervising investigator arrives
2. Assign at least one officer to stay at the crime-scene at all times until decontamination
3. Assign one officer to control access and to note any person entering or exiting the crime-scene
4. Assign officers to remove live animals

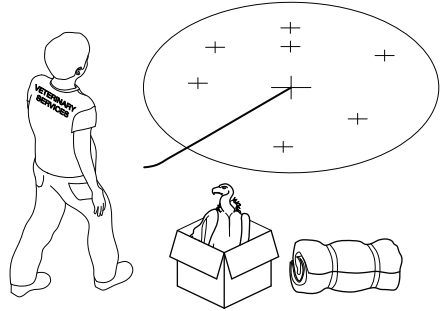
OPEN A PRELIMINARY SURVEY REPORT (CRIME-SCENE LOG)

1. Record: Date, Location, GPS coordinates
2. Record: First Responder's contact details
3. Record: of all preliminary observations
4. Record: of any live animals that are immediately removed

FIRST OFFICER DUTIES

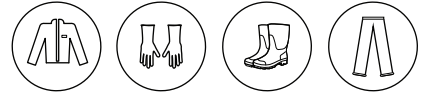
SECURE SCENE & SET PERIMETER

1. Walk around the scene at a controlled distance from the central point (key area) in order to observe the crime- scene from every angle
2. Secure the perimeter of the crime-scene with crime-scene tape. Note that it is easier to reduce rather than expand the taped-off crime-scene area
3. Crime-scene tape can be tied to trees or bushes or secured with ground-pegs



SELECT COMMON APPROACH PATH (CAP)

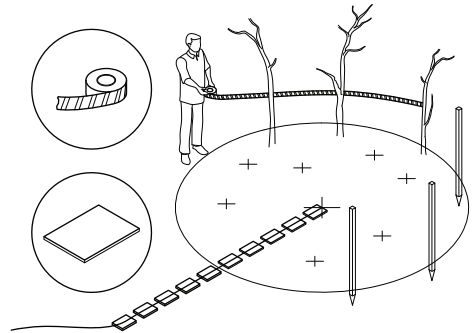
1. The CAP routing is the chosen point of Entry and Exit to the key area, usually the poison bait
2. The CAP is the safest or an already traveled path from the perimeter to the poison bait (key area) or to live victims
3. The CAP can be set with metal or stone stepping-plates to prevent shoes or boots from carrying contaminated bait or vomitus out of the scene.



MANAGE LIVE VICTIMS

HANDLING VICTIMS AT A POISON SCENE

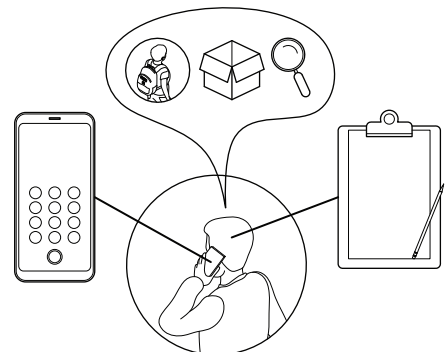
1. Always wear Personal Protective Equipment (PPE) - **SEE PAGE 23 & 24**
2. Victims may be mammals and/or birds, depending on location, source, bait and the chemical used
3. Decide on a staging-point for live animals that is shaded and quiet and away from the investigative action
4. Assign an officer to watch and manage the live victims
5. Caution - comatose victims may suddenly use their last energy for fight or flight
6. Remove live animals through the CAP or the designated points of entry exit - **SEE PAGE 29 & 30**
7. Deceased victims must not be touched or moved or disturbed
8. If it is necessary for safety reasons to move a poison victim, photograph, mark and note the location
9. Conservation and veterinary personnel may provide treatment but must minimize disturbance



SELECT COMMON APPROACH PATH

HAND OVER SCENE TO THE INVESTIGATING OFFICER

1. The First Officer briefs the Investigator on the Preliminary Survey And Evaluation
2. The First Officer signs off on his Preliminary Survey Report Or Crime-Scene Log



CONTACT CRIME SCENE INVESTIGATOR

POISON RESPONSE KIT

 <p>MARKERS</p>	 <p>NOTEPAD</p>	 <p>CAMERA</p>	 <p>SPARE BATTERIES</p>
 <p>RUBBER BOOTS</p>	 <p>LATEX GLOVES</p>	 <p>DUST MASK</p>	 <p>RUBBER APRON</p>
 <p>EYE PROTECTION</p>	 <p>HAND SANITIZER</p>	 <p>MATCHES</p>	 <p>LIGHTER</p>
 <p>EVIDENCE MARKERS</p>	 <p>CRIME SCENE TAPE</p>	 <p>ACTIVATED CHARCOAL</p>	 <p>STERILE SYRINGES</p>
 <p>DISPOSABLE SCALPEL</p>	 <p>SCISSORS</p>	 <p>TWEEZERS & FORCEPS</p>	 <p>CABLE TIES</p>
 <p>SAMPLE CONTAINER</p>	 <p>ZIPLOC BAGS</p>	 <p>DISTILLED WATER</p>	 <p>REFUSE BAGS</p>
 <p>EVIDENCE TAPE</p>	 <p>CARDBOARD BOXES</p>	 <p>PAPERBAGS</p>	 <p>ADHESIVE LABELS</p>

POISON RESPONSE KIT

The following items should be prepackaged in a single bag and brought to each Poison Crime Scene - Each crime scene is unique and the investigation may call for additional equipment and items.

RECORDING/NOTE-TAKING EQUIPMENT:

- Camera
- Backup Battery
- Notebook
- 2x Black Pens
- 2x Permanent Marker
- 2x Permanent Marker fine
- 2x Pencil



PERSONAL PROTECTIVE EQUIPMENT:

- Latex Gloves (Large)
- Protective Clothing (Closed Boots, Long Pants and Long Sleeved Shirt)
- Disposable Masks
- Hand Disinfectant
- Activated Charcoal

SCENE MANAGEMENT:

- Evidence Marker Flags/Cones
- Crime Scene Tape
- Common Approach Path (CAP) Plates

SAMPLING/EVIDENCE KIT:

- 1x Roll Masking tape
- 1x Box Adhesive Tower Labels
- Large Scissors
- Medium Scissors
- 20x Disposable Tweezers
- 1x Box Disposable Sterile Scalpel
- 5x 20ml Sterile Syringes
- Refuse Bags
- 25x Sample Bags (Ziploc Bags)
- Sample Container
- 1x Box Cable Ties
- Cardboard Boxes
- Evidence Tape
- Distilled Water

EMERGENCY NUMBERS:

- INVESTIGATING OFFICER
- POLICE
- VETERINARY SERVICES
- LABORATORY
- DOCTOR
- HOSPITAL/CLINIC
- GOVERNMENT AGENCY
- OTHER

OTHER:

- 1x Lighter
- 1x Box Matches

**– BE PREPARED –
HAVE EMERGENCY NUMBERS IN THE POISON RESPONSE KIT**

CRIME SCENE INVESTIGATOR

MANAGING THE CRIME SCENE

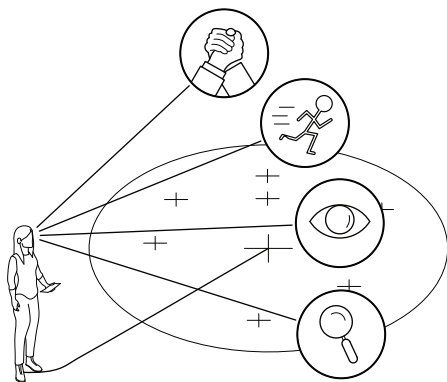
1. Use the SOP to lead and manage security of the crime-scene
2. Receive briefing and Preliminary Survey Report from the First Officer
3. Discuss the preliminary observations and evaluation and any actions that have been taken
4. Determine necessary duties required for the crime-scene
5. Request additional resources for evidence collection, crime scene security and post investigation crime-scene decontamination

THE INVESTIGATOR ASSIGNS OFFICERS TO SPECIFIC DUTIES

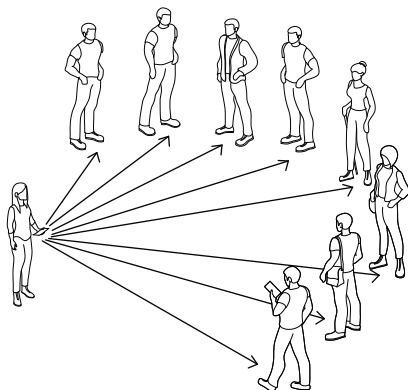
1. Assign an officer to monitor the CAP from the perimeter point of entry/exit to the key area
2. Assign an officer as Photographer
3. Assign an officer as Note-taker
4. Assign officers to retrieve live animals
5. Assign officers to assist with live animals held at staging point
6. Assign officer as Physical Evidence Controller
7. Assigns all other officers to the Grid Search

PRELIMINARY SCENE OBSERVATION

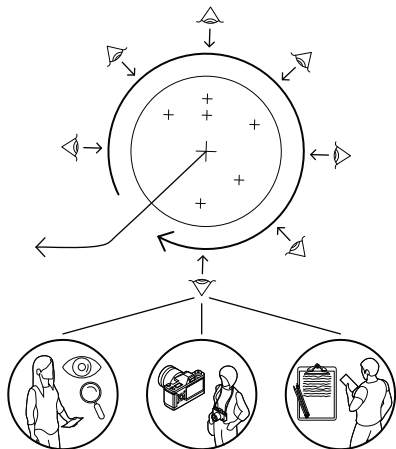
1. The Investigator, with Note-taker and Photographer, begins the investigation with a complete 360 degree perimeter check
2. Photos from the perimeter are taken from every angle (more is better than less)
3. The note taker records all the investigator's observations



OBTAIN BRIEFING FROM FIRST OFFICER



ASSIGN OFFICER DUTIES



PRELIMINARY SCENE OBSERVATION

CRIME SCENE INVESTIGATOR

SCENE ACCESS PROTOCOLS AND PERIMETER SECURITY

1. Ensure that the crime-scene perimeter is set and assesses the choice of the perimeter
2. Check the perimeter markings, or create a perimeter using crime-scene tape
3. Ensure that the CAP is correctly placed and if possible CAP step plates are available
4. Ensure that entry/exit access points are controlled by an officer

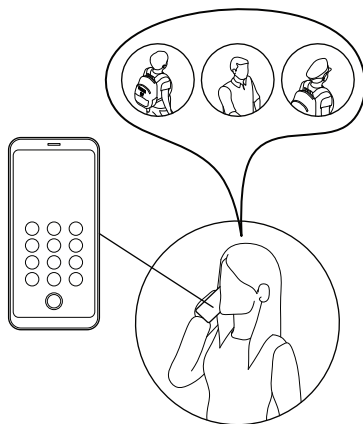
MANAGE COLLECTION OF EVIDENCE

1. The investigator holds the numbered evidence markers (flag or cone) that will be placed at each point of evidence
2. When an evidence-item is found, the investigator places a numbered evidence marker at that site
3. The investigator ensures that photographs have been taken with and without the evidence marker, both close-up and to show the placement of the evidence in the scene
4. The investigator ensures that the note taker has noted the evidence marker's number, the photos taken and any further comments

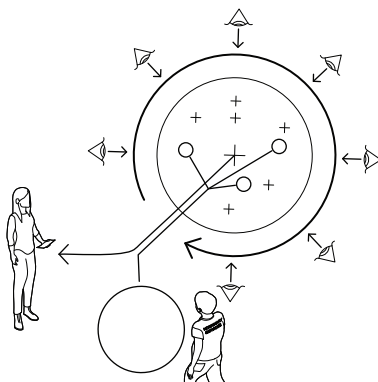
MANAGE LIVE ANIMAL REMOVAL

SEE PAGE 29 & 30

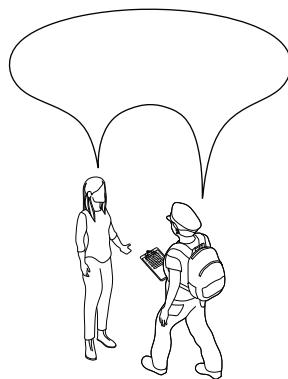
1. Discuss the Removal of Live Animals
2. Assess live animals at the scene
3. Minimize any entry by personnel into scene for removal of live victims
4. Establish staging point for removed live animals
5. Request veterinary or para-veterinary assistance
6. Note taker and Photographer to document live animal removal process
7. Note taker and Photographer to document all live animals removed from scene



REQUEST ADDITIONAL RESOURCES

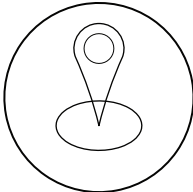


MANAGE LIVE ANIMAL REMOVAL

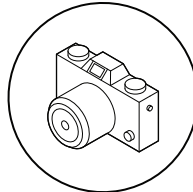


HAND OVER SCENE TO INVESTIGATOR

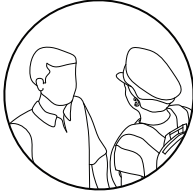
RECORDING THE CRIME SCENE



LOCATION



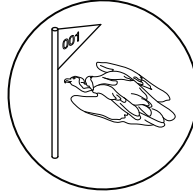
REFERENCE
PHOTOGRAPHS



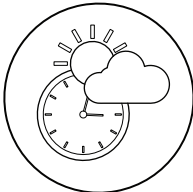
ATTENDING OFFICERS



CRIME SCENE NOTE
TAKER



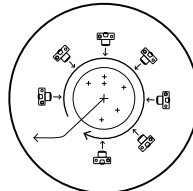
LOG EVIDENCE



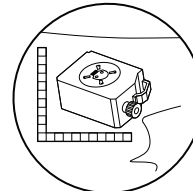
DATE/TIME/WEATHER



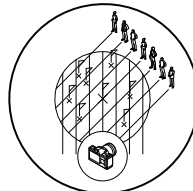
RECORD EVERYTHING



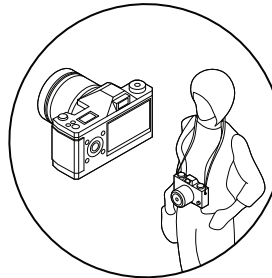
360 PERIMETER



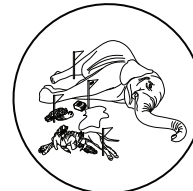
CLOSE-UP WITH
SCALE/RULER



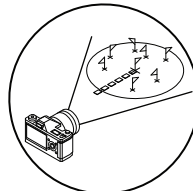
GRID SEARCH



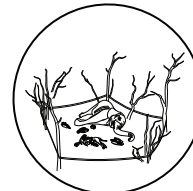
CRIME SCENE
PHOTOGRAPHER



MEDIUM VIEW



LONG WIDE ANGLE



LONG/WIDE ANGLE VIEW

RECORDING THE CRIME SCENE

CRIME-SCENE NOTE TAKER

1. Record Date, Time, Weather, Location Name, GPS coordinates
2. Record names of attending officers
3. Stand with and be the right hand of the investigating officer
4. Record everything that is said by the investigator
5. Record and log all evidence-items as a numbered record
6. Note the evidence marker number assigned to the numbered evidence-item
7. Describe every piece of evidence
8. Record the photograph numbers taken of each evidence-item or scene location

CRIME-SCENE PHOTOGRAPHER

1. Ensure quality and accurate photographs
2. Take the first photographs of the scene from the perimeter at as many angles as possible
3. Photograph all evidence-items in their original location
4. Photograph to link the evidence-item with the area so that identification and orientation corresponds to other areas of evidence in the overall scene
5. Photograph small items and any evidence with and without a scale/ruler
6. Photograph each evidence-item with and without the respective numbered evidence marker
7. The notes and the photographs must provide the answers to what, where, when and even how (eg. by a working dog) for each evidence-item found

SIX STEP CRIME-SCENE PHOTOGRAPHY

Used to identify and orientate evidence within the overall scene

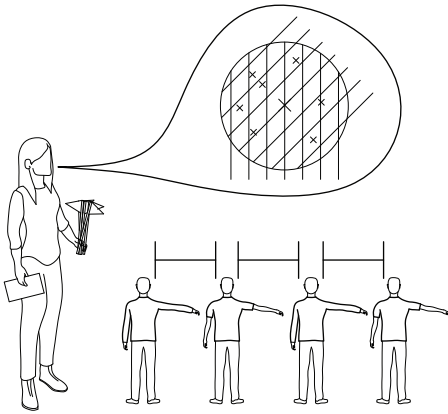
1. The overall scene is photographed with long or wide-angle views from various perimeter points. This can be done at the same time as the preliminary setting of perimeter crime-scene tape
2. Close-up photographs clearly show what an evidence-item is and its' condition
3. A close-up photograph with a scale or ruler shows the size of the evidence-item
4. A midrange photograph focusing on the close-up view to show the evidence-item in its actual location
5. Medium or mid-range photographs focus on specific areas or evidence-items with the numbered evidence markers in order to show position in the crime scene
6. A wide angle photograph of the entire scene with the numbered-markers in place

This process should be repeated during the Grid-Search - **SEE PAGE 11 & 12**

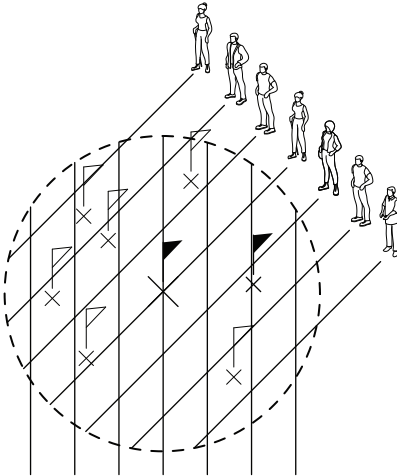
OTHER NECESSARY PHOTOGRAPHS

- All carcasses of victims once they are laid out in rows - **SEE PAGE 25 & 26**
- Any oddity on any animal such as any animal with removed body parts
- Close-up photographs of identification leg-rings or wing-tags on birds,
- Close-up photographs of ear notches, ear-tags, and collars on mammals
- Transmitter devices on birds or mammals
- Evidence boxes packed, sealed and labeled before they are removed from the scene - **SEE PAGE 19 & 20**
- The photographer constantly communicates with the note-taker so that there is a clear record of photographs taken

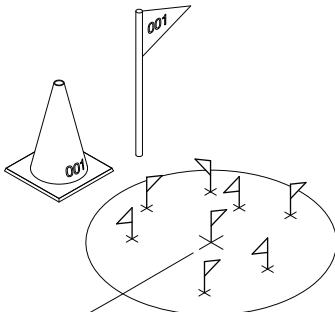
SEARCHING A CRIME SCENE



SETTING UP GRID SEARCH



EXECUTING GRID SEARCH



IDENTIFICATION MARKERS

SEARCHING FOR EVIDENCE AT A CRIME SCENE

THE GRID-SEARCH

1. A systematic on foot investigation of a crime scene ensures that all evidence is found
2. Grid searches are the most useful searches in outdoor areas
3. The investigator assigns officers to the Grid-Search
4. Grid-Search officers form a line at arms length alongside each other
5. The Grid-Search protocols are explained to the team before the search begins

GRID-SEARCH PROTOCOL

1. The line moves only at the command of the investigating officer
2. The line starts at a perimeter point and searches slowly across the crime scene to an opposite point, then turns to search along the next grid-line
3. After covering the field in a grid, the direction of the grid-search is repeated at a 45 degree angle to the first grid search

USING MARKERS FOR EVIDENCE IDENTIFICATION AND COLLECTION

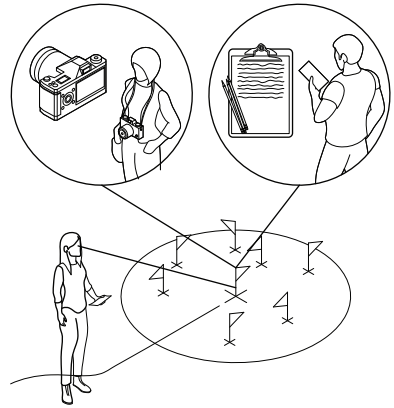
1. Identification markers can be alphanumeric flags or cones
2. Tall numbered flags are useful in a large area, outdoor crime-scene
3. The numbered markers pin locations of specific evidence-items or specific scene areas
4. Photographs are taken whenever a marker is placed at an evidence-item or scene area
5. The photographer takes a photograph of the evidence-item, object or area with and without the marker
6. The note-taker records the marker number with detailed notes of the evidence-item or reason for placing a marker
7. If an evidence-item is collected the marker is left in place and the note-taker notes that the evidence-item has been taken as a sample and moved off the scene.

SEARCHING A CRIME SCENE

OTHER VISUAL CLUES

1. Place covers over evidence to preserve the evidence in its original position
2. Cover footprints and add a evidence marker flag or cone as footprints quickly lose definition
3. Cover or collect, photograph, mark and note other small physical items such as paper or small containers that can be blown away by wind or destroyed by rain
4. The photographer and note-taker document all visual clues

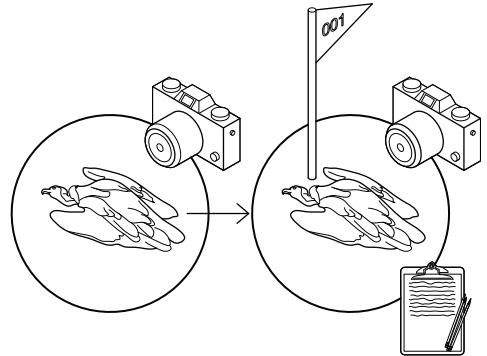
When the grid-search is completed, the investigator and photographer re-check and photograph the scene with all the evidence markers from as many angles as possible



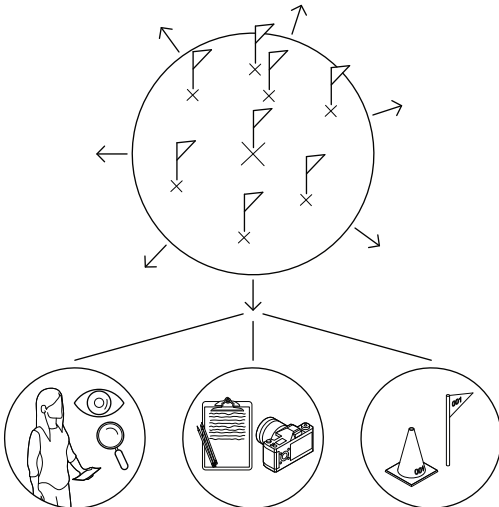
PHOTOGRAPH & NOTE ALL MARKED EVIDENCE

INVESTIGATE THE BROADER AREA

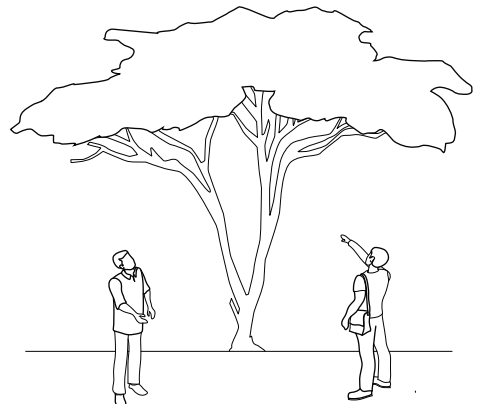
1. Officers are sent out to scout a broader area for possible victims
2. An area of a few kilometers radius is sufficient
3. Check burrows and bush-thickets for poisoned mammal victims
4. Check bushes and trees for bird species, mostly vultures that may have reached a perch, fallen and be caught in the branches



PHOTOGRAPH WITH AND WITHOUT MARKER

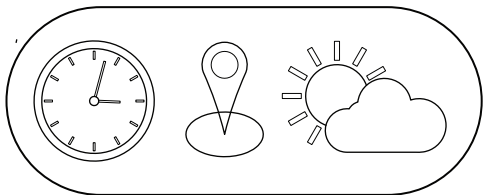


INVESTIGATE THE BROADER AREA



CHECK TREE BRANCHES FOR DEAD BIRDS

EVIDENCE COLLECTION : SEQUENCE AND METHOD



BIOLOGICAL EVIDENCE COLLECTION AND SAMPLING

1. Careful and systematic evidence collection is the responsibility of the Investigator and the team
2. Begin with the crime scene preliminary survey
3. Determine evidence collection sequence to be used

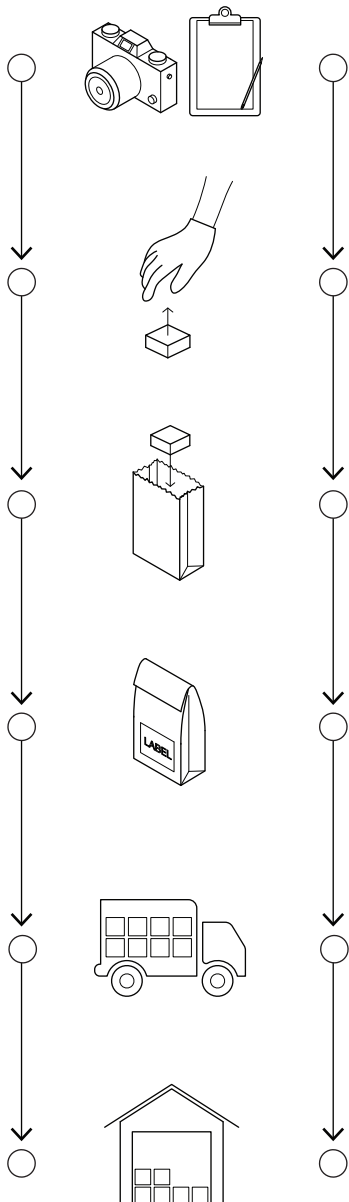
THE EVIDENCE COLLECTION SEQUENCE IS BASED ON THE FOLLOWING:

1. The scene location
2. The time of day.
3. The condition of the evidence whether fragile or stable
4. The weather conditions which might affect the scene or evidence for example rain or wind
5. Scene management considerations which may alter or contaminate the evidence, such as entry and exit points

Additional processing techniques may need to be conducted at the scene with specialized personnel for example management and first aid for affected live animals

MAINTAINING A CHAIN OF CUSTODY

1. The evidence collection method is important for maintaining a Chain of Custody
2. A unbroken chain of custody is essential for successful prosecution of wildlife poisoning incidents
3. Specimens and other evidence must be collected, stored and submitted in the correct prescribed manner from the field to the laboratory
4. All samples must be photographed, documented, correctly packed, labeled and transported, with attention given throughout the process to ensure the quality and integrity of the material and to maintain the chain of custody



EVIDENCE COLLECTION : SEQUENCE AND METHOD

SAMPLING EQUIPMENT

Appropriate equipment for collecting evidence should be in the Poison Response Kit - **SEE PAGE 5 & 6**

Collection equipment that may come into contact with forensic evidence must be sterile.



EQUIPMENT THAT MAY BE USED IN THE EVIDENCE COLLECTION PROCESS INCLUDES:

SAMPLING/EVIDENCE KIT:





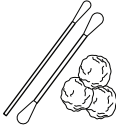


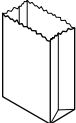




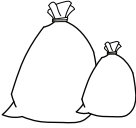
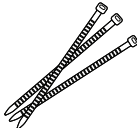

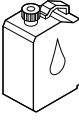
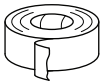
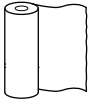
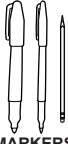





- 5x 20ml Sterile Syringes
- Forceps
- 1x Box Sterile Scalpel
- Large Scissors
- Medium Scissors
- Evidence Swabs
- 20x Disposable Tweezers
- Cardboard Boxes
- Paper Bags
- Evidence Tubes
- Evidence Containers
- 1x Box Adhesive Tower Labels
- 25x Ziploc Bags
- Refuse Bags
- 1x Box Cable Ties
- 5 Gallon Bucket
- Distilled Water
- 1x Roll Masking tape
- 1x Roll Wrapping Paper
- 1x Roll Aluminium Foil

RECORDING/NOTE TAKING EQUIPMENT:

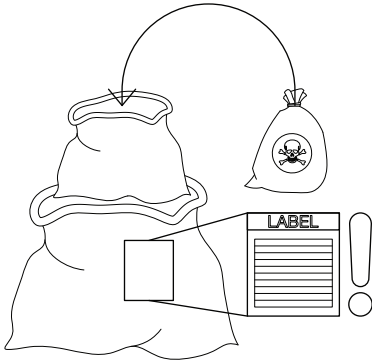
- Note Book
- 2x Black Pens
- 2x Permanent Markers
- 2x Permanent Markers fine
- 2x Pencils

PERSONAL PROTECTIVE EQUIPMENT:

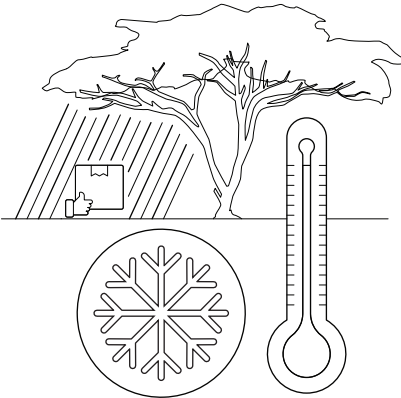
- Latex Gloves
- Rubber Boots
- Rubber Apron
- Disposable Masks

 SYRINGES	 FORCEPS	 SCALPLE	 SCISSORS
 SWABS	 TWEEZERS	 CARDBOARD BOXES	 PAPER BAGS
 EVIDENCE TUBE	 EVIDENCE CONTAINER	 TOWER LABELS	 ZIPLOCK BAGS
 REFUSE BAGS	 CABLES TIES	 5-GAL BUCKET	 DISTILLED WATER
 MASKING TAPE	 WRAPPING PAPER	 MARKERS	 NOTEPAD
 RUBBER BOOTS	 LATEX GLOVES	 EYE-PROTECTION & DUST MASK	 RUBBER APRON

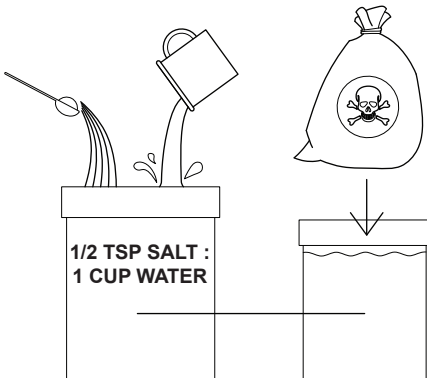
EVIDENCE COLLECTION : TECHNIQUES AND SAMPLING



TRIPLE BAG POISON SAMPLES TO PREVENT LEAKAGE



STORE IN SHADE AND BEST BELOW 4°C



STORE POISON SAMPLES IN HYPERTONIC SALINE SOLUTION

EVIDENCE COLLECTION

Wear Personal Protection Equipment (PPE) when handling contaminated evidence
- SEE PAGE 23 & 24

BEST PRACTICE TECHNIQUES FOR SWABBING

The swabbing collection technique is used for the recovery of biological evidence in a dried or liquid state

Suspected biological evidence can be found on fur, feathers skin, bait or other absorbent surfaces
Suspected biological evidence must be transported to the laboratory in an appropriate container

GUIDELINES FOR TRANSPORT OF POISON SAMPLES

Each sample is in a separate bag
Double or triple bags are used to prevent leakage of wet/liquid materials

Every bag is marked with an evidence item number and has an attached label

Keep all samples in the shade and as cool as possible

Poison samples are best kept refrigerated below 4°C or frozen below -20°C

Without refrigeration samples can be kept for a few days in a hyper-tonic saline solution

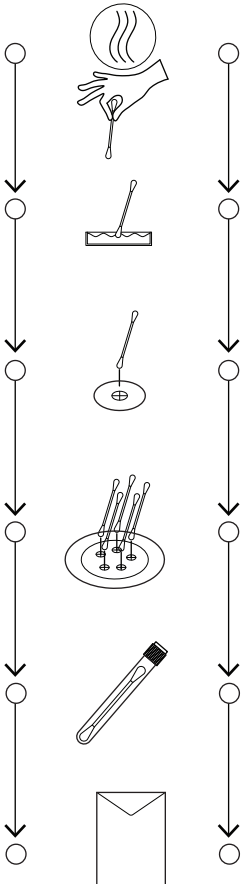
A hyper-tonic solution is made with half a teaspoon salt to a cup of clean water

EVIDENCE COLLECTION : TECHNIQUES AND SAMPLING

DRIED MATERIAL COLLECTION TECHNIQUE

Biological evidence already in a dried form on a fixed surface that cannot be transported can be recovered using the swab technique

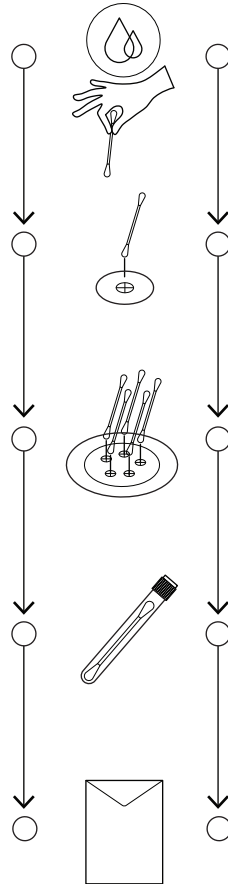
1. Damp a swab (cotton wool or eardud) with distilled water
2. Rub the stained area with a single moistened swab
3. When only a small area is available, concentrate as much as possible on the tip of the swab
4. Use multiple swabs for a large area
5. Air-dry the swabs and place each swab into a separate bag or container
6. A control sample should be collected from an unstained area using the same technique
7. The sample bag or container may be placed inside a paper envelope that is sealed and labeled



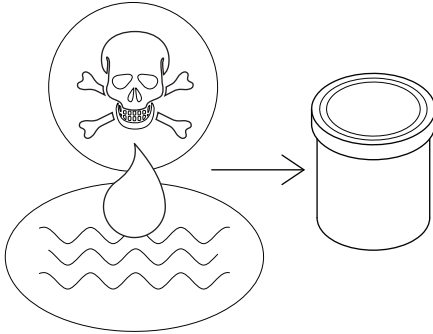
LIQUID MATERIAL COLLECTION TECHNIQUE

Biological evidence in a liquid form on a fixed surface that cannot be transported can be recovered using the swab technique

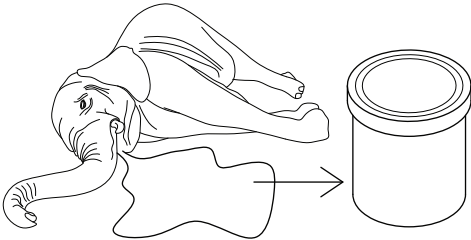
1. Swab the liquid material allowing the swab to absorb as much of the substance as possible
2. Multiple swabs should be used when a large quantity is available
3. Thoroughly air-dry each swab
4. Package the swab inside an appropriate bag or container
5. Collect a control sample from an unstained area using the same techniques
6. Use paper wrapping to prevent contamination
7. Wet swabs can later be air-dried in a drying locker - to be packaged into a suitable dried evidence container
8. The sample bag or container is placed inside an envelope that is sealed and labeled



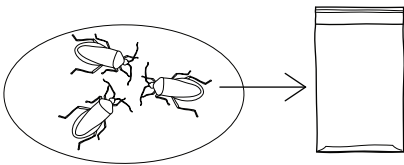
EVIDENCE COLLECTION : TECHNIQUES AND SAMPLING



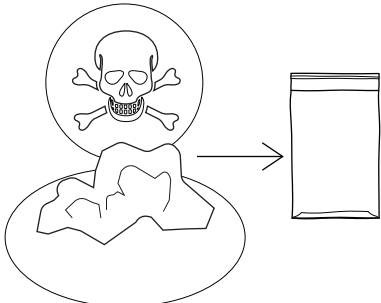
COLLECT WATER



COLLECT VOMITUS



COLLECT DEAD INSECTS



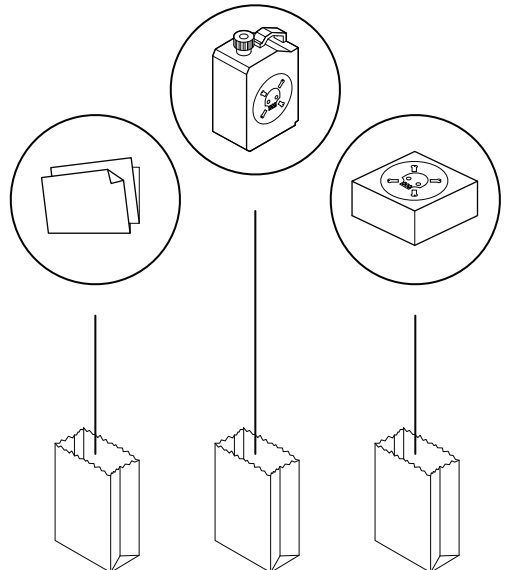
COLLECT BAIT OR FOOD

COLLECTION OF SAMPLES

1. Collect any probable contaminated bait or food from the scene
2. On a large contaminated section of a carcass, cut off and collect slices that are covered in the contaminant, about 500 grams (2 cup fulls)
3. Collect any food or bait that an animal has vomited
4. Collect dead insects
5. Collect water in clean jars
6. Collect all containers, papers that may have been brought onto the scene
7. Collect all other objects that the investigator considers relevant to the crime

IMPORTANT

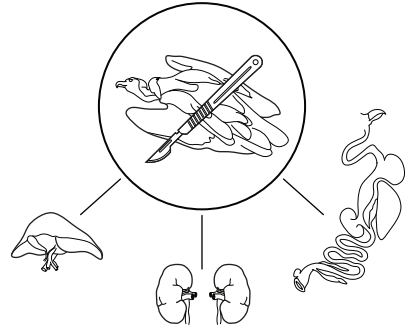
- Samples from animal carcasses should be collected by trained persons
- The services of a veterinarian or para-veterinarian is invaluable
- Avoid cross-contamination of biological samples by using new gloves, scalpels, forceps and containers for every sample collected
- Collect samples from carcasses at the end of the investigation after the carcasses have been removed from the key area



PACKAGE ALL EVIDENCE-ITEMS INDIVIDUALLY

SAMPLE COLLECTION FROM BIRD CARCASSES

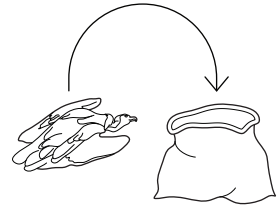
1. Take samples from as many carcasses as possible
2. Cut remove and store the whole digestive tract – Beak, Oesophagus, Stomach and Intestine
3. Cut, remove and store internal organs useful for toxicology– Liver and Kidneys
4. Birds can also be bagged and stored whole
5. Separate collecting equipment must be used for each bird
6. Samples from each bird should be bagged and stored separately
7. Multiple samples from the same carcass should also be bagged and stored separately
8. Every sample must be labeled



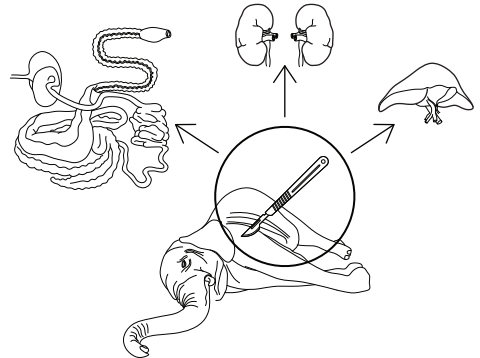
COLLECT DIGESTIVE TRACT FROM BIRDS

SAMPLE COLLECTION FROM MAMMAL CARCASSES

1. Take samples from as many carcasses as possible
2. Cut, remove and store internal organs especially the digestive tract – Tongue, Oesophagus, Stomach and Intestine as well as the Liver and Kidneys
3. Small mammals can be bagged and stored whole
4. Separate collecting equipment must be used for each mammal
5. Samples from each mammal should be bagged and stored separately
6. Multiple sample from the same carcass should also be bagged and stored separately.
7. Every sample must be labeled

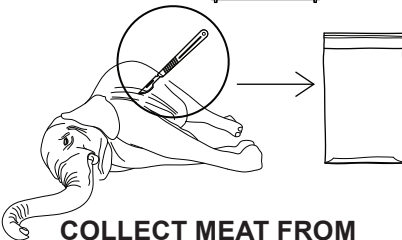


SMALL BIRDS COLLECTED WHOLE

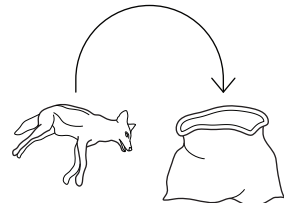


COLLECT DIGESTIVE TRACT FROM MAMMALS

COLLECT AND DISPOSE OF ANY AND ALL USED EQUIPMENT IN A RESPONSIBLE AND SAFE MANNER.



COLLECT MEAT FROM CONTAMINATED CARCASS



SMALL MAMMALS COLLECTED WHOLE

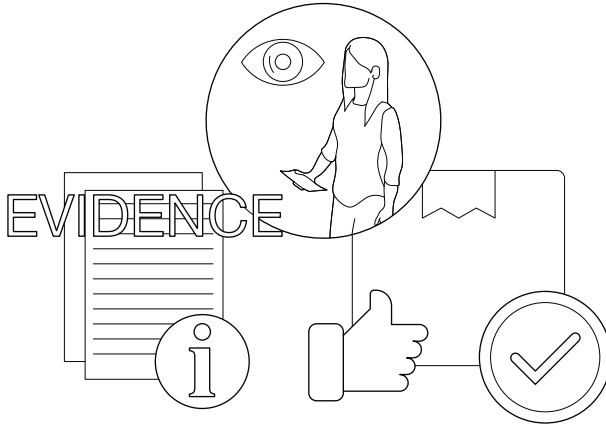
EVIDENCE HANDLING AND LABELLING

HANDLING AND LABELLING PROTOCOLS

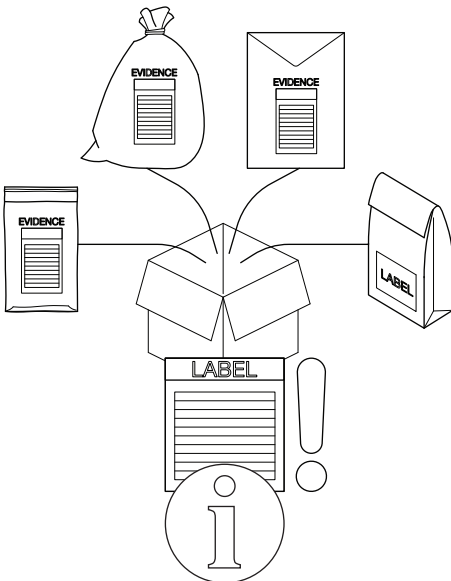
Evidence-items are collected in a container or envelope according to the national or a specific agency's crime-scene protocol

Correct marking, packaging, numbering and labeling prevents loss, cross-contamination of evidence and any break in the chain of custody from a crime scene to the investigating agency

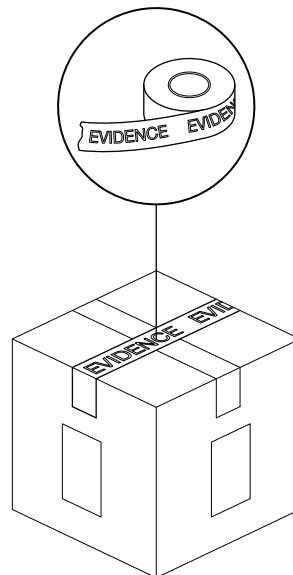
Every evidence-item container must be sealed with evidence-tape, numbered, labeled and inventorised before it is removed from the scene and handed over to the custody of the investigating agency



EVIDENCE-ITEM CONTAINERS MUST BE SEALED WITH EVIDENCE-TAPE, NUMBERED, LABELLED AND INVENTORISED



**EVIDENCE-ITEMS PACKAGED
& SEALED IN OUTER EVIDENCE BOX**



**SEAL ALL OUTER PACKAGES
WITH EVIDENCE TAPE**

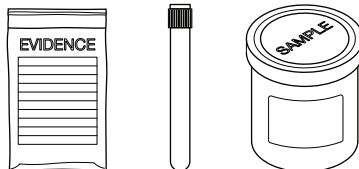
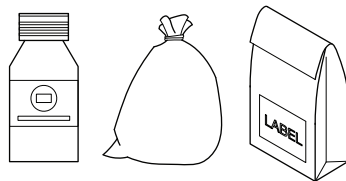
EVIDENCE HANDLING AND LABELLING

LABEL INFORMATION FOR EVIDENCE-ITEM CONTAINERS

Each evidence-item should be packaged and labeled separately.

INCLUDE THE FOLLOWING INFORMATION FOR EACH EVIDENCE-ITEM

- Agency, police or case number
- Date and time collected
- Marker number
- Item number
- Description of the item
- Investigators surname and initials
- Signature of investigator or collection officer
- Other notes



CAREFULLY LABEL ALL EVIDENCE-ITEMS

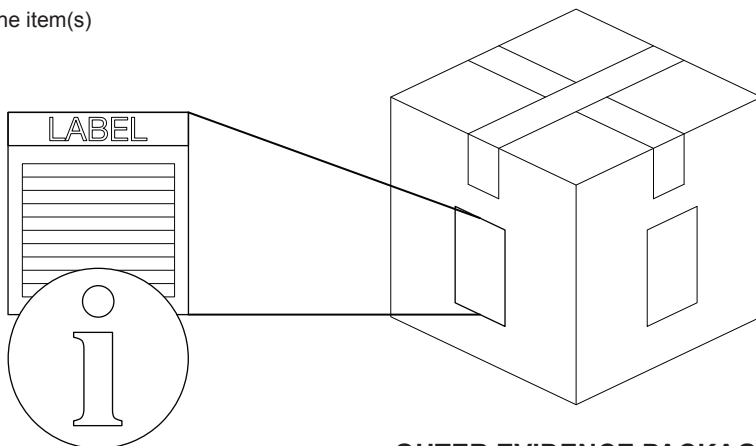
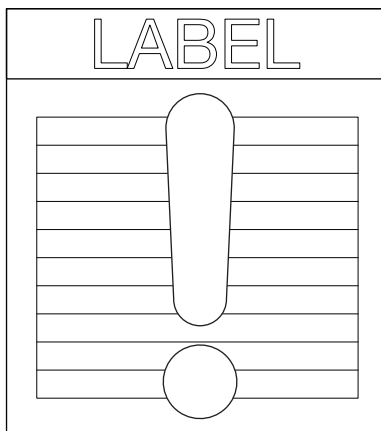
LABEL INFORMATION FOR OUTER EVIDENCE PACKAGES

Evidence-item containers are placed together in an outer package, box or bag, for transport

The outer package is sealed with evidence tape and marked with the investigator's surname and initials, contact details and the date

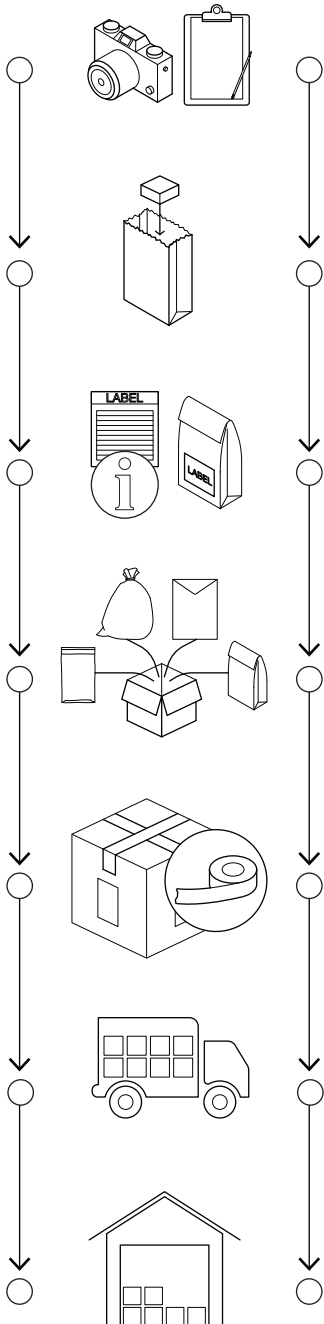
INCLUDE THE FOLLOWING INFORMATION ON EACH OUTER EVIDENCE PACKAGE

- Date and time collected
- Location
- GPS coordinates
- Number of Items
- Item numbers
- Description of the item(s)
- Signature



OUTER EVIDENCE PACKAGE LABELS

MAINTAINING A CHAIN OF CUSTODY



MAINTAIN THE CHAIN OF CUSTODY

ESTABLISH AND MAINTAIN THE CHAIN OF CUSTODY FOR SUCCESSFUL PROSECUTION

The chain of custody begins with the investigator who takes custody of evidence and prepares a tracking document beginning with detailed scene notes about the evidence.

Evidence must be correctly marked, packaged and labeled to prevent the loss, cross-contamination or breaks in the chain of custody from a crime scene to the investigating agency.

THE CHAIN OF CUSTODY PROCESS

EVIDENCE-ITEM MANAGEMENT

1. Each numbered evidence-item is noted and photographed
2. Notes include the recovery location, time and date, the flag number and an item description
3. Every evidence-item collected must be in an appropriate container or envelope according to a national or a specific agency's protocol
4. Every container or envelope must be sealed with evidence-tape, numbered, labeled and inventorised before it is removed from the scene
- **SEE PAGE 19 & 20**
5. The containers and envelopes with evidence-items are packed in an outer bag/box which must also be evidence-tape sealed and labeled
6. The investigator transfers and submits an evidence-tape sealed bag/box to an agency's "Property Room" or directly to a crime-laboratory with all necessary documentation

INFORMATION CONTAINED IN THE SEALED BAG/BOX OF EVIDENCE-ITEMS

1. Agency case number
2. Type of evidence
3. Investigating Officer: Name, Rank and Identification Number
4. Transporting officer: Name, Rank and Identification
5. Number and assignment of the investigator.
6. Signature or other identifier of responsible officer and date prepared
7. Date the evidence is submitted to the property room
8. Address where the incident was located, or where the evidence was recovered

MAINTAINING A CHAIN OF CUSTODY

CHAIN OF CUSTODY DOCUMENTATION FOR SUCCESSFUL PROSECUTION

Documentation of the chain of custody is important to legitimize the transfer of the evidence from an investigator to another individual, location or agency. This is submitted in addition to physical evidence.

THE EVIDENCE REPORT

1. A list of the evidence-items
2. Each evidence-item numbered sequentially
3. Quantity of items included in the evidence
4. Item description
5. Reason for the transfer as needed
6. Status for further action
e.g. Submit for Analysis or Hold
7. All transfers must include the date and time of transfer
8. The signature of the individual releasing the evidence to another individual or location
9. The signature of the individual transporting the evidence
10. The signature of the individual receiving the evidence from another individual or location

THE CRIME SCENE REPORT

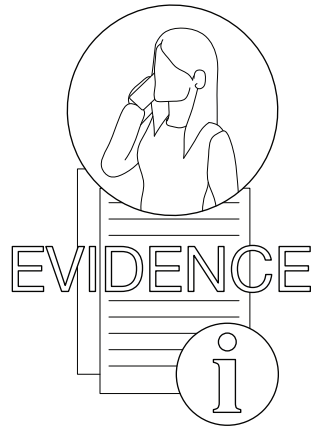
- Investigators prepare an outline or draft of their scene report as required by their SOP or agency's policy
- The report captures data from the crime-scene activities with the evidence investigation processing results

THE LABORATORY EVIDENCE ANALYSIS REPORT

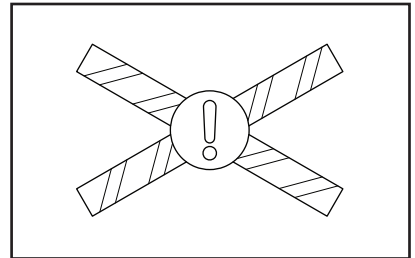
- The laboratory evidence analysis report is also a report that can be used for prosecution
- Evidence analysis is performed by laboratory personnel or technicians.
- The laboratory examination report has a laboratory format

THE FINAL REPORT FOR PROSECUTION

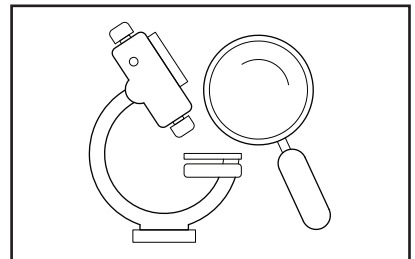
- The final report combines the crime scene report and the laboratory analysis report
- A review process of the final report may include both an administrative and a technical evaluation
- Copies of the final combined reports are distributed to both the prosecutor and the submitting agency



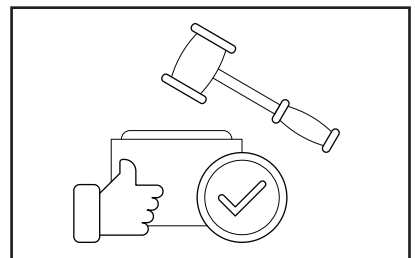
CAREFULLY DOCUMENT ALL EVIDENCE



CRIME SCENE REPORT



EVIDENCE ANALYSIS REPORT



FINAL REPORT

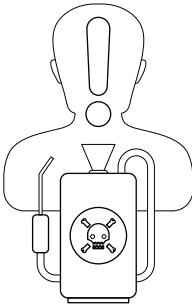
PERSONAL PROTECTION



DO NOT EAT/DRINK ON SCENE



DO NOT SMOKE ON SCENE



BEWARE OF POISON SPRAY



GOGGLES



MASK



LONG SLEEVE SHIRT



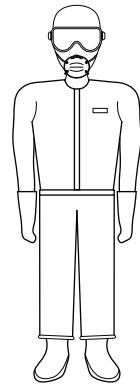
LATEX GLOVES



LONG PANTS



RUBBER BOOTS



WEAR PPE

POISONS AND PESTICIDES ARE DANGEROUS

Safe handling and exposure prevention is better than treatment.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- Wear Goggles or a full face mask
- Wear Organic Vapor mask or Dust mask for the nose and mouth
- Overall long trousers and long sleeves
- Rubber gloves
- Rubber boots – trousers must not be tucked into the boots
- A Rubber apron

POISON CAN ENTER A BODY IN 3 WAYS

SKIN - DERMAL CONTACT

- The skin is not a total barrier
- Wear PPE - gloves, a long-sleeved overall, or long trouser and long sleeved shirt

SWALLOWING - ORAL INGESTION

- Can be criminal, deliberate or accidental
- Avoid accidents by proper storage. Never transfer poison or pesticides into unlabeled containers
- Beware of contamination, do not eat, drink or smoke at a poison-scene
- Remove gloves and move away from the site before handling a drinking container

BREATHING - INHALATION

- Chemicals can create fumes
- Never breathe in from a container that has been used for an unknown substances
- Be aware of any mist spraying that has been done in the area.

**BE PREPARED –
HAVE EMERGENCY NUMBERS IN THE
POISON RESPONSE KIT**

**PRE-PLAN FOR MEDICAL
EMERGENCIES – KNOW THE
CLOSEST MEDICAL CENTER**

PERSONAL PROTECTION

SYMPTOMS OF POISONING

Headache, Dizziness, Nausea, Cramps, Sweating, Salivation, Anxiety, Blurred Vision, Tremors often starting with the eyelids and tongue, Vomiting and Muscular weakness.

MILD POISONING SYMPTOMS

Presents like a spell of flu – fatigue, skin irritation, loss of appetite, dizziness, weakness, nervousness, nausea, perspiration, diarrhea, eye/nose and throat irritation, insomnia, thirst, restlessness, sore joints and changes of mood.

MODERATE POISONING SYMPTOMS

Nausea, trembling, muscular incoordination, excessive salivation, blurring of vision, constriction in the throat and difficulty in breathing, flushed or yellowing of skin and mucous membranes, abdominal cramps, vomiting, diarrhea, mental confusion, twitching of muscles, weeping, excessive perspiration, profound weakness, rapid pulse, persistent cough,

SEVERE POISONING SYMPTOMS

Vomiting, loss of reflexes, inability to breathe, uncontrollable muscle twitching, pupil dilation or contraction, convulsions, unconsciousness, severe secretions from the respiratory tract, fever, thirst and increased rate of shallow breathing.

FIRST AID MANAGEMENT

In case of dermal exposure, contaminated hands or other skin or eyes, wash with water

Use soap if available

Use dry cloths for wiping the skin if water is unavailable

Remove clothing that is contaminated and is poisoning through dermal contact

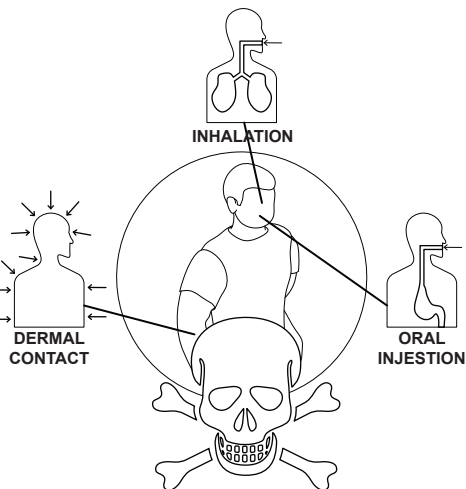
Cover the person with a blanket if they show signs of toxic-shock

Place and store all contaminated clothes in a Plastic Container or bag

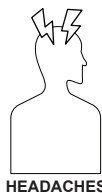
Give Activated Charcoal if a poison has been swallowed - 4 - 6 capsules or tablets

Do not offer anything else by mouth at the site

In any case of exposure to poison - Go to the nearest Hospital or Clinic to seek medical help



POISON CAN ENTER THE BODY THREE WAYS



SYMPTOMS OF POISONING

MANAGING CRIME SCENE MORTALITIES

MANAGING MORTALITIES AT A POISON SCENE

1. After the grid-search and evidence collection the carcasses can be removed from the scene
2. Carcasses are laid out in lines of the same species
3. Count and record the dead animals of each species
4. Samples for laboratory analysis can then be taken from the carcasses - **SEE PAGE 17 & 18**
5. Separate, count and record any birds or mammals with missing limbs or missing heads
6. Check wings and legs of vultures and other birds for leg-rings, wing-tags or tracking devices
7. Check mammals for tracking collars, ear tags or notches
8. Any bird or mammal with a Satellite or GPS transmitter should be kept aside so that these expensive items can be retrieved and returned to the relevant research organization
9. At an old scene lay out and count skulls, beaks, pelvic bones or other skeletal structures
10. Insects are also noted in the mortalities and should be photographed in situ, sampled and recorded

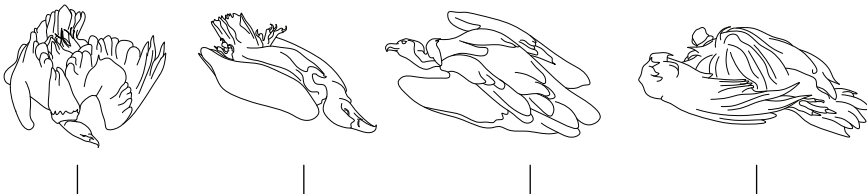
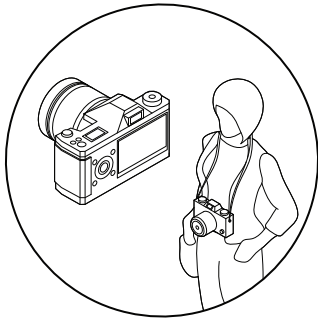
THE PHOTOGRAPHER AND NOTE-TAKER

1. Photograph and record each line of carcasses from various angles
2. Photograph and record the entire number of mortalities
3. Photograph and record any identification leg-ring or wing-tag or collar
4. Photograph and record any seemingly odd or different thing

POST CRIME SCENE INVESTIGATION

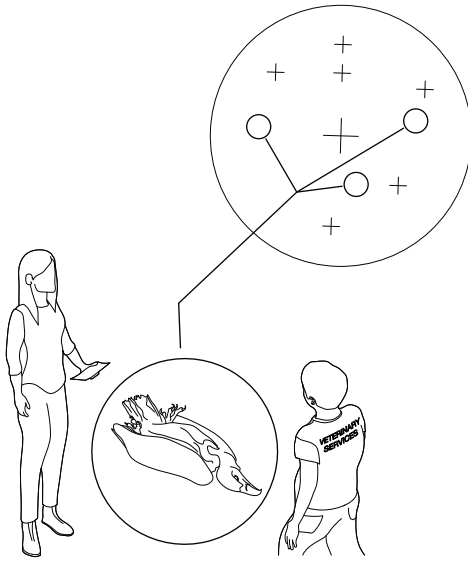
- The investigator re-checks all dead birds and animals before decontamination
- Decontamination is in most cases burning the carcasses at the crime scene after all counting, photographing, sampling and recording is complete. In some cases carcasses are removed to an appropriate incinerator.

IMPORTANT - CHECK ALL DEAD BIRDS AND ANIMALS BEFORE DECONTAMINATION

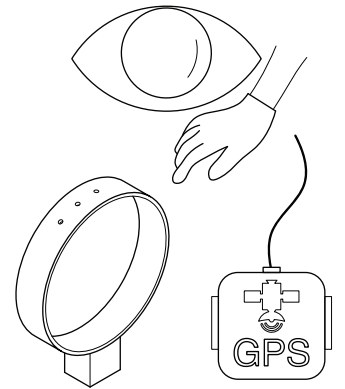


SORT SAME SPECIES

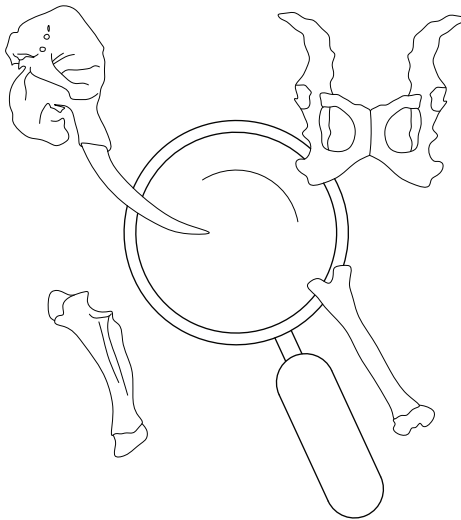
MANAGING CRIME SCENE MORTALITIES



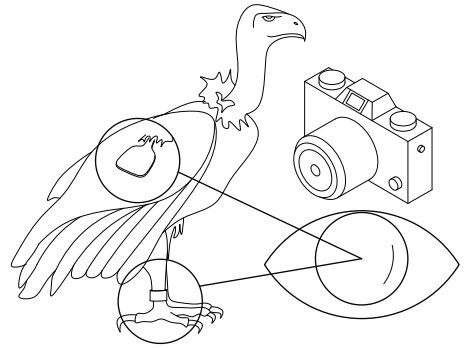
REMOVE CARCASSES FROM SCENE



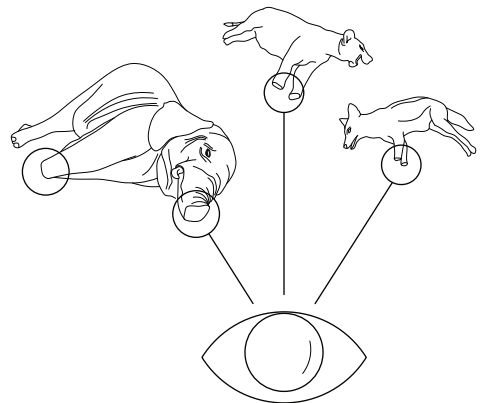
COLLECT ALL TRACKING DEVICES



NOTE ALL SKELETAL REMAINS



SEARCH FOR WING-TAGS AND LEG-RINGS



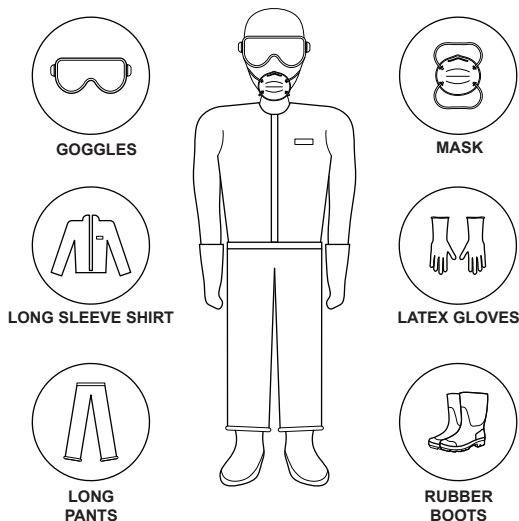
NOTE MISSING PARTS

DECONTAMINATION THE CRIME SCENE

WEAR PERSONAL PROTECTIVE EQUIPMENT (PPE) WHEN DECONTAMINATING A SCENE

1. The only reliable way to decontaminate a poison scene under field conditions is to burn all carcasses, baits and any other items not collected as evidence
2. The investigator will determine when the crime scene investigation is complete
3. Decontamination prevents any further mortalities and any further access to the poison
4. Any carcass that cannot immediately be disposed of by burning must be covered
5. Covered carcasses must be guarded to keep any humans or wildlife away until it can be destroyed.
6. Scarecrows and flags around a poison site will help to keep animals and birds away until decontamination
7. With very large carcasses, cut off the obvious contaminated meat and burn
8. Rake dead insects into the fire to be burnt
9. Burning must be in a hot fire until everything is burnt to ash.
10. Avoid exposure to and inhalation of the smoke caused by the fire
11. Turning a carcass over will hide the poison but will contaminate the soil
12. Do not empty poisonous water into the soil
13. Small contaminated bodies of water should be covered
14. Scarecrows and flags should be place around large bodies of contaminated water

After decontamination of the Poison Scene officers again scout a wider area for possible sick or dead victims that had managed to escape the core poison area



ALWAYS WEAR PPE



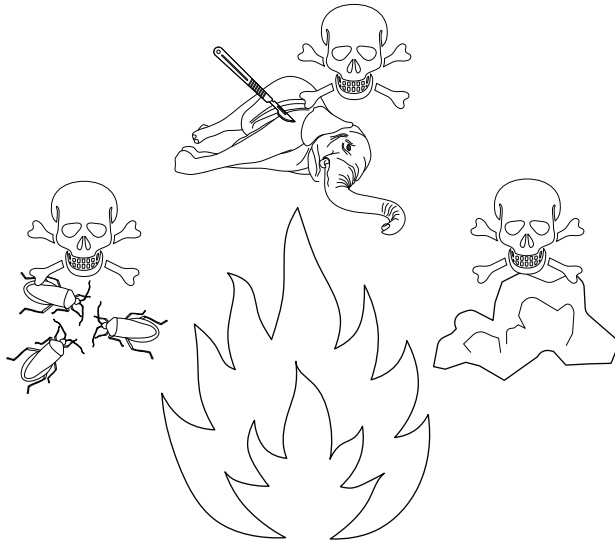
TAKE PRECAUTIONS - POISON SCENES ARE DANGEROUS FOR YOUR HEALTH

DECONTAMINATION THE CRIME SCENE

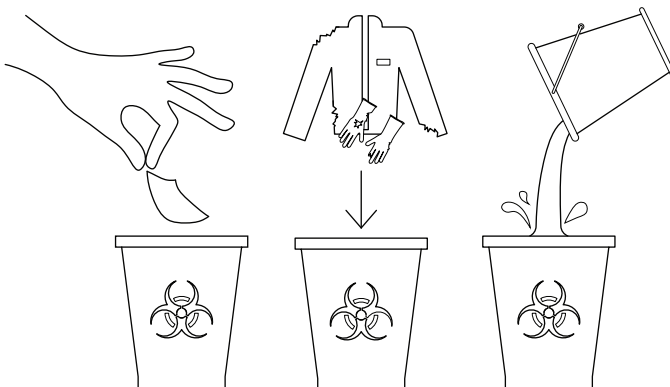
DECONTAMINATION OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

1. All PPE must be DECONTAMINATED. Do not leave any item lying around at home
2. Gloves and anything to be destroyed are put into a plastic bag marked Hazardous Waste
3. Boots should be washed inside and out, (contaminated boots may be licked by the dog)
4. Wash the clothing with detergent or soap through a normal wash process or cycle
5. Wash the protective cover clothing such as overalls separately
6. Dispose of the washing water away from children, animals, and any other water source
7. Everything is hung on the line to dry completely
8. Any damaged item must be repaired or replaced immediately

Ensure that Poison Response Kit is packed in preparation for the next WILDLIFE CRIME SCENE - SEE PAGE 5 & 6

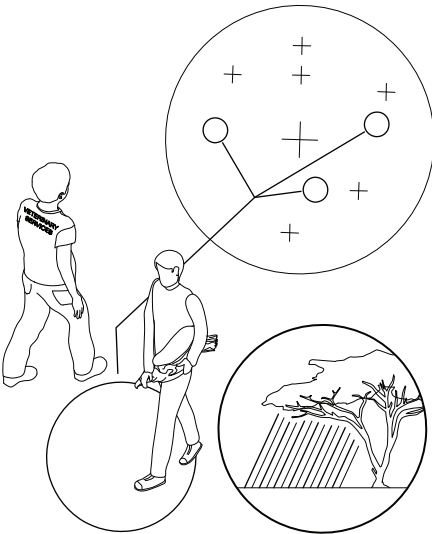


BURN ALL CONTAMINATED BIOLOGICAL MATERIALS

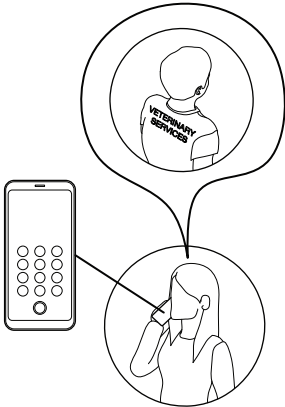


DISPOSE OF DAMAGED PPE, CONTAMINATED LITTER AND LIQUIDS CORRECTLY

LIVE ANIMAL MANAGEMENT



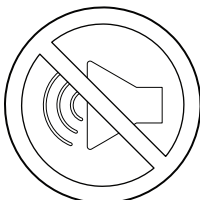
MOVE LIVE ANIMALS TO SHADED STAGING POINT



CALL A VETERINARIAN OR REHABILITATION CENTER



**ACT
QUICKLY**



**WORK
QUIETLY**

HANDLING LIVE VICTIMS AT A POISON SCENE

1. The removal of live animals is the only scene disturbance before the investigation begins
2. All animals removed must be noted and reported to the investigating officer
3. Wear Personal Protective Equipment (PPE) to protect yourself from poison or pesticide contamination

FIRST RESPONSE FOR ALL LIVE ANIMALS

1. Move live victims off the source of poison and out of the crime-scene area as soon as possible
2. Decide on a staging place until the animals can be taken to a veterinary or rehabilitation clinic
3. Use the CAP or other selected entry exit pathways to remove the live victims
4. Choose a shaded and quiet place away from the investigative action
5. Minimize noise, movement and disturbance around live victim
6. Work as quickly and quietly as possible
7. Keep the animal calm and if possible cover the eyes with a blindfold
8. Assign an officer to watch and manage the live victims

NOTE

- The location, source or bait and the chemical used will determine whether victims are mammals and/or birds
- Caution, unconscious and very ill looking animals may be able to summon adrenaline and respond with their last energy to avoid capture

SIGNS OF POISONING

1. Difficulty breathing, breathing rate may be very fast or very slow and shallow
2. Comatose – victims are lying seemingly dead
3. Vomiting or attempt at vomiting
4. Strange body positions
5. Seizures
6. Ataxia - victims are staggering about with poor control of their limbs
7. Diarrhea - Often greenish in color



WEAR PPE

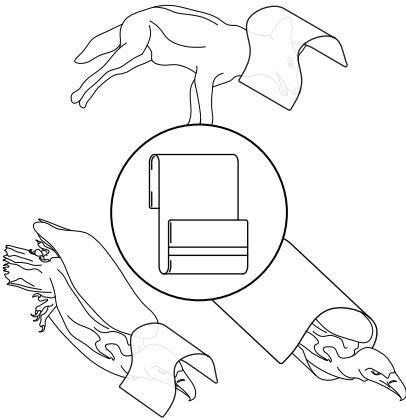
LIVE ANIMAL MANAGEMENT

SECURING INJURED OR POISONED ANIMALS

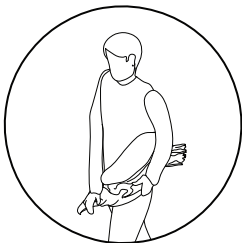
Poisoned animals can seem beyond hope and recovery but animals can survive poisoning!
DO NOT GIVE FOODS OR FLUIDS ORALLY

HANDLING POISONED DOMESTIC OR WILD MAMMALS

1. Get veterinary advice as soon as possible
2. Get the animal off the poison source
3. Try and get the animal into shade
4. Keep the animal calm – if possible cover the eyes with a blindfold
5. Keep the animal in a recumbent position on its sternum and not lying flat – support it with towels or bales or cut bush-brush
6. Work as quickly and quietly as possible



COVER LIVE ANIMALS WITH BLANKET



RESTRAIN WINGS AND HEAD

POISONED VULTURES AND BIRD OF PREY SPECIES

Poison scenes most often involve vultures, however other bird species may also be present and affected.

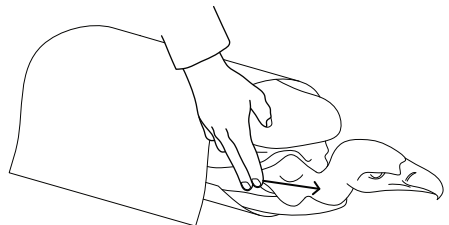
HANDLING POISONED BIRDS

1. Use a towel or cloth to cover the eyes
2. Take hold of the legs and the neck high up near the head
3. Prevent the wings from flapping by wrapping the bird with the towel or by tucking the bird against your body
4. Move the bird out of the sun
5. Position the bird on its stomach with head to the side
6. The highest priority is for the airways to be open for adequate breathing
7. Put the bird in a well ventilated space - a box or back of vehicle may not be ideal because of flapping and the need for clean air
8. A poisoned bird may not be able to thermo-regulate, assist its temperature by covering with a towel or light blanket
9. Keep the area as quiet and dark as possible.

INDUCE VOMITING

1. If the bird has not regurgitated (vomited) the contaminated meat, you will feel a full crop.
2. Hold the bird with head facing down and push from the crop up along the oesophagus till the food is vomited out of the mouth
3. Vomitus must be collected as a sample.
4. Do not give water but holding the bird with its head facing down use a damp cloth to clear the poison or contaminated vomitus from the mouth

CALL A VETERINARIAN OR REHABILITATION CENTER
List Contact Details in Poison Response Kit



INDUCE VOMITING USING FINGERS

