



Plantation

Sime Darby Plantation Berhad

Group Sustainability

Standard Operating Procedure for Human-Wildlife Conflicts

Mitigation in Plantation



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Standard Operating Procedure for Human-Wildlife Conflicts Mitigation in Plantation

2020

Policy Instrument Control Table

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List of abbreviation

| | |
|------|--|
| CBU | Conservation & Biodiversity Unit |
| COBC | Code of Business Conduct |
| DWNP | Department of Wildlife and National Park |
| EC | Energy Commission |
| GS | Group Sustainability Department |
| HEC | Human-Elephant Conflict |
| HCV | High Conservation Value |
| HOD | Head of Department, Head Office |
| HSE | Health, Safety & Environment |
| HWC | Human-Wildlife Conflict |
| IUCN | International Union for Conservation of Nature |
| PPE | Personal Protective Equipment |
| RAC | Responsible Agriculture Charter |
| RTE | Rare, Threatened, Endangered |
| SDPB | Sime Darby Plantation Berhad |
| SFC | Sarawak Forestry Corporation |
| SPEG | Sistem Pagar Elektrik Gajah |
| SQM | Sustainability & Quality Management |
| SWD | Sabah Wildlife Department |
| WCA | Wildlife Conservation Act |
| WCE | Wildlife Conservation Enactment |
| WLPO | Wildlife Protection Ordinance |
| | |

1.0. Objective

The objectives of this SOP are:

- To provide guidance in managing human-wildlife conflicts in oil palm plantation in Sime Darby Plantation and adjacent plantations
- To support the Responsible Agriculture Charter (RAC), and complement the related best practices in wildlife management in oil palm plantation
- To support the national wildlife conservation initiative for local and international sustainable certifications requirement

2.0. Scope

- This SOP covers all operational activities in the estate and mill management in Malaysia.
- The wildlife involved in this particular SOP are elephants and other but also protected wildlife identified and listed under the Wildlife Conservation Act of West Malaysia (WCA 2010), Wildlife Conservation Enactment of Sabah (WCE 1997) and Wildlife Protection Ordinance of Sarawak (WLPO 1998).

3.0. Definition

Human-wildlife conflict occurs when the needs and behaviour of wild animals impact negatively on the goals of humans or when the goals of humans negatively impact the needs of wildlife. ¹

Wildlife-related effects and impacts;²

- Effects: Positive and negative outcomes of interactions among wildlife, people, and wildlife habitat.
- Impacts: A subset of wildlife-related effects that a stakeholder/people recognize and regards as important.

¹ Preventing and mitigating human-wildlife conflicts: World Parks Congress Recommendation, *Journal of Human Dimensions of Wildlife*, Vol 9, 259-260, 2004.

² A practitioner's Guide: Human-Wildlife Conflict Management, *Northeast Wildlife Damage Management Research and Outreach Cooperative*, 2002

Types of wildlife-related effects and impacts - there are eight (8) kinds of major human-wildlife conflicts. They are as follows:

| Types of effects and impacts | Description |
|---------------------------------|---|
| Fatal | <ul style="list-style-type: none"> • Involves loss of human life • Involves loss of animal life |
| Injury/ sickness/ lost/ trapped | <ul style="list-style-type: none"> • Involves physical injury to human due to being chased, pushed, beaten, or trampled, and emerging zoonotic disease • Involves physical injury or sickness to the animals and/or disruption to their social structure or behaviour |
| Property damage | Involves destruction of properties such as building structures, equipment, appliances and vehicles |
| Crop damage | Involves destruction and depredation of agricultural crops or natural vegetation, and lost opportunity cost |
| Instil fear | Causes fear among workers/ employees of being attacked/ charged when they are outside their houses or when working on site / within plantation. |
| Roaming / foraging | Involve sightings of species that roam but do not cause any harms or fears. |
| Mental disturbance | Involves emotional distress and psychological stress and the need to get peace and tranquillity |
| Others | Other than as stated above (e.g. loss of habitat) |

The list of identified species commonly involved in conflict is attached in the appendix.

4.0. Wildlife Conservation Principles

The overall objectives of human-wildlife conflict management in SDPB are as follows:

- To increase the awareness of wildlife conservation among our employees, societies and respective operational stakeholders.

- To set the standard for human-wildlife conflict management best practices and move towards achieving human-wildlife co-existence within our operations.

5.0. Value Creation

Explore opportunities in using evidence-based and adaptive management approaches in decision making to mitigate human-wildlife conflict to reduce unnecessary actions. This includes operational efficiency improvements, operational costs minimisation and conservation best practices promotion within plantation.

6.0. Roles and Responsibility

6.1. Managing wildlife in plantation

- Estate Managers need to be aware of the internal capacity to manage wildlife in plantation which includes the costs, complexity of monitoring, and also able to determine the extent of external assistance that may be required.
- Develop plans and programs to manage wildlife in plantation particularly in areas where the likelihood of finding Rare, Threaten, Endangered (RTE) / protected wildlife is high.
- Periodic management review, at least once a year, to assess the progress in meeting management's objectives.
- In case of wildlife emergency, Estate Managers must authorise personnel to communicate with the relevant authority, with assistance from GS-CBU and the regional support team.

6.2. Data collection

- Estates facing human-wildlife conflict are required to continually collect all relevant data on human-wildlife conflict within the estate's boundary.
- The record on human wildlife conflict including death of wildlife, wildlife attacks, illegal activities related to wildlife poaching and other types of conflict as defined in section 3.0, should be easily retrievable at all times at the respective estates.

- The wildlife in conflict needs to be identified and the data should be maintained separately according to species (e.g.: crop depredation by elephants, wild boars, monkeys and etc.).

6.3. Analysis of data and HWC pattern

- GS-CBU will request estates that have reported HWC previously to submit the relevant data on quarterly basis via email.
- GS-CBU will analyse this data and the findings will be used to determine the mitigation plan to address the conflict at the respective estates, as information for sustainability certifications and others when deemed necessary.

6.4. Communication and support

- GS-CBU will be the focal point of contact and engagement on matters related to human-wildlife conflict in plantation.
- This would include communication and collaboration with external parties in relation to human-wildlife conflict management and wildlife conservation in estates
- Any information related to human-wildlife conflict in plantation intended to be communicated formally to internal and external parties MUST be verified by GS-CBU.
- Similarly, any evidence related to wildlife incident, provided by the witnesses should not be shared or communicated externally including via social media without authorisation from the management. Those found committing these offences are considered breaching the company's Code of Business Conduct (COBC)³ - 10.8.

³ <http://www.simedarbyplantation.com/sites/default/files/Code%20of%20Business%20Conduct%20%28Aug%202018%29.pdf>



7.0. Training

- Wildlife awareness training will be carried out internally by GS-CBU upon request.
- All personnel assigned for wildlife monitoring such as elephant patrolling, shall attend wildlife awareness training conducted either internally by, GS-CBU and / or by external parties on annual basis.
- Estates are encouraged to seek technical training for capacity building relevant to the type of wildlife identified in their respective plantation.

8.0. Personal Protective Equipment (PPE) and Safety Aspect

- Where applicable, personnel patrolling elephant using any equipment with chemical must exercise caution in handling materials and wear suitable PPE as recommended by regional SQM - HSE team.
- Where applicable, personnel patrolling elephant using deterrent such as loud noises must exercise caution and wear suitable PPE as recommended by regional SQM - HSE team.
- PPE shall be managed in accordance with the internal Personal Protective Equipment procedures.

9.0. Operational Procedure Implementation

9.1 Administrative

9.1.1 Establishment of manpower/budget for patrolling

| | Actions | Personnel in charge |
|--|---------|---|
| 9.1.1.1 Any employee of the respective estates with skills in identifying species, experience, and passion in wildlife should be considered to be part of the patrolling team. | | <ul style="list-style-type: none"> • Respective estate management team |
| 9.1.1.2 The involvement of Auxiliary Police (AP) is highly recommended for the patrolling activity. | | <ul style="list-style-type: none"> • Respective estate management team |
| 9.1.1.3 Disciplinary actions should be taken against the patrolling team if they are found consuming / under the influence of alcohol/drug during the patrol duty. | | <ul style="list-style-type: none"> • Respective estate management team |

| | Actions | Personnel in charge |
|---------|---|---|
| 9.1.1.4 | The cost incurred in mitigating human-wildlife conflict should be indicated in the monthly financial / account reporting (<i>e.g. dedicated items, existing admin items</i>). | <ul style="list-style-type: none"> Respective estate management team |

9.2 Land-use control

9.2.1 New planting

| | Actions | Personnel in charge |
|---------|--|--|
| 9.2.1.1 | New planting SOP and documentation should complement other documentation required by internal and external parties. | <ul style="list-style-type: none"> Upstream Malaysia Respective estate management team |
| 9.2.1.2 | Avoid acquiring or investing in a new area that is known to be a wildlife corridor or seasonal movement or wildlife refuge area. | <ul style="list-style-type: none"> Upstream Malaysia Other parties involved in the acquisition process |

9.2.2 Replanting programme

| | Actions | Personnel in charge |
|---------|--|--|
| 9.2.2.1 | Replanting programme SOP and documentation should complement other documentation required by internal and external parties. | <ul style="list-style-type: none"> Upstream Malaysia Respective estate management team |
| 9.2.2.2 | Estate management should notify the GS-CBU should there be any areas pending replanting that is experiencing wildlife conflict. A localised HWC management plan should be developed. | <ul style="list-style-type: none"> Respective estate management team GS-CBU |
| 9.2.2.3 | Each estate with HWC should first carry out its mitigation plan before conducting replanting programme. | <ul style="list-style-type: none"> Respective estate management team GS-CBU |

9.3 Use of physical barriers to protect people and crops

9.3.1 Electric fencing

| | Actions | Personnel in charge |
|--|---|---|
| 9.3.1.1 Before construction | | |
| (a) | Assessment and evaluation of the suitability of the construction sites/location. | <ul style="list-style-type: none"> Respective estate management team |
| (b) | The fence should be constructed in areas that are visible from both sides and will also made maintenance work easy to access. | <ul style="list-style-type: none"> Regional support team GS-CBU |
| (c) | The type of power supply to be used (e.g. solar panels) should be identified and installed at suitable areas to receive optimum power source. Optimum areas here include, but not limited to, areas that are located on higher ground to avoid flood and abundant source of sunlight, avoid tampering by human and/or animals, and/or potential accidental electrocution (lightning) etc. | <ul style="list-style-type: none"> Another relevant department (e.g. Engineering Department) |
| (d) | The design of the fence should be discussed and communicated internally with Engineering Department, GS-CBU, and externally with Wildlife Department, Energy Commission and other relevant parties before tendering process. | |
| (e) | For a new establishment, the distance from one supporting post with another should be 10 meters and 100 meters from one main post to another. | |
| (f) | A floodgate controller should be installed at low-lying area and identified flood-prone areas. | |
| <p>Cross-references: SPEG Manual by PERHILITAN-MPOC-FELDA</p> | | |

| | Actions | Personnel in charge |
|--|---|--|
| (g) | The material used for power supply has to be certified and in compliance with the Energy Commission (EC) regulations. | |
| <i>Cross-references: Electric Fence Installation Guideline by Energy Commission</i> | | |
| 9.3.1.2 During construction | | |
| (a) | Land clearing works for this purpose have to be conducted in accordance with the company policy e.g. no open burning shall be conducted at any point of the fence installation. | <ul style="list-style-type: none"> • Respective estate management team • Regional support team |
| (b) | The felled and debris should not be transported out and disposed internally. | <ul style="list-style-type: none"> • Appointed contractors |
| 9.3.1.3 Post construction and maintenance | | |
| (a) | Every main and support posts need to be numbered and mapped. | <ul style="list-style-type: none"> • Respective estate management team |
| (b) | Replacement of materials such as posts and wires destroyed by wildlife need to be recorded. | |
| (c) | Grass cutting to be carried regularly to ensure no vegetation grows close to the wire-fence. | |
| 9.3.2 Trenches | | |
| Actions | | |
| Personnel in charge | | |
| 9.3.2.1 | Trenches constructed for security purposes are excluded from this action to be taken. | <ul style="list-style-type: none"> • Respective estate management team |
| 9.3.2.2 | Combination of trenches and electric fences, is recommended with caution and to be maintained during and after construction. | <ul style="list-style-type: none"> • Regional support team |
| 9.3.2.3 | Should management decide to use trenches, maintenance must be carried out regularly and the | |

| Actions | Personnel in charge |
|---|---------------------|
| frequency is determined by the type of soil, terrain, and rainfall. | |

9.3.3 Others

| Actions | Personnel in charge |
|--|---|
| 9.3.3.1 GS-CBU has to be informed from the commencement of the HWC mitigation effort that operations plan to undertake which include but not limited to biological control, usage of synthetic chemical or any technology. | <ul style="list-style-type: none"> • Respective estate management team • GS-CBU |
| 9.3.3.2 The effort in addressing human-wildlife conflict in SDP estates should be measurable and the effectiveness monitored accordingly. | <ul style="list-style-type: none"> • Respective estate management team • GS-CBU |

9.4 Crop guarding / patrolling

9.4.1 Routine monitoring of HCV areas and wildlife sighting

| Actions | Personnel in charge |
|---|---|
| 9.4.1.1 Routine monitoring at identified HCV areas is to be conducted by the appointed / trained person. | <ul style="list-style-type: none"> • Respective estate management team |
| 9.4.1.2 The HCV monitoring form must be filled up when observing wildlife and evidence (photo) has to be attached/ provided to the management office. | |
| 9.4.1.3 Sighting of RTE species / unusual species should be identified and recorded. | |

9.4.2 Chasing / driving elephant away during patrolling

| Actions | Personnel in charge |
|--|---|
| 9.4.2.1 A good road system along the perimeter of forest / river should be maintained for wildlife monitoring and boundary patrolling. | <ul style="list-style-type: none"> • Respective estate management team |

| Actions | Personnel in charge |
|--|---------------------|
| 9.4.2.2 The use of machines/ vehicles to deter elephants from encroaching (e.g. spotlight and engine noise) must only be done by a trained personnel/ team. | |
| 9.4.2.3 The use of technical equipment and technology such as radio communication and drones are recommended during patrol duty. | |
| 9.4.2.4 The mobile patrol team should approach the sighted elephant with caution. Check carefully for sounds or signs to see if there are other elephants in the area. Stay at the periphery and avoid moving in between elephants as it may stress them and could result in a dangerous response. | |
| 9.4.2.5 Escape routes, terrain and animal behaviour should be assessed before chasing/driving the elephants out of the areas planted with young palms (below 5 years old). | |
| 9.4.2.6 Maintain a safe distance (minimum 50 metres) should there be young elephants in a group. | |
| 9.4.2.7 Shooting or throwing objects at elephants is strongly discouraged/prohibited. | |
| 9.4.2.8 A buddy/pair system should be practised when patrolling and entering any areas with known elephant presences. If one person is focused on a task, the buddy needs to stay alert and keep a look out at the surroundings for any signs of threat or danger. | |
| 9.4.2.9 Only trained and authorised personnel can use fire and firearm to scare elephants. | |
| 9.4.2.10 Real-time communication with neighbouring landowners should be initiated to alert them | |

| | Actions | Personnel in charge |
|---|--|---------------------|
| | <p>especially when chased-out elephants had escaped into their land and to assist/ herd the elephants back to the protected area.</p> | |
| | <p><i>Cross-references: Elephant behaviour field guide by Seratu Aatai, Sabah Wildlife Department (SWD), HUTAN and Oregon Zoo</i></p> | |
| <p>9.5 Emergency situation</p> | | |
| <p>9.5.1 Personnel attacked by wildlife</p> | | |
| | Actions | Personnel in charge |
| <p>9.5.1.1 Any personnel who had encountered and chased by wildlife should report the incident to the management.</p> | <ul style="list-style-type: none"> • Respective estate management team • GS-CBU | |
| <p>9.5.1.2 Hospital Assistant (HA) or Medical Assistant (MA) receiving an injured patient following attack by the wildlife need to report to the management.</p> | | |
| <p>9.5.1.3 Management office to record the incident/ case and notify Conservation & Biodiversity Unit through email. humanwildlifeconflict@simedarbyplantation.com</p> | | |
| <p>9.5.2 Wildlife mortality and witnessing sick RTE wildlife</p> | | |
| | Actions | Personnel in charge |
| <p>9.5.2.1 Sighting of unusual behaviour, movement or/and condition of RTE wildlife (e.g. elephant in musth, abnormal excretion, etc.) should be reported verbally or/ and in writing to the estate management office as soon as possible and no later than 24 hours.</p> | <ul style="list-style-type: none"> • Respective estate management team | |
| <p>9.5.2.2 Any findings of dead RTE wildlife within the estate should be reported verbally or/ and in writing to the</p> | | |



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| | Actions | Personnel in charge |
|-------------------------------|---|---|
| | estate management office as soon as possible and no later than 24 hours. | |
| 9.5.2.3 | Witness must provide information as complete as available, example any sighting of body parts missing, and providing photos as evidence is encouraged. | |
| 9.5.2.4 | Estate management to notify through the most convenient channel of communication to local Wildlife Department officer and inform GS-CBU as soon as possible and no later than 24 hours. | |
| 9.5.2.5 | Estate management to arrange for the incident site to be barricaded and to ensure that the site is not encroached until further advice from the local Wildlife Department officer. | <ul style="list-style-type: none"> • Respective estate management team • GS-CBU |
| 9.5.3 Removal of RTE wildlife | | |
| | Actions | Personnel in charge |
| 9.5.3.1 | Where possible, the wildlife should be allowed to roam and use the mature area as a passageway in between adjacent plantations and other land use in the landscape. | <ul style="list-style-type: none"> • Respective estate management team • GS-CBU |
| 9.5.3.2 | Translocation of RTE species should be the last option in mitigating human-wildlife conflict. | |
| 9.5.3.3 | An exception removal can be considered in situations where a serious and persistent crop-raider has become habituated to all mitigation measures employed and threatening the safety of humans. | |

10.0. Documentation

The result from any internal and external platforms of project collaborations related to wildlife conservation, wildlife conflict mitigation, and patrolling capability improvement in plantation should be recorded and maintained for analysis, monitoring and reporting purposes.

Document retention and filing related to wildlife management and monitoring should be developed and recommended to include but not limited to the following items;

- Crops / property damage caused by wildlife (along with the insurance documents to be submitted to Finance Department - Insurance & Management)
- RTE wildlife roaming/ sighting (HCV monitoring form, wildlife photos, camera trapping, etc.)
- Wildlife emergency (workers being attacked by wildlife, wildlife injury and death)
- Wildlife conservation projects (internal and external collaborations)
- Electric fence maintenance details
- Others

11.0. Reporting

This procedure should support the internal procedures of Class 11 (SDP/SQM(ESH)/001-2-9) on incidents involving the death of RTE species or damages to conservation areas within our operating areas.

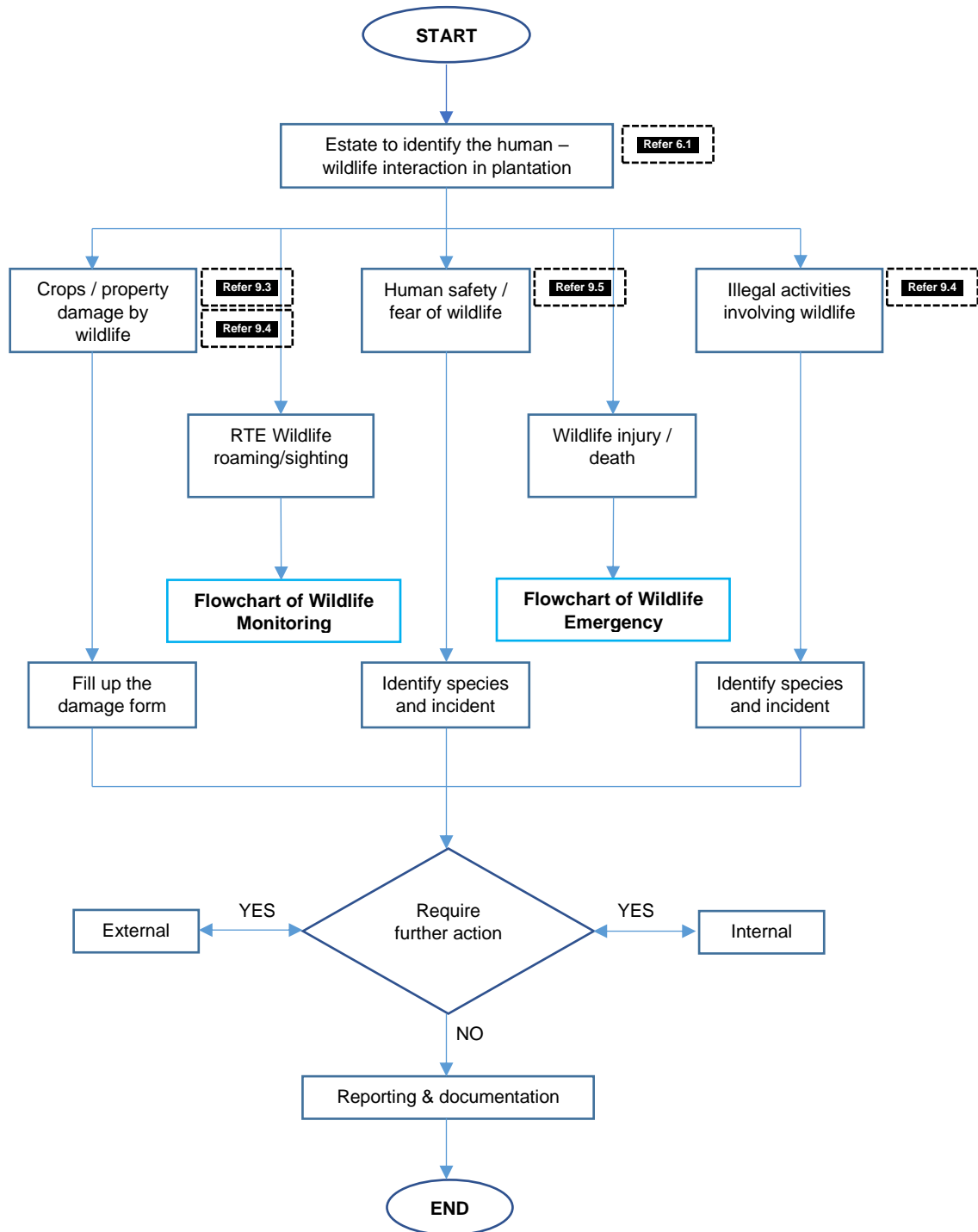
Refer to the reporting flowchart for:

- Overview of wildlife management and monitoring
- Wildlife monitoring (e.g. wildlife sightings, HCV area monitoring, etc.)
- Wildlife emergency (e.g. sick, injury and death)

12.0. Reference Documents:

- Wildlife Conservation Enactment 1997
- Wildlife Conservation Act 2010 (Act 716)
- Wildlife Protection Ordinance 1998
- Elephant Action Plan (2012 - 2016) by Sabah Wildlife Department, Ministry of Tourism, Culture and Environment
- National Elephant Conservation Action Plan by Department of Wildlife and Nature Park (DWNP), Ministry of Natural Resource & Environment
- Guidelines on the Better Management Practices for the Mitigation and Management of Human-Elephant Conflict in and around Oil-Palm Plantations in Indonesia and Malaysia by WWF – Malaysia. Version 1; 29 July 2005
- ESH Management System Manual, Incidents, Accidents & Non-conformance management by Sime Darby Plantation (M) Sdn. Bhd. Doc ID: SD/SDP/SQM (ESH)/001-2-9; February 2015
- Elephant Behaviour Field Guide by Seratu Aatai, Sabah Wildlife Department (SWD), HUTAN, and Oregon Zoo
- Sistem Pagar Elektrik Gajah (SPEG), by PERHILITAN-MPOC-FELDA
- IUCN Redlist of Threaten Species: <https://www.iucnredlist.org/>
- IUCN Human-Wildlife Conflict Taskforce website: <http://www.hwctf.org/>

1. Overview of wildlife management and monitoring





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2. Decision-making approach for wildlife management and monitoring

| <i>What is the wildlife conflict / interaction in your estate?</i> | Crops / property damage by wildlife | RTE Wildlife roaming/sighting | Human safety / fear of wildlife | Wildlife injury / death | Illegal activities involving wildlife |
|--|---|--------------------------------------|---|--------------------------------|--|
| <i>What information you need to provide?</i> | Census on damages - breakdown on the property/ crop details (field and total palms) and wildlife details (how many, what species) | Wildlife Monitoring Flowchart | Identify species and details of incidents which includes witness details and nature of sightings / experience | Wildlife Emergency Flowchart | Identify species and details of incidents |
| <i>What forms to fill?</i> | 1. Crop damage form 2. Insurance claim form (if applicable) | | 1. HCV monitoring form 2. Keep photos/video in the data folder at the office | | 1. HCV monitoring form 2. Keep photo/video of evidence in the data folder at the office |
| <i>Who to report the incidents to?</i> <i>(Records to be maintained and retrievable)</i> | 1. Management team 2. GS-CBU team 3. Wildlife Department if the wildlife persists/ incident recurs | | 1. Management team 2. GS-CBU team 3. Wildlife Department if the wildlife persists/ incident recurs | | 1. Management team 2. GS-CBU team 3. Wildlife Department if the wildlife persists/ incident recurs |



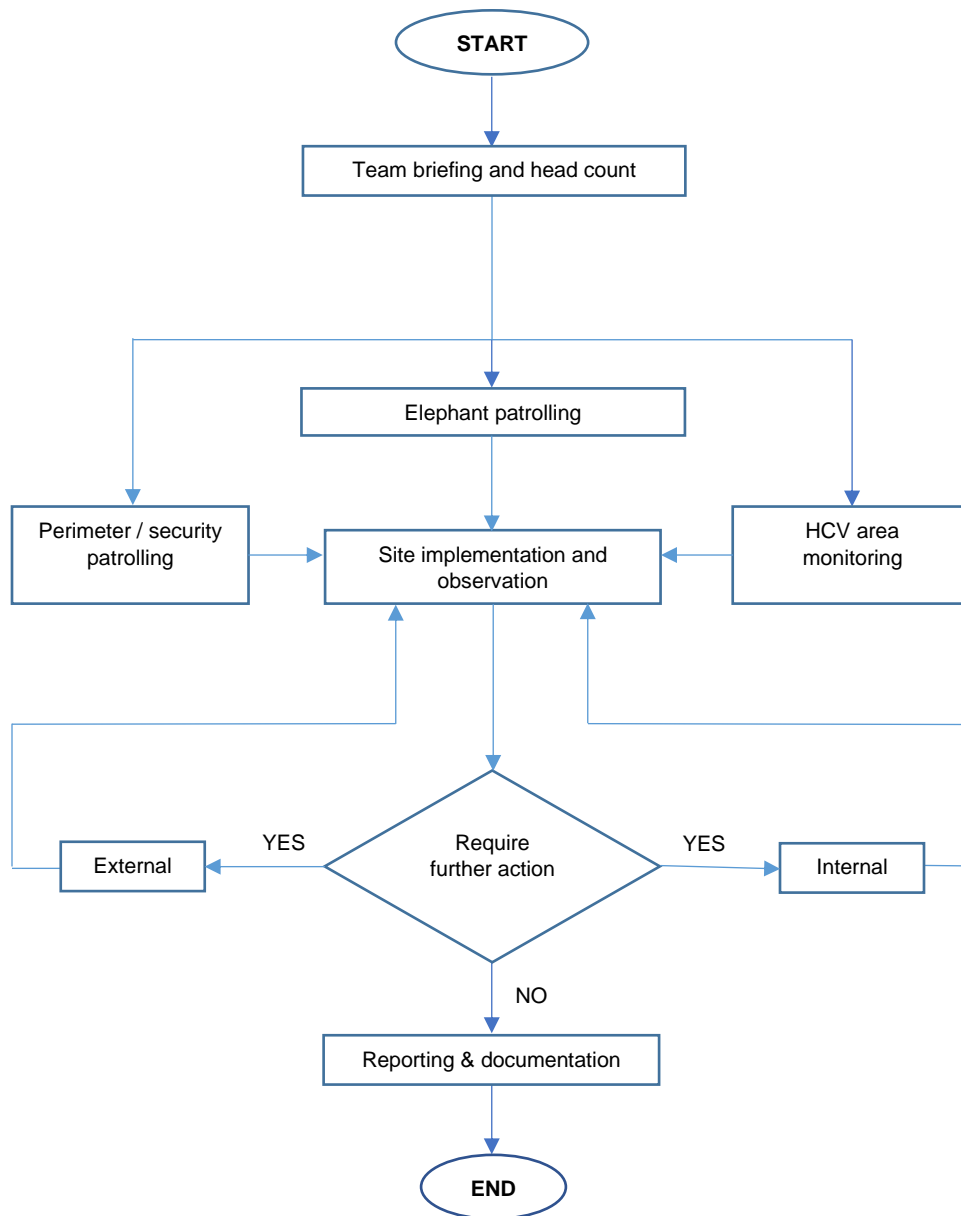
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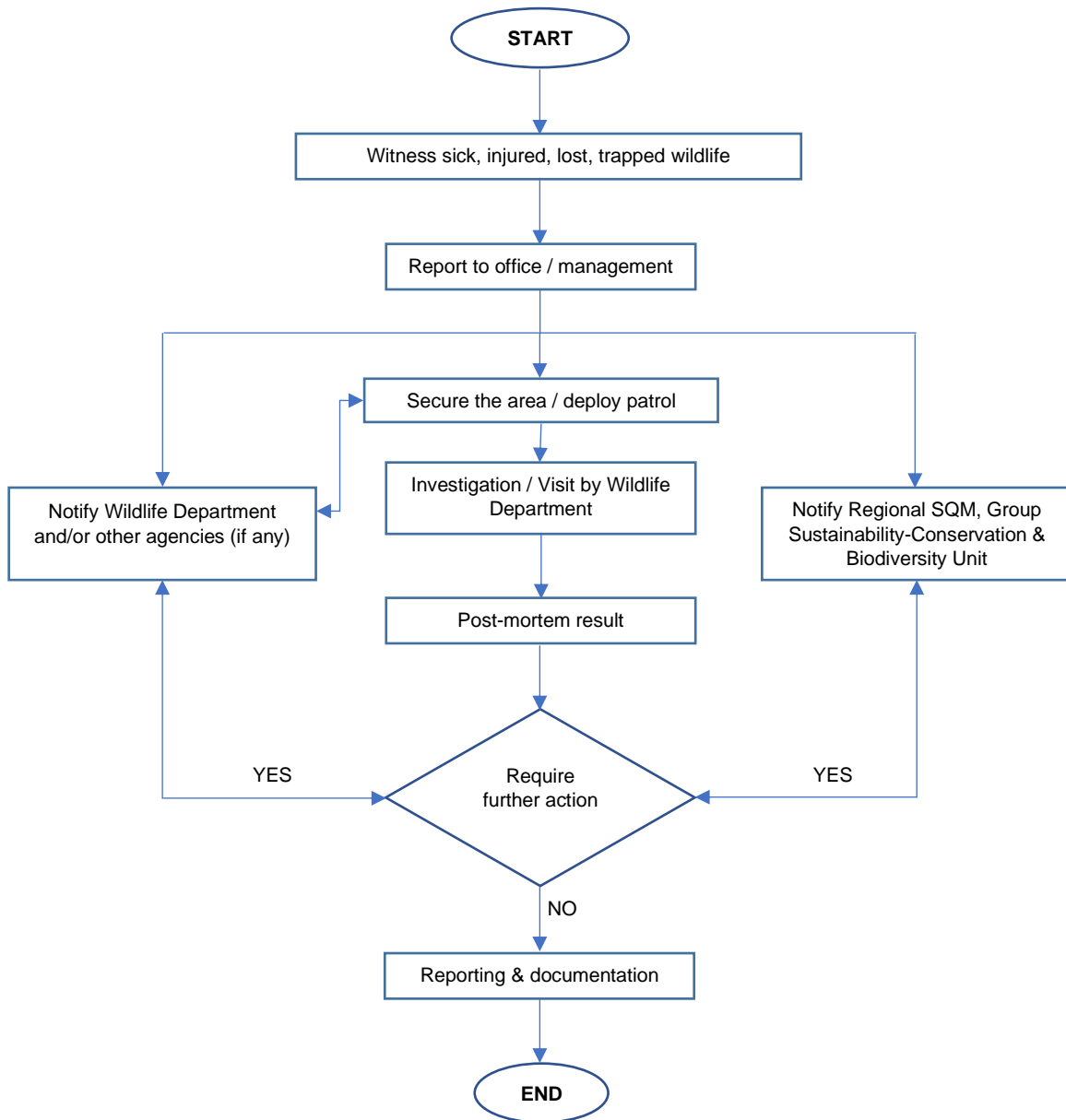
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| <i>What is the wildlife conflict / interaction in your estate?</i> | Crops / property damage by wildlife | RTE Wildlife roaming/sighting | Human safety / fear of wildlife | Wildlife injury / death | Illegal activities involving wildlife |
|---|--|--|--|---|--|
| | 4. Police, for insurance claim | | 4. Jabatan Pertahanan Awam (after informing the Wildlife Department) | | 4. Police, for illegal activities |
| <i>When should I report?</i> | Not later than 24 hours through the most convenient communication platform | | Not later than 24 hours through the most convenient communication platform | | Not later than 24 hours through the most convenient communication platform |
| <i>How to mitigate / resolution for the incidents?</i> | Physical barrier and active patrolling | Routine patrolling and management review | Subject to the identified species, awareness programme / individual consultation should be provided. | Real-time communication with other landowners and good rapport with local wildlife department | Good rapport with local wildlife department and police |

3. Flowchart of wildlife monitoring (e.g. wildlife sightings, HCV area monitoring, etc.)



4. Flowchart of wildlife emergency (e.g. sick, injury and death)





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EMERGENCY CONTACT/HOTLINE NUMBER

1. Peninsular Malaysia
 - a. PERHILITAN hotline 1-800-88-5151 (Monday to Friday 8am until 6pm)
 - b. MYCAT wildlife crime hotline at 019-3564194 (24hr, 7days a week)
 - c. Website for directory: <https://www.wildlife.gov.my/index.php/2016-04-11-03-50-17/2016-04-11-03-57-37/2016-04-12-01-28-44>

2. Sabah
 - a. SWD hotline at 088-254767 (24hr, 7days a week)
 - b. e-Complaint site accessible via www.wildlife.sabah.gov.my
 - c. Website for directory: <http://www.wildlife.sabah.gov.my/>

3. Sarawak
 - a. SFC hotlines Kuching (019-8859996, 016-8565564),
 - b. SFC hotlines Sibul (019-8190140, 019-8894474),
 - c. SFC hotlines Bintulu (019-8223449, 019-8332737), and
 - d. SFC hotlines Miri (019-8224566, 019-8290994).
 - e. Website for directory: <https://www.sarawakforestry.com/our-offices/>



GLOSSARY OF TERMS

| | |
|--------------------|---|
| RTE | Rare, Threatened and Endangered (RTE) species as defined by the IUCN Species Conservation Status |
| Conflict | The conflict is as defined in 3.0 |
| Wildlife incidents | The incidents that occur involving animal and human interaction as listed in the 3.0 |
| Pest | Protected wildlife is known to be viewed as “pest” due to their depredation behaviour on agriculture crops. |

COMMON / IDENTIFIED HUMAN-WILDLIFE CONFLICTS

| No | Species in conflict | Remarks |
|----|---------------------|--|
| 1 | Asian Elephant | <ul style="list-style-type: none"> Listed as Endangered Species on IUCN. Listed as Vulnerable Species on Redlist of Mammals for West Malaysia, V2.0. Listed as Totally Protected Species in Malaysia. The conflict generally occurs when land clearing for oil palm/ replanting programme commences at estate/ plantation bordering a reserve. The conflict involves loss of crops, property and causes fear among workers. |
| 2 | Wild boar | <ul style="list-style-type: none"> List of protection subjects to species (i.e <i>Sus barbatus</i> listed as Vulnerable on IUCN and endemic to Borneo). Listed as Totally Protected Species (<i>Sus barbatus</i>) in West Malaysia, others are protected (<i>Sus scrofa</i>) with license/permit to kill/hunt. The conflict generally occurs at reserve borders, replanting areas and mature oil palm areas. The conflict involves damage of crops and causes fear (being chased) among workers. |
| 3 | Long-tailed macaque | <ul style="list-style-type: none"> Previously listed as Least Concern Species, elevated as Vulnerable species on IUCN in 2020, protected with licence/permit to kill/hunt by Malaysia Acts. Also known as the crab-eating macaque The most common conflict in public areas. The conflict usually starts when to human starts to feed them or/and poor management of waste bins. |

| No | Species in conflict | Remarks |
|----|---------------------|--|
| 4 | Pig-tailed macaque | <ul style="list-style-type: none"> Previously listed as Vulnerable Species, elevated as Endangered Species on IUCN in 2020. Listed as Least Concern Species on Redlist of Mammals for West Malaysia, V2.0. Aggressive compared to long-tailed. The conflict usually involves charging and chasing of workers by the alpha male. |
| 5 | Snake | <ul style="list-style-type: none"> Depending on the species, conflict mostly involved King cobra (<i>Ophiophagus hannah</i>), Indian cobra (<i>Naja naja</i>) and Monocled cobra (<i>Naja kaouthia</i>). Generally, the rescue is carried out by the local Jabatan Pertahanan Awam. |
| 6 | Crocodile | <ul style="list-style-type: none"> Estuarine Crocodile listed as Least Concern Species, but False Gharial listed as Vulnerable on IUCN. Sarawak has announced through media, commercial culling to reduce crocodile-human conflict. The conflict generally occurs at riverbanks either sighting the animals sun-bathing, predating or nesting, mainly reported during fishing/river activities. |
| 7 | Bat | <ul style="list-style-type: none"> Depending on the species, conflict mostly occurred at workers' housing complex that has fruit orchards/trees. The conflict involves bats that reside in the roofs and instil fear of zoonotic infections in human. |
| 8 | Others | Other conflicts with wildlife such as pangolin, porcupine, civet, and deer are described as not a significant conflict. The conflict is not harmful to human but impacts on the wildlife, especially conservation issues such as illegal trading and consumption. |



Sime Darby Plantation Berhad

Standard Operating Procedure for Human-Wildlife
Conflicts Mitigation in Plantation

2020

APPENDICES

1. Crops /property damage form
2. HCV monitoring form
3. Electric fence maintenance form
4. SPEG guideline on elephant electric fence
5. EC Guideline on general electric fences
6. Elephant Behaviour Field Guide for Bornean Elephant