

# WILDLIFE MANAGEMENT SERVICES

*(a division of Critter Control, Inc.)*

## SUGGESTED PROTOCOL FOR THE RESPONSIBLE MANAGEMENT OF WILDLIFE AFFECTED BY LAND CLEARING AND THE MODIFICATION OF WILDLIFE HABITATS

*Based upon initiatives of  
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# 1 INTRODUCTION AND BACKGROUND

## 1.1 Suggested Protocol for the welfare and management of wild animals affected by land-clearing and habitat modification:

This Suggested Protocol provides guidelines to ensure that fair, reasonable and appropriate measures are available to those involved in the destruction or modification of wildlife habitats; the overall purpose being to minimize the adverse effects on wild animal welfare and conservation. The principles set out in this protocol are for the guidance of land and real estate developers, municipal planners, plant and machinery operators, lumber companies, farmers, and any other person, entity or agency involved in activities which are likely to cause the unnecessary suffering, displacement or death of wild animals, either directly or indirectly, as a result of destruction, modification or disruption of wildlife habitats. The suggested protocol will help in reducing conflicts between people and wildlife, including but not limited to animal/vehicle accidents, destruction and damage to homes/structures and property, drop damage, aircraft strikes, etc.

The protocol emphasizes the responsibilities of all relevant parties to:

- take all reasonable steps necessary to prevent cruelty and/or suffering to animals
- minimize the loss of wildlife caused directly or indirectly by development or land-clearing
- conserve, as much as possible, the ecological values of development sites and their surrounding natural environment.

The protocol also provides operating procedures and guidelines for wildlife control operators, on whom much of the responsibility rests to ensure application of this protocol, in respect of projects for which they are contracted or employed.

Although the greater community is largely unaware of the impacts of development on wildlife, there exists, nevertheless, an expectation that animals, whether domestic or wild, should not be treated cruelly. This protocol reflects that general societal view by providing guidelines and mechanisms to minimize cruelty to, or suffering of, wild animals as a result of development processes.

## 1.2 Wildlife loss associated with land-clearing

Loss of habitat and large scale habitat modification represents the most significant threat to wildlife in the United States. Substantial numbers of native mammals, birds and reptiles die yearly as a result of broad-scale clearing of land. Land-clearing may also isolate populations or individuals in pockets of habitat, leaving them susceptible to accident, urbanization, natural disasters, overpopulation, genetic degradation through inbreeding, and a range of other deleterious effects.

### **1.3 Wildlife issues associated with land-clearing**

Aside from the long-term ecological consequences of such a massive loss of wildlife, there are serious animal welfare issues associated with the methods used in the clearing of vegetation while animals are present. Although some animals may be killed instantaneously, it is likely that a much larger proportion suffer painful, distressing or prolonged deaths. Furthermore, displaced animals that survive the process of clearing may be subject to increased exposure to accidents, motor vehicle trauma, starvation or attack by other animals or predators.

#### **1.3.1 Animal injuries associated with land-clearing**

Animals injured directly in the process of vegetation clearing generally suffer from major crushing or fall related injuries. Arboreal species may suffer from trauma associated with falling from a tree and/or crushing and injuries associated with branches and limbs falling on or beside them. Such injuries include severe internal bleeding and organ disruption, multiple bone breaks, eye and head injuries. Animals resting in tree cavities, similarly, may receive crushing injuries if the hollow trunk disintegrates, or suffer internal organ injuries and tearing as a result of falling.

Ground dwelling animals, such as turtles, snakes and lizards most commonly suffer from crushing and tearing injuries (such as traumatic limb amputation), or may be buried alive during earthworks.

Highly mobile species such as birds and most mammals may avoid direct injury by machinery, but may suffer injuries by running into fences, motor vehicle strike or other accidents.

Injuries suffered by animals during land-clearing vary from mild to severe and fatal, but these animals are only rarely presented to wildlife rehabilitators. This is primarily because they are less likely to be discovered by members of the community and are more usually buried or confined in piles of debris during the process of clearing, which are then subsequently burned, chipped or deposited in a landfill.

#### **1.3.2 Accident and starvation associated with land-clearing**

Animals that survive the process of land-clearing may succumb later to starvation, predation, territorial aggression, accident (such as drowning in swimming pools, entanglement in fences, and the like), domestic animal attack, motor vehicle strike and failure to adapt to new habitats. A small proportion of animals may disperse to adjacent habitats with little ill-effect, but, contrary to popular belief, the proportion of animals successfully doing this is likely to be small. Wildlife species that are forced from their natural habitat must compete for food and shelter and may become more susceptible to

disease - and will seek other habitats, infringing on human populations and dwellings, becoming nuisance wildlife.

### **1.3.3 Isolation of wildlife and habitat fragmentation**

Developments or land-clearing that result in destruction or diminishment of habitat corridors or loss of habitat connectivity may result in reduction or loss of the ability of individuals of a species to disperse from the isolated habitat fragment. This may lead to loss of wildlife through overpopulation and starvation, mortality during dispersal attempts, and loss of individuals through edge effects (such as domestic animal attack), as well as marked diminishment of ecological values generally. Wildlife populations isolated by loss of corridors present larger and more complex management problems for future developments impinging on the remaining habitat, or alternatively may reach a critical population mass at which mass mortality occurs, or causes human-animal conflict issues for surrounding communities. Property damage may also occur when species invade residential neighbors in search for food and shelter.

### **1.4 Removal of wildlife prior to land-clearing and “eco-friendly” development**

The removal of wildlife from sites shortly prior to, and during vegetation clearing represents the most proximate mechanism for reducing wildlife injury and mortality associated with land clearing, and will reduce human/wildlife conflicts in surrounding areas. This requires the use of personnel skilled in the detection and removal of wildlife from vegetation and other terrestrial habitats, and the adoption of protocols and procedures for the humane trapping, handling, housing, translocation and disposition of wildlife following removal from their habitats.

The application of ecologically sound design and planning principles to proposed developments represents the most important method of reducing and minimizing adverse impacts on wildlife and the ecological value of habitat remnants. These principles should be rigorously applied to all development proposals at an early stage in planning to minimize the requirement for expensive (and less desirable) wildlife and habitat management alternatives, some which are detailed in this protocol. It is important that all parties involved in urban and rural planning and development projects attempt to adhere to ecologically sound and sustainable development principles.

### **1.5 Relevant legislation**

A number of state, federal and possibly local laws provide some degree of legislative protection for wildlife likely to be affected by land clearing, including the Endangered Species Act, The Migratory Bird Treaty Act of 1918, various state game laws and local ordinances.

## **2 SCOPE AND AIMS OF THE PROTOCOL**

### **2.1 Scope**

This Suggested Protocol provides guidelines for the humane treatment of wildlife affected by the clearing of vegetation or other natural or artificial terrestrial wildlife habitats. The first section deals with the general responsibilities of any person engaged in, or directing an activity that involves destruction or modification of wildlife habitats, including artificial habitats. The second section deals with the specific roles and responsibilities of appropriately certified wildlife control operators.

Many minor activities or development processes relevant to this protocol may not require the use of a wildlife control operator (see Section 1 of the protocol). However, for larger projects or activities in which wildlife is likely to be at risk, the use of appropriately licensed/permitted and adequately insured wildlife control operator(s) is required for compliance with this protocol.

The developer, wildlife control operator, and any other person whom by virtue of their activities or involvement in a development, has a “duty of care” towards animals that may be affected by the development or activity.

It is not the intent of this protocol to provide detailed description of ecological assessment, but rather, operating procedures (SOPs) for wildlife control operators aimed at ensuring consistency and effectiveness of practice; and guidelines to assist developers and others in their legal and ethical obligations to minimize injury, hardship, suffering or death to wild animals, associated directly or indirectly with land-clearing and other development processes.

### **2.2. Aims**

The broad aim of the protocol is to provide guidelines and procedures that will ensure that all reasonable steps are taken to protect the welfare of wild animals affected by land-clearing or other forms of wildlife habitat modification or destruction.

The specific aims of this Suggested Protocol are:

- to provide guidelines to prevent or minimize cruelty or harm to wild animals associated with, or resulting from land-clearing and other development processes;
- to provide standard operating procedures for wildlife control operators;
- to define the requirements for licensing/permitting of wildlife control operators working under this code;

- to define the requirements for adequate and appropriate insurance of wildlife control operators for the protection of developers and the general public;
- to provide guidelines on the management of wildlife likely to be affected by land-clearing and other development processes;
- to provide guidelines for minimizing the ecological harm caused by land-clearing and development

### **3 IMPORTANT GUIDING PRINCIPLES UNDERPINNING THE SUGGESTED PROTOCOL, AND DEFINITIONS**

#### **IMPORTANT PRINCIPLES**

##### **3.1 Duty of care**

“Duty of care” obligations to wild animals are similar to those underpinning the majority of applicable local, State and Federal animal protection laws. The duty of care responsibility rests individually and collectively on any and all parties involved with, engaged in, or directing land-clearing or the destruction or modification of wildlife habitat.

Furthermore, the duty of care exists in respect of any wildlife habitat, irrespective of whether animals are known to use the habitat or not. In other words, wildlife must be *assumed* to be present in potential wildlife habitat unless or until proven otherwise by a person suitably trained and/or experienced to make that judgment.

Duty of care relates to the responsibility of a person, or persons, involved in an activity that may result in harm to or death of an animal or animals, to take all fair, reasonable and appropriate steps to avoid or minimize that risk. Failure to meet duty of care responsibilities, that is, failing to take fair, reasonable and appropriate measures to avoid or protect wild animals from harm, is a violation of this code and may, in the most egregious instances or when protected or endangered species are involved may result in prosecution under the applicable local, State and/or Federal laws.

##### **3.2 Due diligence**

The term “due diligence” relates to the application of sufficient and appropriate techniques to detect the presence of animals, or determine the absence of animals, in a tree, structure or other habitat. It also applies to determination of whether a structure, habitat feature or site is likely to be important or essential to the survival of a wild animal or population. It may also apply to assessment of the risk posed by a development process, activity or structure, to wildlife or their habitats.

Due diligence is an essential part of the protocol, and must be performed by a qualified professional (biologists, certified wildlife control operators, governmental wildlife officials/agents, etc.) prior to engaging in an activity or development process relevant to this code.

### 3.3 Fair, reasonable and appropriate measures

Fair, reasonable and appropriate measures” includes guidelines, recommendations and suggested operating procedures included in this protocol, plus any other measure or activity that is available, suitable and appropriate to minimize the risk of harm to animals, or deleterious impacts on the natural environment. This guiding principle recognizes that any process that causes significant disruption or destruction of wild animal habitats may result in the death of some animals, (particularly small animals such as lizards, turtles, frogs and the like), in spite of efforts to avoid it.

Current societal attitudes lead to an expectation that fair and appropriate steps are taken to avoid or minimize cruelty or suffering to animals, and that due respect is given to minimizing adverse impacts on their habitats. The expertise of wildlife control operators and other suitably qualified or experienced people is important in determining what constitutes fair, reasonable and appropriate measures, in the present circumstances.

### 3.4 Definitions

For the purposes of this Suggested Protocol:

**“vegetation”** is any native or non-native tree, shrub or plant, including grasses and “remnant vegetation” and “re-growth (non-remnant) vegetation”

**“animal”**, **“wildlife”** and **“fauna”** are any free-living native or non-native vertebrate animal, including feral animal and declared pest animal species, and any invertebrate animal specifically protected under the applicable local, State and/or Federal laws.

**“wildlife habitat”** is any natural terrestrial, subterranean or aquatic habitat, or man-made structure, or other structure known to be, or reasonably likely to be used by wildlife. Wildlife habitats include, but are not necessarily limited to:

- (a) vegetation, or vegetated areas, including forests, plains, wetlands, grasslands, dunes, deserts, and marine environments; whether classified as “remnant” or “non-remnant”, and whether native, non-native or artificially created.
- (b) Freshwater and marine habitats
- (c) Caves, rocky outcrops, river banks and other natural geological features
- (d) Man-made or artificial structures or habitats, such as drains, buildings, dams, canals, bridges, telecommunication towers, or any other structure known, or reasonably likely to be used by wildlife.

**“wildlife corridor”** is any section, strip or area of wildlife habitat (whether degraded or not), or cleared area, that is known to be used as, or may reasonably be expected to act as, a corridor for wildlife movement, between, or linking wildlife habitat areas.

**“essential wildlife habitat”** is any wildlife habitat block or area, or feature that is reasonably likely to be essential to the survival of one or more wild animals, such as a dam that is the only source of water for a wild animal or local wildlife population.

**“land clearing”, “development processes”, and “relevant activity”** mean any process or activity that involves, causes, or results in, either directly or indirectly, the removal, destruction, or significant modification of natural or man-made wildlife habitats, that are known to contain, or may reasonably be expected to contain, support, or be used by, wildlife, for their survival, movement and reproduction, to an extent that is reasonably likely to cause death, suffering or significant hardship.

**“certified wildlife control operator”** is any person duly licensed/permitted and in accordance with this protocol, is thereby authorized under the applicable local, state and/or federal law(s) to conduct and/or supervise wildlife control activities including but not limited to the detection, capture, removal and disposal of wildlife from sites proposed to be developed and who for the protection of the developer, the general public and others provides proof of general liability insurance in an amount no less than \$1,000,000.

**“developer”** is any person, corporation, entity, government body or agency conducting or proposing to conduct land clearing, vegetation clearing or other development processes, or any activity that results in the modification or destruction of wildlife habitats or corridors. For the purposes of the code, this definition includes plant and machinery operators, tree trimmers, site foremen, and any other person or persons engaging in, directing or supervising any activity or process involving the destruction or modification of a wildlife habitat, or other development process relevant to this code.

**“operating procedures (OP)”** are any documented procedures or protocols required to be routinely applied by relevant personnel to ensure compliance with the suggested protocol.

**“Wildlife Protection and Management Plan (WPMP)”** is a document prepared by a wildlife control operator or similarly trained and licensed individual, that defines all of the actions and measures, and their timing, in relation to a development or activity, required to protect the welfare of wild animals and minimize the adverse ecological impacts of that development or activity, to a level, guideline or standard as outlined in the suggested protocol, and consistent with the intent of all applicable local, state and/or federal laws. The WPMP is to be prepared before the onset of site clearing or development.

**“Wildlife Management Report”** is a document prepared by a wildlife control operator at the completion of a project, which details the wildlife and habitat management procedures recommended and used for the development. It contains detailed data on animal capture, movement and disposal.

## SUGGESTED PROTOCOL

### SECTION 1: GENERAL PRINCIPLES

#### **Responsibilities of a developer**

- 1.1 A developer must not proceed with any development process or activity (as defined in the previous section) without first:
- a) having determined by a certified wildlife control operator whether, or not, a site, or portion of a site, or structure, that is proposed to be subject to a development process, is likely to be used as a wildlife habitat; and
  - b) applying due diligence in determining the presence or absence of wild animals (if a site or structure contains a wildlife habitat); and
  - c) determining that the site is *not* an essential wildlife habitat, and is *not* part of a wildlife corridor; and
  - d) determining ways to minimize any harm, injury or death to any wild animals using the habitat or site as a result of the proposed development process or activity; or
  - e) applying fair, reasonable and appropriate measures to avoid such harm, injury or death, including engaging a certified wildlife control operator in circumstances defined by this code.
- 1.2 In the case of minor projects or activities, such as minor earth works on previously cleared land, or the removal of one or more small trees, the requirement for due diligence may be satisfied by simple observation.

*For example: if a small tree is to be removed, “due diligence” and “fair, reasonable and appropriate measures” may be satisfied simply by close observation of the tree to confirm the absence of nests, hollows, animals under sloughing bark, and the absence of animals on the branches or in the canopy.*

- 1.3 Approval of a development site and/or permits by state or local Boards of Zoning or building authorities does not relieve a developer of their obligations in respect of this protocol, state or federal wildlife protection statutes.

#### **Requirement for engagement of a certified wildlife control operator**

1.4 In the case of any proposed project, activity or process, in which a lay person could not reasonably be expected to make the determinations defined in section 1.1 (a-d) above, then a certified wildlife control operator or other appropriately licensed/permitted and insured person, must be engaged to perform the same.

1.5 Furthermore, if a site, or portion of a site, or structure forms part of a wildlife corridor of a protected species, or forms a significant part of a protected species home range or territory, such that its destruction may result in harm or death to the animal, or have a

significant adverse ecological effect, then a certified wildlife control operator must be engaged to prepare and implement a Wildlife Protection and Management Plan (WPMP).

*Mitigation techniques are allowed. For example: the removal of a pole or snag used as a nesting site by ospreys must not occur without an appropriate replacement and the involvement of a licensed and insured certified wildlife control operator.*

1.6 Certain criteria relating to a site or proposed development processes or activities may determine the need for the engagement of a wildlife control operator, and include, but are not limited to:

- a) removal of any tree, or trees, containing nest/den cavities or bird nests or other features indicative of current or recent use by wildlife as determined by qualified personnel and;
- b) removal of all or part of a significant wildlife corridor or essential wildlife habitat, or any process or activity that, for compliance with the code, requires the capture, trapping or removal of native animals;
- c) removal of any complex structure or habitat feature (such as an old farm shed, or brush or log pile) which cannot, by cursory observation, be determined to be uninhabited by wildlife.

### **Discharge of a developer's responsibilities under the Suggested Protocol**

1.7 If a developer has satisfied the provisions of section 1.1 above, then that is sufficient discharge of their responsibilities and a development activity or process may proceed.

1.8 If a certified wildlife control operator or qualified personnel engaged in that role, for a project or activity makes a determination (in writing) that a development process is *unlikely* to cause significant adverse effects on wild animals, then that will be sufficient discharge of a developer's responsibilities, and the development activity or process may proceed.

1.9 Notwithstanding sections 1.7 and 1.8 above, if new information becomes available regarding the presence of animals on, or using a site, then any determinations regarding the need for engagement of a wildlife control operator, and/or fair, reasonable and appropriate measures to protect the welfare of animals, may need to be reviewed.

### **Removal of wildlife from a site without a certified wildlife control operator**

1.10 A person, other than a licensed and insured certified wildlife control operator, may not catch, remove, harass or disturb any animal protected under local, state and/or Federal laws unless that person is properly licensed or permitted by the appropriate local, state and/or federal regulatory agency(s).

1.11 Notwithstanding section 1.10 above, if an animal has wandered onto a site that has previously been assessed as fulfilling the requirements of this code, *and* a licensed and

insured wildlife control operator is not immediately available, then the animal may be encouraged to move off the site, with due care and attention paid to minimizing the stress or danger to the animal, subject to the following criteria being met:

- a) the animal can be easily encouraged to move back into safe habitat without capture or undue interference or distress; and
- b) suitable habitat is easily able to be reached by the animal; and
- c) there are no proximate risks (such as busy roads) to the animal's safety; and
- d) there are no other apparent reasons to require the animal's capture (such as significant injury or illness).

*For example: if Canada geese are grazing on grassland (the development site) which is adjacent to an area of secure wetlands or ponds, and no proximate danger is apparent (such as a busy road), then the geese may be carefully encouraged back into the wetland or pond area prior to the onset of operational works.*

1.12 However, if a potential risk or danger to an animal is apparent (such as proximity to a busy road), or an animal would more appropriately be captured and translocated, then a licensed and insured wildlife control operator or governmental wildlife officer must be engaged to manage the situation.

1.13 Notwithstanding section 1.12 above, if a wildlife control operator is not available within a reasonable timeframe, then a developer may contact the local or regional office of the appropriate local, State and/or Federal regulatory agency, for direction on an alternative course of action that will comply with the Provisions of the Suggested Protocol

### **Use of wildlife control operators for development activities or processes**

1.14 Licensed and insured wildlife control operators must be used in all circumstances requiring, or likely to require, or cause:

- a) the capture or removal of wildlife as required by the code (except as exempted by virtue of section 1.11 of the code, above)
- b) the preparation of a Wildlife Protection and Management Plan
- c) the destruction or modification of an essential wildlife habitat or habitat feature, or a wildlife corridor
- d) any impact, either through operational works, or by virtue of the design or functioning of a development after completion, that is likely to have a significant adverse effect on a wild animal or wildlife population

*For example: if a development will require the construction of a road (which is likely to become busy) through a wildlife habitat, or if, by virtue of the development, an existing road is likely to bear a significant increase in traffic, then the engagement of a wildlife control operator and the preparation of a WPMP is required for compliance with the code, even if the road is not part of the development or site.*

1.15 The omission of a “wildlife control operator must be used” condition on a local government development approval is not sufficient grounds for exemption from compliance with the requirements of section 1.14 above.

## SECTION 2: LICENSING/PERMITTING AND RESPONSIBILITIES OF WILDLIFE CONTROL OPERATORS.

### **Roles of qualified wildlife control operators**

2.1 The proper conduct of wildlife management procedures at land-clearing and development sites involves processes such as:

- fauna and flora assessment;
- species identification;
- animal trapping, capture and handling;
- assessment of animal health and injuries;
- assessment of development impacts on wildlife and ecosystems
- preparation of Wildlife Protection and Management Plans
- husbandry of captured wild animals;
- identification of suitable wildlife release sites;
- emergency euthanasia of injured or sick animals.

2.2 Personnel conducting these activities must be suitably trained in these techniques, and also licensed by appropriate government authorities. It is understood that a combination of qualified personnel may be required to complete all tasks

### **Licensing/permitting of wildlife control operators**

2.3 The wildlife control operator and/or the employees of the wildlife control operator shall be duly tested, licensed and/or permitted as per the appropriate local, State and/or Federal laws applicable to the location of the site and the jurisdiction of the regulatory agency(s).

### **Powers and responsibilities of wildlife control operators**

2.4 Under the provisions of the appropriate local, State and Federal laws licensed wildlife control operators may have specific powers and responsibilities. These powers and responsibilities are intended to ensure the best animal welfare outcomes for wildlife affected by development. Misuse of powers or failure to meet responsibilities may result in revocation of license or permit as a wildlife control operator and/or civil or criminal penalty at the discretion of the appropriate local, State and/or Federal regulatory agency(s).

### **Powers of wildlife control operators under applicable local, state and/or Federal laws**

2.5 A licensed and insured wildlife control operator and/or qualified personnel engaged in that role for a development or activity has the authority under this protocol to make an

**animal welfare direction** in respect of operations, activities or structures that may impact on the welfare of wild animals. The direction should be made in an approved written format (Appendix 1) This direction may define the timing of and actions or measures required to protect the welfare of animals likely to be affected by such operational works, activities or structures. Any breach of the direction may be considered to be a violation of this protocol.

*For example: the wildlife control operator may direct that a suitable fence or barrier be constructed along the border of a busy road adjacent to a development site to prevent animals from running onto the road during clearing activities.*

2.6 Such directions may form part of the **Wildlife Protection and Management Plan**, or may be made separately upon identification of a specific risk. An animal welfare direction shall be made in writing in an approved form, and copies given to all relevant persons; or, in the case of a clear and present risk to animal welfare, an animal welfare direction may be made verbally with written confirmation to follow. In general, an animal welfare direction will only be used in circumstances in which the wildlife control operator and/or wildlife biologist considers that a real and proximate risk to animal welfare exists.

2.7 In unlikely event that circumstances in which an **animal welfare direction** has been breached, or in the opinion of the wildlife control operator an activity is occurring, or is likely to occur that may result in immediate significant risk to, or death of animals, the wildlife control operator spotter/catcher may make a **stop work order**. This order will remain in force until the wildlife control operator is satisfied that appropriate measures have been taken to mitigate the risk.

### **Responsibilities of wildlife control operators**

2.8 The wildlife control operator has ethical responsibilities to ensure the welfare of wild animals in respect of a development or activity for which they are acting in that role. A wildlife control operator also has an obligation to comply with the provisions of this suggested protocol.

2.9 In terms of the performance of duties and operating procedures required for each project, the wildlife control operator's/qualified personnel responsibilities include, but are not limited to:

- a) thorough site assessment and fauna survey (or validation of a previously conducted fauna survey).
- b) preparation of a Wildlife Protection and Management Plan (WPMP) (see Appendix 2)
- c) ensuring that relevant persons associated with developments and operational works or activities are provided with copies of the WPMP and understand their responsibilities under the applicable local, State and/or Federal laws, and the importance of complying with Animal Welfare Directions.
- d) clearly identifying to all relevant persons the specific wildlife welfare risks associated with the project, and recommended risk mitigation measures.

- e) ensuring the timely and appropriate removal and management of animals from development sites prior to and/or during operational works or activities.
- f) ensuring the appropriate housing, veterinary assessment and care, translocation, euthanasia or other appropriate disposal of animals removed from development sites.
- g) preparation of a **Wildlife Management Report** on completion of a development project or activity, to be submitted in a timely manner to the developer and as may be required to local, State and/or Federal regulatory agencies.
- h) notification of the appropriate local, State and/or Federal regulatory authorities of breaches of the applicable laws.

2.10 In addition, the wildlife control operator should be aware of their own “duty of care” obligations under the applicable local State and/or Federal law(s) as these apply to animals captured, trapped or held in the course of their duties.

#### **Use of unlicensed personnel by a wildlife control operator**

2.11 In order to ensure compliance with the code and other regulations regarding the welfare and protection of wild animals on a site, where permitted by law to use unlicensed personnel, a licensed wildlife control operator must ensure that the level of supervision of personnel involved in the capture, management and care of animals takes into account their experience and competence.

2.12 Wildlife control operators are responsible for the proper supervision and direction of their personnel.

#### **Accountability of wildlife control operators for powers given under local, State and/or Federal laws.**

2.13 Wildlife control operators must be accountable for the correct and proper use of their powers under the appropriate local, State and Federal laws and appropriate discharge of their responsibilities.

2.14 Wildlife control operators are commonly contracted by a developer or developer’s agent to perform services required as a condition of a development approval, and therefore have certain responsibilities towards their client. They also have important responsibilities to the community generally to ensure that all reasonable measures are taken to protect the welfare of wild animals likely to be impacted by a development.

2.15 Any powers given to a wildlife control operator under the provisions of local, State and/or Federal laws must be used strictly in accordance with the provisions of those laws and as required to ensure compliance with this Suggested Protocol.

2.16 In accordance with the provisions of local, State and/or Federal laws licensed wildlife control operators are accountable to those agency(s).

## **Disagreement between a developer and a wildlife control operator**

2.17 In some circumstances there may arise some disagreement between a developer and a wildlife control operator with regard to what constitutes “fair, reasonable and appropriate measures” to protect the welfare of wildlife. Such disagreements may occur particularly in instances in which a measure, or measures, proposed by a wildlife control operator, are time or resource intensive. In such instances, resolution of disagreements should be attempted by reference to this Suggested Protocol. In all cases, however, the welfare of animals is of paramount importance and is the primary responsibility of the wildlife control operator.

2.17.1 In those situations where adherence to this code is mandated by a regulatory agency or branch of government any irreconcilable disputes between a developer or their agent, and the wildlife control operator should be referred, for resolution, to the representative of said government agency or branch.

2.17.2 In those situations where adherence to this code is strictly voluntary any irreconcilable differences may be unilaterally decided by the developer or their agent. In this situation the wildlife control operator has an obligation to make note of his/her dissenting view in the final Wildlife Management Report.

## **Termination of a contract by a developer**

2.18 A developer may wish to terminate the contract of the wildlife control operator and contract a new wildlife control operator for completion of a project. However,

2.18.1 If the reason for termination is as a result of disagreement over a measure or measures proposed by a wildlife control operator in the interests of protecting the welfare of wild animals, then the incoming wildlife control operator, has an obligation to make note of this in the final Wildlife Management Report.

2.18.2 A developer may terminate a contract with a wildlife control operator without such notation in the final Wildlife Management Report if:

- a) The wildlife control operator has failed to perform any operating procedure or duty reasonably expected to be performed in the course of their duties as a wildlife control operator ; or
- b) The wildlife control operator has misused a power given under local, State or Federal laws; or,
- c) The wildlife control operator has failed to perform their duties in accordance with their contract; or,
- d) Any other reason, notwithstanding section 2.22.1 below.

## **Termination of a contract by a wildlife control operator**

2.19 A wildlife control operator may terminate a contract with a developer for any reason by giving due notice in writing, stating the reasons for termination of the contract to the developer or developer's nominated agent and the relevant local, state or Federal government authority.

2.20 Notwithstanding section 2.21 below a wildlife control operator may be liable for damages for breach of contract.

## **Misconduct by a wildlife control operator**

2.21 A wildlife control operator may be guilty of misconduct if:

- a) there has been an abuse of the powers given under local, State and/or Federal laws; that is, either Animal Welfare Directions or Stop Work Orders have been issued inappropriately;
- b) he or she has failed to apply due diligence in the detection of wildlife at a site, resulting in injury or death to a wild animal, or the likelihood of injury or death to a wild animal;
- c) he or she has failed to apply, or define in the Wildlife Protection and Management Plan, fair, reasonable and appropriate measures, resulting in injury or death to a wild animal, or the likelihood of injury or death to a wild animal; or
- d) he or she has failed to make provision for the proper care and/or veterinary needs of a captured animal.

## **STANDARD OPERATING PROCEDURES FOR WILDLIFE CONTROL OPERATORS**

### **SECTION 3: SITE ASSESSMENT**

#### **General principles**

3.1 The wildlife control operator has a significant burden of responsibility to ensure that the animal welfare and ecological impacts resulting from a development or activity, for which they are engaged in that role, are minimized.

3.2 The general principles of **due diligence** in the detection of wildlife, and **fair, reasonable and appropriate measures** in preventing wildlife loss or ecological damage, apply to the practice of wildlife control operation as they do for any individual engaged in a relevant activity.

3.3 Wildlife control operators are expected to have specialized knowledge in the detection, identification and removal of wildlife; assessment of potential impacts of developments or activities on wildlife; an understanding of basic ecological principles; good animal handling and care skills; local knowledge of appropriate release sites for wildlife, if applicable; and a

good general understanding of local, State, and Federal statutes relating to wildlife, relocation, habitat and development issues.

3.4 Wildlife control operators should maintain currency of information in their field of expertise by attendance at workshops, training days and by other means of continuing education.

3.5 In order to ensure consistency in practice between, wildlife control operators, the following minimum Operating Procedures should be applied.

### **Wildlife Protection and Management Plan (WPMP)**

3.6 A Wildlife Protection and Management Plan should be prepared for any project or activity in which:

- a) wild animals are likely to be captured or removed from a site; or
- b) an essential wildlife habitat or wildlife corridor will be, or is likely to be impacted by the development or activity; or
- c) operational works, or any of the operational aspects or features of the completed development, will have, or are likely to have significant impacts on local wildlife populations;

3.7 The Wildlife Protection and Management Plan should be in the format shown in Appendix 2.

3.8 The detail in the Wildlife Protection and Management Plan should reflect the complexity or scale of wildlife management required for the site or activity.

*For example: for a project in which a large area of highly significant wildlife habitat will be cleared the WPMP will be a long, thorough and detailed document, whereas that for the removal of a few small pine trees would be short and simple.*

3.9 The Wildlife Protection and Management Plan must include the following:

1. A description of the project (including timeframes for operational works) with special reference to features likely to affect wildlife or wildlife habitats;
2. A pre-development site plan with recent aerial photograph (if available) showing wildlife habitats, corridors, riparian features, and relevant adjacent habitat. Proposed development site plan should indicate areas of habitat likely to be removed or affected, and structures, roads or other potential hazards that may impact on wildlife after the development is completed.
3. Fauna survey results, including reference to species that were not detected, but are likely to be present.
4. Wildlife and habitat impact assessment detailing all aspects of development activities, operational works, and features likely to have an impact on wildlife, as well as likely

- future impacts on wildlife after completion of the development or activity. This section should include reference to adjacent habitat as well as that contained on site.
5. Wildlife and habitat impact mitigation plan indicating:
    - a) measures required to be taken to minimize wildlife and habitat effects during operational works;
    - b) wildlife capture and removal plan;
    - c) contingency plan for wildlife requiring euthanasia, other veterinary procedures or captive care;
    - d) wildlife storage and housing plan;
    - e) wildlife release and disposal plan; and
    - f) measures required to be taken to minimize adverse wildlife impacts following completion of works.

### **Approval of Wildlife Protection and Management Plan**

3.10 A completed Wildlife Protection and Management Plan should be submitted to the developer and/or his appointed agent, prior to implementation.

3.11 In the case of a development or activity requiring local, State or Federal government agency approval, a Wildlife Protection and Management Plan should also be submitted to the relevant agency prior to its implementation.

### **Wildlife Protection and Management Plan not required**

3.12 A wildlife control operator is not required to prepare a Wildlife Protection and Management Plan if:

- a) wildlife are not detected at a site, or will not be impacted by activities proposed for the site; and
- b) wildlife will not be required to be captured or moved from the site; and
- c) the site is not wholly, or part of, an essential wildlife habitat or wildlife corridor; and
- d) operational works, or operational aspects or features of the completed development, are unlikely to have adverse effects on local wildlife populations or individuals.

3.13 If an activity or development fulfils the requirements of section 3.12 above and is an activity or development requiring local, State and/or Federal government agency approval, then the wildlife control operator should give notice in writing to the relevant government agency, that a Wildlife Protection and Management Plan is not required, and the reasons for that.

### **Site and Fauna Surveys**

3.14 Each site or project must be assessed using fauna survey equipment and methodologies sufficient for the wildlife control operator/wildlife biologist to form a reasonably accurate picture of the species diversity and estimates of individuals likely to be present.

3.15 Such assessments, along with the project design and operational works plans and schedules, form the basis of the information required for the formulation of the Wildlife Protection and Management Plan.

3.16 In some instances, site, fauna and flora surveys may have been previously conducted by other consultants to the project. In such cases, duplication is not required by the wildlife control operator unless discrepancies are suspected or observed.

3.17 The use of resource bases such as state or federal species distribution maps, local university resources and State department of Natural Resources are encouraged in the preparation of fauna and/or flora surveys by wildlife control operators.

### **Site Survey**

3.18 A site survey should be conducted and a basic site plan drawn up indicating terrain features, waterways, vegetation types etc. Detailed site plans may be available from surveyors consulting on larger projects.

3.19 Site survey plans should be of sufficient detail to enable easy interpretation of the Wildlife Protection and Management Plan.

*For example: large habitat/hollow trees should be individually identified, as should special habitat features likely to contain ground dwelling or burrowing wildlife, known mast or fruit producing trees and the like.*

### **Fauna Survey**

3.20 The following methodologies are provided as a minimum requirement when conducting fauna surveys prior to wildlife habitat disturbance:

- a) Diurnal searches – Intensive investigation of the ground layer (i.e. under logs, rocks, leaf litter) and low vegetation (i.e. under tree bark and tree stumps) and caves targeting amphibians, reptiles, bats and animal traces (i.e. scats, owl pellets, remains and tracks). Minimum effort: approximately 4 person hours per day conducted in the middle of the day.
- b) Pitfall traps – This method targets amphibians, reptiles and small mammals, particularly those mammals that aren't readily recorded using other trapping methods (for example ground squirrels and voles). These traps should be cleared early morning and late afternoon. Minimum effort: Thirty (30) or more pitfall traps divided into four or eight lines comprising approximately four (4) pits (20l bucket) and a 15-20yd. drift fence. However, the number of buckets per line is often best determined on individual site characteristics and may require 6-20 pits on a 50yd drift fence. Trapping duration is a minimum of four (4) days and nights.
- c) Spotlighting – Nocturnal observations using both high powered spotlights and head lamps. This method targets nocturnal flying, arboreal and terrestrial mammals (bats), birds (owls), reptiles and amphibians. Call playback can also assist this method when

- targeting specific species. Minimum effort: approximately 3 person hours per day commencing in the early evening.
- d) Sherman traps – This method targets small arboreal and terrestrial mammals. These traps should be cleared daily and reset. Trap placement will be influenced by vegetation diversity, the size and shape of the habitat area and by naturally occurring features such as logs, rock outcrops, tree bases and clumping vegetation. As a guide, all distinctly different broad vegetation communities should be surveyed. Minimum effort: 100 traps over four nights, arranged in 5-10 transects with 10 or 20 traps in each transect with trap placement at 5yds. apart. A variety of baits should be utilized such as rolled oats with peanut +/- honey, bacon, canned fish. When conducting arboreal trapping with this method, a bait mixture may be applied on the trunk and braches near the trap to act as an attractant to species such as flying and other squirrels.
  - e) Cage traps - This method targets medium to large arboreal and terrestrial mammals. These traps should be cleared **daily** and reset. Trap placement will be influenced by vegetation diversity, the size and shape of the habitat area and by naturally occurring features such as logs, rock outcrops, tree bases and clumping vegetation. As a guide, all distinctly different broad vegetation communities should be surveyed. Minimum effort: 20 traps over four nights, arranged in 5 transects with trap placement at 5-20m apart. A variety of baits should be utilized such as rolled oats with peanut +/- honey, bacon, canned fish.
  - f) Bird surveys – Fixed or random transects are walked with five (5) minutes spent stationary at designated locations along the transects. Birds are recorded indicating the method of identification (i.e. call or visual observation) and the type and location of habitat. Minimum effort: 30-60 minutes commencing prior to and during dawn to early morning and prior to dusk.
  - g) Harp traps, mist nets and sonic bat detectors - These methods target insectivorous bats. Trap and sonic detector (i.e. ANABAT) should be located within suitable habitat where insectivorous bats are likely to frequent (i.e. natural flyways between vegetation and narrow forest tracks). Calls recorded from a sonic detector (i.e. ANABAT) should be analyzed by a suitable qualified person to ensure accurate species identification.

### **Wildlife safety risk mitigation measures.**

3.21 In some circumstances, the removal of wildlife from development sites may not be necessary due to retention of habitat, and/or minimal impacts of the development or activity on wildlife or habitats. However, operational works may still present hazards to wildlife retained on site or inhabiting areas adjacent to the site.

*For example: Operational works may require the use of heavy earthmoving equipment on a site adjacent to wetland habitat bounded by a major road. Risk mitigation may require temporary fencing of the road to minimize risk of motor vehicle accidents. Operational works may also require the construction of deep ditches or footings, presenting risks to wildlife wandering onto the site. Risk*

*mitigation may require the use of temporary fencing or barriers around trenches during operation works.*

3.22 It is the responsibility of the wildlife control operator to identify significant wildlife safety risks both for wildlife retained on site, as well as wildlife in adjacent areas or widely ranging wildlife that may use, or move through, the site during operational works. Measures required for mitigation of such risks should be included in the Wildlife Protection and Management Plan

### **Vegetation and rubble piles**

3.23 It is essential that piles of rubble, felled timber or any other material, proposed to be burned, buried or chipped, are not left to serve as a refuge for displaced or roaming wildlife. Felled vegetation piles and earth often provide attractive habitats for a range of small mammals, birds, reptiles and frogs, presenting a high risk of poor animal welfare outcomes if not managed appropriately.

3.24 Appropriate risk mitigation measures include immediate destruction or removal of such materials, or erection of wildlife-proof barriers to prevent wildlife use.

3.25 Old piles of felled vegetation or other material must be treated in the same way as any other potential wildlife habitat, and must be assumed to be inhabited by wildlife, unless proven otherwise.

### **Design features and wildlife safety risks**

3.26 In addition to wildlife risks associated with operational works, the wildlife control operator must attempt to identify any features of the design or plan of the completed project that may present a significant risk to wildlife and recommend risk mitigation measures.

3.27 Design features likely to have undesirable impacts on wildlife should be brought to the attention of the developer. Early intervention in terms of recommending design changes may lead to significant reduction in costs associated with wildlife management and impact mitigation measures caused by poor design.

### **Pre-works meeting.**

3.28 After preparation and approval of the Wildlife Protection and Management Plan, and prior to the onset of operational works or land-clearing, the wildlife control operator should have a briefing meeting with the project manager, site foreman and equipment operators, for the purposes of discussing the requirements of the plan.

3.29 The wildlife control operator should clearly detail the sequence of land-clearing and wildlife capture, identify special habitat features, state the requirement for special equipment, (such as cherry pickers or cranes), and clearly outline the importance of compliance with any Animal Welfare Directions.

3.30 The wildlife control operator should ensure that the project manager or developer understand fully the requirements of the Wildlife Protection and Management Plan, and request their sign-off on the plan.

### **Notification of unmanageable wildlife risk situations**

3.31 In circumstances that result in wildlife risks that are unable to be adequately managed, the wildlife control operator has an obligation to notify both the developer and the appropriate local, state and Federal government regulatory authorities.

*For example: an approved development may cause an essential wildlife corridor to be severed or significantly affected, resulting in starvation or accidental mortality for isolated wildlife.*

3.32 Unmanageable wildlife risk situations are *serious* animal welfare issues that may require intervention beyond the scope of the wildlife control operator with the developer, and it is essential that regulatory authorities are appropriately informed of such circumstances.

3.33 Notification of unmanageable wildlife risk situations should be made in writing in the approved form (Appendix 3), and submitted promptly to the appropriate local, state and/or Federal regulatory agency(s). A copy should also be submitted to the developer.

3.34 If possible, the wildlife control operator should attempt to identify potential unmanageable wildlife risk situations preemptively, by developing a sound knowledge of surrounding habitat and important ecological features.

## **SECTION 4: WILDLIFE MANAGEMENT**

### **General Principles**

4.1 It is the responsibility of the wildlife control operator to direct and/or take all reasonable steps to protect the welfare of wildlife that may be impacted by vegetation clearing, construction, operational works or design features of development sites.

4.2 In many cases this will necessitate the removal and relocation of wildlife to other suitable habitat, or temporary housing of displaced wildlife during operational works.

4.3 It is preferable to remove as much wildlife as possible prior to the commencement of vegetation clearing to minimize the risk of injury to animals during the clearing process.

4.4 Attention must be paid to all habitat strata (arboreal, terrestrial, leaf litter, etc.), as well as all taxonomic groups in the removal of animals.

4.5 Seasonal and temporal variation in the visibility of animals must be taken into account when wildlife detection and capture procedures are being performed.

*For example: many animals are primarily nocturnal, and are less visible and active during winter months. They are therefore much more at risk from earth works and land-clearing during these times, and in colder weather.*

4.6 Particular attention must be paid to the results of the fauna survey to ensure that the specific methods used to detect and capture animals reflect the diversity of species expected at the site.

*For example: in a site identified as habitat for groundhogs, badgers, ground squirrels, skunks or other ground-dwelling fauna, it is insufficient to simply concentrate effort on habitat trees. Thorough searching of all strata and wildlife habitats is necessary.*

### **Removal of terrestrial wildlife**

4.7 Terrestrial wildlife may be removed from the site prior to the onset of vegetation clearing using a variety of trapping methods. These methods will generally have been detailed in the fauna survey report prepared by the wildlife control operator or by other consultants to the project.

4.8 Specific habitat features of interest, such as log piles, rocky outcrops, riparian and wetland areas should be indicated on the site map prepared by the wildlife control operator and deserve special attention. These areas should be cleared or disturbed only after less important surrounding habitat areas have been cleared. This is important because it provides opportunity for more intensive trapping around the feature, improved visibility for the wildlife control operator, and allows more flexibility to apply less destructive clearing methods.

4.9 The wildlife control operator must ensure that he/she has adequate numbers of appropriately trained staff working on habitat features likely to contain high numbers of wildlife that may scatter when the feature is disturbed.

4.10 It is the responsibility of the wildlife control operator to ensure that clearing methods used on terrestrial habitat features of special interest are appropriate to ensure minimal risk of injury or death to wildlife contained therein.

*For example: log piles should be gently dismantled one by one, rather than bulldozed en masse. Hollow logs should be carefully inspected using a flashlight, and may require windows to be cut with a chainsaw for thorough inspection, prior to disposal or burning.*

4.11 The wildlife control operator should pay particular attention to observing for the presence of burrows or tracks in leaf litter adjacent to rock, brush piles, log piles or other habitat features.

### **Removal of arboreal wildlife**

4.12 Removal of arboreal wildlife should be accomplished initially by thorough trapping efforts. Appropriate use of traps will minimize the risk of injury to wildlife collected by more direct methods, or at the time of clearing.

4.13 Trees contain a variety of different habitats for wildlife including cavities in the limbs and primary trunk, under bark, as well as foliage and upper limbs. All such habitats should be thoroughly explored for the presence of wildlife.

4.14 It is the responsibility of the wildlife control operator to ensure that appropriate methods are used to retrieve wildlife from arboreal habitats such that the risk of injury to the animals is minimized.

4.15 Trees containing wildlife *must not* be felled until all reasonable efforts have been made to remove wildlife.

4.16 Habitat trees of high importance should be felled last, after surrounding less important vegetation has been cleared to allow easy access of special equipment (such as cherry pickers), traps, and to allow unhindered lowering of cavity-bearing limbs. It is not acceptable to fell or push over cavity-bearing trees without first removing wildlife, due to the high risk of fall and/or crushing injuries to wildlife inhabiting such trees.

4.17 Cavity-bearing limbs can be cut and lowered gently to the ground using a variety of techniques, such as the use of cranes or special rigging. Prior to any intervention, exit holes should be plugged with rags or newspaper to prevent escape of wildlife during cutting or lowering of cavity-bearing limbs.

### **Preservation of tree cavities and other habitat features.**

4.18 Whenever possible, the integrity and structure of tree cavities contained in trees which are to be removed should be preserved. These should be relocated to appropriate habitat retained on the site, or to appropriate habitat close to the site.

4.19 The wildlife control operator should aim to ensure that there is no net loss of important habitat features, such as tree cavities.

4.20 Other valuable habitat features such as large fallen logs, log piles, rock piles or outcrops, etc. should be preserved as much as possible, and translocated and re-established at appropriate habitat close to their site of removal.

4.21 In the interests of “no net loss” of tree cavities, the wildlife control operator should ensure that in instances in which natural tree cavities are destroyed, the replacement of artificial cavities occurs at a rate of 4 artificial replacements per natural cavity destroyed. This replacement should occur irrespective of whether cavities were used by wildlife at the time, or not.

### **Species Identification**

4.22 All species removed or captured for translocation must be properly identified by the wildlife control operator to the species level.

4.23 For correct identification of any specimens that cannot be identified by the wildlife control operator the State Department of Natural Resources should be contacted.

4.24 The State Department of Natural Resources must be notified within 24 hours of capture of any animal unable to be identified.

4.25 Any captured animal must not be disposed of unless its species has been positively identified.

### **Notification of species of special significance**

4.26 Any individual animal captured by a wildlife control operator of a species that is indicated in state and/or Federal lists as species of special significance, threatened or endangered must be retained by the wildlife control operator or retained at an approved wildlife holding facility pending notification by the State Department of Natural resources as to its disposal. Species lists will vary from state to state and possibly by bio-geographic region.

### **Restraint and holding of captured wildlife**

4.27 All animals removed from development sites must be captured, restrained and held in a manner that is unlikely to result in injury, unacceptable distress or suffering. Animal welfare is the primary priority and responsibility of the wildlife control operator.

### **Capture, restraint and examination**

4.28 In general, capture methods that utilize netting, bagging, restraint with a blanket, trapping or (in special circumstances) sedation/anesthesia, are preferable to direct manual restraint.

4.29 As soon as possible after capture, and prior to release, all animals should be examined for signs of injury or illness. Restraint for examination may only require placing an animal into a transport cage for observation, or may require manual restraint using a burlap bag, cloth or blanket.

4.30 Physical examination of an animal should include observation of normal movement, check for injuries, discharges, lumps, asymmetry, breathing pattern, bleeding or any other lesion indicative of injury or significant illness.

4.32 Any animal showing signs of injury or illness, or showing abnormal behavior should be immediately referred to an experienced wildlife veterinarian or approved wildlife rehabilitation facility.

### **Short-term holding**

4.32 Captured animals may be held for short periods of time in burlap bags, transport cages, box traps or any other appropriate container as long as the following criteria are met, and due regard is given for species differences:

- a) the animal is protected from extremes of temperature;
- b) the animal is protected from accidental trauma by other animals, equipment, machinery and the like;
- c) the animal is protected from adverse sensory stimuli such as loud noises;
- d) the bag or container provides sufficient airflow to allow normal air exchange and radiation/dispersal of heat;
- e) the container, receptacle or bag is protected from direct sunlight, rain, wind or other environmental conditions likely to cause suffering or harm to the animal;
- f) the animal is able to hide, or be protected from threatening stimuli (such as providing a hide box, or covering a wire transport cage with a towel or blanket);
- g) the animal is checked regularly during its period of confinement;
- h) the container, bag or receptacle is clean, hygienic and safe for the animal.

4.33 All mammals and birds held in short term containment for more than 4 hours must be given access to water.

4.34 Mammals and birds held in burlap bags or bags of other material for longer than 2 hours must be transferred to appropriate transport or holding boxes or enclosures containing hide spaces or boxes when appropriate for the species.

4.35 All neonatal or juvenile animals other than completely independent juveniles must be fed and contained in a manner appropriate for their age and species. Supplemental warmth must be provided to any nestling or juvenile unable to adequately thermo-regulate.

4.36 All dependent young unable to be returned to parental care within a reasonable timeframe or unlikely to be accepted back by their parents must be immediately transferred to a licensed wildlife rehabilitation facility.

4.37 The following guidelines should be followed for short to medium term (4-24 hours) containment of adult animals. Maximum times are indicated in **hours** unless otherwise

indicated. Animals should be released or transferred to an approved wildlife holding facility for long-term holding at or before the expiry of the times indicated in the last column.

Species	Water	Food	Max. time in bag	Max. time in short-term enclosure (eg transport box)
Rodent	4	8	2	24
Insect bat	4	4	12 (**)	12
Snake	24	7 days	24	24
Lizard	24	2 days	24	24
Turtle	24	2 days	24	24
Frog	12 (#)	24	8 (#)	24

\* With sedation/anaesthesia only

\*\* Only if fed and watered every 4 hours

\*\*\*

# Containers for frogs must prevent drying. Plastic boxes with ventilation are preferred.

### Long-term holding

4.38 Animals may require long-term holding (>24 hours) for a variety of reasons, such as:

- a) delayed access to appropriate release sites;
- b) accumulation of a number of individuals for group release;
- c) treatment of injuries or illness;
- d) inclusion in radio telemetry studies or other research;
- e) handrearing of dependent young;
- f) temporary housing during operational works prior to return to site.

4.39 Long-term holding of native animals should only occur in circumstances approved by the State Department of Natural Resources, US Department of Agriculture, and/or US Fish & Wildlife Service and in facilities approved for such purpose.

4.40 Care of animals in long-term care should be in accordance with the all applicable local, State and Federal laws and current best practice.

4.41 Facilities for the holding of native animals awaiting translocation or relocation back to the original development site are restricted to those facilities approved for that express purpose by the state Department of Natural Resources and/or US Fish & Wildlife Service.

### **Disposal of wildlife**

4.42 The ideal outcome for wildlife removed from a site during operational works is to be relocated back to the same site at the completion of works, so long as suitable and sufficient habitat remains. This ensures that any potential adverse ecological consequences associated with translocation and the potential adverse effects (on the individual) of placement in unfamiliar territory are avoided. However, this outcome is generally only achievable if there has been significant retention of habitat, and appropriately “eco-friendly” design and planning.

4.43 Translocation of animals is not a preferred option unless retention at, or relocation back to, the original site is inappropriate.

4.44 In order of preference, outcomes for removed wildlife are as follows (unless local or state regulations state otherwise, dependent upon the health and condition of the animals, and subject to developer and wildlife control operator’s mutual agreements):

- a) relocation back to original site following operational works;
- b) translocation to suitable habitat adjacent to site;
- c) translocation to distant suitable habitat;
- d) placement in captive institution for educational, conservation or research purposes;
- e) euthanasia.

4.45 Each of these options is dependant on fulfillment of a number of conditions and criteria which affect its relative suitability under different circumstances.

4.46 In determining the most suitable option for each individual, the wildlife control operator must ensure that the chosen option is appropriate in terms of local, State and/or Federal law, animal welfare and ecological outcomes.

4.47 Any animal showing obvious clinical signs, or behavior consistent with injury or illness must be treated in an appropriate manner, detailed in sections 4.99-4.104 or alternatively, as required by law.

### **Relocation of animals back to original site following operational works**

4.48 In some circumstances, the extent of destruction of habitat may not be sufficient to warrant permanent translocation of animals, but operational works or other factors may present unacceptable risks to the health and safety of some animals present on site.

4.49 In such cases, a range of measures may be used by the wildlife control operator to mitigate or minimize risks, including the temporary removal of animals from the site, with the aim of returning animals back to their habitats at the completion of risk-associated works.

4.50 Important criteria for return of animals to the original development site include:

- (a) Sufficient habitat is, or will be retained on site to support the animal population, taking into account factors such as: viability of prey species populations; availability of nesting sites or cavities; availability of clean water; and availability of sufficient food resources.
- (b) Habitat corridors retained are of suitable size, topography and vegetation cover to provide effective routes for normal ecological processes such as immigration, emigration, recruitment and dispersal.
- (c) Habitat blocks and corridors are of sufficient size to maintain ecological integrity and effectiveness, taking into account likely edge effects.
- (d) Long-term risk factors to individual and population survival associated with the development have been (or will be) adequately managed or mitigated. *For example: domestic animal control, motor vehicle/road impacts, swimming pool risk.*

4.51 The temporary removal of native animals destined for return back to the site of origin, is conditional upon the availability of appropriate long-term holding facilities and resources, and the suitability of the species and individuals for long-term holding.

4.52 In some instances, it may be appropriate to construct temporary holding yards or enclosures on site during operational works, which are removed on completion of risk-associated works.

### **Translocation of animals to suitable habitat adjacent to development site**

4.53 If development of a site occurs adjacent to a large area of similar habitat, with little retention of habitat on site, native animals are most appropriately translocated into adjacent areas. Criteria for use of adjacent habitat are as for 4.64 a-d, but include:

- (a) Translocation of animals into adjacent habitat should only occur if the likelihood of significant impacts on resident animals in the recipient habitat is considered to be low. (i.e. Recipient habitat is not considered to be at maximum carrying capacity for that species.)
- (b) Recipient habitat is of sufficient size to allow for dispersal of individuals from the point of release, with minimal likelihood of mortality.

*For example: raccoons may disperse long distances from the point of release, particularly in already occupied habitat and should not be released into small habitat fragments bounded by busy roads or other hazards.*

- (c) Recipient habitat is the same or very similar in type to the donor habitat, or is known to be able to support the species proposed to be translocated, and contains appropriate and sufficient sources of food and water.
- (d) The recipient habitat is known to contain, or historically contained, the species proposed to be translocated.
- (e) The recipient habitat is either permanently protected or not likely to be developed in the foreseeable future.
- (f) Landowner permission has been obtained.

4.54 Additional conditions for translocation of animals to adjacent habitat include:

- (a) Appropriate wildlife-proof barriers must be used between adjacent habitat and risk-associated structures, such as swimming pools, busy roads, trenches, canals, etc.
- (b) Translocated animals show no signs of infectious/contagious disease and must be in good health and body condition.
- (c) Species for which there is little or no information regarding efficacy of translocation may be fitted with radio-telemetry devices and radio-tracked for appropriate periods of time.
- (d) For species utilizing tree cavities: that appropriate numbers and types of natural or artificial cavities or nest boxes are placed into recipient habitat to provide for the nesting requirements of translocated animals.

### **Translocation of animals to distant habitat**

4.55 If development of a site is such that habitats are completely removed, or retained habitats, (including habitats adjacent to the site) are insufficient to support retention of animals on or adjacent to the site, then animals inhabiting the site may be translocated to other areas of suitable habitat that may be distant to the site.

4.56 Criteria for choice of recipient sites include:

- a) habitat is suitable for translocated species, either currently or historically inhabited by that species;
- b) recipient habitat is not considered to be at carrying capacity for that species, and has sufficient food and water to sustain population increase resulting from translocation;
- c) recipient habitat is of sufficient size, and/or with sufficient habitat corridors and connectivity to allow for expected dispersal of translocated individuals from the release site without significant likelihood of mortality;
- d) recipient habitat is either permanently protected or not likely to be developed within the foreseeable future;
- e) landowner permission has been obtained.

4.57 Conditions for translocation of animals to distant habitat sites include:

- a) animals are not showing signs of infectious/contagious diseases and are in good health and body condition;
- b) species for which there is little or no information regarding the efficacy of translocation may be fitted with radio-telemetry devices and radio-tracked for appropriate periods of time;
- c) for species utilizing tree cavities: that appropriate numbers and types of natural or artificial cavities or nest boxes are placed into recipient habitat to provide for the nesting requirements of translocated animals;
- d) translocated animals must be released at a point with sufficient proximity to water and food sources that maximize their chances of survival;
- e) soft release methods should be used for species that are known to be susceptible to relocation mortality and/or are likely to be exposed to excessive territorial aggression from resident conspecifics or other species.

### **Placement of animals into permanent care or captivity**

4.58 In some cases, animals may be captured or acquired by the wildlife control operator, that are either unsuitable for release back into the wild, or for which there is no suitable or appropriate habitat to be released into.

4.59 Un-releasable native animals may be valuable for education, conservation and research purposes and may be suitable for permanent placement into a captive facility if allowed by law.

4.60 Criteria for placement of un-releasable native animals into captivity include:

- a) the animal is likely to be given a quality of life sufficient to justify keeping it alive;
- b) the proposed recipient person or institution has suitable long-term holding facilities and sufficient resources (including veterinary care) to maintain an acceptable quality of life for the animal for the term of its natural life;
- c) the animal provides some educational, conservation or research benefit;
- d) the animal is not suffering from incurable disease likely to significantly affect its quality of life now, or in the future;
- e) appropriate licenses and permits are possessed by the recipient institution or person for the acquisition and keeping of the animal.

### **Placement of animals into temporary care or captivity**

4.61 In some cases, a native animal removed from a site may require hand-rearing (in the case of dependent young) or rehabilitation because of injury or illness. In these cases, the responsibility for the ultimate disposal of the animal may be shared by the licensed wildlife rehabilitator or organization, in accordance with the relevant local, State and/or Federal laws.

4.62 A healthy native animal removed from a development site, may be placed into temporary captive care at a facility approved for that purpose by the State Department of Natural Resources and/or US Fish & Wildlife Service for the following reasons:

- a) during operational works, for ultimate relocation back to the original habitat site;
- b) for the purposes of “soft release” into other appropriate habitat;
- c) for the purposes of accumulation of sufficient individuals to viable “colony” or family group, for relevant species.
- d) pending definitive identification of an unidentified animal, or confirmation of species identification by the State Department of Natural Resources;
- e) pending inclusion in an approved radio-tracking or research project;
- f) pending approval by the State Department of Natural Resources for the euthanasia of healthy native fauna (see section 4.82 below);
- (g) for any other reason justifiable on animal welfare or ecological grounds.

4.63 Notwithstanding section 4.62 above, a healthy native animal should be held in temporary care only for the minimum amount of time required to achieve the relevant objective. Animal care related health issues, conditioning/imprinting and loss of survival skills and muscle tone may be consequences of excessive periods in captivity, leading to reduced survival following release.

### **Euthanasia of animals**

4.64 In some circumstances, the euthanasia of some animals removed from a development site is the most appropriate or humane option or may be required by law. Reasons for euthanasia of animals may include:

- (a) The animal is either feral, and/or a declared pest.
- (b) The animal is suffering from injuries or illness sufficient to warrant euthanasia on humane grounds.
- (c) The animal is unlikely to survive if released back into the wild.
- (d) Euthanasia is required by law.

4.65 Euthanasia of animals must be conducted in accordance with the provisions of the American Veterinary Medical Association.

### **Euthanasia of healthy protected fauna**

4.66 The euthanasia of healthy native animals must be performed only as a last resort as no other approved alternative measure is possible, or as required by state laws.

4.67 Dependent neonates of animals being killed must also be killed, or appropriate provision made for their care, in accordance with the relevant Suggested Protocol.

4.68 The euthanasia of healthy specimens of protected native animals must not be considered as a cheap or convenient alternative to the other preferred options described in previous sections.

### **Euthanasia of feral or declared pests, or other non-native species**

4.69 The euthanasia of feral/non-native animals must be performed:

- a) only by a suitably qualified and experienced person;
- b) in accordance with the provisions of the American Veterinary Medical Association;
- c) only if dependent young are able to be humanely captured and killed, or provision made for their care;
- d) in the case of domestic species, only if appropriate investigations have been made to rule out ownership of the animal(s).

4.70 In the case of a domestic animal whose status as feral (rather than owned) is not clearly determined, then the animal should be surrendered to the local government animal control authority.

### **Emergency euthanasia of sick or injured animals**

4.71 If an animal is found to be suffering from injuries or illness likely to cause extreme suffering and/or distress, and a high likelihood of death, a wildlife control operator or other competent person may perform immediate euthanasia if the following conditions are met:

- a) the assistance of a veterinarian is not available within an appropriate timeframe given the suffering of the animal, and the time taken to transport the animal to a veterinarian would impose undue further suffering on the animal; and,
- b) the chosen method of euthanasia will cause instant or rapid insensibility (loss of consciousness), followed shortly afterwards (and before return of consciousness), by death; and
- c) the person proposing to conduct the euthanasia procedure is competent at the procedure; and
- d) the carcass is not disposed of until death is confirmed.

4.72 It is recommended that all wildlife control operators are appropriately trained in humane (AVMA approved) methods of euthanasia.

### **Use of veterinarians and veterinary services or drugs**

4.73 Due to the nature of wildlife management, capture and translocation, the use of veterinary drugs and services is occasionally required.

4.74 Reasons for veterinary involvement in wildlife management processes may include:

- a) use of restricted drugs for sedation or anesthesia of animals;
- b) examination and veterinary management of sick, injured or orphaned animals;
- c) euthanasia of animals;
- d) consultation on animal welfare issues; and/or
- e) assessment and management of wildlife population health and reproduction.

### **Nomination of veterinarian on Wildlife Protection and Management Plan**

4.75 A wildlife control operator must nominate one or more licensed veterinarians, whom they will use in the event that veterinary services are required.

4.76 A nominated veterinarian must be able to provide resources and facilities appropriate for responding to wildlife emergencies that may occur in the field.

4.77 The nominated veterinarian(s) must be indicated in the Wildlife Protection and Management Plan under the section entitled "Contingency plan for wildlife requiring euthanasia, other veterinary procedures or captive care."

4.78 It is preferable that nominated veterinarians are experienced with wildlife, although in some areas this may not be possible.

### **Wildlife control operators to inform client of obligations regarding the provision of veterinary care**

4.79 It is the responsibility of the wildlife control operator to inform the client and/or project manager of the potential for requirement of veterinary services, and the expected costs of such services.

4.80 The wildlife control operator must also ensure that the client or authorized representative is aware of their "duty of care" obligations to animals captured or injured in the course of the conduct of relevant activities.

4.81 It is recommended that the wildlife control operator prepare a document detailing the above, to be signed by the client or client's authorized representative.

### **Provision of veterinary care to sick or injured animals**

4.82 The wildlife control operator must make provision for the prompt veterinary examination and treatment of any animal injured, or caused to be sick, as a result of development processes or activities.

4.83 If an injured animal has not already been captured, then the wildlife control operator must make every reasonable attempt to capture the animal for the purposes of veterinary assessment and treatment. This may include the engagement of a veterinarian for the purposes of darting the animal with a tranquilizer or anesthetic.

4.84 The wildlife control operator must also make provision for the veterinary assessment and treatment of any animal captured or trapped that is showing evidence of any significant injury or illness, irrespective of the cause of the injury or illness.

*For example: a captured raccoon that is showing obvious signs of distemper, such as weeping eyes, should be referred to an approved wildlife rehabilitation facility for veterinary assessment and treatment or euthanasia rather than being released back into the wild in that condition.*

4.85 Any native animal requiring in-patient veterinary care must be referred to a recognized wildlife veterinary hospital or facility, a private veterinary practice or licensed wildlife rehabilitator that has appropriate wildlife experience and facilities for the housing and treatment of native animals.

4.86 A wildlife control operator has not fulfilled their duty of care obligation to a sick or injured animal simply by delivering it to a veterinarian, unless that veterinarian or veterinary practice fulfils the requirements of section 4.102 above, and agrees to provide an appropriate level of care to the animal.

4.87 Similarly, the wildlife control operator has not sufficiently discharged their duty of care in respect of a sick or injured animal by simply delivering it to a wildlife rehabilitator.

#### **Requirement for presence of veterinarian on site**

4.88 In rare circumstances, a wildlife control operator may consider that, despite reasonable measures being taken, a development process, activity or structure is likely to result in significant harm, injury or death to an animal.

4.89 In such circumstances the wildlife control operator must arrange for a licensed veterinarian to be present on site, for the period of time during which the risk is present. If possible, the veterinarian should be experienced in the management and care of wildlife.

4.90 If any restricted or controlled drug is proposed to be used by a wildlife control operator, then this use must be on the direction of, and under the direct supervision of a licensed veterinarian as allowed by law.

#### **Requirement for monitoring of sedated or anesthetized animals**

4.91 Both the wildlife control operator and on-site veterinarian have a 'duty of care' towards any animal affected by sedative or anesthetic drugs, and must ensure that an appropriate level and duration of monitoring is applied to prevent injury, predation, drowning or other incident that may result from the impairment of the animal's normal abilities or responses.

## SECTION 5: RECORD KEEPING AND REPORTING

### **Preparation of a Wildlife Management Report**

5.1 During the course of the development or activity, the wildlife control operator should keep an accurate record of all animal captures, incidents and disposals for that project.

5.2 At the completion of a project, the wildlife control operator should prepare a Wildlife Management Report (WMR) in the approved format (Appendix 4) for submission to the developer.

5.3 If the development or activity for which the Wildlife Management Report was prepared was subject to local government approval, then the report should also be submitted to the relevant local government authority.

5.4 The Wildlife Management Report consists of three sections:

- a) the wildlife and habitat management plan;
- b) the wildlife capture and disposal record;
- c) the animal injury and euthanasia report.

### **Wildlife and habitat management plan**

5.5 The wildlife and habitat management plan should contain the following information:

- a) Aspects of the design or planning of the development identified as risks to wildlife, essential wildlife habitat or wildlife corridors, and the measures taken to mitigate or avoid the risks;
- b) Aspects of operational works identified as risks to wildlife health or safety, and the measures taken to mitigate or avoid the risks;
- c) Aspects of the operation or function of the finished development (including traffic impacts) identified as posing risks to wildlife health and safety either presently or in the future, and the measures taken, or required to be taken, to mitigate or avoid those risks;
- d) Recommendations on the type, frequency and timeframes for monitoring of wildlife and habitat impacts resulting from the development;
- e) Requirements for ongoing wildlife, habitat or ecological management measures for the site or development to mitigate or avoid present or future wildlife impacts;
- f) Any measures taken to replace or improve wildlife or habitat outcomes, including compensatory vegetation planting, nest-box or tree cavity replacement, and the like;
- g) Recommendations and/or outcomes associated with unmanageable wildlife risks identified as being caused by, or associated with the development or activity including measures recommended or implemented by local, State and/or federal government agencies;

- h) Description and discussion of all irreconcilable differences unilaterally decided by the developer;
- i) Description and discussion of termination of a prior wildlife control operator due to termination as a result of disagreement over a measure or measures proposed by a wildlife control operator in the interests of protecting the welfare of wild animals (see 22.2.1 above).

5.6 The detail contained in the wildlife and habitat management plan should reflect the size and/or likely environmental impacts of the development or activity.

### **Wildlife capture and disposal record**

5.7 The wildlife capture and disposal record must contain the following details for each animal:

- (a) Species
- (b) Common name
- (c) Sex (M, F, or unknown)
- (d) Approximate age or age class (neonate, juvenile, subadult, adult)
- (e) Time and date of capture
- (f) Method of capture
- (g) Exact point of capture (shown on site map)
- (h) State of health
- (i) Incidents associated with capture likely to affect the animal
- (j) Veterinary intervention or treatments
- (k) Time held in captivity
- (l) Disposal (euthanasia, re-release, translocation etc)
- (m) Date and time of disposal
- (n) Details of disposal (if released, exact point of release by GPS or map)
- (o) For released animals: distance from point of capture to point of release.

5.8 If any native animals were, or are presently, held in temporary or permanent captive care, then the wildlife control operator should provide the location(s) and details of the reason for such holding.

5.9 Furthermore, the wildlife control operator should indicate the availability of husbandry and veterinary records for each animal placed into temporary or permanent captive care.

### **Animal injury and euthanasia report**

5.10 A separate Animal Injury and Euthanasia Report must form part of the Wildlife Management Report, detailing the circumstances, management and final outcome of every animal injury or incident, and the circumstances and reason for each animal euthanasia.

5.11 A “nil return” Animal Injury and Euthanasia Report should be included in the Wildlife Management Report if there were no animal injuries or euthanasia.

5.12 In tabulated form, the Animal Injury and Euthanasia Report should indicate, for each animal:

- (a) Species
- (b) Sex (if identified)
- (c) Common name
- (d) Age class (neonate, juvenile, sub-adult, adult)
- (e) Nature and details of incident or condition resulting in injury or euthanasia
- (f) Initial management or intervention (e.g. taken to veterinarian – give details)
- (g) Final outcome
- (h) Method of euthanasia, by whom; or details of disposal
- (i) Current location of animal or details and method of disposal
- (j) Any other relevant information.

### **Reporting**

5.13 If a development or activity is subject to approval by a local, State and/or Federal government agency, then the wildlife control operator shall submit a copy of the Wildlife Protection and Management Plan and Wildlife Management Report to the appropriate local, State and/or Federal government agency within one (1) month of completion of the project.

### **Appendices**