



Office of
Environment
& Heritage

Code of Practice for Injured, Sick and Orphaned Protected Fauna



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Office of Environment and Heritage NSW

59–61 Goulburn Street

PO Box A290

Sydney South 1232

Report pollution and environmental incidents

Environment Line: 131 555 (NSW only) or info@environment.nsw.gov.au

See also www.environment.nsw.gov.au

Phone: (02) 9995 5000 (switchboard)

Phone: 131 555 (environment information and publications requests)

Phone: 1300 361 967 (national parks, climate change and energy efficiency information and publications requests)

Fax: (02) 9995 5999

TTY: (02) 9211 4723

Email: info@environment.nsw.gov.au

Website: www.environment.nsw.gov.au

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1. Preface

The Code of Practice for Injured, Sick and Orphaned Protected Fauna (the Code) is intended for everyone authorised to rehabilitate and release protected fauna by the Office of Environment and Heritage (OEH) and has been developed to protect the welfare of fauna in their care. The Code contains both standards and guidelines for the care of protected fauna that is incapable of fending for itself in its natural habitat.

An animal's welfare can be thought of as the way its health, safety and well-being are affected by its physical and social environment. Health and behaviour indicators provide information about how an animal is responding to a situation, enabling rehabilitators to make informed decisions.

Compliance with this Code does not remove the need to abide by the requirements of the *Prevention of Cruelty to Animals Act 1979* (POCTA Act) and any other laws and regulations, such as the *Local Government Act 1993*.

Compliance with the standards in the Code is a condition of licences to rehabilitate and release sick, injured and orphaned protected fauna issued under Section 120 of the *National Parks and Wildlife Act 1974* (NPW Act). Failure to comply with a licence condition is an offence under Section 133 of the NPW Act and may result in a Penalty Infringement Notice being issued or the commencement of a prosecution.

This Code has been prepared by OEH in consultation with the NSW Wildlife Council, Taronga Conservation Society and the Royal Society for the Prevention of Cruelty to Animals NSW (RSPCA). It is also endorsed by the NSW Animal Welfare Advisory Council.

The Code is neither a complete manual on animal husbandry, nor a static document. It will be revised regularly to take into account new knowledge of animal physiology and behaviour; technological advances; developments in standards of animal welfare; and changing community attitudes and expectations about the humane treatment of animals. OEH will consult with licence holders regarding potential changes to the Code and give written notice when the Code is superseded.

2. Introduction

This Code sets standards for the care and housing of protected fauna that is incapable of fending for itself in its natural habitat. Compliance with the standards in this Code is a condition of fauna rehabilitation and release licences (s120 of the NPW Act) issued by OEH. The Code does not apply to non-native fauna as their release into the wild has a detrimental impact on native fauna and is an offence under the NPW Act. This Code comprises both enforceable provisions and recommended guidelines. Enforceable provisions are identified by the word 'standards' and they must be followed.

3. Interpretations and definitions

3.1. Interpretations

Objectives

Objectives are the intended outcome(s) for each section of this Code.

Standards

Standards describe the mandatory specific actions needed to achieve acceptable animal welfare levels. These are the minimum standards that must be met. They are identified in the text by the heading 'standards' and use the word 'must'.

Guidelines

Guidelines describe the agreed best practice following consideration of scientific information and accumulated experience. They also reflect society's values and expectations regarding the care of animals. A guideline is usually a higher standard of care than minimum standards, except where the standard is best practice.

Guidelines will be particularly appropriate where it is desirable to promote or encourage better care for animals than is provided by the minimum standards. Guidelines are also appropriate where it is difficult to determine an assessable standard. Guidelines are identified in the text by the heading 'guidelines' and use the word 'should'.

Notes

Where appropriate, notes describe practical procedures to achieve the minimum standards and guidelines. They may also refer to relevant legislation.

3.2. Definitions

In this Code:

Experienced fauna rehabilitator means someone who has an extensive knowledge of current rehabilitation techniques gained through training courses and many years of successfully caring for native fauna.

Fauna rehabilitator means someone who is either authorised by a Fauna Rehabilitation Group or zoological park or is individually licensed by OEH to rehabilitate and release Protected Fauna.

Fauna rehabilitation means the temporary care of injured, sick or orphaned fauna with the aim of successfully releasing it back into its natural habitat.

Fauna rehabilitation group means an incorporated group that is licensed by OEH to rehabilitate and release Protected Fauna.

Park means a national park, historic site, state conservation area, regional park, nature reserve, karst conservation reserve or Aboriginal area, or any land acquired by the Minister under Part 11 of the NPW Act.

Protected Fauna means any amphibian, reptile, bird and mammal with the exception of fauna listed in Schedule 11 of the NPW Act (such as horses, dogs and rabbits). For the purposes of this Code, protected fauna includes all native vertebrate fauna except fish and is referred to as fauna.

3.3. Supervision and responsibility

This section details how the Code fits into the state's legislative and regulatory framework and explains the responsibilities of stakeholders in relation to the Code.

3.3.1. The Office of Environment and Heritage (OEH)

OEH has statutory responsibility for the protection and care of fauna in NSW as articulated by the NPW Act. This includes licensing persons to rehabilitate and release Protected Fauna under Section 120 of the NPW Act. OEH has the power to apply terms and conditions to a licence which are legally binding on the licensee. The National Parks and Wildlife Service (NPWS) is part of OEH.

3.3.2. The New South Wales Wildlife Council (NWC)

The NWC is the peak body representing the state's wildlife rehabilitators. It will assist with developing, maintaining and up-dating standards in relation to the care of sick, injured and orphaned Protected Fauna. It has the right to specify terms and conditions of membership to the Council.

3.3.3. Fauna rehabilitation groups and zoological parks

Fauna rehabilitation groups and zoological parks have a legal obligation to ensure their authorised fauna rehabilitators comply with the conditions of the NPW Act. They are also responsible for ensuring their authorised fauna rehabilitators comply with the standards in this Code and for providing regular training and education.

3.3.4. Species coordinators

Most fauna rehabilitation groups have coordinators to supervise the activities of fauna rehabilitators. Their responsibilities include providing guidance and support to fauna rehabilitators and ensuring compliance.

3.3.5. Fauna rehabilitators

Fauna rehabilitators are responsible for meeting the Code's standards, keeping their skills and knowledge current and undertaking ongoing self-assessment.

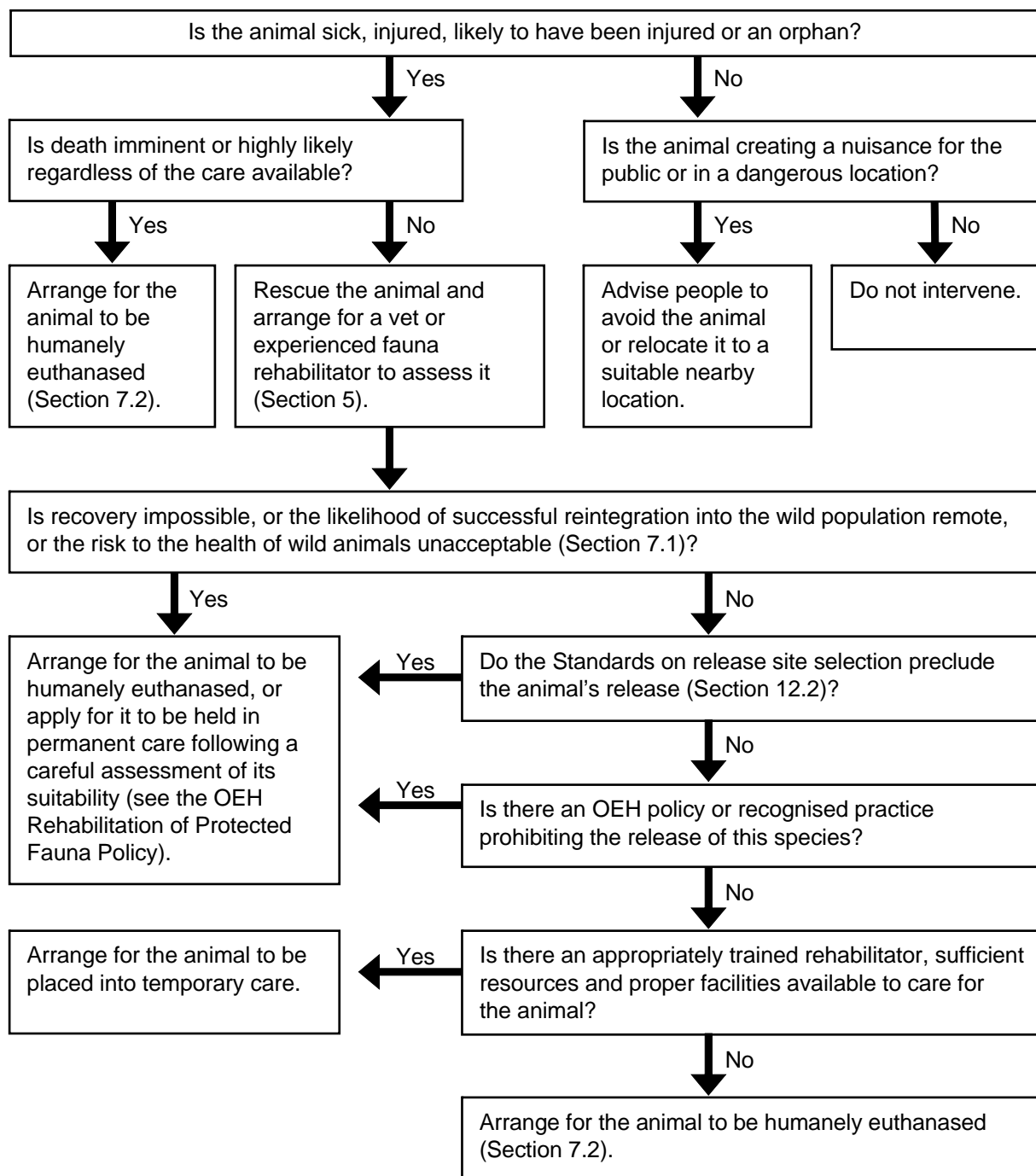
4. Case assessment

Objective

To assess fauna in order to determine the type of intervention required. The primary objective of rehabilitation is the successful reintegration of fauna into the wild population and all decisions are to be informed by this goal. This will mean that some fauna may benefit from rehabilitation whereas others will need to be euthanased.

4.1. Standards

4.1.1. The decision tree below must be followed when determining how to respond to a fauna encounter:



4.1.2. Rescuers must arrange for fauna to be assessed by a veterinarian or experienced fauna rehabilitator within 24 hours of rescue to ensure accurate diagnosis and prompt treatment or euthanasia. If this is not possible due to the remoteness of the location, expert advice must be sought via telephone or email.

Note: An animal creating a nuisance for the public generally refers to an animal that has entered a person's house and/or represents a human health risk (e.g. a venomous snake in a playground). It does not include an animal defending its territory (e.g. a magpie) or exhibiting other normal behaviour (e.g. a brush turkey building a mound). OEH has a range of policies guiding the response to aggressive wildlife.

5. Rescue

Objective

To conduct rescues so as to minimise further stress and injury to fauna.

5.1. Standards

- 5.1.1 Prior to a rescue attempt, the rescuer must assess the risks to fauna from environmental hazards and from capture.
- 5.1.2. Rescuers must employ the correct rescue equipment for the type and size of fauna and be trained in its use (see Section 13 Training).
- 5.1.3. Rescuers must only attempt to rescue fauna when a sufficient number of trained personnel for that species and size are involved.

5.2. Guidelines

- 5.2.1. Rescuers should monitor healthy nestling and fledgling birds rather than attempt to rescue them. Birds at risk of attack from domestic or feral animals may be protected by placing them in a nearby tree or by erecting temporary fencing.
- 5.2.2. Rescuers should take steps to protect fauna from additional stressors during rescue, such as onlookers, loud noises, other animals and extremes of temperature.

6. Transport

Objective

To transport fauna so as to minimise further stress and injury. This section applies to all movement of fauna including from the point-of-rescue to a veterinary surgery and between rehabilitation facilities.

6.1. Standards

- 6.1.1. Transport methods and container sizes must be appropriate for the species, size, strength and temperament of fauna.
- 6.1.2. Containers must be designed, set-up and secured to prevent injuries to fauna. This may involve padding walls and covering floors with a non-slip, non-ingestible, tangle-free surface.
- 6.1.3. Containers must be designed to prevent fauna from escaping.
- 6.1.4. Fauna in containers must be positioned so its breathing is not restricted and its pain or discomfort is minimised.
- 6.1.5. Containers must be kept at a temperature appropriate for the species and age.
For example:
 - a range of 25 – 27°C is appropriate for most species and ages
 - 31°C is appropriate for unfurred joeys
 - 21°C is appropriate for echidnas, platypuses and frogs.
- 6.1.6. Containers must be ventilated so air can circulate around fauna.
- 6.1.7. Containers must minimise light, noise and vibrations and prevent contact with young children and pets.
- 6.1.8. During transport, containers holding snakes and bats must have a clearly visible warning label that says 'DANGER – live snake' or 'DANGER – live bat'.
- 6.1.9. Fauna must not be transported in the back of uncovered utility vehicles or car boots that are separate from the main cabin.

6.2. Guidelines

- 6.2.1. Adult fauna should not be fed or watered during trips lasting less than a few hours. Dependent young may require feeding during shorter trips.
- 6.2.2. The use of medication to facilitate transport should be assessed and approved by a veterinarian.
- 6.2.3. Fauna transport should be the sole purpose of the trip and undertaken in the shortest possible time.

7. Euthanasia

7.1. When to euthanase

Objective

To end an animal's life in situations where death is imminent; or recovery is impossible; or the likelihood of successful reintegration into the wild population is remote; or the animal poses an unacceptable health risk to wild animals.

7.1.1. Standards

7.1.1.1. Fauna must be euthanased without exception when

- death is imminent or highly likely regardless of the treatment provided, or
- it is suffering from chronic, un-relievable pain or distress, or
- it is carrying (or suspected to be carrying) an incurable disease that may pose a health risk to wild animals, or
- its ability to consume food unaided is permanently impaired due to a missing or injured jaw, teeth or beak (prosthetic beaks must not be used as they are ineffective over the long-term).

7.1.1.2. Fauna must be euthanased (unless OEH has granted permission to hold it in permanent care) when

- there is no suitable release location, or
- its ability to reproduce is lost due to an injury, disease or procedure, or
- its ability to locomote normally (i.e. run, climb, crawl, hop, fly or swim) is permanently impaired due to a missing or injured limb, wing, foot, back bone or tail, or
- its ability to sense it's environment (i.e. see, hear, smell, taste or feel) is permanently impaired due to a missing or injured organ (e.g. eye, ear or nose), or
- its ability to catch or handle food is permanently impaired due to a missing or injured digits (e.g. missing rear toe in raptors), or
- its advanced age renders it unable to survive in its natural habitat, or
- it is an amphibian (due to the risk of spreading chytrid fungus).

In certain exceptional circumstances, OEH may grant permission to hold such animals in permanent care. See the OEH Rehabilitation of Protected Fauna Policy for details.

7.1.2. Guidelines

- 7.1.2.1. Fauna should be euthanased when
- its ability to locomote is expected to be impaired for more than 3 months, or
 - it is at a stage of development where it is unlikely to be hand reared to the point where it can be released, or
 - it is suffering from exudative dermatitis that is likely to persist for more than 1 month (mammals), or
 - it has a major crack in its carapace and/or plastron involving displaced or missing segments (turtles).

7.2. How to euthanase

Objective

To induce death with minimal pain and distress to fauna.

7.2.1. Standards

- 7.2.1. A euthanasia method must be used which produces a rapid loss of consciousness immediately followed by death.
- 7.2.2. Death must be confirmed prior to disposal of the carcass. The absence of a heart beat and the loss of corneal reflexes indicate death has occurred.

7.2.2. Guidelines

- 7.2.2.1. Fauna rehabilitators should arrange for a veterinarian to perform euthanasia. Intravenous barbiturate overdose should be used.
- 7.2.2.2. When a non-veterinarian is required to perform euthanasia, a method appropriate for the species and circumstances should be employed to ensure minimal pain and suffering.
- This may include the following methods:
- shooting with a rifle for large animals
 - stunning followed by cervical dislocation for small birds and mammals (less than 0.5 kg)
 - stunning followed by decapitation and/or destruction of the brain for reptiles and amphibians.
- 7.2.2.3. The following euthanasia methods should not be used on fauna:
- suffocation via drowning, strangulation or chest compression
 - freezing or burning
 - carbon dioxide in any form
 - poisoning with household products
 - air embolism

- exsanguination or decapitation without prior stunning
- electrocution or microwave irradiation
- chloroform or strychnine
- neuromuscular blocking agents.

7.2.2.4. Fauna that requires euthanasia should not be exposed to additional stressors such as large numbers of onlookers, people touching it, loud noises or extremes of temperature.

Note: Refer to 'Euthanasia of Animals Used for Scientific Purposes (ed. J Reilly) 2nd edition (2001). ANZCCART Australia' for further information on appropriate euthanasia methods.

The National Code of Practice for the Humane Shooting of Kangaroos and Wallabies for Non-Commercial Purposes (2008) contains conditions for euthanasing injured kangaroos and wallabies.

The *Veterinary Practices Act 2003* places restrictions on the types of procedures non-veterinarians can perform on animals.

The *Poisons and Therapeutic Goods Act 1966* places restrictions on the types of poisons people can possess.

The *Firearms Act 1996* specifies animal welfare as a genuine reason for having a firearms licence.

7.3. Disposal of carcasses and animal waste

Objective

To dispose of waste so that the risks of disease transmission are minimised.

7.3.1. Standards

7.3.1.1. Carcasses and organic waste suspected of disease contamination or that have been exposed to chemicals (e.g. barbiturates) must either be incinerated or buried at a depth that will prevent scavengers from reaching them.

7.3.1.2. Protected fauna that have died from disease or chemical means (e.g. barbiturate overdose) must not be fed to other fauna.

Note: Local councils have laws regulating the disposal of carcasses and other biological waste.

8. Care procedures

8.1. Monitoring

Objective

To check the health of fauna undergoing rehabilitation so that issues can be promptly identified and managed. The type and frequency of monitoring will vary with the species, type of injury or illness and required treatment.

8.1.1. Standards

- 8.1.1.1. Dependent young and fauna in intensive care must be monitored repeatedly during the day and weighed at least twice per week.
- 8.1.1.2. Independent young and fauna in intermediate care must be monitored at least once per day and weighed at least once per week.
- 8.1.1.3. Fauna being prepared for release must be observed every few days to determine if it is physically and behaviourally ready (See Section 11. Suitability for Release).
- 8.1.1.4. Fauna rehabilitators must regularly monitor the temperature within enclosures containing thermal support to ensure that appropriate temperatures are maintained (e.g. blankets, hot water bottles and electric heat mats).

8.2. Controlling disease transmission between animals

Objective

To prevent the spread of diseases among fauna undergoing rehabilitation. Stressed animals are more susceptible to contracting and expressing infectious diseases.

8.2.1. Standards

- 8.2.1.1. Newly arrived fauna must be isolated in separate areas until its disease status can be determined by a veterinarian or Experienced Fauna Rehabilitator.
- 8.2.1.2. Fauna suspected or known to be carrying an infectious disease must be kept under strict quarantine conditions throughout its rehabilitation. Signs of disease may include coughing, sneezing, abnormal breath sounds, discharge from the eyes or nose and diarrhoea.
- 8.2.1.3. Dedicated cleaning equipment must be used for enclosures housing fauna with a suspected or confirmed infectious disease.
- 8.2.1.4. All enclosures, transport containers, cage furniture, food containers and water containers must be thoroughly cleaned and disinfected between each occupant.
- 8.2.1.5. Fauna undergoing rehabilitation must be prevented from coming into contact with domestic pets.
- 8.2.1.6. Fauna rehabilitators must wash their hands thoroughly with soap or disinfectant before and after handling each animal in care.

8.2.2. Guidelines

- 8.2.2.1. When handling multiple animals, rehabilitators should start with the youngest and healthiest and finish with the oldest and sickest to reduce the risks of disease transmission.
- 8.2.2.2. Different species undergoing rehabilitation should be kept in separate enclosures at all times.
- 8.2.2.3. When different species are housed together, care should be taken to minimise aggressive interactions.
- 8.2.2.4. Pest control is recommended for all rehabilitation facilities.

9. Husbandry

9.1. Food and water

Objectives

To ensure that fauna have a feeding and watering regime that encourages rapid recovery, supports growth in juveniles and assists with the maintenance of foraging behaviour necessary for survival in the wild.

9.1.1. Standards

- 9.1.1.1. Clean, fresh drinking water must be available at all times and changed daily, except in the case of dependent young (see Section 9.1.1.6).
- 9.1.1.2. Water containers must be designed and positioned so as to avoid spillage and contamination and must be appropriate for fauna's species, size, age and mobility.
- 9.1.1.3. If bathing water is required, it must be in a separate area from drinking water.
- 9.1.1.4. Fauna must be provided with a balanced and complete diet that supports growth and development and is appropriate for the species, size, age, mobility and physiological status of the animal.
- 9.1.1.5. Food that is available in the wild must form the basis of the animal's diet.
- 9.1.1.6. Hand-reared mammals must be fed a milk formula that is appropriate for the species and stage of development.

9.1.2. Guidelines

- 9.1.2.1. Food should be weighed and compared to the animal's weight gain.
- 9.1.2.2. Food in storage should not be accessible to pets, pests and wild animals and should be protected from contamination and nutritional loss.
- 9.1.2.3. Fauna rehabilitators should refer to species-specific Codes of Practice where available for information on appropriate diets.

Note: The feeding of live vertebrate prey to an animal is only acceptable under certain circumstances (as set out in the POCTA Act). Rehabilitators are encouraged to contact the Animal Welfare Branch of Industry and Investment NSW for further information.

The use of wild-caught animals as food for animals in care poses a disease and poisoning risk.

9.2. Hygiene

Objectives

To maintain clean rehabilitation facilities so that diseases are prevented or contained.

9.2.1. Standards

- 9.2.1.1. Faeces and uneaten food must be removed on a daily basis and disposed of so they cannot be consumed by other animals (e.g. in closed garbage or compost bins).
- 9.2.1.2. Food and water containers must be cleaned on a daily basis. Cleaning involves the use of water, a detergent and the physical removal of all residues.
- 9.2.1.3. Enclosure furniture, bedding, weighing bags and pouches must be cleaned when soiled.
- 9.2.1.4. Fauna must be cleaned when soiled with faeces, urine or uneaten food.
- 9.2.1.5. Fauna rehabilitators must minimise the disturbance to fauna when cleaning.

9.2.2. Guidelines

- 9.2.2.1. Equipment used for cleaning animal enclosures, containers and furniture should be separate from those used domestically.
- 9.2.2.2. Fauna rehabilitators should wash their hands and clean all food preparation surfaces and equipment prior to preparing animal food.

10. Housing

10.1. General requirements

Objectives

To ensure that fauna undergoing rehabilitation are housed in enclosures that keep it safe, secure and free from additional stress.

10.1.1. Standards

- 10.1.1.1. Enclosures must be escape-proof.
- 10.1.1.2. Housing must be made safe for fauna to live in by excluding hazards that might harm it.
- 10.1.1.3. Housing must be designed and/or positioned so as to protect fauna from physical contact with wild animals and pests.
- 10.1.1.4. Housing must be designed and/or positioned so that fauna cannot see domestic pets.
- 10.1.1.5. Housing must be designed so rehabilitators can readily access fauna.
- 10.1.1.6. Housing must be positioned so that fauna are not exposed to strong vibrations, noxious smells (e.g. wood smoke) or loud noises (e.g. radios and televisions).
- 10.1.1.7. Housing must be constructed from non-toxic materials that can be easily cleaned and disinfected.
- 10.1.1.8. If multiple animals of the same species are kept within a single enclosure, there must be sufficient space for individuals to avoid undue conflict with cage-mates.

10.1.2. Guidelines

- 10.1.2.1. Enclosures should be at least the size specified in Appendix A for the species and stage of rehabilitation. These dimensions are suitable for average-sized adults. Smaller individuals may not require the space specified and larger individuals may require more space.

Note: The failure to recognise pet species as predators will preclude rehabilitated fauna from being released into the wild.

10.2. Intensive care housing

Objectives

To reduce activity for a short period of time in order to facilitate frequent monitoring, treatment, feeding and re-hydration.

10.2.1. Standards

- 10.2.1.1. Intensive care housing must provide sufficient space for fauna to maintain a normal posture (e.g. stand upright) and to stretch its body and limbs, but not enough space to run, jump or fly.
- 10.2.1.2. Intensive care housing must provide a constant temperature appropriate to the species, age and nature of the illness or injury.

- 10.2.1.3. The temperature in intensive care housing must be regularly monitored using a thermometer.
- 10.2.1.4. Electrical heat sources must be regulated by a thermostat.
- 10.2.1.5. Fauna in intensive care housing must experience a light-dark cycle that replicates outside conditions. If an artificial light source is used, it must be separate from any artificial heating.
- 10.2.1.6. Intensive care housing must be designed and/or positioned so that visual and auditory stimuli are reduced (e.g. by covering with towel and placing in a quiet room).
- 10.2.1.7. Intensive care housing must be adequately ventilated without allowing excessive drafts.
- 10.2.1.8. Substrate used in intensive care housing must be replaced daily.

10.2.2. Guidelines

- 10.2.2.1. Birds undergoing intensive care should not be kept in cages with exposed wire as it can cause feather damage or cages with a straw substrate as it can lead to infection.

10.3. Intermediate care housing

Objectives

To provide mobile fauna with enough space to allow some physical activity while enabling it to be readily caught for monitoring or treatment.

10.3.1. Standards

- 10.3.1.1. Intermediate care housing must provide sufficient space for fauna to move about freely while being conveniently sized for quick capture.
- 10.3.1.2. If an artificial heat source is provided, fauna must be able to move to a cooler section of the enclosure. Electrical heat sources must be regulated by a thermostat.
- 10.3.1.3. Fauna in intermediate care housing must experience a light-dark cycle that replicates outside conditions. This may be achieved by placing the enclosure in a well-lit room or in a sheltered area outside.
- 10.3.1.4. Perching birds must be provided with multiple perches that are high enough for its tail feathers to clear the substrate. Waterbirds and seabirds must be provided with a pool of clean water deep enough for swimming and a dry area covered with a soft substrate.
- 10.3.1.5. Intermediate care housing for reptiles must contain absorbent substrate and a shelter that facilitates natural hiding behaviour. Reptiles that naturally bask must be provided with lighting appropriate to the species' needs (e.g. UV light). Arboreal reptiles must be given climbing opportunities and aquatic reptiles must be given swimming opportunities.
- 10.3.1.6. Hand-reared gregarious species must be exposed to members of the same species or family during the intermediate care stage.

10.3.2. Guidelines

- 10.3.2.1. Reptiles do not usually require extensive conditioning prior to release and should be suitable for release after an appropriate period in the intermediate care stage.

10.4. Pre-release housing

Objectives

To give fauna the opportunity to regain its physical condition, acclimatise to current weather conditions and practise natural behaviour. At this stage of rehabilitation, interactions between fauna and humans will be greatly reduced.

10.4.1. Standards

- 10.4.1.1. Pre-release housing must provide sufficient space for fauna to move about freely and express a range of natural behaviours.
- 10.4.1.2. Pre-release housing must provide areas where fauna can gain exposure to prevailing weather conditions and locations where it can shelter.
- 10.4.1.3. Pre-release housing must contain habitat that enables fauna to perform a range of natural behaviour.

For example:

- perching birds require a variety of perches designed to suit the size and habits of the species being housed (e.g. limb-perching and ledge-perching birds)
 - waterbirds and seabirds require a pool of clean water deep enough for swimming and a dry area covered with a soft substrate
 - possums require nest boxes and branches at various heights with foliage cover
 - koalas require at least two tree forks each
 - kangaroos require open areas, locations for dust bathing and obstacles to jump over
 - wombats and echidnas require deep, hard-packed substrate for digging.
- 10.4.1.4. Pre-release housing must be designed and/or positioned so that exposure to humans is kept to the minimum required for observation, feeding and cleaning.

10.4.2. Guidelines

- 10.4.2.1. Birds and bats in pre-release housing should have some opportunity for flight (10 wing beats is recommended). This may not be feasible for the larger seabirds; however it should have enough space to flap its wings.
- 10.4.2.2. Pre-release housing for bats and birds capable of flight should have a double-door entry system.

11. Suitability for release

Objectives

To ensure that fauna is physically fit and possess the appropriate survival skills prior to its release. Preparations for release will start at the time of rescue and continue throughout the rehabilitation process. Many species will gradually lose their survival skills in captivity, so it is vital their time in care is kept to a minimum.

11.1. Standards

11.1.1. Fauna must not be released until it is physically ready.

This status has been achieved when:

- it has recovered from any injury and/or disease (e.g. locomotes normally)
- its weight and condition (i.e. body score) is within the appropriate range for that species, age and sex
- it has appropriate fitness levels as determined by both passive observation and active assessment (e.g. by encouraging the animal to exercise and noting recovery time)
- its pelage, plumage, scales or skin is adequate for survival in its natural habitat (e.g. waterbirds have water-proof feathers)
- it has acclimated to prevailing climatic conditions
- it exhibits salt tolerance (marine species only).

11.1.2. Fauna must not be released until it is behaviourally ready.

This status has been achieved when:

- it can recognise, catch and consume appropriate, naturally-available food
- it can recognise and successfully avoid predators (including pets)
- it is not attracted to humans (i.e. not humanised) or to sights, sounds or smells that are specific to captivity (i.e. not imprinted)
- it can navigate effectively through its natural environment
- it can recognise and interact normally with other members of the same species (social species only).

11.1.3. Fauna's readiness for release must be confirmed by either a veterinarian or experienced fauna rehabilitator.

11.2. Guidelines

11.2.1. Species that manipulate their physical environment (e.g. dig burrows or construct dreys) should begin to exhibit this behaviour prior to release.

12. Release considerations

12.1. Timing of release

Objectives

To ensure that fauna is released as soon as it is ready and at a time that minimises stress and maximises its chances of survival in its natural habitat.

12.1.1. Standards

12.1.1.1. Once fauna is deemed ready for release, it must be released as soon as conditions are suitable (see below for what suitable conditions are).

12.1.1.2. Fauna must be released at a time of year that facilitates survival and reintegration into the wild population.

For example:

- reptiles must be released during the warmer months (e.g. spring and summer)
- juvenile animals must be released during their natural dispersal period
- insectivorous species must be released during periods of high insect abundance (e.g. spring and summer)
- migratory species must be released at least one month prior to their typical departure period.

12.1.1.3. Fauna must be released when weather conditions encourage high activity levels (e.g. reptiles must be released on warm days or when water temperatures are high). Release during extremes of temperature and storms must be avoided.

12.1.1.4. Fauna must be released at a time of day that enables it to immediately investigate its environment. The optimal release time for most diurnal animals is approximately one hour after dawn and for most nocturnal animals is approximately one hour after dusk.

12.1.2. Guidelines

12.1.2.1. Territorial species may have occupied a territory prior to coming into care. Such species should be released before their territory is likely to be re-occupied. The average time for this to occur varies between species.

12.1.2.2. If a social species is absent from its family group for too long it may not be recognised when it returns and be treated as an intruder (i.e. attacked). Such species should be released before their group is likely to forget them. The average time for this to occur varies between species.

12.2. Release site selection

Objectives

To ensure that the wild population and natural environment are not negatively impacted by the release. The welfare of the rehabilitated animal after release is a secondary objective.

12.2.1. Standards

12.2.1.1. If the exact location where fauna was found is known and it is a suitable environment for release, it must be released there.

A suitable environment for release is one that

- contains appropriate habitat and adequate food resources
- is occupied by members of the same species
- does not place the animal at a high risk of injury
- has infrastructure for post-release support for animals if required (see 12.3 Release techniques).

12.2.1.2. If the exact location where fauna was found is known but it is an unsuitable environment for release, it must be released in a suitable environment as near as possible to this location, without transporting it across a physical boundary that it would not normally cross or further than it would normally move.

For example:

- migratory birds and flying-foxes may move across eastern Australia
- seabirds, marine mammals and marine turtles may move along the east coast of Australia, with ocean currents playing an important role in the successful dispersal of some species
- large kangaroos may move up to 100 km
- wombats may move up to 50 km
- many mammals do not move further than 10 km and some territorial species, (e.g. brush-tail possums), rarely move more than 50 m
- many birds and reptiles do not move further than 1 km.

If there is no suitable environment within an appropriate distance from the rescue location, the animal must not be released.

12.2.1.3. If only the general location where fauna was found is known and it contains or adjoins a suitable environment for release, it must be released there without potentially transporting it across a physical boundary that it would not normally cross or further than it would normally move (see 12.2.1.2.). If the general location where fauna was found is larger than the distance it would normally move, it must not be released.

12.2.1.4. If there is no information about where fauna was found, it must not be released.

- 12.2.1.5. Fauna can only be released in parks if:
- it was originally encountered in that location
 - the release has written consent from the relevant Parks and Wildlife Area Manager (issued under s.9 of the National Parks and Wildlife Regulation 2009)
 - the release complies with the relevant OEH policies on translocation and environmental integrity.

These conditions also apply to the release of fauna in a location where it might reasonably be expected to enter parks (e.g. on a road adjoining a park).

12.2.2. Guidelines

- 12.2.2.1. Fauna should be released in an area that is connected to other suitable habitat.

Note: Fauna rehabilitators who wish to release rehabilitated or hand-raised fauna in a location it would not move to under normal circumstances require a translocation approval issued by OEH (under s.132 c of the NPW Act).

12.3. Release techniques

Objectives

The use of release techniques that facilitate successful reintegration into the wild population. The collection of information regarding the fate of rehabilitated fauna after release so that the relative merits of different rehabilitation and release techniques can be compared.

12.3.1. Guidelines

- 12.3.1.1. Hand-reared mammals and fauna that have been in care for extended periods of time should be provided with temporary post-release support ('soft' release). This may include supplementary feeding, shelter provision or protection from predators.
- 12.3.1.2. Social species should be released with members of the same species.
- 12.3.1.3. Fauna rehabilitators should not release large numbers of individuals at a single location, as increased competition is likely to have a detrimental effect on the existing population. For example, no more than six ring-tailed possums and two brush-tailed possums should be released at a site per year.
- 12.3.1.4. Fauna rehabilitators should arrange for fauna to be tagged, banded, and micro-chipped or marked as appropriate for individual identification prior to release. Fauna rehabilitation groups and zoological parks are encouraged to participate in post-release monitoring programs to determine survivorship.

Note: All research involving Protected Fauna requires a licence (under s.132c of the NPW Act) and approvals as specified in the *Animal Research Act 1985*.

13. Training

Objectives

Fauna rehabilitators are in possession of appropriate knowledge and skills to ensure the welfare of fauna in their care.

13.1. Standards

- 13.1.1. New fauna rehabilitators must undertake an introductory training course and all fauna rehabilitators must attend an advanced training course every three years and keep up-to-date with changes to this Code.
- 13.1.2. Training courses must:
- teach the standards and guidelines described in this Code
 - focus on what a person will be able to do as a result of completing the course (i.e. be competency-based)
 - have a written assessment component.
- 13.1.3. Fauna rehabilitators must be assessed as competent in the relevant areas before undertaking rescue, rehabilitation or release of particular species.
- 13.1.4. Training must be accompanied by on-going in-field support from fauna rehabilitation groups.

13.2. Guidelines

- 13.2.1. Fauna rehabilitators should have an understanding of
- the objectives of fauna rehabilitation
 - wildlife ecology (e.g. population dynamics, habitat selection, competition, and predator-prey interactions)
 - animal behaviour (e.g. feeding, predator avoidance and social interactions)
 - the health and safety issues associated with fauna rehabilitation (e.g. disease transmission, managing hazardous chemicals and operating in dangerous locations and times)
 - how to keep accurate records.
- 13.2.2. Fauna rehabilitators should be proficient in
- species identification
 - fauna handling techniques
 - first aid for injured fauna
 - recognising the signs of disease
 - animal husbandry.

14. Record keeping

Objectives

To maintain a database of fauna that has entered rehabilitation. Records of fauna admissions represent a vital resource for fauna rehabilitation groups, OEH and research institutions. They can be used to develop better treatments, educate rehabilitators, identify state-wide trends in fauna incidents and identify threatening processes.

14.1. Standards

14.1.1. Licensed fauna rehabilitation groups, zoological parks and individuals must maintain a current register of all protected fauna reported, encountered or rescued.

The register must contain the following information on each animal:

- encounter details (date, location, encounter circumstances, the animal's condition and unique ID number)
- species data (species name, sex, age, initial weight and pouch condition if a marsupial)
- care providers (name and address of the initial assessor (see 4.1.2), name and address of the fauna rehabilitator)
- fate details (date, final disposition, location and any permanent marking).

These records must be submitted to the Wildlife Licensing and Management Unit of OEH in an approved electronic format on an annual basis.

14.1.2. Fauna rehabilitators must record the weight of fauna in their care so changes can be quickly identified (weighing frequency will depend on the type of care provided; see Section 8.1 Monitoring).

14.1.3. When an individual is transferred to another fauna rehabilitator or organisation for any reason, copies of its records must be transferred with it.

14.1.4. If the death of fauna is suspected to be the result of a serious disease outbreak, the fauna rehabilitator must immediately contact their fauna rehabilitation group to ascertain whether tissue analysis or a necropsy is required (see the OEH Policy and Procedures for the Identification and Management of Diseases in Fauna).

14.2. Guidelines

14.2.1. Fauna rehabilitators should record the following additional information at the time of rescue:

- who discovered the animal (name and contact details)
- when the animal was discovered (time of day)
- any treatment or food provided prior to transport.

- 14.2.2. Fauna rehabilitators should record the following additional information at the time of assessment by a veterinarian or experienced fauna rehabilitator:
- details of wounds, injuries, diseases and external parasites
 - details of mobility
 - details of abnormal behaviour
 - recommended management (e.g. euthanasia or treatment).
- 14.2.3. Fauna rehabilitators should record the following additional information at the time of entry into a rehabilitation facility:
- standard length measurements
 - identifying features if it is to be housed communally
 - housing (e.g. intensive care, general) (See Section 8. Housing).
- 14.3.4. Fauna rehabilitators should record the following daily care information:
- details regarding the type and quantity of food/liquid ingested
 - details of treatment (e.g. medication, therapy)
 - details of instructions from veterinarians and species coordinators
 - details of changes to general fitness and behaviour
 - details of enclosure cleaning (e.g. quantity and quality of faeces/urine).
- 14.2.5. Fauna rehabilitators should record the following additional information regarding fate:
- if released, details regarding the type of release (hard or soft)
 - if released, details regarding the condition of the animal (e.g. weight).
- 14.2.6. Fauna rehabilitators should keep duplicates or backups of records to avoid information being lost.

15. Appendix A: Minimum enclosure size guidelines

Table 1: Guidelines for housing mammals

Type of mammal (examples)	Intensive care L x W (m)	Intermediate care L x W (m)	Pre-release L x W x H (m)	No. of animals pre-release
Small bats (microbats)	0.3 x 0.2	0.5 x 0.5	5 x 3 x 2	10
Large bats (megabats)	0.5 x 0.5	1 x 1	10 x 4 x 2	30
Small dasyurids & rodents (antechinus & mice)	0.3 x 0.2	1 x 0.3	1.5 x 1 x 1	6
Large dasyurids & rodents (quolls, phascogales & water rats)	0.5 x 0.3	1 x 1	3 x 2 x 2	1
Bandicoots & potoroos	0.5 x 0.5	1 x 1	4 X 3 x 2	2
Small macropods (pademelons)	0.7 x 0.5	1 x 1	10 x 10 x 2	5
Large macropods (grey kangaroos)	1.5 x 0.7	5 x 5	40 x 20 x 2	10
Small possums & gliders (pygmy possums & feathertail gliders)	0.3 x 0.2	0.6 x 0.3	2 x 1 x 2	4
Large possums (ringtail & brushtail possums)	0.5 x 0.5	1 x 1	3 x 2 x 2	2
Large gilders (greater gliders & sugar gilders)	0.4 x 0.3	1 x 1	5 x 4 x 2	2
Wombats	2 x 1	3 x 2	7 x 5 x 1.5	2
Koalas	0.7 x 0.7	2 x 1	4 x 3 x 3	2
Echidnas	0.5 x 0.5	1.5 x 1.5	5 x 4 x 1	2

Note: L is length, W is width and H is height

Table 2: Guidelines for housing birds

Type of bird (examples)	Intensive care L x W (m)	Intermediate care L x W (m)	Pre-release L x W x H (m)	No. of animals pre- release
Small passerines, parrots & pigeons (finches & wrens)	0.3 x 0.2	0.6 x 0.45	3 x 2 x 1	8
Large passerines, parrots & pigeons (magpies & cockatoos)	0.5 x 0.5	1 x 1	5 x 2 x 2	4
Small waterbirds (ducks & grebes)	0.4 x 0.4	0.6 x 0.6	4 x 2 x 2	2
Large waterbirds (swans & herons)	0.7 x 0.7	1 x 1	6 x 2 x 2	2
Small seabirds (gulls, cormorants & terns)	0.4 x 0.4	0.6 x 0.6	4 x 2 x 2	2
Large seabirds (albatrosses & pelicans)	0.7 x 0.7	1.5 x 1	6 x 3 x 2	1
Small raptors (kestrels & hobbies)	0.5 x 0.5	2 x 2	5 x 3 x 3	1
Large raptors (eagles, hawks & falcons)	1 x 1	3 x 3	15 x 10 x 4	1
Brush turkeys & emu chicks	0.7 x 0.4	2 x 2	5 x 3 x 2	2
Adult emus	1.5 x 0.7	5 x 5	10 x 10 x 2	2

Note: L is length, W is width and H is height

Table 3: Guidelines for housing reptiles

Type of reptile (examples)	Intensive care L x W (m)	Intermediate care L x W X H (m)	No. of animals pre-release
Geckos & small skinks (garden skinks)	0.2 x 0.1	0.6 x 0.6 x 0.6	2
Large skinks (blue-tongue lizards)	0.6 x 0.4	1 x 1 x 0.5	1
Small dragons (jacky dragons)	0.3 x 0.15	0.6 x 0.6 x 0.6	1
Monitors and large dragons (lace monitors)	2 x 1	4 x 3 x 2	1
Small venomous snakes (death adders)	0.5 x 0.3	0.6 x 0.6 x 0.5	1
Large venomous snakes (eastern brown snakes)	1 x 0.5	1.2 x 1 x 0.5	1
Small pythons (spotted pythons)	0.5 x 0.2	0.6 x 0.6 x 0.5	1
Large pythons (carpet/diamond pythons)	1 x 0.5	1.3 x 1.2 x 1.8	1
Small freshwater turtles (eastern snake-necked turtles)	0.5 x 0.3	1.8 x 0.6 x 0.6	2
Large freshwater turtles (broad-shelled turtles)	1 x 0.6	2 x 1.2 x 0.9	2
Amphibians	0.4 x 0.4	0.6 x 0.4 x 0.4	2

Note: L is length, W is width and H is height

