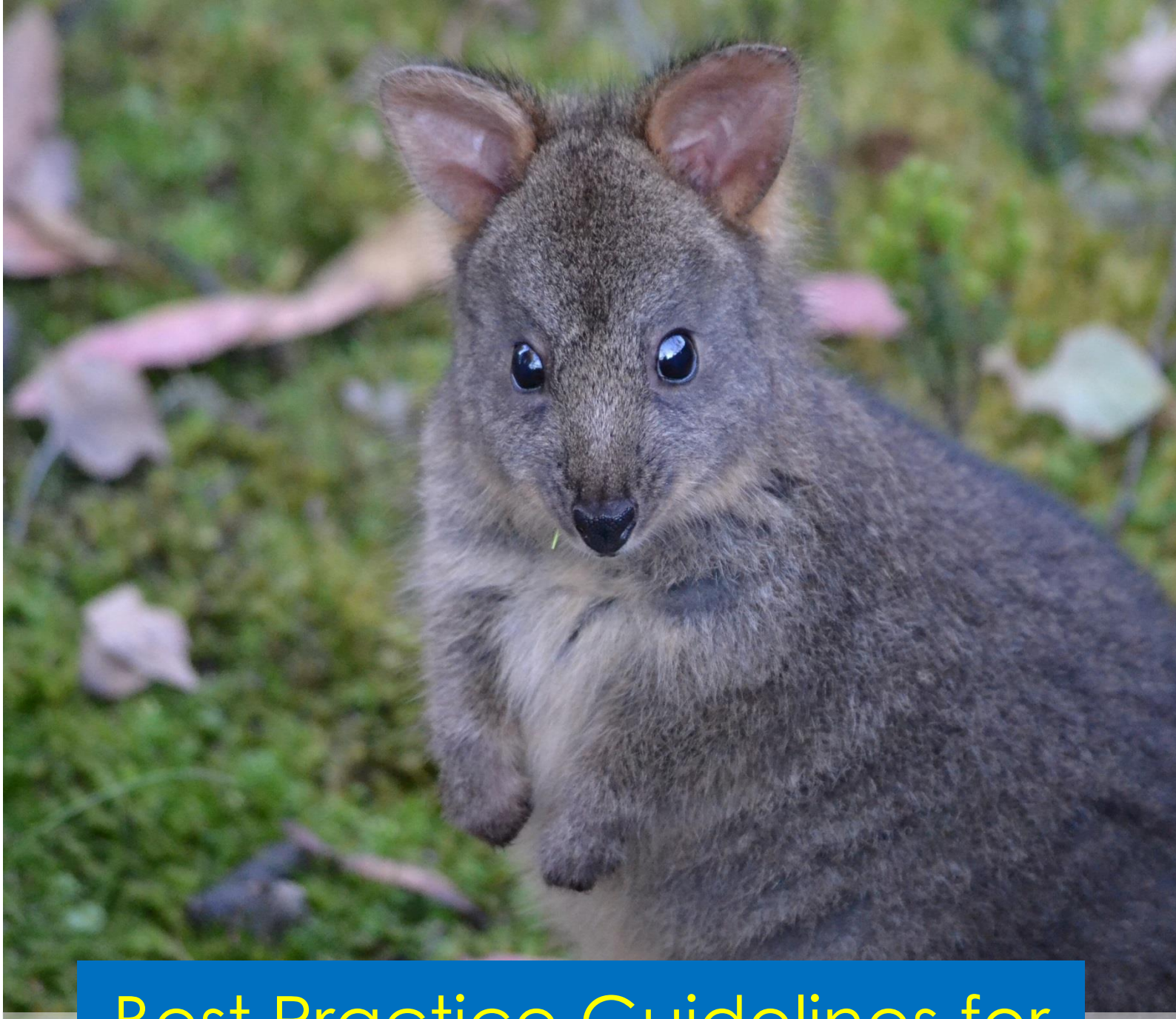

Best Practice Guidelines for Wildlife Rehabilitation

Guidelines for the rehabilitation and release of injured and orphaned wildlife in Tasmania

July 2021 (version 2)

Department of Primary Industries, Parks, Water and Environment

Tasmanian Government

Contents

Acknowledgments

This document has been developed by the Natural and Cultural Heritage Division in the Department of Primary Industries, Parks, Water and Environment (DPIPWE) in consultation with the Tasmanian wildlife rehabilitation sector, the RSPCA and the Animal Biosecurity and Welfare Branch of Biosecurity Tasmania (DPIPWE).

DPIPWE acknowledges the contributions and dedication of the wildlife rehabilitation sector, particularly those who voluntarily commit to assisting injured and orphaned wildlife.

Purpose

The *Best Practice Guidelines for Wildlife Rehabilitation* (the Guidelines) are designed as a decision support tool to be used by the wildlife rehabilitation sector. The Guidelines apply to the rehabilitation of all native birds, mammals and reptiles in Tasmania.

The Guidelines are designed to be used in conjunction with the *Animal Welfare Act 1993,* as well as other relevant Tasmanian legislation. The Guidelines should also be used in association with information from wildlife course material and manuals, current scientific publications, and advice from veterinarians and experienced mentors, as well as personal experience.

The Guidelines will be reviewed periodically by the DPIPWE and revised to reflect changes to knowledge, technological advances, community expectations and welfare standards.

Wildlife rescue and handling techniques are not included in the Guidelines. Please contact DPIPWE, your local wildlife rescue and rehabilitation group or an experienced wildlife rehabilitator if you need further information on these techniques.

The Goals of Wildlife Rehabilitation

Wildlife rehabilitation has two main goals:

1. **To prepare sick, injured and orphaned wildlife (IOW) for independent survival in the wild after release; and**
2. **To prevent the release of rehabilitated wildlife having a negative impact on wild conspecifics, other species in the area, and ecosystems more broadly.**

The first goal focuses on the welfare of an individual animal, both in the rehabilitation environment and after its release back into the wild. To achieve this, rehabilitation techniques should reflect the natural processes that occur

in the wild as closely as possible. Rehabilitators should apply the animal welfare Five Freedoms or Five Domains approach as shown below[1].

Five Freedoms	Five Domains
Freedom from hunger and thirst	Nutrition
Freedom from discomfort	Environment
Freedom from pain, injury and disease	Health
Freedom to express normal behaviour	Behaviour
Freedom from fear and distress	Mental state (interlinked with the other 4 domains mentioned above)

DPIPWE acknowledges that wildlife rehabilitators are integral to achieving the goals of best practice rehabilitation.

Initial Case Assessments

When IOW first present to a wildlife rehabilitator, a case assessment should be completed. This will assist in making an informed decision as to the best outcome for the animal. See Appendix 1 for a sample case assessment form.

The following should be documented by the rehabilitator:

- Species
- Sex and reproductive status (e.g. does it have dependent young?)
- History (e.g. point of origin, when found)
- Developmental stage and weight (head, foot and tail measurements are recommended for joeys)
- Body condition and temperature
- Pelage (fur/hair), feather, skin or scale condition
- Degree of dehydration
- Demeanor and posture
- Signs of disease and presence of parasites
- Presence and severity of injuries
- Has the animal received veterinary or first aid treatment?
- Behaviour (do they seem tame?)
- Has the animal been fed anything?
- Proposed plan/outcome.

[1] Adapted from https://kb.rspca.org.au/knowledge-base/what-are-the-five-domains-and-how-do-they-differ-from-the-five-freedoms/

Introduced Species and Escaped Pets

The initial case assessment may identify the animal is an introduced species or escaped pet.

It is important to note that introduced species can have a detrimental effect on native species in the wild. An example of this is the Sugar Glider, which is known to prey on nestlings of the endangered Swift Parrot.

Another consideration is that keeping introduced species in captivity may limit a wildlife rehabilitator's capacity to rehabilitate and release native species, by taking up valuable space and resources, or introducing disease to the facility.

Table 1 provides recommended outcomes for sick, injured or orphaned introduced species and escaped pets. If unsure, please contact the DPIPWE for advice.

Table 1. Recommended outcomes for injured, sick or orphaned introduced species and escaped pets that have been rescued in Tasmania (this list is not exhaustive).

Species	Legislative status: *Wildlife (General) Regulations 2010*	Recommended outcome
Galah Sulphur Crested Cockatoo	Schedule 3 Protected (Permit to rehabilitate required)	If a pet, attempt to find owner or keep in captivity. If wild, rehabilitate for release. It should be assumed that a bird is wild until determined otherwise.
Alexandra's Parrot Hooded Parrot Little Lorikeet Regent Parrot Superb Parrot Western (Long-billed) Corella	Schedule 3 Protected cage bird	If owner or suitable captivity cannot be found, must be euthanased on welfare grounds. Do not release into wild.
Stubble Quail	Schedule 3 Protected: possible pet/native	If not a pet, rehabilitate for release.

Species	Legislative status: *Wildlife (General) Regulations 2010*	Recommended outcome
Blackbird Starling Sparrow European Goldfinch Greenfinch Kookaburra Little Corella Skylark Spotted Turtle Dove Rainbow Lorikeet[2] Lyrebird Rabbit[3] Noisy Miner[4] Mallard ducks (including hybrids with native species)[5]	Not protected Introduced	If not kept in captivity, must be euthanased.
Forest Raven (crow)	Not protected Native	Rehabilitate for release.
Sugar Glider	Restricted (Special Purpose)	Must be euthanased or kept in captivity in a wildlife park.

Case Assessment Decision

Once the case assessment is complete (excluding those identified as introduced or escaped pets) a decision is made to:

1. **Return the animal to the wild; or**
2. **Euthanase the animal on welfare grounds or due to having a poor prognosis for release; or**
3. **Rehabilitate the animal for release.**

The Guidelines are based around these three outcomes and are designed as a tool to help rehabilitators with this decision-making process.

Consultation with DPIPWE, a veterinarian and/or a more experienced rehabilitator may be required in complex cases.

[2] https://dpipwe.tas.gov.au/invasive-species/invasive-animals/invasive-birds/rainbow-lorikeet
[3] Competition between rabbits and native animals as well as land degradation caused by rabbits are both listed as key threatening processes in the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*.
[4] Overabundance leading to aggressive exclusion of native birds from woodland forest is a key threatening process under the EPBC Act.
[5] See: Feral Mallards: A risk for hybridisation with wild Pacific Black Ducks in Australia? January 2009 Victorian Naturalist 126(3):87-91

1. Return to the Wild

In some cases, wildlife have been mistakenly rescued by well-meaning members of the public, and/or have been assessed by a veterinarian experienced with the species as being fit for immediate return to the wild. In these cases, wildlife do not require rehabilitation.

Examples of this are:

- Echidnas that have wandered into a suburban yard.
- Fledglings that have just left the nest.
- Penguins in moult.
- Brushtail possums in rubbish bins in urban areas.

Holding an animal in captivity, even for a short period, may be detrimental to its reintegration into the wild and could impact upon any dependent young that are reliant upon it for care.

Provided the animal is fit for release it should be returned to its point of origin (or nearby) and released at the appropriate time of day/night. Although the area may be considered a risky environment (for example an urban environment), if the animal originated from the area it can be assumed that it has access to the resources it needs for survival, support from a social or family group, and that the environment is suitable.

Relocation and release of an animal into an unfamiliar environment poses a greater risk due to competition for territory, unfamiliarity of shelter, food and water sources, and increased susceptibility to predation and other threats.

In some cases, releasing the animal at its point of origin is not possible, for example, if habitat has been destroyed. Please contact DPIPWE for advice prior to release. For emergency advice after hours and on weekends please contact Bonorong Wildlife Rescue.

2. Euthanasia

The primary role of a wildlife rehabilitator is to alleviate the suffering of IOW. Not every animal can be (or should be) saved, and it is important for a rehabilitator to recognise when euthanasia is the best outcome for an animal to prevent further suffering.

Ideally, a veterinarian should be consulted for a diagnosis or prognosis prior to the decision to euthanase. In emergency situations where all reasonable attempts to contact a veterinarian or experienced rehabilitator for advice have failed, and the animal is suffering severe injury or disease, euthanasia should be performed using the correct technique by someone who is competent in performing this task (see Table 2).

Wildlife must be euthanased when:

- Death is imminent or highly likely.
- It is suffering chronic, un-relievable pain or distress.
- It is underdeveloped and is unlikely to be successfully rehabilitated for release (See Table 3).
- It has an incurable disease that may pose a threat to wild animals (for example Psittacine Beak and Feather Disease) or domestic stock.
- It is (or will be) unable to feed itself due to missing or badly injured jaw, beak, teeth, bill, mouth.
- A captive environment is likely to be detrimental to the rehabilitation of the animal.
- It has permanent damage to its nervous system.

Unless permission is given by DPIPWE for permanent care, an animal must be euthanased when the animal is (or will be):

- Unable to navigate its natural habitat (run, fly, climb, hop, swim or use prehensile tail).
- Unable to sense its environment (see, hear, smell, taste or feel).
- Unable to catch or handle food (missing important digits or teeth, rear toe in raptors).
- Of an advanced age and likely to die not long after release.
- A territorial adult that requires long-term rehabilitation where release back into its territory is unlikely to be successful.
- Unlikely to be rehabilitated for release for any other reason.

Table 3. Minimum Viability Guidelines for the most common orphaned native mammal species in Tasmania.

Species	Euthanasia is recommended if one or more of the following criteria are met:
Brushtail Possum	• Weight: ≤ 110g • Head: ≤ 49mm • Furless, eyes closed and ears fused
Tasmanian Pademelon	• Weight: ≤ 200g • Head: ≤ 53mm • Furless, eyes closed and ears fused
Bennetts Wallaby	• Weight: ≤ 400g • Furless or fine fur, eyes closed and ears fused
Bare-nosed Wombat	• Weight: ≤ 150g • Furless, eyes closed or just opening and ears fused
Ringtail Possum	• Weight: ≤ 50g • Head: ≤ 35mm • Furless, eyes closed and ears fused
Eastern Grey (Forester) Kangaroo	• Weight: ≤ 600g • Head: ≤ 80mm • Furless, eyes closed and ears fused
Bandicoots	• Weight: ≤ 40g • Furless, eyes closed and ears fused
Long-nosed Potoroo	• Weight: ≤ 85g • Furless, eyes closed and ears fused
Pygmy Possum[6]	• Weight: ≤ 2g • Furless, eyes closed and ears fused
Echidna	• Weight: ≤ 130g • Furless, no spines visible and eyes closed
Tasmanian Bettong	• Weight: ≤ 85 • Head: ≤ 41mm • Furless, eyes closed and ears fused
Tasmanian Devil	• Weight: ≤ 100g • Head: ≤ 35 mm • Furless, eyes closed and ears fused
Eastern Quoll	• Weight: ≤ 40g • Furless, no spots visible and eyes closed
Spotted-tail Quoll	• Weight: ≤ 50g

[6] Scales that can weigh very small amounts are required, and the viability of a pygmy possum should be determined by a pygmy possum specialist.

Further guidance on viability:

- Animals below the minimum weight/size/developmental stage have a very poor chance of successful rehabilitation for release. Please consult with an experienced wildlife rehabilitator if you are unsure on how to apply these guidelines.
- Weights and measurements contained in the table are based on averages and must be considered a guideline only, with consideration given to intraspecific variation, seasonal influences and the individual circumstances of the orphan.
- Marsupials are born before they are properly developed and continue their development in the pouch (or a nursery burrow in the case of the monotremes). Orphaned marsupials with no fur have very intensive needs. This limits a wildlife rehabilitator's capacity to take on IOW with fur (more developed), which have a higher chance of being rehabilitated for release.
- If a joey is sticky to touch and/or the mouth is still fused, it is too underdeveloped and cannot be successfully rehabilitated.
- If a furless joey is significantly compromised it must be euthanased as soon as possible. Significantly compromised in respect to furless joeys refers to one of the following criteria (which are cumulative):
  - severe dehydration (skin tenting or slow capillary refill time)
  - low body temperature (cold to touch)
  - lethargic (unresponsive to gentle handling)
  - wounds (other than a superficial scratch to a non-essential area)
  - bruising indicative of attempted predation or other trauma.
- Head measurements are often more reliable indicators of development, as often orphans are underweight when first presented. Measurements are taken by Vernier calipers as shown. Foot and tail measurements can also be used as guide[7].

- Where the number of IOW requiring rehabilitation exceed the capacity of the sector (particularly wildlife rehabilitators), priority should be given to animals that have a greater chance of survival according to their development. In addition, species listed as protected and specially protected (including endangered) under the *Wildlife (General) Regulations 2010* should be prioritised. This may mean a temporary increase in the minimum viable weights of partly protected animals (Pademelon, Bennetts wallaby and Brushtail possum).

[7] Source: Wombaroo® Milk Replacers and Food Supplements for Native Animals 4th Edition 2017

Methods of Euthanasia

Ideally, euthanasia should be performed by a veterinarian, who can sedate the animal and then administer an intravenous overdose of barbituate.

There may be instances when an emergency situation requires a non-veterinarian to euthanase an animal. The aim of euthanasia in this circumstance is to end the life of the animal in a way that minimises or eliminates pain and distress. A good euthanasia method will result in rapid loss of consciousness followed by loss of brain function.

The following table has been developed to assist in determining the most appropriate method, and to meet the requirements of the *Animal Welfare Act 1993* (See Table 2).

The following methods must not be used to euthanase wildlife:

- Suffocation by drowning, strangulation or chest compression
- Freezing or burning
- Air embolism
- Poisoning with household products
- Exsanguination (bleeding out)
- Electrocution
- Chloroform or strychnine
- Neuromuscular blocking agents.

Captive bolt devices have not been included as an acceptable method of euthanasia in the Guidelines at this time, as this method has not yet been verified as humane. This is due to the current lack of research to determine the most suitable device for wildlife, the efficacy of causing immediate unconsciousness and death in wildlife, and optimal placement of the device.

The following signs should be observed as confirmation of euthanasia:

- Absence of respiratory movement
- Absence of heartbeat
- Corneal and palpebral reflexes are lost (when eyeball is touched).

Table 2. Recommended euthanasia techniques for injured and orphaned Tasmanian wildlife that are unable to be rehabilitated. These techniques are for incapacitated wildlife and should only be used when a veterinarian is not available.

(Y = Recommended, N = Not recommended)

Species	Stunning with heavy blunt instrument followed by:				
	Blunt force trauma to the head	**Cervical dislocation**	**Decapitation**	**Spinal severance/ cervical dislocation followed by brain destruction**	**Shooting[8]**
Microbats	Y	Y	Y (neonates only)	-	N
Small mammals & rodents	Y	Y	Y (neonates only)	-	N
Medium marsupials and monotremes	Y (dependent young)	Y (pouch young)	Y (pouch young)	-	Y [9] (brain or heart shot, no less than 12 gauge or .22 caliber)
Kangaroos and wallabies	Y (dependent or at foot young, except at foot and adult Eastern grey (Forester) kangaroos)	Y (unfurred pouch young only)	Y (unfurred pouch young only)	-	Y [10] (adults and at foot, brain or heart shot, no less than 12 gauge or .22 caliber)
Birds	Y	Y (chicks, small and medium birds only)	Y (chicks, small and medium birds only)	-	Y [11] (over 3kg only)
Lizards and snakes	Y	N	N	Y	Y (large lizards and snakes)
Amphibians	Y	N	N	Y	N

[8] Must be in accordance with the *Firearms Act 1996*.
[9] Where wildlife cannot be captured and euthanasia is required. For wombats no less than a 12 gauge shotgun or rifle using .22 caliber long ammunition at a maximum of 10 metres must be used. The same applies for possums, but up to a range of 50 metres.
[10] Where wildlife cannot be captured and euthanasia is required, no less than a 12 gauge shotgun or rifle using .22 caliber long ammunition at a maximum of 50 metres must be used.
[11] Where wildlife cannot be captured and euthanasia is required, no less than a 12 gauge shotgun or rifle using .22 caliber long ammunition must be used.

3. Rehabilitation and Release

Prior to commencing the long-term rehabilitation of an animal, a rehabilitator must have the capacity to rehabilitate that animal for release. This includes the time, financial resources, facilities, training and mentor support to rehabilitate at a high standard (capacity to care). If not, for the welfare of the animal, it must be transferred to another rehabilitator with a greater capacity.

Capacity to care also includes having access to suitable release sites for rehabilitated wildlife. If the animal was rescued in conjunction with a landowner, they may give permission to release the animal back onto their property.

By agreement among rehabilitators, animals may receive short term care by one suitable wildlife rehabilitator before commencing longer term or pre-release preparation under the supervision of another suitable rehabilitator.

Children can learn about native wildlife by assisting wildlife rehabilitators with rehabilitation activities, where appropriate. They must do so under the supervision of an adult and habituation must not be encouraged.

It is useful to follow a rehabilitation skills pathway which begins with the species and life developments stages that have the least complex needs for rehabilitation. As a rehabilitator builds up their skills and experience they move through the pathway to more complex species and life stages. This provides better outcomes for wildlife, but also helps with the retention of wildlife rehabilitators.

Note: Refer to Appendix 4 and 5 for the Rehabilitation Skills Pathways.

Provision of Veterinary Care

Under the *Animal Welfare Act 1993*, rehabilitators have a duty of care to take all reasonable measures to ensure the welfare of an animal. This includes the provision of timely veterinary attention.

Under the *Veterinary Surgeons Act 1987* only registered veterinarians can perform procedures that are considered to be veterinary services.

Rehabilitators should always have resources available in the event an animal requires veterinary care and should not exceed their capacity to care by accepting more IOW than they can provide timely veterinary care for.

A person must not hold a seriously ill or injured animal overnight without appropriate treatment where after-hours veterinary care is accessible.

Unless prior approval has been given by DPIPWE, the following surgery must not be conducted by a veterinarian or any other person:

- Amputation of a limb or part of a limb
- Removal of an eye
- Amputation of a tail
- A procedure that will render an animal unable to reproduce
- Any other procedure that will be expected to reduce an animal's ability to survive in the wild.

Note: wildlife rehabilitators must correctly dispose of any needles from wildlife treatment.

Prescription Medication

A veterinarian may prescribe medication for treatment of IOW. This medication must be used only for the animal and the condition that it was prescribed for. It must be administered according to the label and instructions from a veterinarian. The treatment course must be completed, even if the symptoms have resolved. Out of date medication must not be administered and should be disposed of safely at a pharmacy.

There may be prescription medication left over and it can be tempting to keep it and/or administer to another animal in your care. However, not only is this in contravention of responsibilities under the *Code of Practice for the Supply and Use of Veterinary Chemical Products*[12], it can also have detrimental effects.

Potential problems with administering prescription medication without veterinarian advice include:

- **Adverse effects**: the medication may not be suitable for the animal due to its health condition, age, sex or species and can cause harm.
- **Over (or under) dosing**: drug doses are calculated for a specific animal and this dose may not be suitable for other wildlife in care. Overdosing could result in death. Underdosing can result in antibiotic resistance meaning that drugs may no longer be effective against certain pathogens.
- **Prolonged suffering**: without seeking veterinary advice wildlife may suffer due to incorrect or ineffective treatment provided.
- **Antibiotic resistance**: overuse and inappropriate use can contribute to antibiotic resistance which affects humans and animals. Where the antibiotic does not successfully kill bacteria, it promotes the growth of

[12] https://dpipwe.tas.gov.au/agriculture/agvet-chemicals/codes-of-practice-guidelines-and-information-sheets/codes-of-practice/code-of-practice-for-the-supply-and-use-of-veterinary-chemicals

antibiotic resistant bacteria. As a precaution a veterinarian may use a microbial culture to first determine if an antibiotic will be a successful treatment before administering it to an animal.
- **Interfere with diagnosis**: administering medication before seeking advice from a veterinarian may lead to difficulties with diagnosis of a condition once veterinary advice is sought.

Disposal of Carcasses

All wildlife carcasses and animal waste products must be disposed of appropriately.

Microbats that may have exposed a human to Australian Bat Lissavirus (ABLV) cannot be disposed of and must be kept for testing.

Incineration or deep burial of carcasses is required where:

- There is a risk of disease transmission (for example, sarcoptic mange), or
- Animals have been euthanased by barbiturate overdose (to prevent secondary poisoning of scavengers).

Disease Control

Of the agents that cause disease in humans, it is estimated that 61% are zoonotic (capable of transferring between humans and animals). The elderly, young children and people with weakened immune systems are the most at risk of contracting zoonotic disease.

Examples of zoonotic disease are:

- Australian Bat Lyssavirus (ABLV) in microbats
- Psittacosis in birds
- Q fever in macropods[13]
- Tularaemia in possums

Some zoonotic diseases, including those listed above, are of significance to public health and have reporting requirements[14].

Rehabilitators should keep up to date with information about diseases that may be encountered when sharing their homes with wildlife and keep vaccinations current. Injuries, including superficial scratches, should be treated promptly, and presented to a GP if there are concerns.

[13] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7725937/. Coxiella burnetii seroprevalence and Q fever in Australian wildlife rehabilitators (2020).

[14] https://www.dhhs.tas.gov.au/publichealth/communicable_diseases_prevention_unit/infectious_diseases

Maintaining a high standard of hygiene throughout all areas of rehabilitation is the primary line of defense against disease.

The following basic biosecurity practices should be incorporated into daily routines to limit the risk of zoonotic disease:

- Wash hands thoroughly before and after handing wildlife.
- Wear personal protective equipment.
- Do not use rehabilitation equipment for any other purpose. Clean and disinfect after use.
- Store rehabilitation supplies separately from human supplies (for example, in a separate fridge).
- Keep wildlife separate from living areas in the home.
- Water sources should be cleaned regularly to prevent establishment of mosquitoes, especially in warmer weather when the rate of development can increase.

As well as spreading to humans, disease can spread quickly through other animals in care. To maintain high standards of disease control, rehabilitators should incorporate the following disease control practices into their routines:

- Newly arrived IOW must be isolated from other wildlife until it can be established that there are no signs of infectious disease or parasites.
- Sick animals must be quarantined until veterinary advice is sought.
- Address the needs of the healthiest animals first and finish with the sickest.
- House different species separately.
- Remove and dispose of faeces and food waste daily.
- Control pests and vermin (baits can have secondary impacts on carnivores).
- Store supplies correctly to avoid contamination, mould and bacterial growth, nutritional loss, and access by vermin and domestic pets.
- Clean and sanitise feeding equipment between individuals and between feeding sessions.
- Separate feeding and cleaning equipment must be used for animals with suspected or confirmed infectious diseases.
- Wildlife undergoing rehabilitation must be prevented from coming into contact with other wild species and domestic pets.
- Disinfect enclosures, equipment and transport containers after each occupant.

Nutrition

The captive diet of IOW should support healthy recovery and development, as well as assist with the maintenance of natural foraging techniques to ensure wildlife are adequately prepared for release.

Clean, fresh drinking water must be available at all times where required.

Rehabilitators must have a good understanding of the natural diet and nutritional requirements of a species prior to rehabilitation. This will help to prevent avoidable dietary-related conditions, which may result in euthanasia, for example 'stargazing syndrome'.

A captive diet should be:

- Appropriate for species, developmental stage, and condition.
- Comprised predominantly of a natural diet to teach food recognition and encourage normal digestive function.
- Entirely natural for at least two weeks prior to the animal's release.
- Based on scientifically developed wildlife products and techniques, veterinary advice, and the best available information on suitability for wildlife.

A captive diet must not consist of:

- Inappropriate milk replacements including: cow's milk, goat's milk, evaporated milk, human breast milk, soy milk, and long-term use of low lactose or lactose free milk.
- Dog or cat food for carnivorous mammals and wombats.

Please note: the long-term use of 'universal' milk replacement formulas developed for domestic species is not recommended for use in wildlife as they may not provide adequate nutritional requirements.

Prior to force feeding an animal, a rehabilitator must have had training from a person with many years of experience in rehabilitating that species.

Housing

Enclosures are essential in the rehabilitation process as they provide safety, security, intra and inter-specific disease barriers, and separation from human living spaces and domestic animals.

Minimum enclosure sizes for different types of wildlife are provided in Appendix 3.

It is beyond the scope of this document to list all possibilities for design and building materials; however enclosures should meet the following requirements.

General requirements that are applicable to all types of housing:

- Must be escape proof.
- Prevent wildlife from sustaining injury or significant feather damage.

- Prevent any contact with vermin and domestic animals, and wild animals (unless the animal is undergoing an assisted release).
- Not expose wildlife to loud noise, strong vibrations and noxious smells.
- Must be readily accessible and easily cleaned and disinfected.
- Should be an appropriate size for developmental stage, illness and injury.
- Allow a natural light/dark cycle.
- Provide adequate ventilation.
- Provide shelter appropriate for the species and developmental stage.

Requirements for critical care housing:

- Allow enough space for an animal to maintain normal posture and stretch, but not enough to run, jump or fly.
- Should be maintained at an appropriate temperature for species, age and nature of injury or condition.
- Enclosure should be monitored with a thermometer, particularly if artificial heat is provided.
- Sights and sounds of a domestic household should be reduced.

Requirements for intermediate care housing:

- Should provide an animal with enough room to move freely, but is confined enough to allow a quick capture.
- If artificial heat is provided there must be enough space for the animal to move to a cooler part of the enclosure.
- Enclosure should be monitored with a thermometer if artificial heat is provided.
- Perching birds must be provided with perches that are high enough for feathers to clear the substrate.
- Perching birds must be provided with perches that are varied in diameter as well as texture to allow the bird to find a comfortable perch and minimise risks of pressure sores ('bumble foot').
- Social species should be slowly introduced to conspecifics.
- Reptiles should be provided with natural substrate and shelter. They can be released successfully from this stage without needing pre-release housing.

Requirements for pre-release housing:

- Must allow sufficient space to improve strength, develop stamina and coordination, and build or restore muscle tone.
- Provide adequate shelter, but also allow acclimatisation to weather conditions.

- Must simulate the species' natural environment to encourage normal wild behaviors.
- Flight aviaries for birds and bats should have a double door system to prevent escapees.

Record Keeping & Monitoring

Maintaining comprehensive records of all IOW is important for the following reasons:

- It demonstrates a rehabilitator's level of experience.
- It can assist DPIPWE with decision-making.
- It can be a valuable educational tool.
- It can assist in diagnosis and early detection of issues.
- It is a means to monitor treatment and recovery.
- It helps to gauge effectiveness of rehabilitation techniques.
- It can provide a decision-making tool for future IOW.
- It can assist veterinarians with diagnosis and treatment and improve relationships with veterinarians.

The type of record keeping and monitoring required will vary with the species and condition. A sample care plan for joeys is contained in Appendix 4.

In addition to the initial case assessment, the following should be recorded throughout the rehabilitation process:

- Details of treatments and veterinary advice
- Regular weights
- Photographs
- Observations of behaviour and demeanor
- Final outcome (euthanased, transferred, died, released)
- Date of final outcome
- Location of release, if applicable.

Below is a guide for monitoring wildlife in care.

Type of care	Frequency of monitoring
Critical Care	Several times daily and weight recorded at least once per day.
Intermediate	At least once per day and weight recorded at least twice per week.
Wildlife requiring artificial heat	Must be monitored several times daily to ensure that heat is maintained at a relatively constant temperature.
Release preparation	Monitored daily to ensure fresh water is available.

Wherever possible post-release observations should be recorded to help guide future releases. This can include:

- Dates and locations of post-release sightings
- Weather conditions at the time
- Sightings of offspring
- Body condition and evidence of injury or disease
- Mortalities and cause (if known).

Transport

Transportation of wildlife in vehicles should only be undertaken where necessary; for example, to a veterinary clinic for treatment or to a release site. Wildlife should be transported in a way that minimises stress (especially heat stress) and prevents injury or further exacerbates an injury.

Wildlife must not be left in an unattended vehicle.

A veterinarian must approve the use of medication to facilitate transport if required.

Transport containers must:

- Prevent escape.
- Prevent injury or feather damage.
- Prevent rolling or tipping during transit.
- Have adequate ventilation.
- Minimise light, noise and vibration.
- Prevent contact or sight of children, pets and predator species.
- House different species and individuals of the same species from different areas in separate containers.
- Have non-slip flooring.
- Be disinfected after each occupant to minimise the spread of disease and the smell of predators.
- Provide appropriate temperature.
- Be appropriate for the species, size, strength and temperament of the individual animal.
- Labelled, if transporting snakes, to alert others to its contents.

Release of Rehabilitated Wildlife

Releasing wildlife back into the wild is the most important aspect of rehabilitation, and each animal should be adequately prepared to survive on its own once released.

When considering release, rehabilitators should work on the basis of sound ecological principles and have a good understanding of the needs of the species being released.

Wildlife Attributes that Demonstrate Readiness for Release

- Full recovery from sickness or injury.
- Do not exhibit any signs of disease.
- Appropriate level of physical fitness.
- Locomotive skills.
- Appropriate weight for species/sex/season.
- Fight or flight behavioral response.
- Foraging behavior.
- Normal species behavior.
- Be of mature age for independent survival.
- Possess appropriate pelage, scales, or plumage to enable survival in the natural environment.

Where to Release Rehabilitated Wildlife

Wildlife should be released at their point of origin to provide the best outcome for the animal.

If the point of origin is unsuitable for release, the animal must be released in a suitable environment nearest to the point of origin, but not outside of the natural dispersal range of the species, or any physical barriers to dispersal.

A suitable release environment is one that:

- Has an existing population of that species (ideally not overcrowded).
- Has suitable habitat and ample resources available.
- Does not place the animal at risk of injury.

Please contact DPIPWE if these options are not possible, as the risk of undesirable ecological and animal welfare impacts must be considered before release into another area. For example:

- The spread of diseases and parasites into local populations.
- Genetic contamination of genetically distinct populations.
- Impacts on stable social structures of resident populations.
- Decreased likelihood of survival in the wild.

Release of orphaned wildlife should not occur at any place of business (for example, tourist accommodation) where it could become habituated, a nuisance animal or pose a threat to public safety.

Migratory and burrowing seabirds should be released at an existing colony, where burrows can offer protection from predators, or on a large headland on a windy day. It is important to have sound knowledge of the timing of

breeding chick rearing and migration when considering appropriate rehabilitation and release of these species.

The release of high numbers of animals from the same location can lead to an increase of predators in the area, which can decrease the likelihood of post-release survival.

In addition:

- The release of wildlife into National Parks or reserved land is only permitted as part of an approved recovery program.
- The release of wildlife on crown land is only permitted with written approval from the relevant authority.
- Permission of the land owner is required to release wildlife on private land.

When to Release

Consider the needs and behavior of the species to give them the maximum amount of time available to become familiar with their new environment, for example:

- If nocturnal release just after dark.
- If diurnal release at dawn.
- If migratory release with conspecifics, ideally one month before expected migration. For shearwaters, adults should be released by March, and any juveniles after this time should be released back to the colony as soon as possible.
- For other species, consider the weather forecast for the next three days and avoid strong winds and heavy rain.
- Consider temporal food availability.

How to Release

Generally, dependent altricial young and those that have been in care for an extended time will benefit from an assisted release, and non-dependent precocial young and adults will benefit from an unassisted release.
Where possible, wildlife should be observed post-release for one month to ensure that they have adapted (or readapted) to life in the wild.

Social species should be released with conspecifics that originate from within the same region. There may be exceptions – please contact DPIPWE.

Display of Injured and Orphaned Wildlife

Displaying IOW to the community can provide educational benefits and raise the profile of the important work of wildlife rehabilitators.

However, display must be carefully considered, as wildlife may experience stress while being on display. It is important to understand the signs of stress for each species in order to monitor the animal and mitigate stressors or remove the animal from display altogether. Prolonged stress can harm the animal's chance of successful release back into the wild.

Display of wildlife to the public requires an authorisation under the *Wildlife (Exhibited Animals) Regulations 2010.* Please contact DPIPWE for more information. Animals must not be handled by the public during a display.

Wildlife undergoing home-based rehabilitation are not on display when close family or volunteers view the wildlife in the home for educational purposes or assist with the rehabilitation process. However, wildlife rehabilitators must limit the risk of habituation by limiting the number of people the animal is exposed to, and by monitoring the animal for signs of stress and habituation that could make the animal unsuitable for release.

IOW are on display when they are transported from their place of rehabilitation with the intent of showing the animal to the public.

If photos of wildlife displays are published on social media it can be useful to add the permit number to the caption in order to demonstrate that it is an authorised activity.

Social Media Considerations

DPIPWE acknowledges that photography and social media is a good way of promoting the work of wildlife rehabilitators. It is also an opportunity for making people aware of the ways that humans can have impacts on wildlife.

When a rehabilitator is taking photos of wildlife in care, actions should be taken to minimise stress to the animal by limiting handling to only primary wildlife rehabilitators, limiting the amount of photos taken, and avoiding the use of flash and artificial lighting. Photography must be ceased immediately if the animal becomes stressed.

Pictures should promote best practice by depicting animals in enclosures, pouches or transport containers, and be accompanied by an educational message about rehabilitation or explanation of why the animal is in care. Photos should not depict the animal as habituated, with other domestic animals, as part of a 'selfie', or out in public, as this can harm the

conservation message by giving the impression that wildlife can be kept as pets.

Photos of wildlife in care should not be used for promotional material for businesses or for commercial gain, other than for fundraising for wildlife rehabilitation, community awareness or for educational purposes.

Definitions

ABLV: Australian bat lyssavirus.

Acclimatisation: adjust to a change in environment.

Altricial: dependent young that require feeding by parents.

Assisted (soft) release: a release technique that involves provision of supplementary food, water and shelter at the site of release after a period of captivity in which the animal is given a chance to adjust to the surrounding environment.

Biosecurity: measures that are taken to stop the spread of disease.

Conspecific/s: a member of the same species.

Critical care: the type of care provided to wildlife that is affected by injuries, sickness, showing signs of pain and discomfort, or is rescued in circumstances that may lead to the death of the animal. This also covers furless joeys.

Diurnal: when the active period of an animal occurs during daytime.

Ecological principles: are aspects that contribute to the overall understanding of ecosystems and how they function. Principles can be concerned with, for example, time, place, species, population, communities, and disturbance.

Euthanasia: to achieve rapid and humane destruction of an animal.

Exsanguination: death caused by loss of blood.

Inter-specific: between individuals of a different species.

Intra-specific: within individuals of the same species.

Migratory: making regular seasonal movements.

Nocturnal: when the active period of an animal occurs during nighttime.

PBFD: Psittacine Circovirus Disease, also known as Psittacine Beak and Feather Disease.

Pelage: insulation layer in mammals, for example hair or fur.

Precocial: active and self-feeding shortly after birth.

Quarantine: isolation of individuals for a length of time that ensures that incubation period of any disease that an animal may have been exposed to is exceeded.

Substrate: material placed on the bottom of an enclosure.

Unassisted (Hard) release: a release technique that involves release directly into the environment with no further support.

Wellbeing: a positive mental state as assessed by physiological and behavioural measures. An animal has successful biological function, to have positive experiences, to express innate species-specific behaviours, and to respond to and cope with adverse social and environmental conditions.

Wildlife rehabilitator: a member of the community who volunteers to rehabilitate sick, injured or orphaned wildlife for release.

Wildlife: mammals, birds and reptiles native to Tasmania. Does not include amphibians for the purpose of this document.

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Appendix 1: Example Initial Case Assessment Form

Species:	Sex/pouch young present:
Weight:	Temperature:
Age/Developmental stage:	Rescue Date:
Rescue location:	Temporary care time: Rescuer: Temp carer: Vet:
Temporary care details (rehydration, feeding regime etc.):	

Demeanour:	Bright	Alert	Depressed	Distressed	Lethargic
Body condition:	Excellent	Good	Fair	Poor	Very Poor
Fur/skin condition:	Excellent	Good	Fair	Poor	Very Poor
Breathing:	Normal	Rapid	Slow	Laboured	Noisy
Observations (injuries, discharges, mobility problems):					

Outcome of initial assessment:	Euthanasia	Beyond capacity to care	Rehabilitation for release	Immediate release
Vet assessment notes:				
Vet details				
Mentor advice:				
Mentor details:				

Appendix 2: Minimum Enclosure Size Guidelines

Please note: the dimensions provided below are estimated standard sizes and not all animals will be the same (e.g. age, sex, condition, health status) therefore in general an enclosure should allow an animal to stretch out fully, turn around, and stand up (express normal range of motion).

Mammals

Type of mammal (examples)	Critical care[15] L x W (or area m^2) x H (m)	Intermediate care L x W (or area m^2) x H (m)	Pre-release L x W (or area m^2) x H[16] (m)	Maximum number of individuals pre-release[17]
Microbats	0.06 m^2 x 0.3	0.25 m^2 x 0.5	8 x 8 x 4*	10
Small rodents and dasyurids	0.06 m^2 x 0.2	0.3 m^2 x 0.6	4 m^2 x 1	NA
Eastern Quoll, Water Rat and Bandicoots	0.15 m^2 x 0.5	0.25 m^2 x 0.3	8 m^2 x 2	4
Devil and Spotted tail Quoll	1 x 1 x 0.5	2 m^2 x 1.2	100 m^2 x 1.2	2
Bettong and Potoroo	0.25 m^2 x 0.5	1 m^2 x 1	12 m^2 x 1.2	4
Tasmanian Pademelon	1 m^2 x 1	4 m^2 x 2	36 m^2 x 1.5	5
Bennetts wallaby	2.25 m^2 x 1.8	9 m^2 x 1.8	600 m^2 x 2	4
Eastern Grey (Forester) Kangaroo	4 m^2 x 1.8	30 m^2 x 1.8	2400 m^2 x 1.8	4 (increase by 240 m^2 for each additional)
Pygmy Possum	0.06 m^2 x 0.5	0.18 m^2 x 1	2 m^2 x 2	6
Brushtail and Ringtail Possums	0.25 m^2 x 0.8	1 m^2 x 1	4 x 2 x 2*	2
Wombat	2 m^2 x 1.2	6 m^2 x 1.2	40 m^2 x 1.5	2
Echidna	0.25 m^2 x 0.5	2.25 m^2 x 1	20 m^2 x 1.5	2

Reptiles

Type of reptile (example)	Critical care L x W x H (m)	Intermediate care L x W (or area m^2) x H (m)	Number of individuals
Small skinks	0.2 x 0.2 x 0.15	0.5 x 0.3 x 0.3	2
Large skinks (Blue tongue lizards, Sheoak)	0.5 x 0.3 x 0.3	1 m^2 x 0.5	2
Mountain Dragon	0.3 x 0.3 x 0.2	0.5 x 0.3 x 0.3	2
White-lipped Whip Snakes	0.6 x 0.3 x 0.3	0.7 x 0.6 x 0.5	1
Copperhead and Tiger snakes	0.5 x 0.4 x 0.5	2.25^2 x 0.6	1

[15] Critical and intermediate care measurements are for one adult individual. The minimum length and width of these enclosures need to be equal or greater to the length of the animal.
[16] The height of enclosure listed is for above ground only.
[17] This assumes that the animals are compatible. Additional floor space should be added with each additional animal.

Birds

Type of bird (example and/or length of bird)	Critical care[18] L x W x H (m)	Intermediate care[19] L x W (or area m^2) x H (m)	Pre-release L x W (or area m^2) x H (m)	Number of individuals	Pool size and depth (m)
Small Passerines (< 20 cm length)	0.5 x 0.3 x 0.2	0.6 x 0.5 x 0.2	6 m^2 x 2	8	NA
Medium passerines (20 – 40 cm) and parrots	0.5 x 0.5 x 0.2	2 m^2 x 0.3	7 m^2 x 2	6	NA
Large Passerines (> 40 cm) and Cockatoos	0.5 x 0.5 x 0.4	4 m^2	25 m^2 x 2	4	NA
Small water birds (Ducks)	0.4 x 0.4	0.36 m^2	8 m^2 x 2	2	1m^2 x 0.5
Large water birds (Swan)	0.7 x 0.7	1 m^2	12 m^2 x 2	2	6 m^2 x 0.7
Small sea birds (Gulls, Cormorants)	0.5 x 0.5 x 0.5	0.36 m^2	8 m^2 x 2	2	1 m^2 x 0.3
Large sea birds (Albatrosses, Pelicans)	1 x 1 x 1	4 x 2.5 x 1.5	12 m^2 x 2	1	6 m^2 0.7
Small raptors (< 60 cm)	0.5 x 0.5 x 0.3	4 m^2	Circular aviary with central pillar or similar, diameter of 10 m	Up to 10 depending on aviary size and species	NA
			Tunnel 10 x 1 x 2	Up to 5 depending on aviary size and species	
Large raptors (≥ 60 cm) (Eagles and Harrier)	1 x 1 x 0.7	9 m^2	Circular aviary with central pillar or similar, diameter of 10 m	Up to 10 depending on aviary size and species	NA
			Tunnel 10 x 1 x 2	Up to 5 depending on aviary size and species	
Little Penguins[20]	0.2 m^2 x 0.4	1 m^2 x 0.4	16 m^2 x 2 (1 x 2 ground)	5	2 m^2 x 0.7

[18] Assumes for smaller birds that an incubator will be the smallest form of enclosure.
[19] Tail feathers of perching birds must not touch faeces
[20] DPIPWE is developing draft Penguin Rehabilitation Guidelines which will contain more specific detail. This table does not include larger vagrant species of penguin. If you are thinking of taking one of these into care please contact the Marine Conservation Program (DPIPWE) prior to capture on 0427 942 537. Adequate enclosures must be provided.

Appendix 3: Example Care Plan Form

Rehabilitation Monitoring Record

Species:

ID:

Foot/tail/head measurement (if applicable):

Stage of development:

Feeds per day:

Daily volume:

Per feed volume:

Date	Time	Fluid/food	Urine	Faeces	Demeanour/behaviour	Sunshine (time)	Exercise (time)	Weight (g)	Notes

Appendix 4: Mammal Rehabilitation Skills Pathway

		Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Species and Development	**Macropods**	**Fully furred** - Pademelon 500g+ - Bennett's wallaby 1kg+	**Fine furred** - Pademelon 350g+ - Bennett's wallaby 800g+	**Just furring** - Pademelon - Bennetts wallaby - Bettong 300g+ - Potoroo 200g+	**All sizes including furless** All macropods including Eastern Grey Kangaroo	See Tier 4
	Possums	**Fully furred** - Brushtail 350g+	**Fine furred** - Brushtail 200g+ - Ringtail 100g+	**Just furring**	**All sizes including furless**	See Tier 4
					Adult Pygmy Possum	**Joey** Pygmy Possum
	Wombat		**Fine furred** 0.8 – 1.5kg initially	**Just furring to fully furred**	**All sizes including furless**	See Tier 4
	Bandicoots			**Just furred to fully furred**	**All sizes including furless**	See Tier 4
	Other				• Juvenile Echidna 800g+ • Native Rodents • Micro Bats (Must be vaccinated)	• Echidna puggle • Platypus • Water Rat • Eastern Quoll • Spotted-Tailed Quoll • Tasmanian Devil • White-Footed Dunnart • Antechinus
Mentoring		Close mentoring required	Seeks mentor advice often	Seeks mentor advice less regularly	May become a mentor	May become a mentor
Minimum no. of wildlife successfully released		30	20	20	30	NA

Previously known as: Novice Intermediate Advanced

Appendix 5: Bird Rehabilitation Skills Pathway

Please use the following reference keys on page 31- 34 to navigate the pathway on page 35.

Altricial Chick Development

Pathway Reference	Stage of development	Appearance	Behaviour
A1	Hatchlings	Eyes closed, naked, may have wisps of down on its body. **Semi Altricial 1** e.g. Hawks, herons Eyes open, fully covered in down. **Semi Altricial 2** e.g. Owls Eyes closed, fully covered in down.	Relies on the parent for food, warmth, protection. Not ready to leave the nest.
A2	Nestlings	Eyes are open, wing feathers appearing as pins (feathers still inside the sheath)	Relies on the parent for food, warmth, protection. Not ready to leave the nest.
A3	Fledglings	Eyes are open, feathered but with short tails, some feathers may still be inside the sheath.	Preparing to leave the nest. May leave the nest but will remain in close proximity. Relies on the parent for food, some warmth and protection. Showing signs of interest in self feeding.
A4	Branchlings	Fully feathered	Have left the nest but cannot fly. Spend some time apart from the parents, remain within the parent's territory relies on the parents for top up feeds and learning to be independent.
A5	Juvenile	The first plumage of "true" or vaned (no down) feathers;	Starting to be fully independent and in some species venturing out of parent's territory.
A6	Sub adult	Developing plumage that occurs after the juvenile (1st-year) plumage but before the adult plumage.	Fully independent
A7	Adult	Finished final stages of plumage development and will retain its appearance no matter how long its life span.	Fully independent

Precocial Chick Development

Reference	Type of development	Stage of development	Appearance		Behaviour
P1	**Precocial 1** (totally independent) N/A in Tasmania	Hatchling Adult	Hatch with eyes open, fully feathered		Completely independent
P2	**Precocial 2** (follow parents, find own food)	Hatchling	**1**	Eyes open, covered in down	Leave the nest within 2 days of hatching
		Young (approx. 2 days old onwards)	**2**	As above	Follow their parents but find their own food. Parents supplement warmth and protect from predators
		Juvenile	**3**	The first plumage of "true" or vaned (non-downy) feathers.	Fully independent and in some Venturing out of parent's territory
		Sub Adult	**4**	Developing plumage that occurs after the juvenile (1st-year) plumage, but before the adult plumage	Fully independent
		Adult	**5**	Finished final stages of plumage development and will retain its appearance no matter how long its life span.	Fully independent
P3	**Precocial 3** (follow parents, are shown food)	Hatchling	**1**	Eyes open, covered in down	
		Young (approx. 2 days old onwards)	**2**	As above	Follow their parents, shown food, pick it up themselves.
		Juvenile	**3**	The first plumage of "true" or vaned (non-downy) feathers.	Fully independent and in some species venturing out of parent's territory
		Sub Adult	**4**	Developing plumage that occurs after the juvenile (1st-year) plumage but before the adult plumage	Fully independent

Reference	Type of development	Stage of development	Appearance		Behaviour
		Adult	**5**	Finished final stages of plumage development and will retain its appearance no matter how long its life span.	Fully independent
P4	**Precocial 4** (follow parents, are shown and fed food)	Hatchling	**1**	Eyes open, covered in down,	Follow their parents and are not just shown food but are fed by them. Staying in the nest a varying number of days
		Young	**2**	As above	
		Juvenile	**3**	The first plumage of "true" or vaned (non-downy) feathers.	Fully independent and in some species venturing out of parent's territory
		Sub adult	**4**	Developing plumage that occurs after the juvenile (1st-year) plumage but before the adult plumage	Fully independent
		Adult	**5**	Finished final stages of plumage development and will retain its appearance no matter how long its life span.	Fully independent
SP	**Semi Precocial** (covered with down, capable of leaving nest, but stay in nest and are fed by parents)	Hatchling	**1**	Eyes open, covered in down,	Stay within nest. Fed by parents
		Young	**2**	As above	Stay within nest. Fed by parents
		Juvenile	**3**	The first plumage of "true" or vaned (non-downy) feathers.	Interacting within the colony, Parents still feeding chicks
		Sub adult	**4**	Developing plumage that occurs after the juvenile (1st-year) plumage but before the adult plumage	Beginning to self-feed
		Adult	**5**	Finished final stages of plumage development and will retain its appearance no matter how long its life span.	Fully independent

Precocial Chick Development for Tasmanian Bird Species

Groups	Precocial 2	Precocial 3	Precocial 4	Semi Precocial
Bush birds		• Brown Quail • Painted Button Quail • Stubble Quail	• Tasmanian Native Hen	• Spotted Quail-thrush
Water birds	• Australasian (Blue-winged) Shoveler • Australian Shelduck (Mountain Duck) • Australian Wood Duck • Banded Lapwing • Black Swan • Black-fronted Dotterel • Blue-billed Duck • Cape Barren Goose • Chestnut Teal • Double-banded Plover • Grey Teal • Hooded Plover • Latham's Snipe • Masked Lapwing • Pacific Black Duck • Red-capped Plover		• Australasian Grebe • Buff-banded Rail • Dusky Moorhen • Eurasian Coot • Great Crested Grebe • Hoary-headed Grebe • Lewin's Rail • Pied Oystercatcher • Purple Swamphen • Sooty Oystercatcher • Spotless Crake	• Musk Duck
Sea birds				• Bridled Tern • Caspian Tern • Crested Tern • Fairy Tern • Kelp Gull • Little Tern • Pacific Gull • Short tailed Shearwater • Silver Gull

Bird Rehabilitation Pathway

Note: Unidentified species should be Tier 5. Nests with more than chick are not to be split up, entire nest to go to the Tier covering the youngest chick's development. Vagrants species Tier 4/5. **USM=Under Strict mentoring**

Interest base		Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Bush birds and Parrots	**Nectivore honeyeater**	**Honeyeaters A3-A7 (may not be strict nectivore)** Noisy Miner Little Wattlebird Yellow Wattlebird	**Honeyeaters A2-A7 (may not be strict nectivore)** Noisy Miner Little Wattlebird Yellow Wattlebird	**Honeyeaters (may not be strict nectivore)** Noisy Miner A1-A7 Little Wattlebird A1- A7 Yellow Wattlebird A1- A7 New Holland Honeyeater A3 -A7	**Honeyeaters A1 -A7 (may not be strict h nectivore)** **(See left)** Black-headed Honeyeater Crescent Honeyeater New Holland Honeyeater Strong-billed Honeyeater Tawny-crowned Honeyeater Yellow-throated Honeyeater	**Honeyeaters** **(See left)** Eastern Spinebill
				Lorikeet A2 -A7 Musk Lorikeet	**Lorikeet A2 -A7** Musk Lorikeet	**Lorikeets, Parrot** **(See left)** Swift Parrot **Pardalotes** Spotted Pardalote Striated Pardalote Forty Spotted Pardalote
	Insectivore	**Magpie, Currawong, Raven A3-A7** Black Currawong Grey Currawong Forest Raven Little Raven	**Magpie, Currawong, Raven A2-A7** Black Currawong Grey Currawong Forest Raven Little Raven	**Magpie, Currawong, Raven A1- A7** Black Currawong Grey Currawong Forest Raven Little Raven **Grey Butcherbird A3 -A7**	**Magpie, Currawong, Raven, Butcherbird A1-A7**	**Magpie, Currawong, Raven, Butcherbird A1-A7**

Interest base	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
	Lapwings P2:3-5 Masked Lapwing Banded Lapwing	**Lapwings P2:2-5** Masked Lapwing Banded Lapwing	**Lapwings P2:1-5** Masked Lapwing Banded Lapwing	**Lapwings** **(See left)**	**Lapwings** **(See left)**
	Swallows A3 -A7 Dusky Woodswallow Welcome Swallow Fairy Martin Tree Martin	**Swallows A2 -A7** Dusky Woodswallow Welcome Swallow Fairy Martin Tree Martin	**Swallows A1 -A7** Dusky Woodswallow Welcome Swallow Fairy Martin Tree Martin	**Swallows A1-A7** **(See left)** Fork-tailed Swift A2-A7 White-throated Needletail A2-A7 White-browed Woodswallow A2-A7	**Swallows A1-A7** **(See left)**
	Silvereye A3 -A7 **(not strict insectivore)**	**Silvereye A2 -A7** **(not strict insectivore)**	**Silvereye A1 -A7** **(not strict insectivore)** **Robins, Wrens, Thornbills, Whistler A3 - A7** **(May not be strict insectivore)** Dusky Robin Flame Robin Pink Robin Scarlet Robin Southern Emu-wren Striated Fieldwren Superb Fairy-wren Tasmanian Scrubwren **(AS)** Scrubtit Brown Thornbill Tasmanian Thornbill Yellow-Rumped Thornbill Olive Whistler	**Silvereye (see left)** **Robins, Wrens, Thornbills, Whistler A1 - A7** **(May not be strict insectivore)** **(See left)** Tasmanian Scrubwren **(-AS)** White-fronted Chat	**Silvereye (see left)** **Robins, Wrens, Thornbills, Whistler A1 - A7** **(May not be strict insectivore)** **(See left)** Grey Fantail Richards Pipit Satin Flycatcher Golden Whistler
		Cuckoo A2- A7 Fan-tailed, Horsfield's Bronze, Pallid and Shining Bronze-Cuckoo	**Cuckoos and Shrikes A1 -A7** Fan-tailed Cuckoo Horsfield's Bronze-Cuckoo Pallid Cuckoo Shining Bronze-Cuckoo Black-faced cuckoo-shrike	**Cuckoos, shrikes and thrushes A1-A7** **(See left)** Bassian Thrush Grey Shrike Thrush	**Cuckoos, shrikes and thrushes A1-A7** **(See left)**
			Tawny Frogmouth A3 -A7	**Tawny Frogmouth A1 -A7**	**(See left)**

Interest base		Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
	Carnivore	**Raptors & Owls** Contact Raptor Rehabilitation Coordinator	**Raptors & Owls** Contact Raptor Rehabilitation Coordinator	**Raptors & Owls** Contact Raptor Rehabilitation Coordinator	**Raptors & Owls** Contact Raptor Rehabilitation Coordinator	**Raptors & Owls** Contact Raptor Rehabilitation Coordinator
	Granivore	**Galah, Cockatoo A3-A7** Sulphur-crested Galah	**Galah, Cockatoo A2 -A7** Sulphur-crested Galah	**Galah, Cockatoo A1 -A7** Sulphur-crested Galah	**Galah, Cockatoos A1 -A7** **(See left)** Yellow-tailed Black	**Galah, Cockatoos** **(See left)**
			Rosellas A4- A7 Green Rosella Eastern Rosella	**Rosellas A3- A7** Green Rosella Eastern Rosella	**Rosellas A1- A7** Green Rosella Eastern Rosella **Parrots A3-A7** Blue-winged Parrot	**Rosellas, Parrots A1- A7** **(See left)** Eastern Ground Parrot
					Bronzewing A1- A7 Brush Bronzewing Common Bronzewing **Quails P3: 1-5** Brown Quail Painted Button Quail Stubble Quail **Finch A1-A7** Beautiful Firetail	**Bronzewing, Quails, Finch A1-A7** **(See left)**
Sea Birds	**Piscivore**	**Gulls SP:1-5** Kelp Gull Pacific Gull	**Gulls SP:4-5** Kelp Gull	**Terns SP:1-5** Antarctic Tern Bridled Tern	**Gulls, shearwaters, terns** **(See left)**	Common Greenshank **Dotterels** Black-Fronted Dotterel Red-kneed Dotterel

Sea Birds		Silver Gull	Pacific Gull Silver Gull **<u>Shearwaters SP:1-5</u>** Short-tailed Shearwater Sooty Shearwater	Caspian Tern Crested Tern Fairy Tern Little Tern White-fronted Tern White-winged Black Tern **<u>Shearwaters P4:3-5</u>** Short-tailed, Sooty Fluttering, Buller's Shearwaters	**<u>Cormorants A3 -A7</u>** Black-faced Cormorant Great Cormorant Little Pied Cormorant Little Black Cormorant Pied Cormorant **<u>Australian Gannet A3 -A7</u>** **<u>Oystercatchers P4: 3-5</u>** Pied Oystercatcher Sooty Oystercatcher **<u>Knots</u>** Great, Red. Grey-tailed Tattler **<u>Plovers</u>** Double-banded, Red-caped, Lesser Sand, Hooded, Pacific Golden, Grey, Little Ringed. Ruddy Turnstone Russ Sanderling **<u>Sandpipers</u>** Sharp-tailed, Curlew, Pectoral, Wood, Common, Marsh, Terek **<u>Stints</u>** Little, Red-necked Whimbrel **<u>Godwits</u>** Bar-tailed Godwit Black-tailed Godwit **<u>Penguins A6-A7 USM</u>**	**<u>Shorebirds (no deep pool required)</u>** **<u>Gulls, terns, Shearwaters, Oystercatchers, Knots, Plovers, Sandpipers,</u>** **(See left)** **<u>Curlews</u>** Eastern Curlew Little Curlew **<u>Stints, Godwits, ,</u>** **<u>Sea bird (deeper pool required)</u>** **<u>Cormorants</u>** **<u>Pelican</u>** **<u>Penguins</u>** **<u>Gannetts</u>** **<u>Albatrosses</u>** **<u>Prions</u>** Antarctic Prion Fairy Prion **<u>Petrels</u>** Black-bellied Storm-petrel Grey-backed Storm-petrel White-faced/headed Storm-Petrel Common Diving-petrel Northern Giant Petrel Cape Petrel Great-winged Petrel Great Skua

Interest base		Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Water Birds		**Ducks P2:2-5** Pacific Black Australian Wood Duck	**Ducks P2:1-5** Pacific Black Australian Wood Duck	**Grebes P4:1-5** Australasian Grebe Great-crested Grebe Hoary Headed Grebe	**Crakes P4: 3-5** Australian Spotted Crake Spotless Crake **Egrets P4: 3-5** Cattle Egret Great Egret Intermediate Egret Little Egret **Herons, Bittern A3- A7** Nankeen Night Heron White-faced Heron Australasian Bittern **Rails P4: 3-5** Lewin's Rail Buff-banded Rail Latham's Snipe	**Grebes, Crakes, Egrets, Heron, Bittern, Rails** **(See left)** **Kingfisher** Azure Kingfisher Little Grassbird
				Ducks P2;1-5 Chestnut Teal Grey Teal Australasian Shoveler Blue-billed Duck Australian Shelduck (Mountain) Musk Duck SP:1-5	**Ducks P2;1-5** **(See left)** Freckled Duck White-eyed/Hard Head	**Ducks P2;1-5** **(See left)** Pink-eared Duck
				Hens, Coots, Geese Purple Swamphen P4:3-5 Cape Barren Goose P2:1-5 Dusky Moorhen P4:3-5 Eurasian Coot P4:3-5 Native Hen P2:2-5	**Hens, Coots, Geese** **(See left)** Native Hen P2:1-5 **Swan** Black Swan **P2**:1-5	**Warbler** Clamorous Reed Warbler
	Mentoring	Close mentoring required	Seeks mentor advice	Seeks mentor advice	Seeks mentor advice May become a mentor	May become a mentor
	Minimum no. of successfully released	**30**	**40**	**20**	**30**	**N/A**

Contact

For further information about the Best Practice Guidelines please contact DPIPWE.

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