WReNNZ

Minimum standards for rehabilitators

C O N T E N T S

I. Introduction

How were the standards formed?

These standards were introduced in 2007 and reviewed in 2008. The standards were confirmed and voted on in 2009 when the WReNNZ committee was formed.

What are these minimum standards for?

The objective of these minimum standards is to ensure that wildlife rehabilitation in New Zealand is conducted by skilled WReNNZ members in a professional manner . It is important to meet these standards in terms of animal welfare, and to ensure your rehabilitation efforts are successful.

Who should use them?

All WReNNZ members should aim to meet these minimum standards wherever possible and wherever practical.

II. Document details

Approved for use

Approved at WReNNZ Committee meeting

Date 20.03.10

Amendments

Amendment date	Amendment details	DOCDM version	Amended by

Terminology and definitions

Auscultate: Auscultation is the technical term for listening to the internal sounds of the body, usually using a stethoscope

Fomite: A **fomite** is any inanimate object or substance capable of carrying infectious organisms (such as germs or parasites) and hence transferring them from one individual to another.

Preservation reflex: Birds go to great lengths to hide clinical signs of illness. In the wild, sick birds attract the attention of predators and, in flocking species, a sick bird will be shunned by flock mates (Hume 2000). This masking of signs of illness is known as the 'preservation reflex'. Birds generally do not look sick until they are in an advanced state of illness and near collapse (Cannon 1991).

NSAIDs: Non-steroidal anti-inflammatory drugs

Stress bar: A Stress bar is a name for the lines sometimes found running across the shaft of a bird's feather. Stress bars occur during feather development, and can be an indicator of a problem with the bird's environment, routine, or diet.

Zoonosis: An infectious disease in animals that can be transmitted to people. The natural reservoir for the infectious agent is an animal. Examples of zoonoses include rabies (a viral disease that can be transmitted to humans through an infected animal's bite) and psittacosis (a chlamydial infection resembling influenza that is spread to humans by the droppings of infected birds).

III. Minimum standards – summary

Minimum Standard	Detail
1. Skills required to be a rehabilitator	• All staff/volunteers must undertake training to be able to provide the appropriate care for rehabilitation • Drugs are administered to wildlife only under the direction of a veterinarian
2. Euthanasia	**How:** Euthanasia should only be carried out by suitably trained people and preferably after consultation with a vet. **When:** For animals which are unlikely to be successfully rehabilitated and have no predetermined place in a captive management programme.
3. Human health and Safety	• Be aware of diseases which may affect humans and animals and undertake precautions to prevent infection • Ensure staff/volunteers understand correct handling procedures for each patient • Provide protective equipment where required
4. Human Interest	• Animal welfare is paramount • Ensure the welfare of the patient is not compromised by any media/human attention
5. Housing design	Housing is appropriate to the species and the injury/illness and the stage of rehabilitation
6. Hygiene and Disease Transmission	• Keep domestic animals away from the patients at all times • Undertake disease screening if required
7. Hygiene	Identify and undertake hygiene requirements as appropriate (e.g. washing of hands disinfection of equipment & facilities).
8. Admission of animal	• Record details of history if available • Record details of initial examination
9. Stabilisation	• Provide appropriate stabilisation (quiet, heat, humidity, pain relief and fluids as required) • Seek veterinary consultation if a “major illness/injury” is suspected • Notify DOC according to your permit conditions

10. Recognise signs of illness	Ensure all staff/volunteers are aware and able to recognise of the signs of illness
11. Assessment and Consultation with a veterinarian	Any animal showing signs of sickness, injury or deterioration in condition while in care must be thoroughly assessed and treated appropriately
12. Intensive care and nursing support	• Follow veterinary instructions and treatment protocols • Record daily progress and food eaten
13. Rehabilitation for release	• Provide predator safe appropriate housing which allows exercising to buil condition • Provide a natural diet, or access to some natural food and appropriate artificial foods • Provide natural environmental enrichment to encourage natural behaviou • Record patient progress at appropriate intervals
14. Release Criteria	• Only those animals which meet the criteria to function normally in the wil are to be released. Refer to release criteria for the species where this exists. • If the animal cannot achieve the criteria, consult with your DOC conservancy or species co coordinator to discuss options of euthanasia or inclusion in a captive management programme, if appropriate. •
15. Release	• Assess the patient against the release criteria and determine if release is appropriate • When a wild animal is returned to its natural habitat, care must be taken t ensure it is not released in circumstances in which it is likely to suffer unnecessarily (Zoo Welfare Code) • Undertake the release according to your xxx permit conditions
16. Reporting	• Keep your own individual patient records • Submit annual report to WReNNZ in the WReNNZ approved format by 30th June including specified data. • WReNNZ committee forwards native species reports and any significant events report to DOC by 30th September

1. Skills required to be a rehabilitator

Minimum Standard 1	Detail	Helpful resources/links
Skills required to be a rehabilitator	• All staff/volunteers must undertake training to be able to provide the appropriate care for rehabilitation • Drugs are administered to wildlife only under the direction of a veterinarian	Refer to WReNNZ website for up-to-date links and information

Veterinary considerations

Best Practice: Each rehabber should establish a formal relationship with a local veterinarian to ensure legal and correct supply/administration of drugs, development of written protocols and access to veterinary advice and consultation.

Rehabilitation skills: The rehabilitator must:

Use of medications

- Understand the correct use of pain relief drugs and antibiotics, and the contraindications for use
- Administer drugs only under the direction of a veterinarian (this may include training in correct use)
- Note that no bird is to receive medication without approval from a vet. This especially includes antibiotics and Non Steroidal Anti-inflammatory Drugs

Bird identification

- Be able to identify species and life stage correctly so it is clear what to provide for husbandry and nutrition and so there is a strategy in place for early decisions on the outcome.

First aid

- Be efficient and effective in the provision of first aid.

Health and illness identification

- Be sufficiently experienced to recognise the signs of good health and ill health or injury. Seek advice if inexperienced or unsure.

Nutrition

- Have or be able to access knowledge of correct nutrition for the species in care.

Housing

- Have or be able to access knowledge of correct housing for the species in care.

Ability to assess release criteria

- Be able to assess birds' flight capability before release and know that:
- Water birds, fowl and sea birds need to be assessed for waterproofing before release
- There are varying levels of waterproofing requirements e.g.: penguins 100% others seabirds 90% and less and how to assess that
- Non marine birds will also need to be weatherproofed
- Seabirds require active salt glands for release.

2. Euthanasia

Minimum Standard 2	Detail	Helpful resources/links
Euthanasia	**How:** Euthanasia should only be carried out by suitably trained people and preferably after consultation with a vet. **When:** For animals which are unlikely to be successfully rehabilitated and have no predetermined place in a captive management programme.	Refer to WReNNZ website for up-to-date links and information ANZCCART, DOC Captive Management SOP

Principles of euthanasia

- Euthanasia must be human (quick and painless)
- Euthanasia should be undertaken promptly or as soon as it becomes apparent that the patient will not recover to a releasable state
- Euthanasia must be administered according to any conditions in your rehabilitation permit
- Patients which cannot be released must be euthanased EXCEPT where there is a place in an approved DOC or coordinated captive management or advocacy program
- Consult your DOC office to determine if the body of threatened species should be sent for a necropsy or other purpose e.g. Te Papa, iwi, etc.
- Euthanased animals must be treated with respect and disposed of according to your permit.

Euthanasia (From the MAF Code of Welfare for Zoos)

(a) When an animal is euthanased the euthanasing agent must render the animal unconscious in a rapid and pain-free manner.

(b) When an animal is euthanased the operator or keeper must ensure that death occurs quickly.

(c) There must be provision of an effective method of euthanasia for each species held.

(d) Where an operator elects to euthanase an animal the handling, restraint and technique used must ensure the stress of the procedure for the animal is minimised.

(e) All necessary equipment must be easily available at all times.

3. Human health and Safety

Minimum Standard 3	Detail	Helpful resources/links
Human health and Safety	• Be aware of diseases which may affect humans and animals and undertake precautions to prevent infection • Ensure staff/volunteers understand correct handling procedures for each patient • Provide protective equipment where required	

Health and safety points to consider

- The rehabber is to provide safe and effective handling for the bird, themselves and volunteers in their care
- Correct methods of restraint should be employed to protect the bird and the person
- Have an awareness of zoonosis and strategy in place to minimise the likelihood of this occurring
- Prevention of zoonosis is part of your nursing and rehabber responsibility. This can be achieved by hygiene and cleaning regimes, correct handling and disposal of wastes
- Animal food preparation areas separate from human food prep areas. i.e. animal and human utensils are washed in separate areas or in the same area but at different times to avoid cross contamination
- Equipment and drugs should be handled, stored and disposed of appropriately
- Consult your doctor regarding preventative medications/vaccinations appropriate to your situation.

4. Human Interest

Minimum Standard 8	Detail	Helpful resources/links
Human Interest	• Animal welfare is paramount • Ensure the welfare of the patient is not compromised by any media/human attention	

Minimising stress

- Limit public and media exposure where appropriate
- Updating the finder is important but it is critical to keep visitors to a minimum as these are sick and wild patients and they stress easily
- The responsibility of the rehabber is to act as an advocate for these birds by minimizing stress and foot traffic
- Reduction of stress is achieved by providing a quiet safe enclosure and no domestic animals around the wildlife.

5. Housing design

Minimum Standard 5	Detail	Helpful resources/links
Housing design	Housing is appropriate to the species and the injury/illness and the stage of rehabilitation	

Indoor stabilisation housing will usually be small cages which are easy to clean. Rehabilitation housing will usually be larger aviaries which allow normal behaviour and movement, e.g. swimming and flying (to build muscle condition for release).

Some housing basics

General

Housing should:

- Be away from cats and dogs and all domestic avian species
- Be away from people other than those required to feed, treat and care for the animals

- Be in a quiet setting
- Prevent further injury by offering correct caging, substrate and privacy
- Provide good access & placement of food: e.g. Can the bird reach into the bowl? Will they knock it over? Is the bowl under the perch where it will be contaminated with faeces? Will their injury limit their ability to feed?
- Protect feathers. Perches, tail wrap, minimal and correct handling, hygiene especially for raptors
- Supply enough room for birds to fly and suitable places to perch, when appropriate in their treatment.

Indoors

- Provide warm air temperature in hospital cages/any critical care and inside cages
- Provide covers for indoor stabilisation cages at appropriate times for certain species.

Outdoors

- Provide adequate shelter from rain, wind and cold

6. Hygiene and Disease Transmission

Minimum Standard 6	Detail	Helpful resources/links
Hygiene and Disease Transmission	• Keep domestic animals away from the patients at all times • Undertake disease screening if required	

- Birds that are to be released to the wild should be free of disease
- Disease screening before release is recommended to prevent the transmission of diseases that would negatively impact on the wild population
- One of the best and most simple ways of reduce disease transmission is by good hygiene especially washing your hands between patients
- Disease can be transferred by fomites (equipment, on people etc). Dedicate bowls and cleaning equipment to each area. Supply a written cleaning regime so that it can be followed by volunteers
- To minimise the spread of disease from feral birds to natives the rehabber must have separate areas for domestic species, feral species and natives
- Native and non-native species may not be caged together

7. Hygiene

Minimum Standard 7	Detail	Helpful resources/links
Hygiene	Identify and undertake hygiene requirements as appropriate (e.g. washing of hands, disinfection of equipment & facilities).	See WReNNZ website for recommended agents and use

Hygiene standards

- Equipment is cleaned, disinfected and rinsed regularly and between patients
- Disinfectant soap is provided and staff/volunteers undertake regular hand washing
- Rehab housing is cleaned, disinfected and rinsed between patients
- Hospital and ICU cage(s) are cleaned using correct cleaning agents
- Understand the correct contact times and cleaning agents that can be used around avian species.

8. Admission of animal

Minimum Standard 8	Detail	Helpful resources/links
Admission of animal	• Record details of history if available • Record details of initial examination	• How to carry out a physical examination • Checklist • Body scoring system

Animal details

Record the species, sex and estimated age,

Record details of history

If possible, obtain the following details about the animal's history from the submitter:

- Where was the bird found?
- What was it doing?
- How was it captured?
- When was it captured?

- Any treatment, food, medication already offered by the submitter
- Contact details of submitter

Observation

Record details of your observations of the animal;

- Posture normal (vs. abnormal, noting abnormalities e.g., head tilt, wing droop etc.)

Assess the demeanour:

- Bright, alert, reactive
- Quiet, dull, unresponsive
- Comatose

Can it stand/perch; are the feet and legs weight bearing?

Conduct initial assessment

Physical exam Note: This initial examination may not be able to be done immediately or all at once if the bird is stressed.

1. Take a weight
2. Look for obvious signs of injury (bleeding, fish hooks, bites, cuts, fractures, limbs at unusual angles)
3. Check body confirmation and symmetry
4. Check all external openings (ears, eyes, nares, vent) for discharge, discolouration. Check eyes for reaction, pupil size and dilation, third eyelid position. Check inside the mouth for colour, odour, mucus, parasites
5. Are the wings and feet functional – test by observation; can the bird perch, fly and gain height, hold its food? Check and palpate (feel) the wings, legs and feet for wounds or broken bones and to check they are fully functional e.g. joints have a full range of normal movement
6. Assess body score - check keel, is it normal for that time of year?
7. Check for feather damage
    - Are the feathers sitting in a uniform manner and undamaged?
    - Are there any feathers missing or is the bird fluffed up?
    - Are there stress bars on the feathers indicating disease events?
8. Check for external parasites
9. Check nails for damage
10. Heart and lungs auscultated (optional)
11. Check faeces colour & consistency. Just remember when the bird has just travelled they produce stress faeces that are not always a good indication of what's normal. Is there mucus or other discharges?

9. Stabilisation

Minimum Standard 9	Detail	Helpful resources/links
Stabilisation	• Provide appropriate stabilisation (quiet, heat, humidity, pain relief and fluids as required) • Seek veterinary consultation if a "major illness/injury" is suspected • Notify DOC according to your permit conditions	

Stabilisation of birds requires warmth, humidity and hydration, darkness and quiet.

Warmth and humidity

Sick birds are unable to maintain a normal body temperature

- Normal bird body temperature 40-42°C (38 C for kiwi)

Provide a room/cage temperature of 28-30°C (note with seabirds & kiwi provide 25°C)

Provide humid heat or a source of humidity

Fluids/hydration

Note: most sick/injured animals will have some degree of dehydration on arrival and will benefit from fluids

- Oral (or Subcutaneous if trained in this)
- Provide humidity to reduce effects of dehydration

Low stress environment

- Keep animals in a dark place away from noise and activity.

Initial stabilising treatment

- Stabilise fractures / Pain relief by bandage
- Pain relief NSAID (oral) under direction from a veterinarian (via consultation, phone discussion or as per written protocols developed with the veterinarian who supplies the drugs)
- Clean wounds with saline only at this point
- Provide supportive nutrition
- Notify vet within 24 hours

- Notify DOC if required by your permit

10. Recognise the signs of Illness

Minimum Standard 10	Detail	Helpful resources/links
Recognise signs of illness	Ensure all staff/volunteers are aware and able to recognise of the signs of illness	

Recognise signs of illness

Birds effectively mask illness and this is called the preservation reflex. However, once working with birds for a period of time, a rehabber will recognise signs of illness (by observation and examination). This is not an exhaustive list but can include:

- Increased irritability
- Aggression
- Anorexia
- Lethargy
- Regurgitation and or vomiting
- Vocalisation on movement, excessive vocalisation, no vocalisation
- Eyes closed, weeping eyes, partial or full blindness
- Discharge from mouth and beak
- Plumage condition
- Lameness
- Dehydration
- Abnormal faeces and urates
- Change in posture/ unusual posture
- Lying down for extended periods
- Changes in respiratory character:
    - Open mouth breathing
    - Increased depth and rate of respiration
    - Laboured breathing
    - Audible wheezing, coughing, sneezing
- There may be a noticeable tail bob
- Absolute stillness (a bird in pain may be very still)

- Convulsions, head twitching, unable to properly stand (due to head injury or poisoning)
- Coma
- Inability to rise or stand (ataxia) or keep stable in water
- Visual signs of hypo and hyperthermia

11. Assessment and Consultation with a veterinarian

Minimum Standard 11	Detail	Helpful resources/links
Assessment and Consultation with a veterinarian	Any animal showing signs of sickness, injury or deterioration in condition while in care must be thoroughly assessed and treated appropriately	

Consult a veterinarian

You must consult a veterinarian as soon as possible if there is serious injury, including:

- Fracture
- Eye injury
- Respiratory distress
- Inability to rise or stand, or wobbly (ataxia)
- Inability to keep stable in water
- Inability or abnormal reluctance to move
- Severe diarrhoea
- Persistent vomiting
- If the animal is comatose or has open wounds
- If you have any concerns about what is wrong with the animal.

Legislative reasons for consulting a veterinarian

Vet consultations ensure good welfare for the animal in care and relieves pressure on rehabbers.

Collaborative decisions should be made early within the process as to whether euthanasia or rehabilitation is the most appropriate option.

12. Intensive care and nursing support

Minimum Standard 12	Detail	Helpful resources/links
Intensive care and nursing support	• Follow veterinary instructions and treatment protocols • Record daily progress and food eaten	

Facilities and care

- Provide an Intensive Care Unit (ICU) set up appropriate for the species
- Provide correct ongoing nutrition
- Daily weight must be taken to assess progress (This can be done when handling the animal for treatment/feeding)
- Provide caging away from all domestic pets and people.

Observations

- Undertake daily observation of food intake, faeces, demeanour and note any abnormalities (can include faecal colour, consistency and amount plus comments on urate colour).

13. Rehabilitation for release

Minimum Standard 13	Detail	Helpful resources/links
Rehabilitation for release	• Provide predator safe appropriate housing which allows exercising to build condition • Provide a natural diet, or access to some natural food and appropriate artificial foods • Provide natural environmental enrichment to encourage natural behaviours	

	• Record patient progress at appropriate intervals	

- Provide safe and appropriate outdoor housing
- Assess and record condition and/or weight
- Provide species specific substrate
- Provide natural diet where you can - or have access to correct artificial diets
- Exercise and observe normal flight and range of movements
- Provide environmental enrichment using safe materials

14. Release Criteria

Minimum Standard 14	Detail	Helpful resources/links
Release Criteria	• Only those animals which meet the criteria to function normally in the wild are to be released. Refer to release criteria for the species where this exists. • If the animal cannot achieve the criteria, consult with your DOC conservancy or species co coordinator to discuss options of euthanasia or inclusion in a captive management programme, if appropriate.	

Release Criteria

- Normal weight within acceptable range for time of year and breeding status
- Suitable release site available.
- Able to function normally in the wild e.g.:
    - can it fly/swim?
    - can it feed naturally?
    - can it socialise with its own species? i.e., not imprinted
    - it has a normal response to humans(i.e., avoidance
    - and any species appropriate parameters which indicate it can function normally in the wild

Recommended screening for disease

- Normal faecal sample result
- Crop wash result
- Normal blood values (optional)

Please expect there will be species specific requirements

15. Release

Minimum Standard 15	Detail	Helpful resources/links
Release	• Assess the patient against the release criteria and determine if release is appropriate • When a wild animal is returned to its natural habitat, care must be taken to ensure it is not released in circumstances in which it is likely to suffer unnecessarily (Zoo Welfare Code) • Undertake the release according to your xxx permit conditions	

Notification

- Notify the finder of the release (if they expressed a sincere interest or you agreed to this)
- Notify DOC if this is a condition of your permit

Transfer

- Use a species specific transport carrier with good substrate and ventilation
- Only have one bird per box (unless best practice states otherwise)

Release

NOTE: You will need to get clearance from DOC to release animal/s into a national park.

- Release at correct time of day and weather conditions for that species
- Preferably release to the location the animal was found if known, or to an alternative safe location if unknown or if original site is unsafe

16. Record Keeping and Reporting

Minimum Standard 16	Detail	Helpful resources/links
Record Keeping and Reporting	• Keep your own individual patient records • Submit annual report to WReNNZ in the WReNNZ approved format by 30th June including specified data. • WReNNZ committee forwards native species reports and any significant events report to DOC by 30th September	Refer to website

Record keeping

As a rehabilitator, you are required to keep individual patient records. How you choose to record these is up to you, but the minimum standard is that you collect the following information:

- History
- Physical examination
- Daily observations
- Rehabilitation progress observations

Your agreement with your veterinarian will also contain requirements for recording and reporting use of medications.

Reporting

Reporting is an important part of rehabilitation because:

- it helps us to build a picture of all the important rehabilitation work that's being done
- it allows us to provide the evidence we need for funding bids
- it helps us to drive improvements, e.g., to determine the most effective treatment regimes, make recommendations on which animals to treat and which ones not to treat etc.

Specified data for annual report

Use the following template to record the animals you have seen and held for rehabilitation. Short notes are preferable e.g. for "Treatment" you might note that the animal had "antibiotics and a bandage".

If you use an excel spreadsheet to record this information, it can be submitted to the WReNNZ committee electronically and easily added to the annual report to DOC.

Date Received	**Species**	**Native? y/n?**	**Location found**	**Assessment** e.g. type of injury	**Vet referral** y/n	**Brief summary of Treatment**	**Outcome** e.g. released, died, euthanased, transferred & where
e.g. 01/01/08	kereru		Waitangi Park	sprained wing	y	x-ray, bandage, pain meds, antibiotics	released

Date Received

Record the date the animal arrived at your facility.

Species

What species is the animal, common name or scientific name.

Location found

Record where the animal was collected from.

Assessment

What is wrong with the animal? E.g. Broken wing, starvation, cat attack, orphaned, head injury

Vet referral

Did you seek veterinary attention for this animal? Yes or no

Brief Summary of Treatment

What treatment did the animal receive? E.g. bandage, splint, antibiotics, pain relief, tube feeding, fluids, feeding etc

Outcome

What happened to the bird? Was it released? Did it die or get euthanased? Did it go to a captive management programme?