

Procedure - Oil/Chemical Spill Wildlife Response – Release of Wildlife

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Prepared by	NSW DPI Emergency Management Unit NSW NPWS Reserve & Wildlife Conservation Branch		
Contact Officer	Deputy AASFAC		

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1. Application / Scope

The aim of a wildlife response following an oil or chemical spill is to release as many healthy rehabilitated animals as possible back into their natural environment. Animals must not be released until their habitat is free of oil or chemicals and they meet the criteria for release set out in Section 4.3 below. (See Section 11 of the [NPWS Code of Practice for Injured, Sick and Orphaned Protected Fauna](#)).

Release criteria vary for different species and the decision to release animals will be based on consideration of the criteria and on medical advice from veterinary experts. Release sites and the timing of release of wildlife must be approved by a Regional Manager or other authorised officer of the National Parks and Wildlife Service.

This procedure assists personnel involved in the release of rehabilitated wildlife only and does not address any other aspects of a wildlife response which are covered in separate procedural documents. Refer to other procedures listed at the end of this document.

2. Abbreviations / Definitions

- JSA – Job Safety Analysis
- NPWS - National Parks and Wildlife Service (part of OEH)
- OEH - Office of Environment and Heritage
- SWMS – Safe Work Method Statement

3. Resources / Equipment

- Vehicles suitable for transporting wildlife
- Suitable personal protective equipment (identified in a risk assessment) for personnel involved in wildlife release
- Access to experts for advice - veterinarians and biologists
- Personnel experienced in handling birds and animals
- Containers for animals – containing food and water if long journeys are required
- Sufficient bird bands/animal tags

4. Warnings

- Release operations are affected by weather conditions, tides, poor light, slippery or otherwise dangerous surfaces (rocks, oil on the shoreline). Human safety is the highest priority and release attempts must not be undertaken where conditions are unsafe. Risks associated with the release of wildlife are to be evaluated and strategies developed to deal with them ahead of release operations. These are to be detailed in a Job Safety Analysis and Job Safety Brief for the operation, prepared by the Wildlife Coordinator.
- Personnel can be affected by exhaustion, dehydration, sunburn and hypothermia, and strain injuries. Steps must be taken to minimise risk and suitable protective equipment provided.
- Personnel releasing wildlife may be working along shorelines, either on foot or in vehicles, and may be required to work in or around water. Reference should be made to the following Safe Work Method Statements (SWMS)/Job Safety Analyses:
 - [Boating Operations](#)
 - [Driving Vehicles](#)
 - [Using and Transporting Quad/Motor Bikes](#)
 - [Working on and Around Water](#)

- Wildlife can be aggressive and release should be undertaken by individuals trained in animal handling and provided with suitable protective equipment. Refer to the SWMS [Handling of Animals](#). Personnel handling wildlife must have a current Tetanus vaccination.
- In general, mammals have greater capacity than birds to injure humans by biting, clawing or kicking. Handling of mammals, particularly larger species, is therefore challenging. Training, experience and the correct equipment are all important if capture is to be undertaken without injury to the animals and with minimum risk to human safety.
- Spread of disease is possible from animals to humans when large numbers of animals are confined in close proximity to each other.

5. Procedure

5.1 Responsibility

Rehabilitation Crews from the Wildlife Unit will be responsible for the transport and release of wildlife.

5.2 Planning considerations

- Releases should be planned in advance, particularly when large numbers of animals are involved.
- Animals should preferably be released at the site where they were captured, providing it is free of oil/chemicals. If this is not possible, a suitable release site is one where other members of the species are present or have recently been observed. Other suitable release sites include those with habitat similar to the capture site, with an available, uncontaminated food supply. Local experts and specialists should be consulted about suitable sites and on the appropriate timing of releases. Considerations should include the following:
 - Releasing an animal in another's breeding territory may cause problems, as can release of migratory animals after the migration period. Migratory waders for example may be severely compromised by an extended period in captivity, resulting in a loss of muscle tone and stamina, which will affect their fitness for the long migration flight home. Migratory birds may also be affected by missing other flocks of that species during seasonal migration if not released at the appropriate time.
 - Breeding patterns - species with small global populations may be permanently affected by failing to reproduce at an appropriate time in a breeding season.
 - An animal should not be transported to a release point across a geographic or physical barrier it would not normally cross.
- Since birds may return to their original home ranges, it may be preferable to first release a small number of radio-tagged or banded individuals to monitor and confirm that released birds will not return to the contaminated site.
- A balance may need to be struck between delaying release due to the risk of animals returning to contaminated areas versus the increased risk of secondary problems developing if they are retained in care for too long. This decision will be made by the Wildlife Coordinator, in consultation with the Incident Controller and veterinary staff, using a risk management approach.
- Once the release site has been chosen, transportation and access to the site must be planned. The release process is stressful to animals and should be undertaken as quickly as possible.
- Sufficient resources (vehicles, boxes, bird bands etc) must be prepared in advance and sufficient personnel with animal handling experience must be available who can capture the animals quickly and place them securely in containers ready for transport.
- Personnel safety must be considered at all times and releases must not be attempted if weather or other conditions could make it dangerous.
- Wildlife releases are often large media events and should be used to generate positive media and as an opportunity to acknowledge the efforts of volunteers etc. A public affairs

officer should be contacted several days prior to the planned release (if possible) to allow for appropriate media management and development of key messages.

5.3 Criteria for releasing birds

- Before release, all birds must be given a thorough clinical examination by incident veterinary staff and must meet the following criteria:
 - haematological and biochemical blood values are within normal range for the species (if known)
 - there are no signs of disease and no remaining significant injuries
 - respiration is normal
 - eyes are normally responsive to light and do not show any inflammation
 - no neurological signs such as ataxia, twitching or paralysis are present
 - the skin is not cut, abraded or inflamed
 - mucous membranes are normal
 - droppings are normal - parasite screening should be carried out to ensure that the released individual will not introduce disease to the wild population
 - body condition, fitness and weight are normal - the bird should be of normal weight, or within 10% of normal, for the species and subspecies/type, sex, time of year and its age. It must have sufficient pectoral (breast) muscle development to be able to fly normally
 - behaviour is normal for the species - including normal feeding, preening, flying, swimming and diving habits and ability to catch their own food
 - plumage is fully waterproof. Both the covert and the down feathers should remain dry in a properly waterproof bird
 - Water birds must have full waterproofing as indicated by withstanding 24 hours on water without any loss of waterproofing. The bird should remain buoyant in the water.
 - Diving birds must remain waterproof after spending a period of time in a pool with a depth three times their body length, to show that they can remain waterproof when underwater.
- For pelagic species:
 - Salt tolerance must be present in pelagic birds, with nasal gland secretions visible (salt excretions on the nostrils and/or the bill tip).
 - For pelagic species which have been maintained on fresh water for more than ten days, salting is required. This is done by adding salt tablets or granular salt to food; the maximum daily dosage being 100 mg per kilogram of body weight. Supplementation should begin 1-2 weeks prior to release, starting at a quarter of the maximum dose and gradually increasing the dose every 3 or 4 days.
- Prior to release, each bird must be banded by authorised personnel in accordance with the Australian Bird and Bat Banding Scheme (ABBBS) using bands provided through the scheme. The scheme is administered by the Department of Sustainability, Environment, Water, Population and Communities. Banding is used to enable post-release monitoring studies.
- Any temporary bands (e.g. plastic numbered rings used for individual bird identification during rehabilitation) should be removed and replaced with the ABBBS band.

5.4 Transporting birds to release site

Rehabilitation Crews will transport and release Wildlife. For transporting requirements, see [Oil Chemical Spill Wildlife Response – Transporting Wildlife](#).

5.5 Releasing birds

- Local experts should be consulted when choosing a suitable release site and the site must be approved by the Wildlife Coordinator following consultation with the local NPWS Area Office.
- Most rehabilitated seabird species can be released from a beach. Some species may be released from seaside cliffs which provide an updraft. Others may be released from boats.
- Personnel releasing birds must be trained or experienced in bird handling.
- There should be minimal disturbance from human activity at the release site and birds should be handled gently and released as quickly as possible to minimise stress.
- Most diurnal species should be released early in the morning to allow the bird to adapt to its new situation before nightfall. This also allows the maximum time for observers to monitor the released individuals.
- Nocturnal species should be released one hour after dark.
- Aquatic birds should be released in favourable weather conditions, onto calm seas, and when a long-range weather forecast indicates several days of stable weather without high winds or high seas.
- There should be sufficient wind for birds to become airborne: some seabirds require a 25 knot wind or higher therefore releasing into very calm conditions would not be appropriate.
- Birds should be monitored for activity level, fitness and general health post release.
- Typically, aquatic birds will show head dipping, rolling, wing shuffling, diving and preening in the first hours after release before moving offshore.

For more detailed information on the release of rehabilitated birds refer to the Field manual – Rescue and Rehabilitation of Oiled Birds, Erna Walraven, June 2004, copies of which are available in the [Oiled Wildlife Response Kit](#).

5.6 Criteria for releasing mammals

- Rehabilitated mammals should be fully recovered prior to release.
- Individuals must pass a veterinary examination and display the following characteristics:
 - normal haematological and biochemical findings
 - no evidence of infectious disease or other abnormal findings
 - weight within 10% of normal range for the species and age class
 - pelage in good condition
 - normal behaviour for the species including feeding, swimming and diving habits
- Additional tests may be carried out (e.g. faecal checks, urinalysis, tests for particular infectious diseases) depending on particular concerns for the individual animal and the population.
- Mammals may be pit tagged by experienced personnel prior to release and any temporary identification bands should be removed. (See NPWS Seal Standard Operating Procedures).

5.7 Transporting mammals to release site

Rehabilitation Crews will transport and release Wildlife. For transporting requirements, see procedure [Oil Chemical Spill Wildlife Response – Transporting Wildlife](#)

5.8 Releasing mammals

- Release should be at or near the site of capture, unless this is not possible due to continuing contamination of the local habitat, in which case a suitable alternative site must be chosen within the seasonal range for the species. Local experts should be consulted when choosing a suitable release site and the site must be approved by the Wildlife Coordinator following consultation with the local NPWS Area Office.
- The release site must be accessible for personnel to safely carry the animal in its container without injury to themselves or the animal.

- Release should take place as soon as possible after capture to minimise the duration of time in captivity and minimise human interaction and habituation.
- Release should be timed to provide the best chance for survival eg species with well-defined breeding seasons should not be released until after the end of the season.
- Water temperature, salinity, and other environmental factors must be within the range of tolerance for the species. If possible, release should be timed to match feeding cycles.
- Inflatable boats may be used if seals are to be transported back to colonies.
- Release should take place in good weather when calm weather is forecast for several days.
- Release should take place when the tide is going out.
- Personnel releasing mammals must be trained or experienced handlers.

5.9 Releasing marine reptiles (turtles and snakes)

For detailed information on the release criteria, tagging of individuals, selection of release sites and transportation of rehabilitated marine reptiles refer to the NPWS Marine Wildlife Management Manual.

5.10 Animals unsuitable for release

Animals must NOT be released if they:

- are handicapped with a permanent or long-term disability which could reasonably be assumed to preclude them from leading a normal life and surviving in the wild
- are suspected of carrying a serious disease or a disease which is likely to be transmitted to the detriment of populations or habitat
- do not meet the release criteria in Section 4.3.

Animals and birds unsuitable for release should be euthanised or may, in exceptional circumstances, be taken into permanent care. For further details see NPWS policy [Rehabilitation of Protected Fauna 2010](#).

6. References

Policies

- [Policy for the Translocation of Threatened Fauna in NSW, NPWS, 2001](#)
- [Rehabilitation of Protected Fauna Policy 2010, NPWS](#)

Procedures

- [Wildlife Response – Cleaning and Drying Wildlife](#)
- [Wildlife Response – Pre-emptive Actions](#)
- [Wildlife Response – Rehabilitation of Wildlife](#)
- [Wildlife Response – Scaling Down and Demobilisation Response](#)
- [Wildlife Response – Search and Rescue](#)
- [Wildlife Response – Set up and Use of Wildlife Treatment Facilities](#)
- [Wildlife Response - Transporting Wildlife](#)
- [Wildlife Response – Triage and First Aid](#)

Forms

- [Wildlife Rescue and Release Form](#)

Safe Work Method Statements / Job Safety Analysis

- [Boating Operations](#)
- [Driving Vehicles](#)
- [Handling of Animals](#)
- [Using and Transporting Quad/Motor Bikes](#)

- [Working on and Around Water](#)

Role descriptions

- [Rehabilitation Division](#)
- [Rescue Division](#)
- [Wildlife Coordinator & Logistics Support](#)

Information

- [NPWS Code of Practice for Injured, Sick and Orphaned Protected Fauna](#)
- NPWS Marine Wildlife Management Manual
- [Oiled Wildlife Response Kit](#)
- Rehabilitation and Release of Seabirds, E. Hall, 2000
- Transport, Handling and Husbandry of Seabirds, E. Hall, 2000

Legislation

- [National Parks and Wildlife Act 1974](#)
- [Threatened Species Conservation Act 1995](#)
- [Environment Protection and Conservation Act 1999](#)
- [Work Health and Safety Act 2011](#)
- [Work Health and Safety Regulation 2011](#)

7. Appendices