



Department of Planning, Industry and Environment

Flying-fox Rehabilitation Training Standards

for the Volunteer Wildlife Rehabilitation Sector



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Environment, Energy and Science
Department of Planning, Industry and Environment
Locked Bag 5022, Parramatta NSW 2124
Phone: +61 2 9995 5000 (switchboard)
Phone: 1300 361 967 (Environment, Energy and Science enquiries)
TTY users: phone 133 677, then ask for 1300 361 967
Speak and listen users: phone 1300 555 727, then ask for 1300 361 967
Email: info@environment.nsw.gov.au
Website: www.environment.nsw.gov.au

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Introduction

Wildlife rehabilitation organisations and their volunteers play a critical role in the rescue and rehabilitation of sick, injured and orphaned flying-foxes in New South Wales. Each year about 6400 flying-foxes on average are rescued. Volunteers participating in their care are trained to ensure animals are managed humanely and have the best chance of rehabilitation and release back into the wild.

The Department of Planning, Industry and Environment, NSW National Parks and Wildlife Service (NPWS), has collaborated with leading flying-fox rehabilitation providers to prepare these Flying-fox Rehabilitation Training Standards for use by trainers in the NSW wildlife rehabilitation sector. These training standards build on the high level of expertise that already exists within the sector and have been designed as a guide to evaluate, develop and support new and existing training. The intended outcome is to ensure minimum training standards are in place for volunteers across the sector, as recommended in the NSW Volunteer Wildlife Rehabilitation Sector Strategy (DPIE 2020). This will give greater certainty about the quality of care afforded to flying-foxes in rehabilitation.

These standards must be used for delivering introductory training for flying-fox rehabilitation. They describe the skills and knowledge that such training must include to ensure volunteers meet the requirements of the NSW Code of Practice for Injured, Sick and Orphaned Flying-foxes (the Flying-fox Code). Any person with an authority to rescue and rehabilitate flying-foxes in New South Wales must be trained to these standards and be assessed as competent.

These training standards have been ordered into 3 suggested core areas of training. Training programs can be structured in their entirety to replicate the standards or can be broken down to cover individual or multiple standards, or can be based on certain roles within flying-fox rehabilitation. Irrespective of the structure used, all training must include the standards relevant to a role and must cover the duties this role would be expected to perform upon completion of the training.

All training must be compliant with the Flying-fox Code. It must have a written assessment component, be competency-based, and be accompanied by ongoing in-field support from experienced wildlife rehabilitators.

Once a person is trained to these standards, they can undertake advanced refresher training and professional development opportunities as determined by their licensed wildlife rehabilitation organisation.

Additional information on training to these standards can be found in the companion Flying-fox Rehabilitation Training Standards for the Volunteer Wildlife Rehabilitation Sector: Trainers' Guide (DPIE 2021). The trainers' guide has been designed to support the sector develop their training in line with these standards.

Structure of the standards

There are 11 flying-fox rehabilitation training standards, organised into the following structure:

- **Objective** is the aim of each standard.
- **Learning outcomes** are the knowledge and skills a learner will have obtained and be able to demonstrate upon completion of training.
- **Sections in the Code** identify sections in the *Code of Practice for Injured, Sick and Orphaned Flying-foxes* that are applicable to each standard.

Prerequisites

As required by the Flying-fox Code, new wildlife rehabilitators must undertake an introductory training course. For generalist groups this could be in their induction training. For flying-fox-specific groups this can be completed as separate induction training or incorporated into Standard 1: The framework for flying-fox rehabilitation in New South Wales.

Definitions

Advanced refresher training: a standard in each Code of Practice requires wildlife rehabilitators to complete additional training every 3 or 4 years depending on the species. In the *Code of Practice for Injured, Sick and Orphaned Flying-foxes* refresher training must be completed every 3 years.

Code of Practice: specifies the minimum standards of care needed to protect the welfare of animals in rehabilitation. There is a general code and species-specific codes. The Code of Practice for Injured, Sick and Orphaned Flying-foxes is the relevant code for flying-foxes.

Competency: is defined by the Australian Skills Quality Authority as the consistent application of knowledge and skill to the standard of performance required in the workplace. It embodies the ability to transfer and apply skills and knowledge to new situations and environments.

Flying-fox: is a fruit bat (megabat) from the genus *Pteropus*.

Learning outcomes: A clear statement of what a learner is expected to be able to do, know about and value at the completion of a unit of study, and how well they should be expected to achieve those outcomes.

Objective: The aim of each standard.

Prerequisites: Something that requires something to happen or be completed before the other; for example, some advanced courses require a prior subject or course to be completed before a learner can enrol in them.

Professional development: Activities that develop or maintain skills or knowledge. Examples could include workshops, conferences, mentoring, independent research and courses.

Standards: are a level of accepted quality.

Flying-fox rehabilitation standards:

Core areas of training

There are 11 flying-fox rehabilitation standards organised into 3 core training areas.

| Core training area | Relevant standard |
|---|--|
| Foundations of flying-fox rehabilitation | Standard 1: The framework for flying-fox rehabilitation in New South Wales |
| | Standard 2: Work health and safety (WHS) requirements of flying-fox rehabilitation |
| | Standard 3: Record keeping |
| | Standard 4: Biology and behaviour of flying-foxes |
| | Standard 5: Stress management in flying-foxes |
| Rescue of flying-foxes | Standard 6: Rescue of flying-foxes |
| | Standard 7: Transport of flying-foxes |
| | Standard 8: Assessment of flying-foxes |
| Rehabilitation of flying-foxes | Standard 9: Rehabilitation of adult flying-foxes |
| | Standard 10: Rehabilitation of flying-fox pups |
| | Standard 11: Release of flying-foxes |

Foundations of flying-fox rehabilitation

Standard 1: The framework for flying-fox rehabilitation in New South Wales

Objective: To familiarise learners with the relevant policies and procedures of flying-fox rehabilitation and provide them with an understanding of the framework that exists to support and regulate flying-fox rehabilitation in New South Wales. Learners must be aware of and understand the NSW Code of Practice for Injured, Sick and Orphaned Flying-foxes_(the Flying-fox Code).

To comply with this standard, a rehabilitation organisation must:

- 1.1 Discuss the Flying-fox Code.
- 1.2 Ensure organisational policies and procedures applicable to flying-fox rehabilitation are defined and understood by learners.

| Learning outcomes | Sections in the code |
|--|----------------------|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none"> • identify and demonstrate understanding of the Flying-fox Code • identify organisational policies and procedures for flying-fox rehabilitation • recognise the objectives of flying-fox rehabilitation. | All |

Standard 2: Work health and safety requirements of flying-fox rehabilitation

Objective: To ensure that learners are able to prioritise their safety and that of the people around them when undertaking flying-fox rescue and rehabilitation.

To comply with this standard, a rehabilitation organisation must:

- 2.1 Explain the Work health and safety (WHS) risks associated with the site, equipment or activity and how they can be minimised.
- 2.2 Explain the WHS risks associated with handling and restraining flying-foxes and how they can be minimised.
- 2.3 Discuss the WHS risks associated with zoonotic diseases relevant to flying-foxes and how they can be minimised.
- 2.4 Discuss rehabilitator wellbeing and the potential mental health impacts of wildlife rehabilitation.

| Learning outcomes | Sections in the code |
|---|--|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none"> • identify WHS risks associated with flying-fox rehabilitation • employ techniques to minimise WHS risks to themselves and other people. | 3. Rescue 5. Euthanasia 6. Care procedures 7. Husbandry |

Standard 3: Record keeping

Objective: To explain the record keeping requirements for flying-fox rehabilitation.

To comply with this standard, rehabilitation organisations must:

- 3.1 Explain the NPWS reporting requirements.
- 3.2 Explain organisational reporting requirements.

| Learning outcomes | Sections in the code |
|---|----------------------|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none"> • keep records in accordance with NPWS and organisational requirements. | 12. Record keeping |

Standard 4: Biology and behaviour of flying-foxes

Objective: To ensure detailed knowledge of flying-foxes is taught to learners. This is done by providing learners with the foundational tools to understand flying-fox biology and behaviour and how these aspects inform interactions with flying-foxes undergoing rehabilitation.

To comply with this standard, a rehabilitation organisation must:

- 4.1 Explain features of flying-fox biology, including anatomy, physiology, social structure, and stages of development and relate them to flying-fox rehabilitation.
- 4.2 Provide the tools and understanding required to identify different species of flying-foxes recorded in New South Wales.
- 4.3 Provide the tools and understanding required to identify normal behaviours in flying-foxes.
- 4.4 Provide the tools and understanding required to recognise signs of abnormal behaviour in flying-foxes.

| Learning outcomes | Sections in the code |
|---|----------------------|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none"> • relate flying-fox biology and behaviour to flying-fox rehabilitation • recognise signs of normal behaviour in flying-foxes • recognise signs of abnormal behaviour in flying-foxes. | All |

Standard 5: Stress management in flying-foxes

Objective: To communicate the importance of managing stress in flying-foxes and to provide mechanisms for minimising this stress.

To comply with this standard, rehabilitation organisations must:

- 5.1 Explain the effects of stress on a flying-fox at various stages of rescue and rehabilitation.
- 5.2 Provide the tools and understanding required to recognise signs of stress in a flying-fox.
- 5.3 Discuss methods for minimising stress in a flying-fox at various stages of rescue and rehabilitation.

| Learning outcomes | Sections in the code |
|---|--|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none">• recognise signs of stress in flying-foxes and its impact• apply methods for minimising stress on a flying-fox. | 3. Rescue 4. Transport 5. Euthanasia 6. Care procedures 7. Husbandry 8. Housing 10. Release considerations |

Rescue of flying-foxes

Standard 6: Rescue of flying-foxes

Objective: To ensure learners have the skills to safely, efficiently and humanely rescue a flying-fox.

To comply with this standard, a rehabilitation organisation must:

- 6.1 Outline common reasons for flying-fox rescue.
- 6.2 Detail how to perform a situational assessment, including the use of the decision tree in the Flying-fox Code, to establish the appropriate course of action.
- 6.3 Detail how to perform a situational assessment of a mass casualty event, to establish the appropriate course of action.
- 6.4 Detail the correct method and equipment required to capture, handle and rescue a flying-fox, as suitable to common rescue situations, age and condition of a flying-fox.
- 6.5 Detail how to rescue a flying-fox to humanely minimise pain, stress and potential injury.

| Learning outcomes | Sections in the code |
|---|--|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none"> • list the common reasons why flying-foxes require rescue • assess a rescue situation and plan the rescue of a flying-fox • safely rescue a flying-fox using correct equipment • determine the type of intervention required at a rescue site • assess a rescue situation and determine the type of intervention required during a mass casualty event. | 2. Case assessment 3. Rescue 4. Transport 5. Euthanasia 6. Care procedures |

Standard 7: Transport of flying-foxes

Objective: To ensure learners have the skills to safely, efficiently and humanely transport a flying-fox.

To comply with this standard, a rehabilitation organisation must:

- 7.1 Demonstrate how to appropriately contain a flying-fox for transport based on size, age and condition.
- 7.2 Outline how to secure the transport container to prevent escape, further injury and ensure human safety.
- 7.3 Detail suitable transport conditions, including ambient temperature, to safely transport a flying-fox.
- 7.4 Discuss the most suitable personnel or location that a flying-fox should be transported to, based on age, condition and organisational policies.

| Learning outcomes | Sections in the Code |
|--|--|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none"> • prepare a carrier for transport • outline the transport conditions required to safely transport a flying-fox • understand the appropriate personnel or location to transport a flying-fox to, based on age, condition and organisational policies. | 2. Case assessment 3. Rescue 4. Transport 5. Euthanasia |

Standard 8: Assessment of flying-foxes

Objective: To equip learners with the skills necessary to assess the health status of a flying-fox.

To comply with this standard, a rehabilitation organisation must:

- 8.1 Explain how to conduct an initial assessment of a flying-fox.
- 8.2 Explain the requirements of a thorough assessment of a flying-fox.
- 8.3 Provide the tools and understanding required to identify developmental stages in flying-fox pups.
- 8.4 Emphasise the need to seek prompt advice and assistance for a flying-fox from a coordinator, veterinarian or other relevant personnel, as appropriate to its condition.
- 8.5 Distinguish signs of and ways to determine common diseases and injuries affecting flying-foxes.
- 8.6 Explain how to manage an injured or diseased flying-fox based on the severity of its condition.
- 8.7 Outline criteria and approved methods for humane euthanasia.

| Learning outcomes | Sections in the code |
|--|--|
| Upon completion of this module, learners will be able to: | 5. Euthanasia |
| <ul style="list-style-type: none">• conduct an initial assessment of a flying-fox• assess the health status of a flying-fox and recognise stages, symptoms and severity of common diseases and injuries• determine the appropriate course of action for a flying-fox based on its age and condition• outline criteria for euthanasia and approved methods of euthanasia | 6. Care procedures 7. Husbandry 8. Housing |

Rehabilitation of flying-foxes

Standard 9: Rehabilitation of adult flying-foxes

Objective: To provide learners with an understanding of the requirements for the rehabilitation of adult flying-foxes, and equip learners with the skills to provide quality rehabilitative care at the relevant stages of rehabilitation.

To comply with this standard, a rehabilitation organisation must:

- 9.1 Explain the importance of and process for quarantining individual flying-foxes entering rehabilitation.
- 9.2 Discuss the effects of stress and the stress-mitigation techniques required to safely rehabilitate flying-foxes.
- 9.3 Detail the facilities required to safely rehabilitate adult flying-foxes, relevant to stages of housing (intensive, intermediate and pre-release).
- 9.4 Describe appropriate equipment and furniture for stages of housing.
- 9.5 Illustrate disease control and hygiene practices appropriate to stages of housing.
- 9.6 Explain how to appropriately provide food and water based on the condition of a flying-fox.
- 9.7 Detail common conditions and diseases that affect flying-foxes.
- 9.8 Discuss how to monitor a flying-fox in accordance with stages of housing and condition.
- 9.9 Demonstrate how to complete a husbandry plan.

| Learning outcomes | Sections in the code |
|---|---|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none"> • outline the requirements for adult flying-fox rehabilitation • demonstrate correct set-up for housing flying-foxes • provide food and water appropriate to the condition of a flying-fox • monitor a flying-fox undergoing rehabilitation • apply hygiene and disease control processes to flying-fox rehabilitation • complete a husbandry plan for a flying-fox. | 2. Case assessment 5. Euthanasia 6. Care procedures 7. Husbandry 8. Housing |

Standard 10: Rehabilitation of flying-fox pups

Objective: To provide learners with the specialised knowledge required to rehabilitate a flying-fox pup.

To comply with this standard, a rehabilitation organisation must:

- 10.1 Explain the importance of and process for quarantining flying-fox pups entering rehabilitation.
- 10.2 Specify key stages of pup development.
- 10.3 Describe appropriate housing for a flying-fox pup based on stage of development and condition.
- 10.4 Discuss appropriate food, feeding methods and monitoring protocols for a pup based on its stage of development.

- 10.5 Explain the importance of maintaining records on growth, behaviour, feeding and toileting of pups throughout the rehabilitation process.
- 10.6 Detail common conditions and diseases that affect flying-fox pups.
- 10.7 Illustrate disease control and hygiene practices appropriate to stages of housing.
- 10.8 Demonstrate how to complete a husbandry plan for a flying-fox pup.
- 10.9 Describe mechanisms to reduce stress and encourage natural behaviours in flying-fox pups.

| Learning outcomes | Sections in the code |
|---|---|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none"> • outline the requirements for the rehabilitation of flying-fox pups • identify stages of development for flying-fox pups and relate these to rehabilitation • apply hygiene and disease control processes to flying-fox pup rehabilitation • reduce stress and encourage natural behaviours in flying-fox pups • prepare a hand-raised flying-fox for release. | 2. Case assessment 5. Euthanasia 6. Care procedures 7. Husbandry 8. Housing |

Standard 11: Release of flying-foxes

Objective: To ensure learners understand suitability for release and criteria for releasing a flying-fox.

To comply with this standard, a rehabilitation organisation must:

- 11.1 Discuss release considerations for flying-foxes including timing and site selection.
- 11.2 Explain how to determine a flying-fox's suitability for release.
- 11.3 Detail the correct techniques and equipment for releasing a flying-fox.

| Learning outcomes | Sections in the code |
|--|--|
| Upon completion of this module, learners will be able to: <ul style="list-style-type: none"> • assess a flying-fox for release suitability • competently release a flying-fox. | 9. Suitability for release 10. Release considerations |

More information

- [Australian Skills Quality Authority](#)
- [Code of Practice for Injured, Sick and Orphaned Flying-foxes](#)
- [NSW Volunteer Wildlife Rehabilitation Sector Strategy](#)