NSW GOVERNMENT
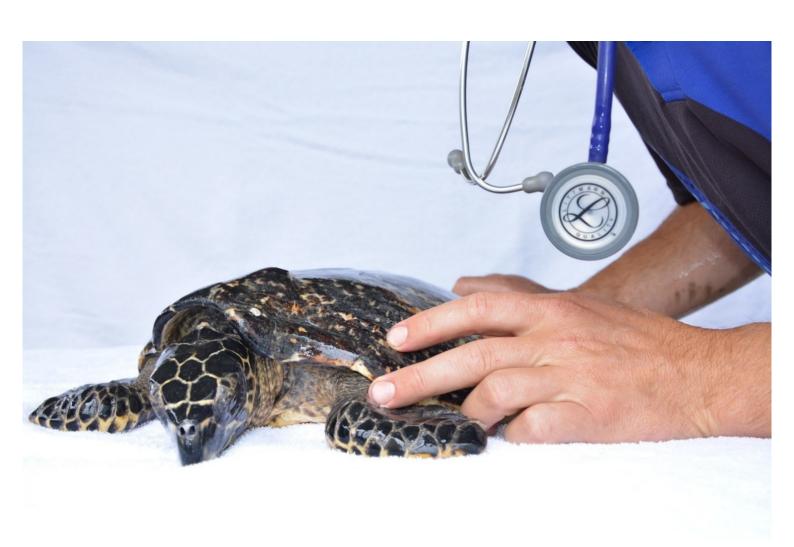
DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT

Sea Turtle and Sea Snake Rehabilitation Training Standards

for the Volunteer Wildlife Rehabilitation Sector

Cover photo: Hawksbill turtle (*Eretmochelys imbricata*). Duane March/Dolphin Marine Rescue

Find out more about your environment at:

www.environment.nsw.gov.au

Contents

Introduction

Wildlife rehabilitation organisations and their volunteers play a critical role in the rescue and rehabilitation of sick and injured sea turtles and sea snakes in New South Wales. Each year over 100 marine reptiles 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 sea turtle and sea snake rehabilitation providers to prepare these *Sea Turtle and Sea Snake 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 sea turtles and sea snakes in rehabilitation.

These standards must be used for delivering introductory training for sea turtles and sea snakes undergoing 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 and Sick Sea Turtles and Sea Snakes (the Sea Turtle and Sea Snake Code). Any person with an authority to rescue and rehabilitate sea turtles and sea snakes in New South Wales must be trained to these standards and be assessed as competent. This applies to both home care and facility-based models.

These training standards have been ordered into three 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 sea turtle and sea snake 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 completing the training.

All training must be compliant with the Sea Turtle and Sea Snake Code. It must have a written assessment component, be competency-based and be accompanied by ongoing in-field support from experienced sea turtle and sea snake 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 *Sea Turtle and Sea Snake Rehabilitation Training Standards for the Volunteer Wildlife Rehabilitation Sector: Trainers' Guide* (DPIE 2021). This document has been designed to support the sector develop their training in line with these standards.

Structure of the standards

There are 11 sea turtle and sea snake 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 and Sick Sea Turtles and Sea Snakes* that apply to each standard.

Prerequisites

As required by the Sea Turtle and Sea Snake Code, new wildlife rehabilitators must undertake an introductory training course. For generalist groups this would be covered in their induction training. For sea turtle and sea snake-specific groups this can be completed as separate induction training or incorporated into Standard 1: The framework for sea turtle and sea snake rehabilitation in New South Wales.

Definitions

Advanced refresher training: a standard in each Code of Practice requires wildlife rehabilitators to complete additional training every three or four years, depending on the species. In the *Code of Practice for Injured and Sick Sea Turtles and Sea Snakes*, refresher training must be completed every three 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 and Sick Sea Turtles and Sea Snakes is the relevant code for sea turtles and sea snakes.

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.

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.

Sea turtles: are animals classified as members of the superfamily Chelonioidea which has extant species in the family Cheloniidae and family Dermochelyidae.

Sea snakes: are animals classified as members of the subfamily Hydrophiidae (sea snakes) and subfamily Lauticaudinae (sea kraits).

Standards: are a level of accepted quality.

Sea turtle and sea snake rehabilitation standards: Core areas of training

There are 11 sea turtle and sea snake rehabilitation standards organised into three core training areas.

Core training area	Relevant standard
Foundations of sea turtle and sea snake rehabilitation	Standard 1: The framework for sea turtle and sea snake rehabilitation in New South Wales
	Standard 2: Work health and safety (WHS) requirements of sea turtle and sea snake rehabilitation
	Standard 3: Record keeping
	Standard 4: Biology and behaviour of sea turtles and sea snakes
	Standard 5: Stress management in sea turtles and sea snakes
Rescue of sea turtles and sea snakes	Standard 6: Rescue of sea turtles and sea snakes
	Standard 7: Transport of sea turtles and sea snakes
	Standard 8: Assessment of sea turtles and sea snakes
Rehabilitation and release of sea turtles and sea snakes	Standard 9: Rehabilitation of adult sea turtles and sea snakes
	Standard 10: Rehabilitation of post-hatchlings
	Standard 11: Release of sea turtles and sea snakes

Foundations of sea turtle and sea snake rehabilitation

Standard 1: The framework for sea turtle and sea snake rehabilitation in New South Wales

Objective: To familiarise learners with the relevant policies and procedures for sea turtle and sea snake rehabilitation and provide them with an understanding of the framework that exists to support and regulate sea turtle and sea snake rehabilitation in New South Wales. Learners must be aware of and understand the NSW Code of Practice for Injured and Sick Sea Turtles and Sea Snakes (the Sea Turtle and Sea Snake Code).

To comply with this standard, a rehabilitation organisation must:

1.1   Discuss the Sea Turtle and Sea Snake Code.

1.2   Ensure organisational policies and procedures applicable to sea turtle and sea snake rehabilitation are defined and understood by learners.

1.3   Ensure objectives of sea turtle and sea snake rehabilitation are understood by learners.

Learning outcomes	Sections in the code
Upon completion of this module, learners will be able to: • identify and demonstrate understanding of the Sea Turtle and Sea Snake Code • identify organisational policies and procedures for sea turtle and sea snake rehabilitation • recognise the objectives of sea turtle and sea snake rehabilitation.	All

Standard 2: Work health and safety requirements of sea turtle and sea snake rehabilitation

Objective: To ensure that learners are able to prioritise their safety and that of the people around them when undertaking sea turtle and sea snake 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 sea turtles and sea snakes and how they can be minimised.

2.3   Discuss the WHS risks associated with zoonotic diseases relevant to sea turtles and sea snakes and how they can be minimised.

2.4   Discuss rehabilitator wellbeing and the potential mental health impacts of rehabilitation.

Learning outcomes	Sections in the code
Upon completion of this module, learners will be able to: • identify WHS risks associated with sea turtle and sea snake rehabilitation • employ techniques to minimise the WHS risks to themselves and other people.	3. Rescue 4. Transport 5. Euthanasia 6. Care procedures 7. Husbandry 8. Housing 10. Release considerations

Standard 3: Record keeping

Objective: To explain the record keeping requirements of sea turtle and sea snake 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: • keep records in accordance with NPWS and organisational requirements.	12. Record keeping

Standard 4: Biology and behaviour of sea turtles and sea snakes

Objective: To ensure detailed knowledge of sea turtles and sea snakes is taught to learners. This is done by providing learners with the foundational tools to understand sea turtle and sea snake biology and behaviour and how these aspects inform interactions with sea turtles and sea snakes undergoing rehabilitation.

To comply with this standard, a rehabilitation organisation must:

4.1   Explain features of sea turtle and sea snake biology including anatomy, physiology, social structure, stages of development and habitat and relate them to sea turtle and sea snake rehabilitation.

4.2   Provide the tools and understanding required to identify different species of sea turtles and sea snakes.

4.3   Provide the tools and understanding required to identify normal behaviours in sea turtles and sea snakes.

4.4   Provide the tools and understanding required to recognise signs of abnormal behaviour in sea turtles and sea snakes.

Learning outcomes	Sections in the code
Upon completion of this module, learners will be able to: • relate sea turtle and sea snake biology and behaviour to rehabilitation practices • understand how to use the different tools to identify different species of sea turtles and sea snakes • recognise signs of normal behaviour in sea turtles and sea snakes • recognise signs of abnormal behaviour in sea turtles and sea snakes.	All

Standard 5: Stress management in sea turtles and sea snakes

Objective: To communicate the importance of managing stress in sea turtles and sea snakes 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 sea turtle and a sea snake at various stages of rescue and rehabilitation.

5.2   Provide the tools and understanding required to recognise signs of stress in sea turtles and sea snakes.

5.3   Discuss methods for minimising stress on sea turtles and sea snakes at various stages of rescue and rehabilitation.

Learning outcomes	Sections in the code
Upon completion of this module, learners will be able to: • recognise signs of stress in sea turtles and sea snakes and its impact • apply methods for minimising stress on sea turtles and sea snakes.	3. Rescue 4. Transport 5. Euthanasia 6. Care procedures 7. Husbandry 8. Housing 10. Release considerations

Rescue of sea turtles and sea snakes

Standard 6: Rescue of sea turtles and sea snakes

Objective: To ensure learners have the skills to safely, efficiently and humanely rescue sea turtles and sea snakes.

To comply with this standard, a rehabilitation organisation must:

6.1   Outline common reasons for sea turtle and sea snake rescue.

6.2   Detail how to perform a situational assessment, including using the decision tree in the Sea Turtle and Sea Snake Code to establish the appropriate course of action.

6.3   Demonstrate the correct method and equipment required to capture, handle and rescue a sea turtle and a sea snake, as suitable to common rescue situations, stage of development and conditions.

6.4   Detail how to rescue a sea turtle and a sea snake to humanely minimise pain, stress and potential injury.

Learning outcomes	Sections in the code
Upon completion of this module, learners will be able to: • list the common reasons why sea turtles and sea snakes require rescue • assess a rescue situation and plan the rescue of a sea turtle and a sea snake • safely rescue a sea turtle and a sea snake using the correct equipment • determine the type of intervention required at a rescue site.	2. Case assessment 3. Rescue 4. Transport 5. Euthanasia

Standard 7: Transport of sea turtles and sea snakes

Objective: To ensure learners have the skills to safely, efficiently and humanely transport a sea turtle and a sea snake.

To comply with this standard, a rehabilitation organisation must:

7.1   Demonstrate how to appropriately contain a sea turtle and a sea snake for transport based on different sizes, stages of development and conditions.

7.2   Outline how to secure the transport container to prevent escape and further injury.

7.3   Detail suitable transport conditions, including ambient temperature, to safely transport a sea turtle and sea snake.

7.4   Discuss the most suitable personnel or location that a sea turtle or a sea snake should be transported to, based on different stages of development, conditions and organisational policies.

Learning outcomes	Sections in the code
Upon completion of this module, learners will be able to: • prepare a carrier for the transport of a sea turtle and a sea snake • outline the transport conditions required to transport a sea turtle safely and a sea snake • understand the appropriate personnel or location to transport a sea turtle and a sea snake to, based on different stages of development, conditions and organisational policies.	2. Case assessment 3. Rescue 4. Transport 5. Euthanasia

Standard 8: Assessment of sea turtles and sea snakes

Objective: To equip learners with the skills necessary to assess the health status of a sea turtle and a sea snake.

To comply with this standard, a rehabilitation organisation must:

8.1   Explain how to conduct an initial assessment of a sea turtle and a sea snake.

8.2   Explain the requirements of a thorough assessment of a sea turtle and a sea snake.

8.3   Emphasise the need to seek prompt advice and assistance for a sea turtle and a sea snake from coordinators or other relevant personnel, as appropriate to their condition.

8.4   Demonstrate use of body scoring to assess the condition of a sea turtle.

8.5   Distinguish signs of and ways to determine common diseases and injuries affecting sea turtles and sea snakes.

8.6   Explain how to manage an injured or diseased sea turtle and sea snake 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: • conduct an initial assessment of a sea turtle and a sea snake • assess the health status of a sea turtle and a sea snake and recognise stages, symptoms and severity of common diseases and injuries • determine the appropriate course of action for a sea turtle and a sea snake based on its condition • understand the criteria for and approved methods of euthanasia.	5. Euthanasia 6. Care procedures 7. Husbandry 8. Housing

Rehabilitation of sea turtles and sea snakes

Standard 9: Rehabilitation of subadult and adult sea turtles and sea snakes

Objective: To provide learners with an understanding of the requirements for rehabilitating subadult and adult sea turtles and sea snakes. To equip them with the skills to provide high quality rehabilitative care of subadult and adult sea turtles and sea snakes at the relevant stages of housing.

> Note: This standard can be applied to a single stage of care, i.e. intensive care, or pre-release care, depending on the role the learner will be expected to perform upon successful completion of the training.

To comply with this standard, a rehabilitation organisation must:

9.1 Explain the importance of and process for quarantining individual sea turtles and sea snakes entering rehabilitation.

9.2 Detail the facilities required to safely rehabilitate subadult and adult sea turtles and sea snakes relevant to stages of housing (intensive care and pre-release).

9.3 Describe appropriate equipment and furniture for stages of housing.

9.4 Illustrate disease control and hygiene practices appropriate to stages of housing.

9.5 Explain how to appropriately provide food and water based on the condition of a sea turtle and a sea snake.

9.6 Detail common conditions and diseases that affect sea turtles and sea snakes.

9.7 Discuss how to monitor a sea turtle and a sea snake in accordance with stages of housing and condition.

9.8 Demonstrate how to complete a husbandry plan.

Learning outcomes	Sections in the code
Upon completion of this module, learners will be able to: • outline the requirements for subadult and adult sea turtle and sea snake rehabilitation • demonstrate correct set-up for housing sea turtles and sea snakes • provide food and water appropriate to the age and condition of sea turtles and sea snakes • monitor sea turtles and sea snakes undergoing rehabilitation • apply hygiene and disease control processes to sea turtle and sea snake rehabilitation • complete a husbandry plan for a subadult and an adult sea turtle and sea snake.	5. Euthanasia 6. Care procedures 7. Husbandry 8. Housing

Standard 10: Rehabilitation of post-hatchlings

Objective: To provide learners with the specialised knowledge required to rehabilitate a post-hatchling sea turtle.

To comply with this standard, a rehabilitation organisation must:

10.1 Specify key stages of hatchling development.

10.2 Describe appropriate housing for a post-hatchling sea turtle based on stage of development.

10.3 Discuss appropriate food and feeding methods for post-hatchling sea turtles based on their stage of development.

10.4 Detail common conditions and diseases that affect post-hatchling sea turtles.

10.5 Illustrate disease control and hygiene practices appropriate to stages of housing.

10.6 Demonstrate how to complete a husbandry plan for a post-hatchling sea turtle.

10.7 Describe mechanisms to reduce stress and encourage natural behaviours in post-hatchling sea turtles.

Learning outcomes	Sections in the code
Upon completion of this module, learners will be able to: • outline the requirements for post-hatchling sea turtle rehabilitation • identify stages of development for post-hatchling sea turtles and relate these to rehabilitation • apply hygiene and disease control processes to post-hatchling sea turtle rehabilitation • reduce stress and encourage natural behaviours in post-hatchling sea turtles • prepare a post-hatchling sea turtle for release.	2. Case assessment 5. Euthanasia 6. Care procedures 7. Husbandry 8. Housing

Standard 11: Release of sea turtles and sea snakes

Objective: To ensure learners understand suitability for release and criteria for releasing a sea turtle and a sea snake.

To comply with this standard, a rehabilitation organisation must:

11.1 Discuss release considerations for sea turtles and sea snakes, including timing and site selection.

11.2 Explain how to determine a sea turtle and a sea snake's suitability for release.

11.3 Detail the correct techniques and equipment for releasing a sea turtle and a sea snake.

Learning outcomes	Sections in the code
Upon completion of this module, learners will be able to: • assess a sea turtle and a sea snake for release suitability • competently release a sea turtle and a sea snake.	9. Suitability for release 10. Release considerations