

TURTLES

LESSON

TERM FOUR

FRESHWATER TURTLE NESTING

- Learning Objectives
- Background
- Activities
- Curriculum Mapping

Photo credit: Dr Donald McKnight





Photo credit: Marilyn Connell

CONTENTS

PAGE 3

LEARNING OBJECTIVES

Here you will find the learning objectives for this lesson

PAGES 6 - 7

CLASSROOM ACTIVITIES

There are three activities for this lesson.

PAGES 4 - 5

BACKGROUND INFORMATION

Learn about Australian freshwater turtle nesting, including time of year, nest site characteristics and the egg chamber

PAGES 8 - 9

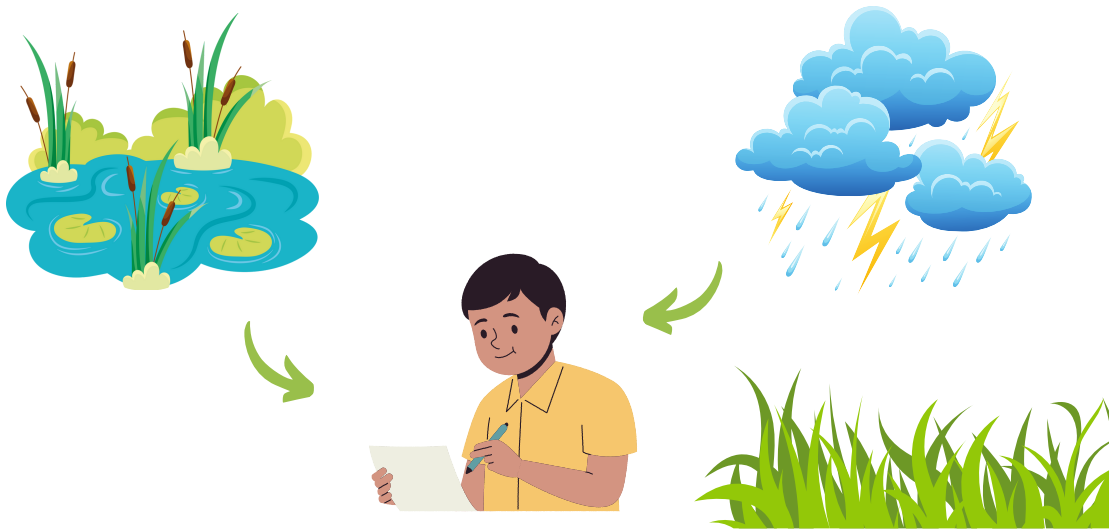
CURRICULUM

See how this lesson maps with the Australian curriculum

Learning Objectives

At the end of the lesson, students will be able to:

- (1) Identify suitable turtle nesting habitat within the wetland environment and describe nest site characteristics;
- (2) Describe turtle nesting behaviour (time of year, egg chamber).



Identify



Describe

Background Information

Freshwater turtle nesting

Nesting season:

The nesting season for freshwater turtles in Australia varies among species and regions. Generally, it occurs during the warmer months, typically from September to March.

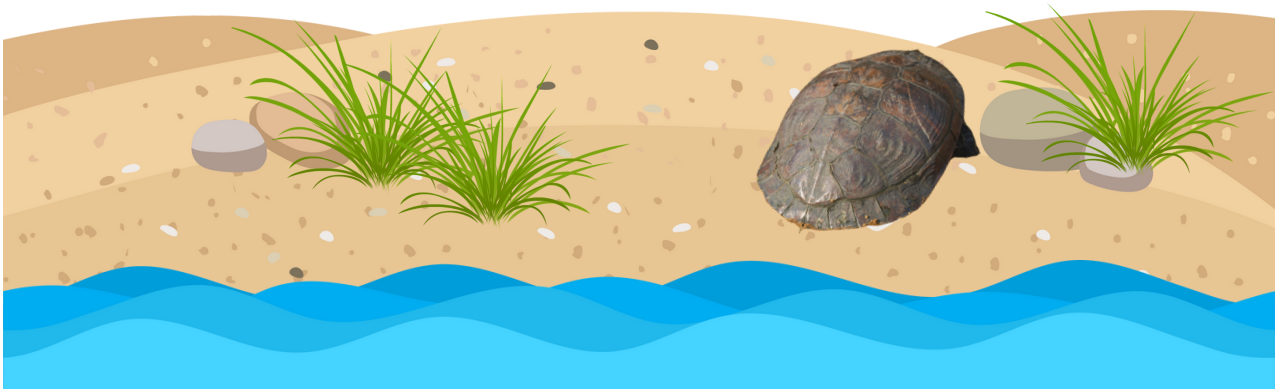
Environmental triggers for nesting:

Females turtles typically emerge from the water during or after spring/summer rainfall as the soil is softer making nest construction easier.



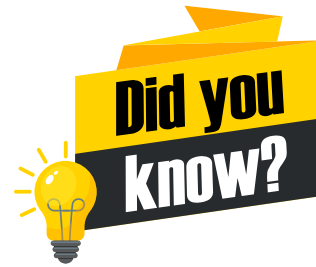
Nest site selection:

Freshwater turtles typically choose sandy or loose soil for nesting, in open areas with minimal vegetation cover. The nesting site is often located close to the waters edge, however some species may travel up to 50 metres from the waters edge.



Nest excavation and egg deposition:

The female will use her hind legs to dig a hole (known as the nest chamber) and will deposit her eggs into the chamber. The female will then use her hind legs to fill in the nest with loose dirt and will compact the soil on top using the force of her body. Nesting may take between 2 to 3 hours to complete. Clutch size varies among species, with females generally laying between 10 - 25 eggs.



Northern long-necked turtles create their nests underwater at the end of the wet season in northern Australia. Embryonic development remains arrested until floodwaters recede in the dry season and the ground dries.

Egg incubation and hatchling emergence:

The eggs will incubate in the nest chamber (underground) for 2 to 3 months (depending on the species). Incubation in some species can be up to 12 months. Hatchlings will begin to emerge from the nest in early autumn. Once emerged they will make their way back to the waterbody.



Classroom Activities

ACTIVITY 1

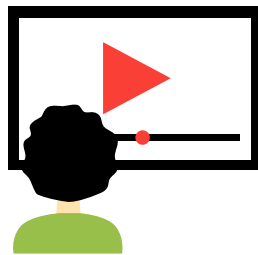
(1A) Begin with a class discussion about what students know about turtle nesting. Write their ideas on the whiteboard.

(1B) Watch the following video from the MidCoast Council. The video provides an overview of nest site selection and general characteristics of freshwater turtle nests.

Link to video: [<https://www.youtube.com/watch?v=JL3uMzcjiWQ>] (Copy and paste into browser).



Discuss



Video



Reflect

ACTIVITY 2

(2A) Watch the following video which shows a female turtle constructing a nest and depositing eggs. Link to video:

[<https://www.youtube.com/watch?v=NTYvFR7jVNE>] (Copy and paste into browser).

(2B) Ask students to reflect on the information in the video and complete the Video Reflection Handout.

ACTIVITY 3

(3A) Place students into groups and assign each group an Australian freshwater turtle species to research.

(3B) Encourage students to search for information using various forms of literature (i.e. articles, books, or printouts).

(3C) Ask students to collate information relating to reproduction, including nesting habitat, time of year and clutch size.

(3D) Instruct students to create a diorama representing turtle nesting. Encourage students to include elements like the turtle, nesting site, eggs, and the surrounding habitat.

(3E) Discuss the importance of accurate representation based on their research.

(3F) Ask students to create small information cards or labels to accompany their dioramas. Each card should include key facts about the turtle species depicted, nesting behaviour, and habitat.



Australian Curriculum addressed in this Lesson



Science

Strand: Science Understanding (Year 5)

Sub-strand: Biological Sciences

AC9S5U01: examine how particular structural features and behaviours of living things enable their survival in specific habitats.

Strand: Science Understanding (Year 6)

Sub-strand: Biological Sciences

AC9S6U01: investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions.



English

Strand: Literacy (Year 5)

Sub-strand: Analysing, interpreting and evaluating

AC9E5LY04: navigate and read texts for specific purposes, monitoring meaning using strategies such as skimming, scanning and confirming.

AC9E5LY05: use comprehension strategies such as visualising, predicting, connection, summarising, monitoring and questioning to build literal and inferred meaning to evaluate information and ideas.

Australian Curriculum addressed in this Lesson



English - continued

Strand: Literacy (Year 6)

Sub-strand: Analysing, interpreting and evaluating

AC9E6LY04: select, navigate and read texts for a range of purposes, monitoring meaning and evaluating the use of structural features; for example, table of contents, glossary, chapters, headings and subheadings.

AC9E6LY05: use comprehension strategies such as visualising, predicting, connecting, summarising, monitoring and questioning to build literal and inferred meaning and to connect and compare content from a variety of sources.