# THE MINISTRACTION OF THE MINIS

Fact file:

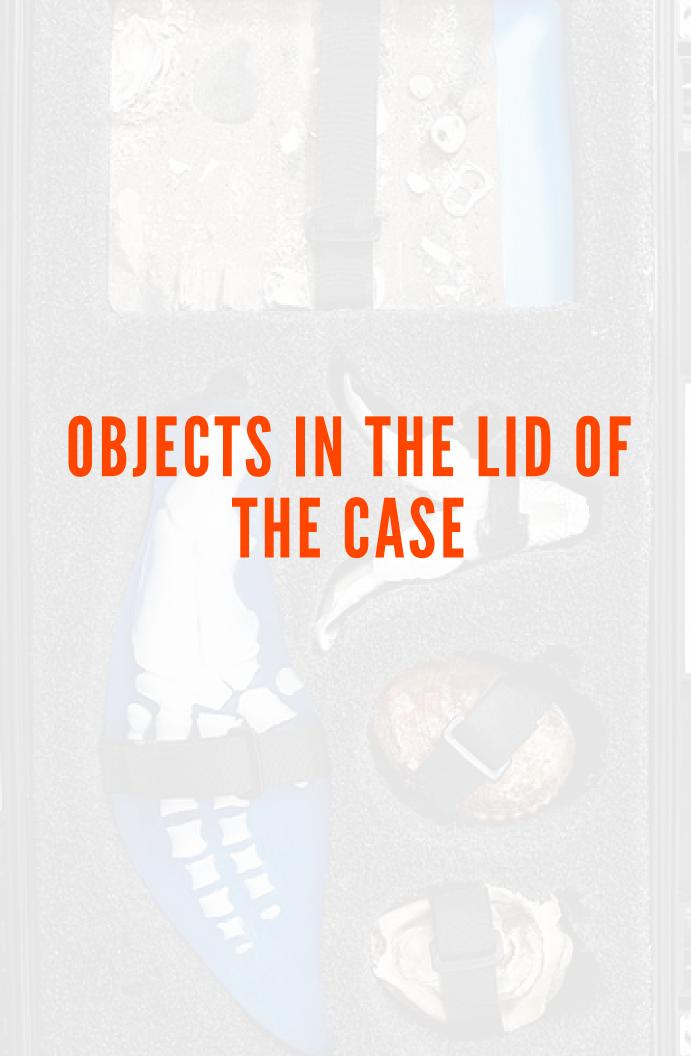
Caring for our Coast, NSW



# TABLE OF CONTENTS

OBJECTS IN THE LID OF THE CASE	03
OBJECTS IN THE CASE	07
EMBEDMENTS	09
DIORAMA	15
APPENDIX	26

.



# Blacklip Abalone shell



Haliotis rubra



- A Backlip Abalone is a sea snail. They have holes at the top of the shell that are used for breathing.
- Abalone shells are used by First Nations peoples as a spoon, a bowl or carved out to create a fish hook.

# Dolphin flipper (model)



Tursiops sp.



- Dolphin flippers have bones inside similar to those inside a human hand.
- Dolphins' flippers are strong, helping them to steer and turn quickly through the water.

# Cross section of a midden (model)



- Middens are collections of shells, bones or tools showing First Nations peoples behaviour and diet over time.
- Middens sometimes have mollusc shells including pipis, oysters, abalone and limpets.

# Oyster (cast)



Ostrea angasi



- An oyster is a mollusc with a soft body and a two part shell.
- The oyster shells can be very sharp and are used by First Nations peoples to make fishhooks, cutting tools and spoons.

# Port Jackson Shark jaw (cast) 🥌



Heterodontus portusjacksoni



- The Port Jackson Shark is a blunt headed fish. Their jaws have small, pointy front teeth and flat back teeth to hold and break their food.
- Their strong jaw allows them to crush oyster shells and the spiked exterior of the sea urchin.



# Banksia 🔎

Banksia genus.



- The banksia is a cone-shaped flower, native to Australia.
- The banksia flower heads have been used by First Nations peoples as paintbrushes.
- Banksia seed capsules burst open during bush fires, allowing the plant to regenerate in the new soil.





# **EMBEDMENTS**







# Fourline Striped Grunter



Pelates quadrilineatus



- The Fourline Striped Grunter is a fish that makes a "grunting" sound when it swims.
- It has 4-6 stripes on its body to help it hide from predators.
- This fish likes to eat the Snapping shrimp.

#### Mat rush &

Lomandra sp.



- Mat rush is a flowering, grass-like plant.
- Mat rush is a useful resource to First Nations peoples. The seeds of mat rush are roasted and ground to make a high-protein flour and the leaves are used to weave baskets and fish nets.

# Neptune's Necklace

Horomosira banksii



- Neptune's Necklace is a type of seaweed with squishy and soft beads filled with water.
- This seaweed provides a home for molluscs and crustaceans, keeping them safe from predators.

#### Pink Sea Urchin skeleton (



Holopneustes pycnotilus



- The Pink Sea Urchin is a marine invertebrate with a hard shell and movable spines.
- The Pink Sea Urchin can eat Neptune's Necklace or dead crustaceans.
- The Pink Sea Urchin was part of the diet of First Nations peoples.



#### Plebidonax deltoides



- Pipis are molluscs with a soft body and two part shell.
- Pipis are an important part of the diet of saltwater First Nations peoples. The shells are often found in middens.

# Purple Rock Crab



Leptograpsus variegatus



- The Purple Rock Crab is a crustacean.
- They scurry and dart quickly among the rocks, and hide in the cracks. They can be quite difficult to catch.

# Seagrass



Order: Alismatales



- Seagrass is an underwater plant that produces flowers and provides a home for sea creatures.
- Many sea creatures eat seagrass, including the adult Green sea turtle. When eaten, seagrass makes the turtle's fat green.

#### Waratah Anemone



Actinia tenebrosa



- The Waratah Anemone is an invertebrate, named after a flower called a Waratah.
- The Waratah Anemone have red tentacles that shrink at low tide and get longer at high tide.

# Zebra Snail

Austrocochlea porcata



- The Zebra Snail is mollusc with unique patterns on their shells. There are no two that are the same.
- The Zebra Snail lives on rock platforms and near rock pools.



# ANIMALS AND PLANTS IN THE DIORAMA

- 1. Acorn Barncale
- 2. Black Nerite
- 3. Blue-lined Octopus
- 4. Cart-rut Shell
- 5. Chiton
- 6. Common sea urchin
- 7. Conniewinks
- 8. Longfin Eel (elver)
- 9. Galeolaris worm (Tube worm)

- 10. Green Sea Turtle
- hatchling
- 11. Limpet
- 12. Moon Jelly
- 13. Mulberry Whelk
- 14. Snapping Shrimp
- 15. Spotted Wobbegong
- 16. Surf Barnacle
- 17. White's Seahorse

#### Fact file for other creatures in the diorama are featured in the Embedments

- Fourline Striped Grunter
- Neptune's Necklace
- Pipi
- Purple Rock Crab
- Seagrass
- Waratah Anemone
- Zebra Snail

# Fact file for other creatures in the diorama are featured in the Objects in the lid of the case

Oyster

#### 1. Acorn Barnacle



Semibalanus balanoides



- The Acorn Barnacle is a sticky crustacean that binds strongly to rock surfaces.
- The Acorn barnacle can build hard, cone-shaped shells for protection.

#### 2. Black Nerite

Nerita atramentosa



- A Black Nerite is a black sea snail with a tough, round shell that protects it from waves
- The Black Nerite clings to rocks like a rock-climber, using its soft body.

# 3. Blue-lined Octopus 🥋

Hapalochlaena fasciata



- The Blue-lined Octopus is a type of Blue-ringed Octopus.
- When this octopus is scared, blue lines appear on its body to help it camouflage and hide from predators.
- They can eat small crustaceans and fish.

#### 4. Cart-rut Shell

Dicathais orbita



- The Cart-rut Shell is a large white sea snail.
- This sea snail has a shell with deep grooves or bumps.
- The Cart-rut Shell eats tube worms and barnacles

# 5. Chiton

Chiton tuberculatus



- Chitons are molluscs found on rocky shores.
- Chitons have eight hard plates on their backs, like tiny shields to protect themselves.
- Chitons creep along rocks, eating algae and barnacles.

### 6. Common Sea Urchin 💥

Heliocidaris erythrogramma



- The Common Sea Urchin is a spherical echinoderm.
- The Common Sea Urchin is covered in sharp spines to keep predators away.
- They are often eaten by the Port Jackson Shark.

# 7. Conniewinks

Bembicium nanum



- Conniewinks are small sea snails that have strong shells and live on rocky shores.
- · Conniewinks grip tightly with their soft body so they don't get washed away by the waves.

# 8. Longfin Eel (elver) 🚙



Anguilla reinhardtii



- The elver is a young eel, and a type of fish.
- The elver can climb and swim up rivers and streams to find a new home.
- The elver can travel all the way from freshwater to the ocean as they grow.

# 9. Galeolaria Worm (Tube worm)



Galeolaria caespitosa



- Galeolaria worms have two heads.
- Galeolaria worms make tiny homes out of hard tubes, sticking them onto rocks.
- The Cart-rut shell is their predator.

# 10. Green Sea Turtle hatchling 🤺



Chelonia mydas



- The Green Sea Turtle hatchling is a reptile.
- The Green Sea Turtles have paddle-like flippers, making them excellent swimmers.
- They like to eat Moon Jellies.

# 11. Limpet

Cellana tramoserica



- Limpets are molluscs that have shells that look like tiny hats.
- Limpets have a strong muscular foot that allows them to attach to rocks.
- Limpet shells are often found in middens.

# 12. Moon Jelly 🐆



Aurelia aurita



- The Moon Jelly is a jellyfish with a soft, transparent body. This allows it to be less visible to predators.
- The Moon Jelly is eaten by the Green sea turtle hatchling.

# 13. Mulberry Whelk 🗀

Tenguella marginalba



- The Mulberry whelk is a sea snail and is part of the First Nations peoples diet. Their shells have been found in historical midden sites.
- The Mulberry Whelk likes to eat other sea snails and barnacles.

# 14. Snapping Shrimp



Alpheus richardsoni



- The Snapping Shrimp is a crustacean with different sized claws.
- The bigger claw opens to create a bubble, then snaps it closed to create a shock wave to scare off predators.

# 15. Spotted Wobbegong



Orectolobus maculatus



- The Spotted Wobbegong is a carpet shark. They are the master of camouflage and hide on the ocean floor.
- The Spotted Wobbeong is a predator of crabs, octopus and fish.

### 16. Surf Barnacle



Catophragmus polymerus



- The Surf Barnacle is a strong and sticky crustacean that attach themselves to surfaces like boats, rocks and whales.
- They produce a natural glue to stay attached for a long time and can withstand strong waves.

# 17. White's Seahorse



Hippocampus whitei



- White's Seahorse is a fish with a bony armour to protect it from predators.
- Their colour changes from brown, grey and black due to the food they eat in their surroundings.
- They are often found using their tail to hold onto seagrass.

# **APPENDIX**

Abalone shell	pg.4
• Acorn barncale	pg. 17
• Banksia	pg. 8
• Black Nerite	pg. 17
• Blue-lined Octopus	pg. 18
• Cart-rut Shell	pg. 18
• Chiton	pg. 19
Common Sea urchin	pg. 19
• Conniewinks	pg. 20
<ul> <li>Cross-section of a midden</li> </ul>	pg. 5
• Dophin flipper	pg.4
• Elver (Longfin Eel)	pg. 20
<ul> <li>Fourline Striped Grunter</li> </ul>	pg. 10
• Galeolaris Worms (Tube Worms)	pg. 21
Green Sea Turtle hatchling	pg. 21
• Limpet	pg. 22
• Mat Rush	pg. 10
• Moon Jelly	pg. 22
<ul> <li>Mulberry Whelk</li> </ul>	pg. 23
• Neptune's Necklace	pg. 11
• Oyster	pg.5
• Pink Sea urchin skeleton	pg. 11
• Pipi	pg. 12
<ul> <li>Port-Jackson shark jaw</li> </ul>	pg. 6
• Purple Rock Crab	pg. 12
• Seagrass	pg. 13
Snapping shrimp	pg. 23
<ul> <li>Spotted Wobbegong</li> </ul>	pg. 24
• Surf Barnacle	pg. 25
• Waratah Anemone	pg. 13
• White's Seahorse	pg. 26
• Zebra snail	pg. 14