

Year I – Tasmanians Who Survive and Thrive



Teacher Guide and Unit Plan

Learning Intentions

We are learning ...

... to explain what “native” means using Tasmanian examples.

... what animals need to survive.

... to communicate what animals need.

Success Criteria

We will be successful when...

... we can sort animals as native or introduced to Tasmania.

... we can draw a native Tasmanian Animal in it’s habitat with what it needs to survive and label these.

... we create a 3D diorama that shows a Tasmanian Native animal in its natural habitat.

... we share these with our classmates by telling them what the environment provides what the animal needs to survive.

Australian Curriculum

Learning Area Content Descriptions

Science

AC9SIU01

identify the basic needs of plants and animals, including air, water, food or shelter, and describe how the places they live meet those needs

Science as a human endeavour

AC9SIH01

describe how people use science in their daily lives, including using patterns to make scientific predictions

Science Inquiry

Questioning and Predicting
AC9SI101

pose questions to explore observed simple patterns and relationships and make predictions based on experiences

Planning and Conducting
AC9SI103

make and record observations...

Processing, modelling and Analysing
AC9SI104

sort and order data and information and represent patterns, including with provided tables and visual or physical models

Evaluating
AC9SI105

compare observations with predictions and others’ observations, consider if investigations are fair and identify further questions with guidance

Communicating
AC9SI106

write and create texts to communicate observations, findings and ideas, using everyday and scientific vocabulary

Cross-Curriculum Priorities

Sustainability

General Capabilities

Literacy, Digital Literacy, Critical and Creative Thinking

Achievement standard

By the end of Year I students identify how living things meet their needs in the places they live. They describe situations where they use science in their daily lives and identify examples of people making scientific predictions.

Students pose questions to explore observations and make predictions based on experiences. They use provided tables and organisers to sort and order data and information and, with guidance, represent patterns. With guidance, they compare observations with predictions and identify further questions. They use everyday vocabulary to communicate observations, findings and ideas.



Teacher Background Information

Tasmania's unique fauna provides rich opportunities for exploring how living things meet their basic needs of air, water, food, and shelter, as identified in the Australian Curriculum for Year 1 Biological Sciences (AC9SIU01). These needs are met through the features of the habitats in which plants and animals live, and understanding these relationships helps teachers scaffold accurate scientific concepts for young learners.

A key example is the Tasmanian devil, an apex scavenger and the largest surviving carnivorous marsupial. Devils rely on food in the form of carrion and small prey, water sources across forested and coastal environments, and shelter in caves, hollow logs, and dense undergrowth. Their habitats naturally supply these needs, but threats such as Devil Facial Tumour Disease (DFTD) and roadkill reduce the safety and availability of suitable shelter and population stability. The Save the Tasmanian Devil Program, managed by Natural Resources and Environment Tasmania (NRE Tas), actively works to conserve devil populations through disease monitoring, captive insurance populations, and habitat protection strategies.

Tasmania also supports two quoll species—the Eastern Quoll and the Spotted-tailed Quoll—each with specific habitat needs. Eastern Quolls typically occupy dry grasslands and forest edges that provide food (insects, small mammals), access to water, and shelter in burrows, rock piles, or logs. Their dependence on these habitat features makes them vulnerable to predation by feral cats and climate-related extremes, as highlighted in conservation advice from the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

The larger Spotted-tailed Quoll relies heavily on intact forests, where tree hollows, rock ledges, and caves provide essential shelter, and where abundant prey allows it to meet its food needs. Habitat loss and invasive predators significantly threaten these requirements.

Tasmania's birdlife also offers clear examples of how animals depend on specific habitats to meet their needs. The **Swift Parrot**, one of the world's most endangered parrots and a migratory species that breeds only in Tasmania, relies on mature blue gum and black gum forests. These habitats provide essential food sources—especially nectar and lerp in summer—along with suitable nesting hollows in large, old trees.



In contrast, the Laughing Kookaburra—introduced to Tasmania—can out-compete natives for food and shelter, demonstrating how introduced species can disrupt the balance between animals and the habitats that meet their needs.

The Spotted Handfish, one of the world's most endangered marine fish, demonstrates how even aquatic habitats must meet fundamental needs. These small fish inhabit soft-sediment areas of the Derwent estuary where they depend on specific substrates—such as stalked ascidians—for shelter and for attaching their eggs. Loss of these structures due to invasive species and human disturbance directly reduces their ability to survive and reproduce. Long-term conservation research by CSIRO has led to artificial spawning structures to support their habitat needs.

By highlighting these examples, teachers can confidently connect students' learning about basic needs with real Tasmanian ecosystems and conservation actions.



Year 1 – Tasmanians Who Survive and Thrive– Unit Plan

	Tuning In	Modelling – I do	Guided Practice- We do	Independent Practice– You do	Plenary	Resources
Lesson 1 – What are native animals?						
Learning Intention	We are learning to explain what “native” means using Tasmanian examples.		Success Criteria		We will be successful when we can sort animals as native or introduced to Tasmania.	
Sequence	Show photos of Tasmanian devil, Eastern quoll, green rosella, spotted handfish, clownfish and silver dollar fish. Students predict: Which live in Tasmania? Which are from somewhere else?	Vocabulary Thrive Native Tasmanian Read the text using an echo read, Tasmanian Native Animals. Define native vs introduced with the kookaburra story (brought to Tasmania to eat snakes).	As a class, place each animal card into a group. Think aloud why Tasmanian devils are mammals; why spotted handfish are fish; note that clownfish and silver dollar fish are fish but not Tasmanian natives.	Students complete a cut and paste to sort animals into native and introduced to Tasmania.	Thumbs up/down: Is a kookaburra native to Tasmania? What does an animal need to stay alive?	
Teacher Notes	Record your personal notes and adjustments here.					





Tuning In	Modelling – I do	Guided Practice- We do	Independent Practice- You do	Plenary	Resources
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Lesson 2 – What do animals need to survive?

Learning Intention	We are learning what animals need to survive.		Success Criteria		We will be successful when we can draw a native Tasmanian Animal in it's habitat with what it needs to survive and label these.
Sequence	<p>What does it mean if an animal is native to Tasmania?</p> <p>Sort – use the animal cards to sort animals.</p> <p>Pose guiding questions to check understanding. Use the Tasmanian Native Animal poster to check.</p> <p>Explain that the Swift Parrot is native for breeding because this is the only place in the world that they breed as they require the Blue Gum Flower that is a native plant here for food.</p>	<p>Vocabulary Survive – latin – from the word supervivere meaning to live beyond. Habitat – where an animal lives</p> <p>Introduce vocabulary and meaning to students. Practise reading each word aloud 5 times.</p> <p>Discuss – What do we need to survive? Record answers in a T chart, in Science Journal, by writing Needs in the left column and anything that isn't a need, is scribed in the right.</p> <p>When finished, ask students to suggest a title for the right hand</p>	<p>Model – Choose a habitat photo card and label the 4 needs. Explain how you know the animal eats meat – it has sharp teeth or plants – a beak or small teeth.</p> <p>Clarify that air comes from plants, water comes from puddles/rivers/lake/rain and the food sources.</p> <p>Share the habitat photo cards to pairs and ask students to point out where they can see the needs.</p> <p>Share answers and record in Science Journal, check for understanding.</p>	<p>Students then complete the task, Animal Needs where they draw a Tasmanian animal in it's habitat and identify their needs.</p>	<p>Quiz to check for understanding.</p> <p>Habitat Photo Cards</p> <p>Animal Cards</p>



		<p>column and then confirm it as wants.</p> <p>Discuss that the needs are necessary to survive. Needs – shelter, food, water, oxygen/air</p> <p>Discuss – If we need these four things, what do animals need?</p>				
Teacher Notes	Record your personal notes and adjustments here.					





EXCURSION TIME

Share the social story with your class and preparing them for their excursion to Hobart Zoo and Aquarium where

	Tuning In	Modelling – I do	Guided Practice- We do	Independent Practice– You do	Plenary	Resources
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Lesson 3,4,5 – Communicating animal needs – part I

Learning Intention	We are learning to communicate what animals need. Note: This lesson should be split over 3 sessions.		Success Criteria		We will be successful when we create a 3D diorama that shows a Tasmanian Native animal in its natural habitat. We will share these with our classmates by telling them what in the environment provides what the animal needs to survive.	
Sequence	Discuss and list the native Tasmanian animals that we saw at Hobart Zoo and Aquarium. <ul style="list-style-type: none"> • Tasmanian Devils • Spotted Tail Quoll • Eastern Quoll • Swift Parrot – Breeding • Bennetts Wallaby including Albino • Eastern ring-tailed possum • Wombat 	Vocab Communicating Important Pollution Introduce vocabulary and meaning to students. Practise reading each word aloud 5 times. Read students the text, Communicating Science then have then read with you for a choral read. Show students the video of the complete diorama	Think Pair Share Use the Diorama Planner and Animal photo cards for students to record their ideas. Students should share this with a partner.	Students spend the next three lessons creating their diorama of a Tasmanian Native Animal and it's habitat.	Gallery Walk Students to put their dioramas out and walk around. Students can give feedback about one thing they think their classmate did well.	Craft and Art Supplies Diorama Planner Reading – Communicating Science Poster of Tasmanian Native Animals



	<ul style="list-style-type: none">• Forester Kangaroo• Green Rosella• Tasmanian Native Hen	and the child presenting the needs.				
Teacher Notes						





	Tuning In	Modelling – I do	Guided Practice- We do	Independent Practice– You do	Plenary	Resources
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Lesson 6 – Communicating animal needs – part 2 – Writing an information report – speech

Learning Intention	We are learning to communicate what animals need.		Success Criteria		We will be successful when we write an information report to tell our classmates what animals need in their habitat to survive.	
Sequence	<p>Think/Pair/Share</p> <p>Why do we need to communicate in Science?</p> <p>Refer to Science Journal.</p>	<p>Highlight the following and their purpose:</p> <p>Title – states the topic</p> <p>Introduction to define the topic.</p> <p>Factual information</p> <p>Conclusion to summarise or give a personal opinion.</p> <p>Model how to write an information text with these features.</p> <p>Begin to modelling by writing the introduction and focus on defining the animal.</p>	<p>In pairs, have students write the facts about what the Tasmanian Devils need in its habitat to survive.</p> <p>Wander around the pairs whilst students are writing. They should have 4 sentences similar to the example below:</p> <p><i>Tasmanian Devils live in the bush.</i></p> <p><i>They need plants for air.</i></p> <p><i>They need other small animals to eat.</i></p> <p><i>Water must in their habitat.</i></p> <p><i>They need hollow logs for shelter.</i></p>	<p>Students then write their text.</p>	<p>Students read their text aloud to a partner with their diorama.</p> <p>Teacher can choose for students to read their information reports aloud to the class or record them for evidence or learning. There is also the opportunity to model peer to peer feedback.</p>	<p>Information Report Planner</p> <p>Tasmanian Devil Exemplar</p>



**Teacher
Notes**

A large, empty rectangular box with a black border, intended for writing teacher notes.





Adjustments

The following adjustments are differentiated to support and engage all students.

	Enabling	Extending
Content	Reduce number of animal examples; pre-teach key words with visuals; provide word banks and sentence stems.	Add non-Tasmanian comparisons (e.g., clownfish, silver dollar fish); consider habitat needs and impacts of change.
Process	Model each step; use think-alouds; provide guided sorting mats and partially completed organisers; pair with a peer.	Independent research using kid-safe sources; design enrichment ideas; lead peer explanations.
Product	Draw-and-label with icons; record orally; use scaffolded writing frames (e.g., "It needs ___ and ___").	Compose a persuasive poster or short explainer video with evidence-based tips for caring for native fauna.

Resources

The following evidence-based websites (hyperlinks) contain facts, images and videos for further information.

[Let's Go: Meet some Tasmanian wildlife - ABC Education](#)

[Your Planet: Road Kill Warriors - ABC Education](#)

[Tasmanian Devil Information for Kids | Department of Natural Resources and Environment Tasmania](#)

[Save the Tasmanian Devil Program | Department of Natural Resources and Environment Tasmania](#) - <https://nre.tas.gov.au/conservation/threatened-species-and-communities/lists-of-threatened-species/threatened-species-vertebrates/save-the-tasmanian-devil-program>

[Department of Natural Resources and Environment | Department of Natural Resources and Environment Tasmania](#) - <https://nre.tas.gov.au/>

[Living with Wildlife | Department of Natural Resources and Environment Tasmania](#)

References

The following evidence-based sources have been used throughout this unit:

ABC News (2020) *Kookaburras, once rare, are taking over Tasmania with their “aggressive” tactics.* Australian Broadcasting Corporation. [abc.net.au]

CSIRO (2022) *Spotted Handfish: walking towards recovery.* Commonwealth Scientific and Industrial Research Organisation. [csiro.au]

CSIRO (2012) *Brachionichthys hirsutus — Spotted Handfish: Conservation Advice.* Commonwealth Scientific and Industrial Research Organisation / Department of Sustainability, Environment, Water, Population and Communities. [environment.gov.au]

Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2023) *Eastern Quoll – Species Profile and Conservation Advice.* Australian Government. [dcceew.gov.au]

Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2020) *Conservation Advice: Dasyurus maculatus maculatus (Spotted-tailed Quoll).* Australian Government. [environment.gov.au]

National Geographic Kids (n.d.) *Tasmanian Devil – Animal Facts.* National Geographic Society. [kids.nationalgeographic.com]

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NSW National Parks and Wildlife Service (n.d.) *Spotted-tailed Quoll – Australian Native Animals.* NSW Government. [nationalparks.nsw.gov.au]

Animalia.bio (n.d.) *Green Rosella – Facts, Diet, Habitat & Pictures.* Animalia. [animalia.bio]

Wikipedia (2025) *Yellow-tailed Black Cockatoo (Zanda funerea).* Wikimedia Foundation. [en.wikipedia.org]

Australian Curriculum, Assessment and Reporting Authority (ACARA) (2023) *Australian Curriculum v9.0 — Science, Year 1.* ACARA. [qcaa.qld.edu.au]



Tasmanian Native Animals

Some animals live only in one place. These animals are called **native** animals. Tasmania is in Australia. Many native animals live here.



Tasmanian devils are native.

Wombats are native.



All animals need food.

They need water and air.

They need a safe place to live.



Help Hobart Zoo and Aquarium to be sustainable by only printing what you need.



Communicating Science

Scientists need to share important ideas with everyone. This helps people to fix big problems like sickness, pollution, and losing animal homes, habitats.

Models, videos, and pictures help people learn and get excited.

Science is all around us every day. It helps us make choices, like if we need a raincoat.

Everyone can be a scientist every day!



Figure 1- Tasmanian Devil Habitat Diorama

