Year 6 – Balancing Act

Teacher Guide and Unit Plan

Learning Intentions

We are learning …

… to describe physical habitat conditions explain how these conditions affect survival.

… to describe how human behaviour impacts the survival of a species.

… how humans can have a positive impact on the physical conditions of the habitat of a species.

Success Criteria

We will be successful when…

… we list the physical conditions of a habitat that affect a species survival and describe how Swift Parrots have been affected.

…we describe at least 3 physical conditions including one cause–effect link to survival.

…we communicate the positive impacts humans have had to support the survival of a species through infographics and real world examples.

Australian Curriculum	
Learning Area	***Content Descriptions***
Science	
AC9S6U01	investigate the physical conditions of a habitat and analyse how the growth and survival of living things is affected by changing physical conditions
Science as a human endeavour	
AC9S6H02	investigate how scientific knowledge is used by individuals and communities to identify problems, consider responses and make decisions
Science Inquiry	
Questioning and Predicting AC9S6I01	pose investigable questions to identify patterns and test relationships and make reasoned predictions
Planning and Conducting AC9S6I03	use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate
Processing, modelling and Analysing AC9S6I04	construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships
Evaluating AC9S6I05	compare methods and findings with those of others, recognise possible sources of error, pose questions for further investigation and select evidence to draw reasoned conclusions
Communicating AC9S6I06	write and create texts to communicate ideas and findings for specific purposes and audiences, including selection of language features, using digital tools as appropriate
Cross-Curriculum Priorities	Sustainability
General Capabilities	Literacy, Digital Literacy, Critical and Creative Thinking

Achievement standard

By the end of Year 6 students explain how changes in physical conditions affect living things. They describe how individuals and communities use scientific knowledge.

They select and use language features effectively for their purpose and audience when communicating their ideas and findings.

Teacher Background Information

Teacher Notes — Year 6 "Habitats, Change & Conservation" (≤500 words)

What "cause and effect" means (for students).
Use "cause → effect" as a clear chain: a change in a **physical condition** (e.g., loss of nesting hollows) leads to a **biological outcome** (lower breeding success). This aligns with curriculum glossaries (English/Science) that emphasise causal links in explanations and arguments.

Humans can **restore**, **protect**, and **enhance** the physical conditions of habitats so animals have the food, shelter, water, and space they need to survive. These actions directly improve temperature regulation, vegetation structure, nesting opportunities, water quality, and ecosystem resilience.

Habitat Restoration (Re-establishing physical conditions)

Large-scale replanting and ecological restoration projects rebuild habitats that were previously degraded.

- Reforestation and wetland restoration globally help **reduce soil erosion**, improve **water quality**, and rebuild ecosystems damaged by climate change or land clearing.

Captive Breeding and Reintroduction

Captive breeding programs improve population stability and allow species to be reintroduced into improved habitats.

- Hobart Zoo and Aquarium participate in breeding programs for the Swift Parrot and Tasmanian Devil.
- Reintroduction efforts demonstrate that restoring physical habitat conditions followed by release programs can reverse declines like in Tasmanian with the spotted handfish.

Science-Led Monitoring and Environmental Planning

Monitoring helps governments and conservation teams understand what physical conditions need restoration.

- The Swift Parrot Recovery Project uses long-term monitoring to guide habitat protection and understand flowering patterns and nesting conditions.
- Land-use planning and conservation strategies regulate where development can occur to prevent further habitat damage.

Community Education and Conservation Strategies

Education programs in zoos and aquariums, like the daily keeper talks and animals encounters at Hobart Zoo and Aquarium, empower communities to participate in conservation, support habitat improvement, and protect sustainable ecosystems.

Year 6 Unit Plan – Balancing Act

	Tuning In	Modelling – I do	Guided Practice- We do	Independent Practice– You do	Plenary	Resources
Lesson 1 – How does the physical condition of a habitat affect a species survival?						
Learning Intention	We are learning to describe physical habitat conditions explain how these conditions affect survival.		**Success Criteria**		We will be successful when we list the physical conditions of a habitat that affect a species survival and describe how Swift Parrots have been affected.	
Sequence	**KWL** How does the physical condition of a species habitat affect it's survival? Model how to record what you know and what you'd like to know to answer the inquiry question. Show students Slide 7 with photos of the Swift Parrot Habitat to give them ideas.	**Read the text – Physical Habitat Conditions** Model how to highlight key facts that explain what physical conditions are.	Students to work in pairs to highlight physical conditions that are affecting the swift parrot. Pose the question: What is the impact of humans on their habitat? Students to highlight examples from the text.	Students to complete the Swift Parrot profile and table. This is leading into the concept of cause and effect for Lesson 2.	Complete the final column of the KWL Chart. Class discussion: How can humans impact the physical conditions of a species habitat? How can you describe these impacts? Prompting for students to understand that humans have a positive and negative impact on habitats.	Reading – Physical Habitat Conditions Swift Parrot Profile Optional – Suzi P the Swift Parrot picture book which highlights the human impact on Swift Parrots on Bruny Island.
Teacher Notes	Record your personal notes and adjustments here.					

	Tuning In	Modelling – I do	Guided Practice- We do	Independent Practice– You do	Plenary	Resources
Lesson 2 – How does human behaviour impact the survival of a species?						
Learning Intention	We are learning to describe how human behaviour impacts the survival of a species.		**Success Criteria**		We will be successful when we describe at least 3 physical conditions including one cause–effect link to survival.	
Sequence	**Ideas Map** Create an ideas map to answer the following How does human behaviour impact the survival of a species?	**Vocabulary** **Conservation** *(noun)* protecting and caring for the natural environment so living things can survive into the future. Conservation helps Australian animals stay safe in healthy habitats. **See PowerPoint for word origin and morphology.**	**Read the Text Impact of Human Behaviour on Animal Habitats** Model how to show a cause-effect link to survival using the Thylacine as an example to describe 3 physical habitat conditions that have changed.	What animals have been impacted by humans? Brainstorm ideas. Using this list or the suggestions on the PowerPoint, students will complete a table to show how 3 physical conditions have been affected by human behaviour. They will summarise the cause and effect of this.	**Pair/Share** Share your summary of the cause and effect with a partner.	Computers for research Class set of Cause and Effect task

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						
	Tuning In	**Modelling – I do**	**Guided Practice- We do**	**Independent Practice– You do**	**Plenary**	**Resources**
Lesson 3 and 4 - Communicate the positive impact that humans have to support the survival of species.						
Learning Intention	We are learning how humans can have a positive impact on the physical conditions of the habitat of a species.		**Success Criteria**		We will be successful when we communicate the positive impacts humans have had to support the survival of a species through infographics and real world examples.	
Sequence	How are Hobart Zoo and Aquarium having a positive impact on the conservation of animal species? Tasmanian Devils Swift Parrots Servals Lions Cotton-Top Tamarins	Model how to research what the Zambian Carnivore Program do and their goals. Model how to create an infographic to create community awareness about the conservation of these species.	**Students to brainstorm different animal species that they are aware of that are vulnerable.** **Teacher to model how to check by using the red list.**	Students then complete an infographic to share with the class and put on display about their chosen animal species. Students must answer the question, what can we do to support conservation efforts. This may be educating others, raising	Gallery walk to share ideas.	Computers for research and to create infographic Art materials for those who wish to hand draw and write their infographic.

				awareness or raising funds.		
Teacher Notes	Record your personal notes and adjustments here.					

Adjustments

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

	Enabling	Extending
Content	Provide simplified readings, key vocabulary explanations, and scaffolded fact sheets to reduce cognitive load and support understanding of core ideas such as habitat needs and cause–effect relationships.	Provide complex texts, multiple species case comparisons, and opportunities to analyse scientific data sets and environmental trends
Process	Use structured graphic organisers, guided group work, modelling, and step-by-step tasks that break down research and writing into manageable stages.	Encourage independent inquiry, evaluation of conservation strategies, interpretation of population graphs or maps, and cross-disciplinary problem-solving.
Product	Allow students to demonstrate understanding through posters, labelled diagrams, short oral recordings, or supported templates for written work.	Require multi-section analytical reports, detailed conservation proposals, comparative evaluations of programs, or the design of new monitoring or citizen-science initiatives.

Resources

WWF-Australia – Protect Endangered Wildlife | Protect Endangered Wildlife| WWF Australia

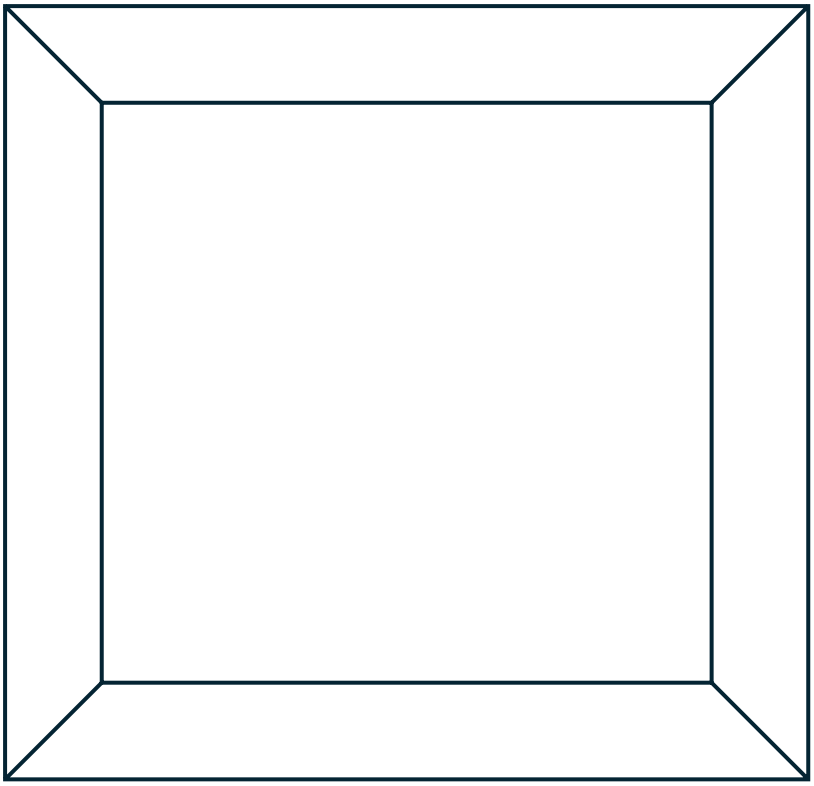
Home | Zambian Carnivore Programme

Proyecto Titi: Conserving the Cotton-top Tamarin in Colombia > Home

Save the Tasmanian Devil Program | Department of Natural Resources and Environment Tasmania

Swift Parrot Profile

Physical Habitat Needs:



Physical Habitat Changes	Effect on Swift Parrots	Solution

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

Physical Habitat Conditions

Animals can only survive if the physical conditions in their habitat meet their needs, such as food, shelter and safety. For example, Swift Parrots need old blue gum trees that produce nectar and have hollows for nesting, but scientists have found that more than half of their breeding habitat has been destroyed or damaged, which means there are fewer places for them to live and feed. They are also preyed upon by nocturnal animals such as sugar gliders and owls.

Figure 1- Swift Parrot nesting in a blue gum hollow.

Humans help to improve the physical conditions of the swift parrot by planting 1,600 trees (Department of Natural Resources Tasmania) and installing nesting boxes on established trees. Blue gums are found on Bruny Island. Here humans have installed nesting boxes high up in trees. The boxes have mechanisms that automatically close at night and open in the morning so that Swift Parrots are protected from nocturnal predators.

Figure 2- Nesting box.

Humans have also helped protect their habitat through the work of the Tasmanian Government where they have protected 260 hectares of breeding ground.

Year 6 - Impact of Human Behaviour on Animal Habitats

Conservation *(noun)* — protecting and caring for the natural environment so living things can survive into the future.
Conservation helps Australian animals stay safe in healthy habitats.

Humans can affect animals in many ways. Some actions harm wildlife, like land clearing and habitat destruction. A famous example is the Thylacine (Tasmanian Tiger). It became extinct in 1936 after heavy hunting, habitat loss which forced them to hunt for prey on farms and closer to towns. In the late 1800s, a government bounty paid people to kill thylacines causing all of them to disappear and render the species extinct.

Figure 3- Thylacine

Changes in physical conditions also affect living things. When temperature and rainfall shift, animals may struggle to find food, stay healthy, or raise young. Education resources from World Wildlife Fund show how climate and environmental changes can shape animal growth, movement, and behaviour, and why conservation is needed to protect species and habitats.

Figure 4 - Wombat burrow flap.

There are positive stories too. In Tasmania, bare-nosed wombats can get sarcoptic mange, a painful skin disease caused by mites. The Tasmanian Government, the University of Tasmania, and community groups are working on safe ways to treat wild wombats, including field-tested methods that apply approved medicines such as fluralaner to protect them from mange. Simple walk-through treatment stations (set up on wombat paths) let wombats receive a measured dose as they pass by, helping reduce outbreaks and improve welfare.

These examples show how human behaviour matters. Harmful choices can push species towards extinction, as happened to the Thylacine. But strong conservation actions—like protecting habitats and treating disease in wild animals—help species such as wombats survive and thrive.

References

Department of Natural Resources and Environment Tasmania n.d., *Wombat Mange*, Tasmanian Government, viewed February 2026. [nre.tas.gov.au]

National Museum of Australia n.d., *Extinction of the Thylacine*, viewed February 2026. [nma.gov.au]

WWF n.d., *Teaching Resources*, World Wildlife Fund, viewed February 2026. [worldwildlife.org]

WWF-Australia 2024, *Living Planet Report 2024*, World Wildlife Fund Australia, viewed February 2026. [wwf.org.au]

CSIRO Publishing 2021, *Conservation Status of Common Wombats in Tasmania I: Incidence of Mange and Its Significance*, viewed February 2026. [publish.csiro.au]

Cause and Effect of Human Behaviour on Animal Species

Animal Species: **Habitat Location:**

Physical Condition	Why It Mattered	Human Impact – Cause	Effect on Animal Species	Cause and Effect Summary

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

References

Australian Government (DCCEEW) 2024, *National recovery plan for the Swift Parrot (Lathamus discolor)*.
Australian Government (DCCEEW) 2026, *State Party Report on the state of conservation for Australia's Great Barrier Reef*.
GBRMPA 2024, *Outlook Report 2024*.
NRE Tasmania 2025, *Swift Parrot Recovery Project* (program page & trend report summary).
NESP TSR Hub 2021, *Threatened Species Recovery Hub—program overview/impacts*.
NESP TSR Hub 2019–2022, *Saving the Swift Parrot (factsheet)*.
National Museum of Australia 2025, *Extinction of thylacine (1936)*.
Tasmanian Museum & Art Gallery (TMAG) 2025, *Thylacine remains identified in TMAG collections*.
Australian Curriculum (v9) 2026, *Glossary lists*.
Australian Curriculum (v8.4) 2026, *English glossary – cause and effect (related terms)*.
Queensland Department of Education 2025, *SOP: Aquatic animal activities (schools)*.
NSW Department of Education 2026, *Animals in Schools: Fish – aquariums*.
Zoo & Aquarium Association 2025, *World Zoo & Aquarium Conservation Education Strategy (WZACES)—overview*.