

**CURRICULUM FOCUS: HABITATS**

ALPINE HABITAT	FOREST HABITAT
<p align="center"><b>MOUNTAIN PYGMY POSSUM (Cool Conservation)</b></p> 	<p align="center"><b>Helmeted Honeyeater (Fighting Extinction Aviary)</b></p> 
<p><b>Key Questions:</b></p> <ul style="list-style-type: none"> <li>• Look for clues around <i>Cool Conservation</i>. What type of habitat does the Mountain Pygmy possum need to survive?</li> <li>• What physical features and behaviours does a Mountain Pygmy possum have to help it survive the freezing cold temperatures over the winter?</li> <li>• What challenges do they face living in a cold alpine habitat?</li> <li>• The snow melting is an indication for Mountain Pygmy possums to come out of hibernation. This is also the time when their main food source starts to appear. Find out what they eat in the signs around <i>Cool Conservation</i>.</li> <li>• Is there a link between their habitat and the Mountain Pygmy possum becoming endangered?</li> <li>• How can you help to save them?</li> <li>• You can also find Mountain Pygmy possums in the <i>Animals of the Night</i> exhibit.</li> </ul> <p><b>Photo evidence:</b> Can you act out how a mountain pygmy possum stays warm in winter? Tuck your arms, legs and head into your chest and take a photo as evidence.</p>	<p><b>Key Questions:</b></p> <ul style="list-style-type: none"> <li>• Look around the <i>Fighting Extinction Aviary</i>. What type of plants do Helmeted Honeyeaters need in their habitat and why do they need them?</li> <li>• Observe the Helmeted Honeyeater in its habitat. What physical features do they have to help them survive in their habitat?</li> <li>• Helmeted Honeyeaters are only found in a very small location, Yellingbo Nature Reserve. What do you think has happened to their habitat?</li> <li>• Look around the aviary for clues. Is there a link between its habitat and the Helmeted Honeyeater becoming endangered?</li> <li>• Is there something you can do at home or school to help save their habitat?</li> </ul> <p><b>Photo Evidence:</b> The Helmeted Honeyeater’s ability to fly with speed is critical for survival in native forests to help it escape from predators. Do your best fast flying aerodynamic pose and take a photo as evidence.</p>
<p><b>ANSWERS</b></p> <ul style="list-style-type: none"> <li>• Mountain Pygmy possums live in snowy, alpine habitats up at Mt Kosciusko, Mt Bogong, Mt Hotham and Mt Bulla.</li> <li>• Mountain Pygmy possums have thick grey fur to help them survive the cold temperatures. They move around at night amongst the rocky boulders in search of food.</li> <li>• Mountain Pygmy possums survive the cold winter months by curling up into a ball and hibernating under the boulders under a thick layer of snow, which helps to keep them warm.</li> <li>• They are the Australia’s only hibernating marsupial and hibernate for 7 months of the year.</li> <li>• Climate change can affect their survival. If the weather is too warm it affects the migration of bogong moths (their main food source).</li> <li>• They rely on invertebrates such as big bogong moths which live amongst the boulders as well as seeds and fruit for their diet.</li> <li>• Mountain Pygmy possums are endangered due to habitat loss from ski resorts and climate change.</li> <li>• Help save Mountain Pygmy possums by riding or walking to school, keeping the heater below 21 degrees and switching off power points/lights to help save energy.</li> </ul>	<p><b>ANSWERS</b></p> <ul style="list-style-type: none"> <li>• Less than 200 left in the wild.</li> <li>• Victorian bird emblem.</li> <li>• Only found in the swampy forests of Yellingbo Nature reserve.</li> <li>• Helmeted Honeyeaters rely on eucalypt trees such as manna gum, swamp gum, tea tree and paper bark trees for their food source which is nectar, insects, sap, lerp and honey dew. They also need these trees to build their nests in.</li> <li>• Helmeted honeyeaters have a brush tip tongue and a long beak that they use to dip into flowers to get nectar.</li> <li>• Their ability to fly with speed through the forest helps them to escape large predators such as birds of prey.</li> <li>• Its olive green, yellow colour helps it to camouflage into the canopy.</li> <li>• Threatened by habitat loss due to land clearing and predation by goshawks and introduced species such as foxes and cats.</li> <li>• Help save the Helmeted Honeyeater and its habitat by switching to 100% recycled toilet paper.</li> </ul>

CURRICULUM FOCUS: HABITATS

FOREST HABITAT

DESERT HABITAT

Leadbeater's possum (Animals of the Night)

GREATER BILBY (Animals of the Night)



Key Questions:

- Observe the Leadbeater's possum move through its enclosure in the nocturnal house. What kind of habitat do they need to survive?
- Why are the connecting branches so important for the Leadbeater's possum and what would happen if the trees were spaced further apart?
- Look closely at the Leadbeater's possum. What features do they have to help them survive in their habitat?
- Is there a link between their habitat and why it has become critically endangered?
- Leadbeater's possums rely on tree hollows that form in 200 year old trees to build nests in. Can you spot a tree hollow along your journey today?
- Why can't we just plant more trees to restore Leadbeater's possum habitat?
- How can you help to save Leadbeater's possums?

**Photo evidence:** Leadbeater's possums are very brave and fiercely defend their family habitat from predators. They use their speed and agility to escape predators. Do your bravest pose outside of *Animals of the Night* and take a photo as evidence

Key Questions:

- Find the Bilby exhibit in the *Animals of the Night* exhibit. What type of habitat do bilbies need?
- What elements do you notice in their habitat that would help them to survive?
- Look closely and observe the behaviour of the bilbies. What physical features do they have to help them survive in their habitat?
- How do you think the development of farms and introduced species such as foxes, rabbits and feral cats has affected bilbies and their habitat?
- What can you do to help save bilbies?

**Photo evidence:** Bilbies are expert diggers and dig spiralling burrows to keep themselves safe. Place your hands half way up your chest as though they are little claws. Take a photo as evidence outside *Animals of the Night*.

ANSWERS

- Leadbeater's possums live in tree hollows of 200 year old Mountain Ash trees in old growth forests and need dense growth of Melaleuca paper bark trees within their habitat
- They rely on the connectivity of fallen branches to move around the forest and find food which consists of tree sap, insects and blossom.
- They have thick fur to survive the cold winter months, sharp teeth to get sap from trees, paws designed to grip branches and a club shaped tail to carry bark back to their nest.
- Less than 1000 left in the Central Highlands forests and less than 40 left at Yellingbo Nature reserve.
- Switch to 100% recycled toilet paper to help save them and protect old forests from being cut down.
- Keep your pet cats healthy and happy indoors to help keep Leadbeater's possums safe at night.

ANSWERS

- Bilbies live in dry, desert habitats.
- Bilbies are nocturnal and survive the hot desert temperatures by staying in their burrow during the day and coming out to forage at night.
- Bilbies have strong claws to help them dig burrows and forage, a long nose with a strong sense of smell to find food and a backwards facing pouch to prevent dirt from getting in when they dig.
- Their long thin ears provide great hearing and cool their blood as it passes through to regulate their body temperature.
- Bilbies are omnivores and eat things as seeds, spiders, insects, bulbs, fruit, fungi and small animals.
- Bilby populations have declined due to land cleared for farms, predation by introduced species such as foxes and cats and competition from introduced species such as rabbits.
- Keep your pet cats healthy and happy indoors to help keep bilbies safe.

CURRICULUM FOCUS: HABITATS

ROCKY OUTCROP HABITAT	WETLAND HABITAT	
<p><b>BRUSH-TAILED ROCK-WALLABY (Rock-Wallaby Exhibit)</b></p> 	<p><b>JABIRU (BLACK-NECKED STORK)</b></p> 	<p><b>SPOONBILL</b></p>  <p style="text-align: center;">Photo credit: Jason Bell</p>
<p><b>Key Questions:</b></p> <ul style="list-style-type: none"> <li>• Take a walk through the <i>Brush-tailed rock wallaby paddock</i>. What elements do you notice in their habitat that would help them to survive?</li> <li>• Can you spot a rock-wallaby? What physical features do rock-wallabies have to help them survive in their habitat?</li> <li>• Habitat loss and introduced species such as cats and foxes have caused the last two populations of brush-tailed rock wallabies to become isolated and separated from each other. How does habitat loss impact on this species?</li> <li>• How can you help save Brush-tailed rock wallabies?</li> </ul> <p><b>Photo evidence:</b> Brush-tailed rock-wallabies often blend into the shadows of the rocks. Can you bound like a rock wallaby and find some shadows to hide in? Take a photo as evidence.</p>	<p><b>Key Questions:</b></p> <ul style="list-style-type: none"> <li>• Wander through the <i>Wetlands</i>. Can you spot the Jabiru and Spoonbill?</li> <li>• What physical features do the Jabiru and Spoonbill have that help them survive in a wetland habitat?</li> <li>• Spoonbills and Jabirus require wetland habitat to build their nests. What do their nests look like and how are they built?</li> <li>• What is threatening Jabirus and their habitat?</li> <li>• Many aquatic habitats are being lost due to land clearing and climate change. How would this impact on Jabirus and Spoonbills?</li> <li>• Is there something you can do to help save these species?</li> </ul> <p><b>Indigenous Culture link:</b> The local Wurundjeri people called the Yarra river the <i>Birrarung - River of Mists</i> and used it as a place to find food. Look for the sign that tells you more about tools such as eel traps and bark canoes and how they were used to catch food in their local wetlands</p> <p><b>Photo Evidence:</b> Can you find the bird hide hidden in the wetlands? Take a closer look at the wetland habitat using the binoculars. Take a photo as evidence.</p>	
<p><b>ANSWERS</b></p> <ul style="list-style-type: none"> <li>• Rock-wallabies live in rugged rocky areas of south-east Australia.</li> <li>• They need rocky slopes in their habitat to hide in and native grasses and plants to feed on at dusk.</li> <li>• Rock-wallabies have dark fur to help them camouflage into the shadows of rocks and long bushy tails to provide balance as they leap over boulders.</li> <li>• There are only two populations of southern brush-tailed rock-wallabies left in Victoria with less than 30 animals in each.</li> <li>• Loss of habitat and feral introduced species such as cats, foxes and goats has caused these two populations to become isolated.</li> <li>• Lack of genetic diversity poses a threat to the ongoing population of the species.</li> <li>• Keep your pet cats healthy and happy indoors to help keep brush-tailed rock wallabies safe.</li> </ul>	<p><b>ANSWERS</b></p> <ul style="list-style-type: none"> <li>• Jabirus live in wetlands and swamps of Northern Australia. Jabirus have long legs to help them stride and forage in water and long powerful bills to help them catch fish.</li> <li>• Spoonbills have long legs to wade through the water.</li> <li>• Spoonbills catch fish, insects and crustaceans by sweeping their bill through the water and then quickly snapping them up.</li> <li>• Jabirus are very secretive and build large platform nests near the water or in trees.</li> <li>• Spoonbills nest alongside other water birds and have a solid bowl shaped nest.</li> <li>• Many aquatic habitats are drying up due to climate change and land clearing causing Jabirus and Spoonbills to decline in numbers.</li> <li>• Help save their habitat by riding or walking to school, keeping the heater below 21 degrees and switching off power points/lights to help save energy and prevent climate change.</li> <li>• You can also reduce your use of single use plastic and use bubbles instead of balloons outdoors to help save them.</li> </ul>	

CURRICULUM FOCUS: HABITATS

AQUATIC HABITATS/WATERWAYS

PLATYPUS (*World of the Platypus*)



GRASSLAND HABITATS

ALPINE LIZARDS: GUTHEGA SKINK  
(*Reptile House*)



**Key Questions:**

- Find the platypus in *World of the Platypus*. Why is an aquatic habitat important for the platypus?
- Observe the platypus and look for clues in the signs. What features do platypus have to help them survive in their habitat?
- With the platypus spending so much time in the water, what might affect its success and survival?
- What actions can you take to help protect the platypus, water rat and their habitat?

**Indigenous Culture link:** The Dreaming story of Woterang (the platypus) is located next to the Woterang totem pole at the entrance to the Platypus arena

**Photo evidence:** Can you make a public pledge to help save platypus. Look for a large sign with bubbles and take a photo in front of it.

**ANSWERS**

- Platypus live in burrows along rivers and creeks.
- They use the waterways to find food such as yabbies, worms and fly pupae.
- Their webbed feet help them to swim and their thick fur traps air which helps to keep them warm when they are in the water.
- Platypus cannot breath underwater, they hold their breath for two minutes and use their bill to forage for food on the bottom of the creek bed.
- Platypus are affected by pollution in the waterways- they can become entangled in plastic or accidently ingest it thinking that it is food. Detergents that wash down your drain can also affect the water quality of local waterways.
- Reduce your use of single use plastic and use bubbles instead of balloons outdoors to help save the platypus.

**Key Questions:**

- Find the Guthega skink enclosure and look for clues around the *Reptile House*.
- What kind of habitat does the Guthega skink require?
- The Guthega Skink has a clever way of surviving the cold winter temperatures in its alpine habitat. What does it do?
- What might affect the survival of the Guthega skink?
- What actions can you take to help save the Guthega skink?

**Photo Evidence:** Find the Guthega extinction fighter poster and do your best wildlife warrior pose beside it. Take a photo as evidence.

**ANSWERS**

- The Guthega skink is an alpine lizard that lives high up in the mountains in tussock grasslands, leaf litter, rocks and woodlands.
- They require this habitat for protection from predators and to find food.
- Guthega skinks survive the cold temperatures in winter by hibernating with their family in a burrow under the rocks.
- The construction of ski resorts and roads, fire and grazing and trampling by feral horses and cattle all impact on Guthega skink habitat as they destroy vegetation that provides protection from predators such as foxes and hawks.
- Tell their story to your family and friends to help save them!