

ADELAIDE  
ZOO



# Threatened Species



## Acknowledgements

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# For the Teacher

## General Information

Welcome to Adelaide Zoo!

The Zoo is a great place for learning. Adelaide Zoo Education aims to support student learning by providing resources to assist classes to have educational and enjoyable experiences at the Zoo.

This booklet will provide a range of activities which may be undertaken by your students during their visit to the Zoo. A map and suggested order of activities is provided to give a logical circuit to travel during the visit.

Animal species change from time to time, and sometimes animals are “off limits” or out of sight during visits, so a flexible approach to completion of activities is recommended.

In planning, please consider whether

- ◆ you would like your class to regroup for lunch, animal feeds, the Discovery Zone or at the Entrance at the end of the visit. If so, relay the times and meeting places to students or supervisors (in writing if possible.)
- ◆ you would like to see the Pandas or use the Nocturnal House: if so, book a time when making the Zoo booking so your students are not disturbed by other school groups.
- ◆ you would like a session with a Zoo Education Officer to support your study theme. Lesson requests are met wherever possible, though at busy times of the year you may need to have a few options with dates to enable a time to be negotiated. Again, this time is arranged at the time of booking your class visit.

If your class is not booked in to a program involving an Education Officer, we will attempt to meet your class at the Entrance on arrival at the Zoo. At this meeting the group will be welcomed and given some information about the Zoo to assist their visit. General behaviour expectations will also be outlined.

Specific information relating to this Zoo Trail will follow for the teachers and for adult supervisors. Please ensure that supervisors have a copy of the relevant pages **before they come to the Zoo** so they can also be mentally prepared to maximise the learning for the students in their care.

# Threatened Species Trail – Junior Primary

## TEACHER INFORMATION

### Pre-visit ideas

- Research different information sources to find out what a “threatened species” is. What are some animals which are Threatened Species? Find out where they live and mark their locations on a world map. Notice any patterns in their distribution, perhaps even make a graph. (S& E, Maths, Science)
- Find some of Australia’s Threatened Species. Do any of them live in your area? (S&E, Science)
- List all of the Threatened Species you have found and group them in to classes such as mammals, birds, reptiles, amphibians, fish and invertebrates. Try to find some Threatened Species for each group. (S&E, Maths, Science)
- Each student can choose a Threatened Species from the list and start individual research projects including why they are threatened and what we are doing to help them. (Language, S&E)
- Report back/present the research to the class. (Language)
- For younger children small groups of 4 - 6 students could choose a Threatened Species to research. Find out different aspects about it e.g. What habitat does it live in? How does it move/eat/hunt? Does it live in a group? Why is it now threatened? What is being done about it? Using the information they find create a role-play about how the species became threatened. Present the information to the class.
- Play the fitness game prison ball but modify it so that the prisoners are the Threatened Species. Teams have to work to save their Threatened Species before they all become extinct. (PE)
- Find out what the class could do to help save some Threatened Species in the world or even locally e.g. making a wildlife friendly yard, being responsible pet owners etc. (S&E)

### Vocabulary / terms / concepts to know before your visit

- Threatened Species
- Extinct
- Habitat
- Destruction
- Native species
- Introduced species

### Post-visit ideas

- Report to the class what each student/group learned about Threatened Species whilst completing the trail. Find out what ideas they came up with to help save these animals.
- Start a class project or fundraiser to help a particular Threatened Species or a group that is trying to save a Threatened Species such as, Free the Bears Fund or Tiger Taskforce (Adelaide Zoo Education Service). (S&E, Maths, Language)
- Find ways to help stop local species becoming threatened. Start projects to assist these such as making a native garden at school or a pond, bird bath or 'lizard lounge'. (S&E)
- Tell others how they can help save Threatened Species by making a book for the library, doing a class presentation at assembly, making posters or writing a newsletter article to inform families and the community. (Language)

### Ideas for assessment

- Students use the knowledge they have gained to complete selected pre and post visit activities. Assessment can be based on the completion of these.
- Follow up on the degree to which students put their learning and knowledge into action to help save Threatened Species. E.g. saving water, recycling, building a pond etc.

## **Links to SACSA framework**

### **Science- Earth and space**

- 1.1 Identifies and shares information about features of their natural and built local environment that affect living things, including themselves.
- 2.1 Expresses ideas about changes that occur in their local environment and considers implications for sustainable environments.

### **Science- Life systems**

- 1.5 Investigates the features and needs of living things, and demonstrates an understanding of their interdependence with each other and the physical world.
- 2.5 Explores relationships between living things by posing investigable questions about features and functions.

### **Society and Environment- Place, space and environment**

- 1.4 Explains and communicates how people interact and identify with environments.
- 2.4 Shows and reports on understanding of the interrelationships between natural and built environments, resources and systems.
- 1.5 Represents and categorises features of places and resources, using maps, contextual language and models.
- 1.6 Participates actively in projects to show understanding of the importance of caring for local places and natural environments.
- 2.6 Understands that people cause changes in natural and social environments and they act together in solving problems to ensure ecological sustainability.

## Background notes for teachers and supervisors on the day.

This trail is designed for students to work individually, in pairs or in small groups.

Students visit a number of native and exotic species, looking at the habitats they live in and adaptations they have to help them.

Students are encouraged to use their observational skills, to read signs and to talk to Zoo staff. Supervisors should encourage students to discuss ideas and express their own point of views.

Key



Observe carefully



Discuss and share ideas with your group



Write down your thoughts

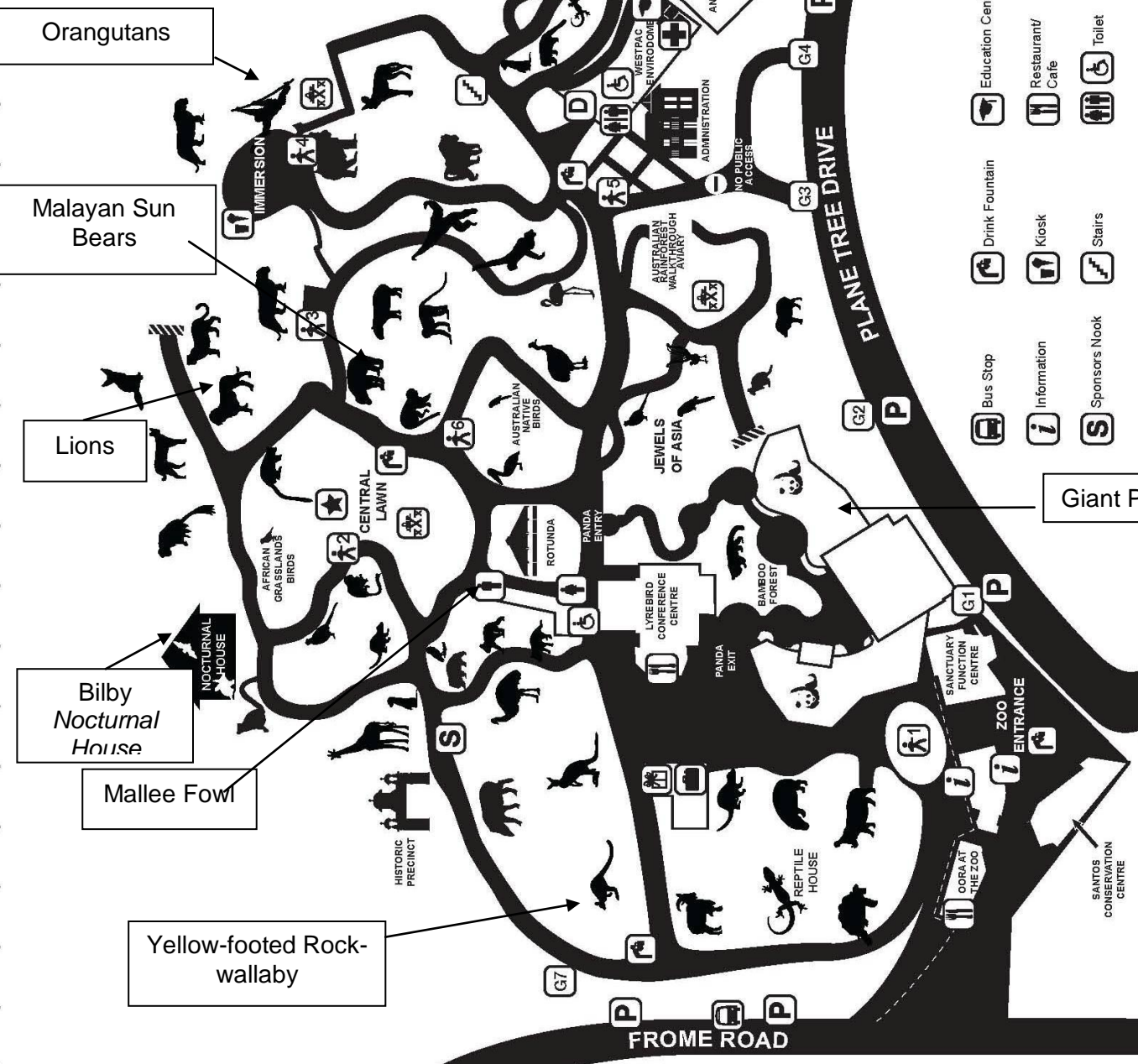


Listen while your adult supervisor reads you some information

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1 2 3 4 5 6 8 9 10 11 12 13 14 15 16 17 18

- Q7 African Wild Dog
- C14 Aldabra Tortoise
- P8 Baboon
- C11 Barbary Sheep
- Q9 Binturong
- E8 Brazilian Tapir
- L9 Cassowary
- I3 Colobus
- M7 Dusky Langur
- G9 Emu
- L3 Fennec Fox
- M9 Flamingo
- I10 Giant Panda
- F7 Giraffe
- E14 Hippopotamus
- E10 Kangaroo
- H8 Koala
- F4 Lemur
- M3 Leopard
- K4 Lion
- L11 Lyrebird
- M7 Malayan Tapir
- P6 Mandrill
- Q9 Meerkat
- G6 Otter
- P5 Orangutan
- M13 Peccary
- J8 Pelican
- U13 Penguin
- H5 Pheasant
- L12 Quokka
- S9 Sealion
- K3 Serval
- K7 Squirrel Monkey
- L6 Sun Bear
- I6 Tamarin
- H9 Tasmanian Devil
- P3, M5 Tiger
- N9 White-cheeked Gibbon
- D10 Wallaby
- R9 Water Dragon
- P10 Westpac Envirodome
- G8 Wombat



Orangutans

Malayan Sun Bears

Lions

Bilby Nocturnal House

Mallee Fowl

Yellow-footed Rock-wallaby

Giant Panda

- Gift shop
- Emergency Assembly Area
- Education Centre
- Restaurant/Cafe
- Photo experience
- Walkabout Tour Stop 1-6
- Drinking Fountain
- Kiosk
- Toilet
- Bus Stop
- Information
- Sponsors Nook

# THREATENED SPECIES

## Welcome to the Adelaide Zoo!

Today you will be learning about Threatened Species.

### Monkey-swing your way to the orangutans...



There are now fewer Orangutans living in the wild than there was. This is because people are cutting down trees and destroying the forests where Orangutans live. People also hunt Orangutans to eat or to keep as pets. Orangutans have become a Threatened Species.



What do wild Orangutans need from the rainforest?



**Clue:** Look around the Zoo enclosure and think about what they need during the day and at night.

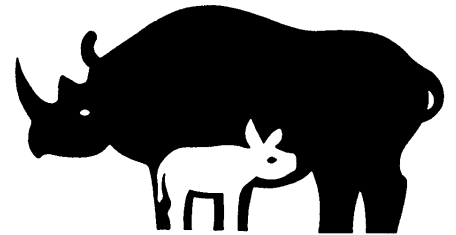


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Look for this rhinoceros symbol on the sign outside the Orangutans. Write what this symbol means.



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As you are walking around the Zoo look for the rhinoceros symbol on other animal enclosures. On this page write the names or draw pictures of **two** other Threatened Species you find:



**A species is threatened if: (tick the correct box)**



- There are too many of this sort of animal in the wild.
- There are not many in the wild and they might become extinct.
- There are none of them left anywhere.

## Creep to the Sun Bears...



Sun Bears come from South East Asia. Humans are similar to Sun Bears because we both have bile in our bellies to help digest our food.

Some people in South East Asia believe that Sun Bear bile makes good medicine. People catch Sun Bears from the wild and put them into farms where they take their bile. Also, the Sun Bears' rainforest habitat is being destroyed so people can sell the timber and build farms.

These are some of the reasons why Sun Bears are a Threatened Species.



How do you think the Bears feel when they are caught to have their bile taken?



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Watch the Sun Bears in their enclosure and think of some words you could use to describe them. Draw a picture of a Sun Bear and write your describing words around it.



A large empty square box is centered on the page. It is surrounded by several lines of varying lengths and orientations, intended for students to write descriptive words for a drawing of a Sun Bear. The lines are positioned at the top, bottom, left, and right of the box.

Why else do you think people take Sun Bears from the wild?



To keep them as \_\_\_\_\_ t \_\_\_\_\_ s .

To \_\_\_\_\_ e \_\_\_\_\_ them.

## Stalk to the Lions...



20 years ago there were twice as many Lions as there are now. The Lion is such a big, powerful animal, how can it be a Threatened Species?

Farms have been built in the grasslands where lions used to hunt for food. The Lions go hungry because there are no animals around for them to eat. People hunt Lions because they are dangerous and farmers poison Lions so they don't eat their herds. It is much harder for Lions to survive than it used to be.



**Circle the group of animals that Lions belong to.**

**Clue:** Look at their body covering.



Birds

Reptile

Insect

Fish

Mammal

Amphibian

The colour of the Lions' fur helps them to camouflage or hide as they creep up on their prey.

**Draw some lion footprints to the habitat they hunt in.**

Lion



Rainforest

Bushland

Swamp

Grasslands

**A habitat is an animal's** h \_ \_ \_ \_ .

## Quietly hippity hop to the Bilby in the Nocturnal House...

Remember Bilbies are very shy so be very quiet when you get near them.



Bilbies used to live over 70% of Australia. In fact a long time ago they lived in the forests where Adelaide and the Zoo are now built!

Now the bilby is extinct in the wild in South Australia and they only live over 20% of Australia in the desert. Their habitat has been cleared, cats & foxes hunt and kill them and rabbits steal their homes and food.

Bilbies have poor vision, but excellent smell and hearing. They eat plants and small animals.



Draw a line from each word to show the reasons that have made the Bilbies athreatened species.



Cats

**Destroy the Bilby's habitat.**

Farms

**Eat the Bilby.**

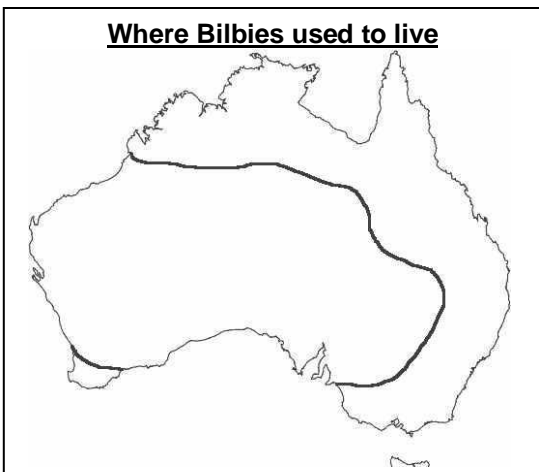
Foxes

**Steal the Bilby's homes and food.**

Rabbits

**Eat the Bilby.**

Where Bilbies used to live



Where Bilbies live now



Colour the maps to show where the bilbies live and used to live.

Write down what has happened to the number of bilbies.



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## Bird-walk to the Mallee Fowl...



The Australian Mallee Fowl likes to live and camouflage in the Mallee scrub. There once was lots of scrub around for them to hide in, but it has been cleared to make farms. This means it is harder for the birds to find a home.

Mallee fowls lay their eggs in big mounds on the ground. Introduced foxes and cats can easily hunt Mallee Fowls for food.

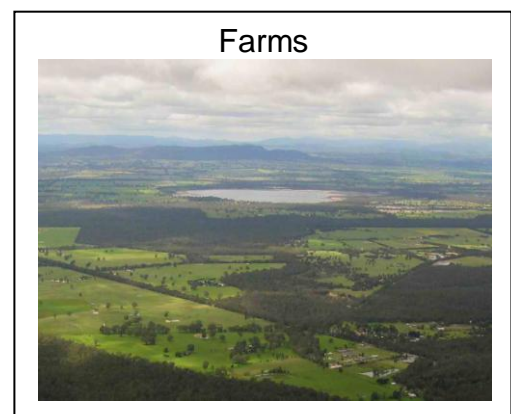
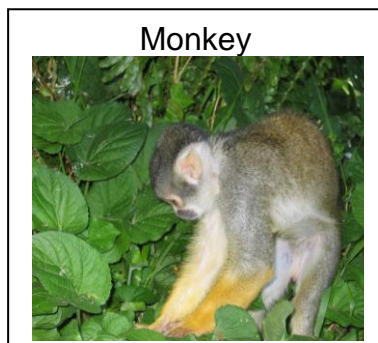
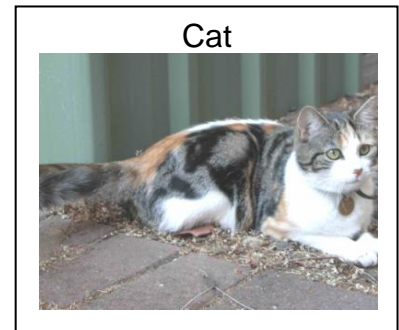
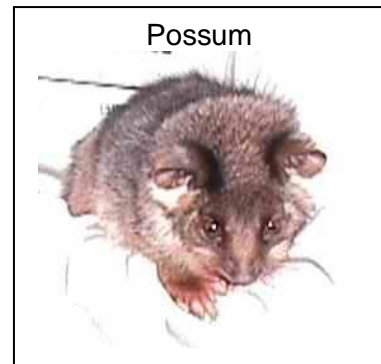
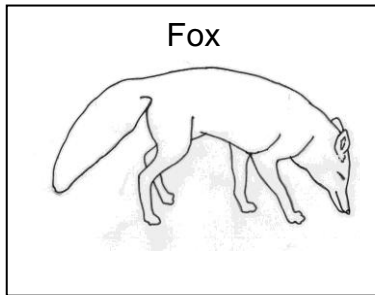


Introduced species are animals that are not n \_ \_ \_ v \_ to

Australia. They have come from a different c \_ \_ \_ t \_ \_ \_



**Draw lines from the Mallee Fowl to the pictures that show things that threaten this bird:**



## Steadily bounce to the Yellow-footed Rock-wallabies...



Yellow-footed Rock-wallabies live in rocky outcrops just like the one you can see in this enclosure. Their long stripy tails helps to give them excellent balance. They only live in a small area of South Australia. Wild goats scare them out of their rocky shelters, which makes it easy for foxes and eagles to catch and eat the wallabies.



Part of the reason we have zoos is to help conserve Threatened Species out in the wild. For this particular species the Zoo is part of "Operation Bounceback". Read the sign to complete these sentences.

Operation Bounceback involves:



- Working to restore the wallaby's h \_ \_ \_ \_ \_
- Controlling foxes and \_ \_ \_ \_ s .
- \_ \_ e e \_ \_ \_ \_ more Yellow-footed Rock-wallabies to release out into the wild.

## Trek Over to the Bamboo Forest ....

Giant Pandas are a threatened species from China. They live in forests high up in the mountains where the weather is cool and damp for most of the year. Loss of and fragmentation of Panda habitat is one of the reasons why there are not many Giant Pandas left in the wild anymore (only about 1600).

In the wild, Pandas eat a lot of bamboo; in fact 99% of their diet in the wild is bamboo. The other 1% is made up of grasses and the remains of small mammals. At Adelaide Zoo our Giant Pandas eat a lot of bamboo as well as fruit, vegetables and Panda Cake which is made from bamboo flour, vegetable oil, eggs, salt and raw sugar.

Panda's front paws are especially adapted for holding bamboo shoots. They have a long wrist bone that forms a kind of thumb covered by a pad of thick skin which helps them to hold onto the bamboo as they eat.



As you walk into the Bamboo Forest keep your eyes and ears open. There is plenty to see along the way.

Did you know that the Giant Panda shares its home with about 1,100 different kinds of other animals?

Almost 100 of these animals are threatened species also. Look as you walk through the bamboo forest and you might be able to see just a few of those animals.



See how many animal statues, signs, pictures and live animals you can find.

**Write the names of two animals that the Giant panda shares its home with.**



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A lot of people live in China. They take up a lot of space. People have turned Panda habitat areas into towns cities and farms.

Pandas eat bamboo. Bamboo is **not** a high energy food therefore Giant Pandas need to eat a lot of bamboo each day ...up to 20kg of stems or 40kg of bamboo shoots each day!



The main reason Pandas are a threatened species is because there is less Panda habitat and bamboo in China for wild Pandas than there used to be.

**Why do you think this makes life hard for Pandas in the wild?**



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Think about all of the threatened species you have seen today. Circle the reasons that you think most species have become threatened...

Clearing natural habitat



Hunters



Tiger



Koala



Introduced species



Hot air balloons



Who has caused all of the problems for the animals you have learnt about today?

P \_ \_ \_ \_ \_

Who do you think should help to save our threatened species? \_\_\_\_\_

\_\_\_\_\_

List some things you could do to help stop species being threatened. Take them back to school and share them with your class.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_