



Conservation

Protecting Animals & Their Environments

Teacher Guide Only

Using WILD LIFE Sydney Zoo to Explore Conservation Across K-6



HOW TO USE THIS GUIDE

This guide supports teachers to explore conservation using real examples from WILD LIFE Sydney Zoo.

It includes:

- key conservation concepts
- real-world animal examples
- human impacts on ecosystems
- actions students can take

**CLASSROOM
LEARNING**
Pages 3–8

**EXCURSION
-BASED**
Pages 10–15

Content can be adapted from Early Stage 1 to Stage 3.



WHAT IS CONSERVATION?



What Is Conservation?

Conservation means protecting and caring for the environment and living things. It involves maintaining and improving habitats so plants and animals can survive.

Zoo Examples

Zoo breeding programs (Littlejohn's Tree Frogs)

Habitat protection partnerships (Koala gum leaves)

Wildlife education programs (Excursions at WILD LIFE Sydney Zoo)



Vocabulary Progression

ES1: help, protect

Stage 1: care, environment

Stage 2: conservation, habitat

Stage 3: sustainability, management



Teacher Questions

ES1: How can we help animals?

Stage 1: Why should we protect animals?

Stage 2: What does conservation mean?

Stage 3: Why is conservation important for ecosystems?

Teaching Focus

Humans play a role in protecting living things.



WHY DO ANIMALS NEED PROTECTION?

Why do animals need protection?

Some animals are at risk of disappearing.

These animals may be:

- endangered (at risk of extinction)
- vulnerable (declining in numbers)

Zoo Examples

Tasmanian devils (Endangered)

Bilbies (declining population)



Vocabulary Progression

ESI: safe, danger

Stage 1: endangered

Stage 2: extinction

Stage 3: biodiversity loss

Teacher Questions

ESI: Is this animal safe or in danger?

Stage 1: What does endangered mean?

Stage 2: Why do animals become endangered?

Stage 3: What happens if a species becomes extinct?

Teaching Focus

Loss of species impacts ecosystems.



HUMAN IMPACT (POSITIVE + NEGATIVE)

How do humans affect ecosystems?

Humans can impact animals both negatively and positively.

Negative Impacts

- habitat destruction
- pollution
- introduced species

Positive Impacts

- conservation programs
- protected areas
- reducing waste

Zoo Examples

Conservation partnerships (Project: Cassowary)

Breeding programs (Littlejohn's Tree Frog)

Education initiatives

Vocabulary Progression

ESI: help, hurt

Stage 1: change

Stage 2: impact

Stage 3: human influence



Teacher Questions

ESI: Are humans helping or harming animals?

Stage 1: What do people do to habitats?

Stage 2: How do actions affect animals?

Stage 3: Can humans reverse environmental damage?

Teaching Focus

Human actions can change ecosystems.

HABITAT LOSS

What is habitat loss?

Habitat loss occurs when environments are changed or destroyed.

Animals may lose access to:

- food
- shelter
- space

Zoo Examples

- Land clearing for farming
- Urban development
- Bushfires

Vocabulary Progression

ESI: home

Stage 1: habitat

Stage 2: habitat loss

Stage 3: environmental change

Teacher Questions

ESI: Where does the animal live?

Stage 1: What is a habitat?

Stage 2: What happens if it disappears?

Stage 3: How does habitat loss affect survival?

Teaching Focus

Habitats are essential for survival.



INTERDEPENDENCE

How are living things connected?

All living things rely on each other.

When one part of an ecosystem changes, it can affect many others.

Zoo Examples

- Predators controlling populations
- Seed dispersal (cassowary)

Vocabulary Progression

ESI: need

Stage 1: depend

Stage 2: connected

Stage 3: interdependence

Teacher Questions

ESI: What does this animal need?

Stage 1: What does it depend on?

Stage 2: How are animals connected?

Stage 3: What happens if one part changes?

Teaching Focus

Ecosystems rely on balance.



CONSERVATION ACTIONS

How can we help?

People can take action to protect animals and environments. They can do this by:

- reducing pollution
- recycling and reusing materials
- protecting habitats
- supporting conservation programs

Zoo Examples

"10 Steps to Save Our Wildlife" action list

Vocabulary Progression

ESI: help

Stage 1: actions

Stage 2: conservation actions

Stage 3: sustainability

Teacher Questions

ESI: What can you do to help?

Stage 1: How can we look after animals?

Stage 2: Which actions make the biggest difference?

Stage 3: How can communities work together?

Teaching Focus

Students can take meaningful action.



The zoo provides a real-world example of conservation in action.

Students can:

- learn about endangered species
- observe animal needs
- understand human impact

Teaching Focus

Connect observation with conservation actions.

ZONE: TRICKY TONGUES & TREETOPS

What Students Will See

Animals with specialised feeding behaviours, including echidnas, numbats and tree kangaroos.

Conservation Focus

Endangered species and specialised adaptations.

Key Teaching Points

Animals have specialised features to help them survive
Some species are vulnerable due to environmental change
Protecting habitats supports these species

Link to Concepts

Adaptations → feeding
Conservation → protection
Habitat → survival

Teacher Prompts

ESI: What is the animal eating?
Stage 1: How does it find food?
Stage 2: What makes this animal special?
Stage 3: How do its adaptations help it survive and avoid predators?

Focus Animal: Echidna

Conservation Status

Generally stable, but vulnerable to habitat change and human impacts

Threats

- Habitat loss
- Vehicle strikes
- Predation (especially on young)

Life Cycle Notes

Echidnas lay eggs, which is unusual for mammals.

The baby (called a puggle) hatches from the egg and develops in the mother's pouch. Protection during early life stages increases survival.

Key Facts for Teachers

One of only a few egg-laying mammals (monotreme)
Uses a long sticky tongue to eat ants and termites
Has sharp spines to protect itself from predators

Link to Learning

Shows how unique adaptations and life cycle stages help animals survive in their environment



ZONE: DAINTREE RAINFOREST

What Students Will See

Dense rainforest habitat with animals such as the cassowary.

Conservation Focus

Keystone species and biodiversity.

Key Teaching Points

Some species support entire ecosystems

Rainforests depend on biodiversity

Habitat protection is essential

Link to Concepts

Interdependence

Ecosystems

Conservation

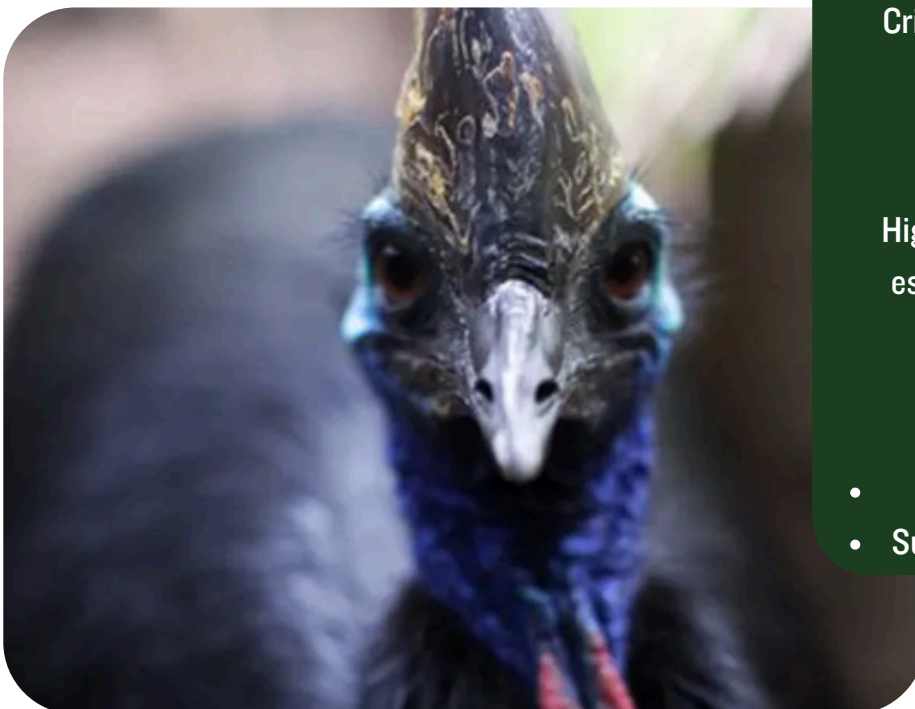
Teacher Prompts

ESI: What does the animal eat?

Stage 1: Why is it important?

Stage 2: How do animals help plants?

Stage 3: What happens if this species disappears?



Focus Animal: Cassowary

Conservation Status

Endangered

Threats

- Habitat destruction
- Vehicle strikes
- Predators

Life Cycle & Survival Notes

Males care for eggs and chicks.
Survival of young supports forest regeneration.

Key Facts for Teachers

Spreads seeds through droppings
Critical to rainforest ecosystems
Large, flightless bird

Link to Learning

Highlights how some species are essential to ecosystem survival (keystone species)

What Can We Do?

- Protect rainforest habitats
- Support conservation organisations

ZONE: KANGAROO WALKABOUT

What Students Will See

Kangaroos, birds and other native animals in an open habitat.

Conservation Focus

Population balance and human impact.

Key Teaching Points

Some species are abundant

Ecosystem balance is important

Human activity can increase or decrease populations

Link to Concepts

Conservation → population balance

Food webs → herbivores

Habitat → survival

Teacher Prompts

ESI: What is the kangaroo eating?

Stage 1: Where does its food come from?

Stage 2: Why are kangaroos successful?

Stage 3: How do human actions affect populations?

Focus Animal: Kangaroo

Conservation Status

Herbivore (primary consumer)

Life Cycle & Survival Notes

Joeys develop in a pouch until they are strong enough to survive outside. This staged development increases survival rates.

Key Facts for Teachers

Kangaroos feed mainly on grasses
They move using powerful hind legs
Young kangaroos continue developing in the pouch after birth

Link to Learning

Demonstrates how energy supports growth and how life cycle stages help animals survive to adulthood



ZONE: NIGHTFALL

What Students Will See

Nocturnal animals such as bilbies and gliders active in low light.

Conservation Focus

Threats from introduced species and habitat loss.

Key Teaching Points

Many native animals are endangered

Introduced predators are a major threat

Behaviour (nocturnal activity) supports survival

Link to Concepts

Adaptations → behaviour

Conservation → threats

Ecosystems

Teacher Prompts

ESI: When is the animal awake?

Stage 1: What does it eat?

Stage 2: What threatens this animal?

Stage 3: How can humans help protect it?



Focus Animal: Sugar Glider

Conservation Status

Generally stable, but impacted by habitat loss and environmental change

Threats

- Habitat loss (loss of trees)
- Land clearing
- Domestic pets

Life Cycle & Survival Notes

Sugar gliders give birth to a very underdeveloped joey that continues to grow in the mother's pouch.

This protected stage helps increase survival rates in early life.

Key Facts for Teachers

Arboreal animal that lives in trees

Uses a membrane (gliding skin) to move between trees

Eats insects, nectar and sap (omnivore)

Link to Learning

Shows how habitat, behaviour and life cycle stages all support survival in an ecosystem

What can we do?

- Protect tree habitats
- Keep pets controlled
- Preserve natural environments

ZONE: KOALA ROOFTOP

What Students Will See

Koalas resting and feeding in eucalyptus trees.

Conservation Focus

Habitat loss and vulnerable species.

Key Teaching Points

Some animals rely on specific habitats

Habitat loss threatens survival

Conservation helps protect species

Link to Concepts

Habitat → survival

Conservation → protection

Adaptations → diet

Teacher Prompts

ESI: What is the koala eating?

Stage 1: Where does it live?

Stage 2: Why does it need this habitat?

Stage 3: How does habitat loss affect this species?



Focus Animal: Koala

Conservation Status

Vulnerable

Threats

Habitat loss, Bushfires, Vehicle strikes,
Disease

Life Cycle & Survival Notes

Joeys develop in the pouch and depend
on the mother for survival.
Habitat quality affects survival at all
stages.

Key Facts for Teachers

Koalas eat only specific species of
eucalyptus leaves
Their low-energy diet results in long
periods of rest
They rely on trees for both food and
shelter

Link to Learning

Shows how habitat loss directly affects
survival

ZONE: CROCODILE BILLABONG

What Students Will See

A crocodile resting in or near the water (water-based habitat).

Conservation Focus

Species protection and conservation laws.

Key Teaching Points

Some species were once endangered

Conservation laws can protect animals

Population recovery is possible

Link to Concepts

Conservation → protection

Food webs → predators

Life cycles → survival

Teacher Prompts

ESI: What does the crocodile eat?

Stage 1: Why was it in danger?

Stage 2: How was it protected?

Stage 3: What role do laws play in conservation?

Focus Animal: Crocodile

Conservation Status

Protected Species

Threats

Hunting

Life Cycle & Survival Notes

Many eggs are laid, but few survive to adulthood.

Temperature affects sex of offspring.

Key Facts for Teachers

Apex predator

Excellent parent protection

Long lifespan

Link to Learning

Shows how conservation can restore species populations

