Call of the Wild

Learning Intent

The Call of the Wild program has been designed to foster student inquiry and investigation into animals, environments and their threats. The program encourages students to examine a diverse range of animals and ecosystems, consider why and how they are important and inform a decision around their findings. Ultimately developing a way to answer;

What makes animal species important?

The program is designed to build upon students' independent inquiry skills, scientific and critical thinking skills and make carefully considered choices supported by their learning. Call of the Wild encourages students to connect with, care about, and discover what makes animals important through inquiry and student-directed investigations, educator guided discussions and challenge based learning.

During their visit to Melbourne Zoo, students will be challenged to decide which of the 10 Save our Species animals (SOS10) they will lend their voice to, and advocate to conserve. We recommend that students spend the exploratory parts of their visit in small groups of peers to encourage self-direction and independence.

The Call of the Wild Program is linked to the following learning frameworks

Victorian Curriculum: Achievements in the subjects of, Humanities - Civics and Citizenship, Economics and Business, Geography, Science, Critical and Creative Thinking & Ethical Capability.

Call of the Wild Guiding Principles & Values

- Inquiry-based/challenge-based learning
- Values education and the activation of Universalism*
- Critical, creative and ethical thinking
- Scientific thinking
- Respect, care and responsibility for nature
- Interspecies connections and interdependence
- Sustainability and conservation

*Universalism is the understanding, appreciation, tolerance and protection for the welfare of all people and for nature. Our focus is protecting the environment and unity with nature.

The Melbourne Zoo Learning Experiences Team, respectfully acknowledges the Wurundjeri People, the Traditional Custodians of the land on which we work, live and learn. We recognise their continuing connection to land, water and wildlife and pay respect to Elders past, present and emerging.

Inquiry Learning

Call of the Wild has been designed to support a unit of inquiry or integrated curriculum. You can use your Zoo experience as part of your tuning in, finding out, sorting out and/or drawing conclusions stages of your inquiry. It is encouraged that students have some background information about the species prior to the excursion, and refrain from answering the big question. Your excursion can inspire your students to take action back at school or in their local communities. We recommend taking up Zoo's Victoria's Community Conservation Campaigns.

The challenge questions posed for the excursion experience are:

Big Question:	**'Why are the SOS10 species important?'**
Supporting Questions:	**'Who will you lend your voice to?'**

Students have the following opportunities throughout the day to:

- Connect with animals that need our help to survive
- Collaborate, inquire and investigate these animals, to learn about key characteristics and discover why they and their habitats are threatened
- Investigate wildlife diversity and features
- Engage with our expert educators
- Access to purposely designed resources, learning spaces and animal encounters
- Access to keeper presentations and opportunities to ask them questions
- Access to animal encounters featuring some of our SOS10 species

Teacher Support:

- Pre and post excursion learning activities
- Post excursion reflection and consolidation of learning
- Ideas for student led action

Activity	Time & Location
Introduction Our Educator will tune students into their day and give them a challenge to set up their inquiry. ***Students will receive their SOS Call of the Wild lanyards. This a learning tool with a map of the Zoo and the time and place of their workshop.***	**Peppercorn Tree** Meet a Zoo Educator at the Peppercorn Tree at your allocated introduction time- 10:00am or 10:30am. (Refer to the Booking Confirmation Letter for allocated time).
Educator- facilitated Workshop A Zoo Educator will facilitate students' learning about the 10 SOS species and provide an opportunity to ask questions. ***A teacher is required to attend the workshop to meet with supervision requirements.***	**Forest Harvest Hut <u>or</u> Gorilla Ranger Station** Workshops are held between 11:00 - 1:00pm. (Refer to Student Lanyards for allocated workshop time). Workshop may be in either Forest Harvest Hut or Gorilla Ranger Station. (Refer to Student Lanyards for allocated workshop location).
Student Led Inquiry Students can develop their understanding by visiting the 10 SOS species. There are specially designed signage and information provided for student research. ***For deeper understanding and an opportunity to ask inquiry questions, students can access Zoo staff at Talks and Encounters delivered daily.***	**Throughout the Zoo** For the location of the 10 SOS Species refer to the maps on the student and teacher lanyards. ***Daily Talks and Encounters*** Asian Elephant Talk- 11:00 Lord Howe Island Stick Insect Encounter- 11:30 12:30 & 1:00 Seal Talk - 11:30 Orangutan Talk- 12:00 Gorilla Talk- 12:30 Philippine Crocodile Talk- 1:15 ***Students will be provided with an opportunity to note down talk and encounter times as well as a URL (<u>www.zoo.org.au/times</u>) where these times can be accessed online.***
Conclusion Informed by what they have learnt during the day, students will decide which of the SOS10 species they will commit to helping in the wild. Our Educator will provide an opportunity for student reflection and further learning.	**Peppercorn Tree** Meet your Zoo educator at the **Peppercorn Tree** at **1:30pm**. Please collect your students' lanyards as they arrive and return to your Zoo Educator. The conclusion will be finished no later than **2:00pm**

Please note:
If you arrive after your scheduled education session time we may be unable to accommodate your students, due to scheduling restrictions. In this event your education program may be cancelled.

Call of the Wild Program Map

This is the map student will receive on their Student Lanyard.

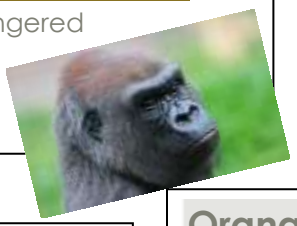
Pre-Excursion Activities

Connecting to Creatures

Introduce the students to the SOS10 animals.

Lord Howe Island Stick insect
Animal Profile
https://goo.gl/Ld1p0g
https://vimeo.com/107557797
Critically Endangered
Primary consumer
Arthropod

Gorilla
Animal Profile
https://goo.gl/25hhQQ
https://vimeo.com/107552609
Critically Endangered
Omnivore
Mammal
Rainforest



Tasmanian Devil
Animal Profile
https://goo.gl/2VaJcz
https://vimeo.com/107660789
Critically Endangered
Detritivore
Mammal
Carnivore

Baw Baw Frog
Animal Profile
https://goo.gl/lSJz93
https://vimeo.com/107555618
Critically Endangered
Insectivore
Amphibian
Alpine

Orang-utan
Animal Profile
https://goo.gl/ipaEmN
https://vimeo.com/107556862
Critically Endangered
Herbivore
Mammal
Rainforest

Snow Leopard
Animal Profile
https:// https://goo.gl/A6zcsi
https://youtu.be/LH-TyiwHGmk
Vulnerable
Apex Predator
Mammal
Montane

Asian Elephant
Animal Profile
https://goo.gl/0fZOi5
https://vimeo.com/15174376
Critically Endangered
Herbivore
Mammal
Rainforest

Australian Fur Seal
Animal Profile
https://goo.gl/FHRVbd
https://vimeo.com/107554902
Common
Piscivore
Mammal
Marine

Philippine Crocodile
Animal Profile
https://goo.gl/UCnnJk
https://vimeo.com/90936453
Critically Endangered
Apex Predator
Reptile
Stealth hunter

Little Penguin
Animal Profile
https://goo.gl/sFiKRW
Least Concern
Meso Predator
Avarian
Marine

Lenses to Look Through

The Call of the Wild program encourages students to consider why and how the SOS10 species are important and inform a decision around their findings. There are many reasons that an animal may be seen to be important. You might like to ask your students to think about their reasoning through the following lenses:

- Scientific
- Ethical
- Cultural
- Interconnections

Below are some inquiry prompts that might help your students investigate through these lenses.

Scientific

- How might the extinction of one species affect other species in its eco-system?
- In what ways can human actions impact on wildlife and the environment? Is this a modern problem? How did indigenous people live in harmony with their environment?

Ethical

- Is it right to value one animal species above another? Why?
- What are your rights and responsibilities as a global citizen in regards to wildlife?
- What rights do you think that wildlife should have? Why?

Cultural

- How & why has human kinds relationship changed with wildlife over history? Indigenous Australians often had a totem animal which they a special relationship with.
- Many animals are highly valued by their local cultures; sometimes as food and sometimes they are viewed as gods. Choose a species to investigate and explore if and how it is significant to the local culture.

Interconnections

Examine the social structure of a chosen species. Explore how changes to its social structure, such as being removed from its family or placed in a family when it was solitary may effect it.

Compare and contrast the social structure and interactions of a chosen species and humans. What might we learn from other animals? E.G. Although painted dogs have a definitive hierarchy, they all share their food so every animal has enough. Even those dogs that can't hunt are fed.

Understanding Classification

There are many ways that the SOS10 species are able to be classified;

Country of Origin
Vertebrate/Invertebrate
Class
Habitat
Indigenous peoples perspective
Ecological role (e.g. apex-predator)
Diet
Conservation Status (IUCN status)
Scientific Taxa

To introduce this concept to students, direct students to create their own 'flash-cards' of the SOS10 (Post-it notes can also be used). Set the challenge for the students to group the animals in as many different ways as possible. This may include; reproduction, body structures and other features of the species.

These cards can also be used for the students to create;

- dichotomous keys
- venn diagrams
- food webs
- taxonomic hierarchy

Students can also plot the location of the species onto a world map and compare the characteristics of the different locations, linking to the challenges and adaptations of the species. These 'flash cards' can be referred to throughout the unit of inquiry and can be added to as students gather additional information.

(Level 5/6) Geography: Place, space and interconnection - Describe and explain the diverse characteristics of places in different locations from local to global scales (VCGGC085)
Describe and explain interconnections within places and between places, and the effects of these interconnections (VCGGC087)
(Level 7/8) Geography: Place, space and interconnection - Identify, analyse and explain interconnections within places and between places and identify and explain changes resulting from these interconnections (VCGGC101)
(Level 5/6) Science: Biological Sciences - Living things have structural features and adaptations that help them to survive in their environment (VCSSU074)
(Level 7/8) Science: Biological Sciences - There are differences within and between groups of organisms; classification helps organise this diversity(VCSSU091) Interactions between organisms can be described in terms of food chains and food webs and can be affected by human activity (VCSSU093)

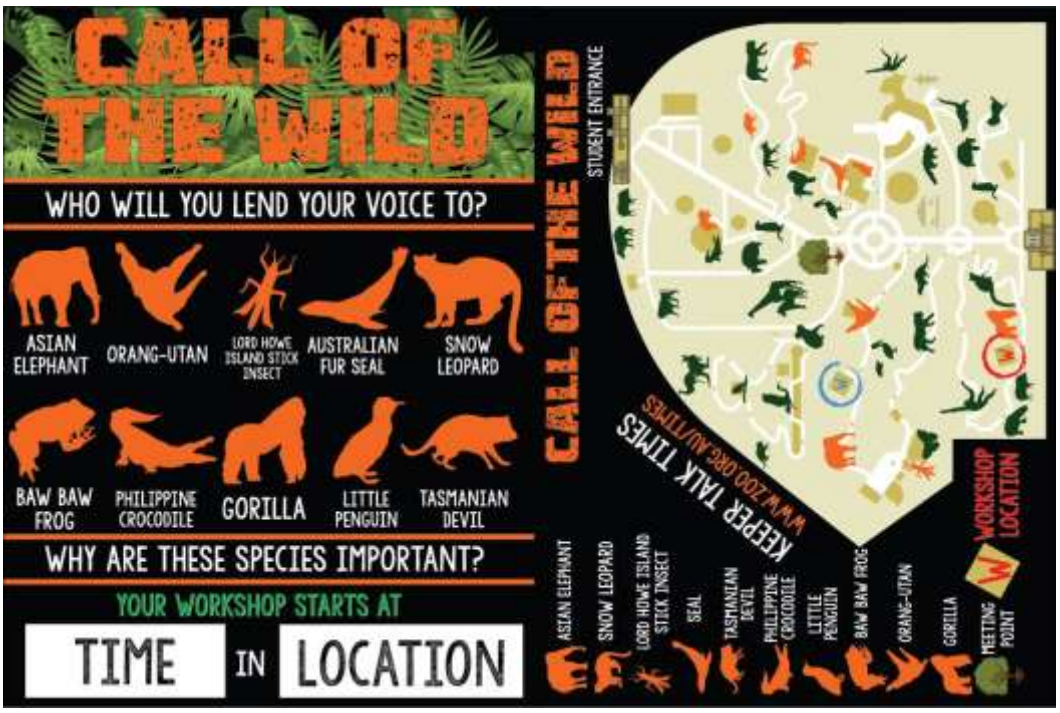
Excursion Preparation

Show the students the pre-visit video;

https://vimeo.com/102304227

On your visit, students will be provided with their own *Call of the Wild* Lanyards, an example of these are below.

The purpose of these lanyards are to allow students to explore the Zoo in small groups, gather information and make an informed decision at the end of the day.



To prepare students for their excursion;

- Make students aware of the lanyards
- Highlight the need for students to structure their day
- Discuss behavior expectations
- Encourage students to bring along a digital learning device to support their learning.[1] Student can use their devices to access information about the Call of the Wild species talk times.

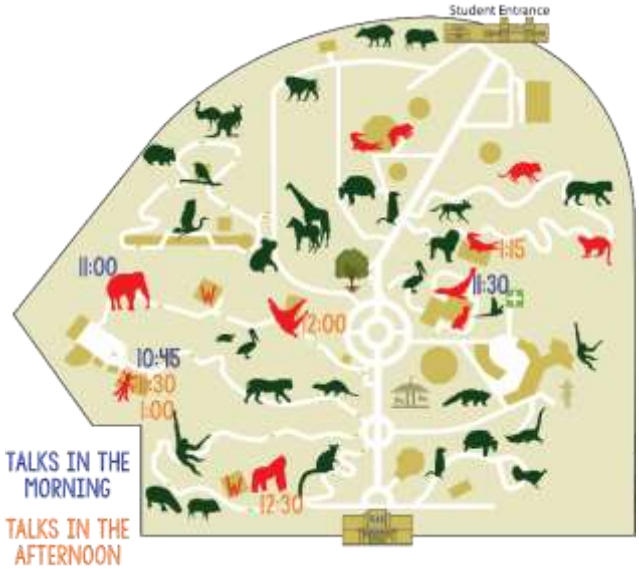
The activity on the following page can be used to ensure students remain on task, and encourage them to gather information from various sources around the property.

[1] Melbourne Zoo accepts no responsibility to loss or damage of devices.

Excursion Activity

Lend Your Voice

The following activity can be used to ensure students remain on task, and encourage them to gather information from various sources around the property. Select **four** of the keeper talks that you would like to attend. You may use the map below to plan your day.



What information would you need to find out more about to make your decision about whether it is an important species?

You may consider:

- Do they have a role in their eco-system?
- How are humans affecting them in the wild?
- Are they culturally significant?
- Do we have a responsibility to help this species?
- What will happen if this species receives no help from us?

(Level 5/6) Critical and Creative Thinking: Questions and Possibilities - Examine how different kinds of questions can be used to identify and clarify information, ideas and possibilities (VCCCTQ021)
Experiment with alternative ideas and actions by setting preconceptions to one side (VCCCTQ022)
Identify and form links and patterns from multiple information sources to generate non-routine ideas and possibilities (VCCCTQ023)
Reasoning - Consider the importance of giving reasons and evidence and how the strength of these can be evaluated (VCCCTR025)
(Level 7/8) Critical and Creative Thinking: Questions and Possibilities - Suspend judgements temporarily and consider how preconceptions may limit ideas and alternatives (VCCCTQ033)
Synthesise information from multiple sources and use lateral thinking techniques to draw parallels between known and new solutions and ideas when creating original proposals and artefacts (VCCCTQ034) (VCCCTM040)
(Level 5/6) Ethical Capability: Understanding Concepts - Discuss how ethical principles can be used as the basis for action, considering the influence of cultural norms, religion, world views and philosophical thought on these principles (VCECU010)
Decision making and Actions - Discuss the role and significance of conscience and reasoning in ethical decision-making (VCECD013)

Write down **three** questions you will ask the keeper at each talk that you plan to attend. Ensure these questions will help you decide who you will lend your voice to.

What information would you need to find out more about to make your decision about whether it is an important species or not?

Assessing Species

Create a rubric to help you make the decision of who you are going to lend your voice to.

As you walk around the Zoo, assess each of the SOS10 species that you see and find out which species scores the highest on your scorecard.

You can create your own criteria and weighting.

Below is an example of how your scorecard might look.
In this example 1 is of **least importance** and 10 is **of most importance.**

	IUCN Status	Role in ecosystem	Culturally Significant	Threat	My ability to take positive action	Total
Baw Baw Frog						
Snow Leopard						
Tasmanian Devil						
Asian Elephant	9	4	2	8	9	**32**
Gorilla						
Orangutan	9	8	3	7	6	**33**
Philippine Crocodile						
Little Penguin						
Seal	1	7	5	5	9	**27**
Lord Howe Island Stick Insect						

Critical & Creative Thinking: Experiment with alternative ideas and actions by setting preconceptions to one side **(VCCCTQ022)** Consider the importance of giving reasons and evidence and how the strength of these can be evaluated **(VCCCTR025)** Explore what a criterion is, different kinds of criteria, and how to select appropriate criteria for the purposes of filtering information and
Level 7 & 8: Ethical Capability: Investigate criteria for determining the relative importance of matters of ethical concern **(VCECU016**) **Critical & Creative Thinking -** Suspend judgements temporarily and consider how preconceptions may limit ideas and alternatives **(VCCCTQ033)** Examine how to select appropriate criteria and how criteria are used in clarifying and challenging arguments and ideas **(VCCCTR039) Science:** Use scientific knowledge and findings from investigations to identify relationships, evaluate claims and draw conclusions **(VCSIS111)**

Post-Excursion Activities

Common Ground

Complete the classification chain for the SOS10.

Consider the different ways that species can be classified by (at the bottom of the page) use these to link the SOS10 species together. Try to challenge yourself by not using the same classification twice.

Place in Habitat	Vertebrate/ Invertebrate	Habitat	Ecological Role
Conservation Status	Country of Origin	Class	Diet

Example Solution

NB: An extension question for students - Where would you add in a link for humans?

(Level 5/6) Critical and Creative Thinking: Questions and Possibilities - Identify and form links and patterns from multiple information sources to generate non-routine ideas and possibilities ***(VCCCTQ023)***
(Level 7/8) Critical and Creative Thinking: Questions and Possibilities – Synthesise information from multiple sources and use lateral thinking techniques to draw parallels between known and new solutions and ideas when creating original proposals and artefacts ***(VCCCTQ034)***
(Level 5/6) Science: Biological Sciences - Living things have structural features and adaptations that help them to survive in their environment ***(VCSSU074)***
(Level 7/8) Science: Biological Sciences - There are differences within and between groups of organisms; classification helps organise this diversity***(VCSSU091)*** Interactions between organisms can be described in terms of food chains and food webs and can be affected by human activity ***(VCSSU093)***

Human Impacts

Students will consider the species that they chose on the day, examine the species' origins and look at the human impacts on that region. Predict and design possible adaptations the species might have in response to the human induced environmental changes.

Eg;

- **Climate** change
- Loss, fragmentation and degradation of **habitat**
- Spread of **introduced** species
- Increased **pollution**
- Illegal **poaching** of species
- Spread of **diseases** by humans

Prompts:

How might humans change their impact on their environment from a negative impact to a positive one?

The difference between animals and humans is that animals change themselves for the environment, but humans change the environment for themselves. – Ayn Rand

There are some four million different kinds of animals and plants in the world. Four million different solutions to the problems of staying alive. – David Attenborough

The potential for tomorrow depends on what we do today – Maori saying

Level 5/6: Biology: Living things have structural features and adaptations that help them to survive in their environment**(VCSSU074)** The growth and survival of living things are affected by the physical conditions of their environment**(VCSSU075) Geography:** Environmental and human influences on the location and characteristics of places and the management of spaces within them **(VCGGK096)**
Level 6/7: Biology: Interactions between organisms can be described in terms of food chains and food webs and can be affected by human activity **(VCSSU093) Geography:** Human causes of landscape degradation, the effects on landscape quality and the implications for places **(VCGGK119)**

Getting Vocal

From the excursion, students can develop and present their reasoning for why their chosen SOS10 animal should be chosen by the whole class. Students may use the question, '**Why are they important?'** for the basis of their argument. This can be written as a persuasive text, or developed as a debate topic or any way they choose.

To make this more inter-active between students, have them grouped around the classroom by their chosen species or campaign. As students become swayed away from their chosen species, they can move to the students that have been the most convincing and join them in support. This will help to facilitate discussion and encourage students to be convincing and grow their support. This can also be the way the class decides which campaign to implement at school. Students can then use the outline on the following pages to develop a school-based campaign.

Discussion Prompts:

- How does climate change effect some of your SOS10 species? Is there ways in which you can help slow climate change down?
- Is it possible to have to maintain animal habitat and to provide all the needs of human kind?
- How might removing an introduced species effect the eco system it has been introduced to? E.g. What would happen if we removed all rabbits from Australia?
- What are some factors that lead to poaching?

(Level 5) English Literacy: Interacting with others - Participate in informal debates and plan, rehearse and deliver presentations for defined audiences and purposes incorporating accurate and sequenced content and multimodal elements **(VCELY338)**
(Level 6) English Literacy: Interacting with others Participate in formal and informal debates and plan, rehearse and deliver presentations, selecting and sequencing appropriate content and multimodal elements for defined audiences and purposes, making appropriate choices for modality and emphasis **(VCELY367)**
(Level 7) English: Interacting with others - Plan, rehearse and deliver presentations, selecting and sequencing appropriate content and multimodal elements to promote a point of view or enable a new way of seeing, using body language, voice qualities and other elements to add interest and meaning**(VCELY396)**
(Level 8) English: Language for interaction - Understand how rhetorical devices are used to persuade and how different layers of meaning are developed through the use of metaphor, irony and parody **(VCELA397)**
Plan, rehearse and deliver presentations, selecting and sequencing appropriate content, including multimodal elements, to reflect a diversity of viewpoints, using voice and language conventions to suit different situations, modulating voice and incorporating elements for specific effects **(VCELY427)**

Action Stations

Many of the campaigns you see around Zoos Victoria use a

Connect - Understand - Act

approach to get the public to think about how their actions impact wildlife. Looking at one Zoos Victoria Community Conservation Campaign, identify the key elements on the chart below.

Information and resources about the Campaigns including student activities are available online at Teacher Resources.

What is the key conversation issue?

How can you reduce the threat?

Who are the people involved? (eg; school/wider community)

Identify an ambassador species to **connect** the public to the

Why did you choose this species?

Select an **action** in the school to help.

How will you explain the problem so that people can **understand**?

What was your chosen campaign?

As a group or a class, develop your own Conservation Campaign for the SOS10 species that you lent your voice to whilst at the Zoo.

Here are some articles that might help you find out more about the **CUA** model;

https://www.iucn.org/content/connect-understand-act-model-engages-zoo-visitors-fighting-extinction

https://www.zoo.org.au/sites/default/files/ZVCommConsMPFinal.pdf

What is the key conversation issue?

How can you reduce the threat?

Who are the people involved? (eg; school/wider community)

Identify an ambassador species to **connect** the public to the campaign.

Why did you choose this species?

Select an **action** in the school to help

How will you explain the problem so that people can **understand**?

What was your chosen campaign?

Level 5/6: English: Plan, draft and publish imaginative, informative and persuasive print and multimodal texts, choosing text structures, language features, images and sound appropriate to purpose and audience (**VCELY329) Biology:** Scientific understandings, discoveries and inventions are used to inform personal and community decisions and to solve problems that directly affect people's lives **(VCSSU073) Ethical Capability:** Examine how problems may contain more than one ethical issue **(VCECU011)** Discuss how ethical principles can be used as the basis for action, considering the influence of cultural norms, religion, world views and philosophical thought on these principles **(VCECU010)** Consider the importance of giving reasons and evidence and how the strength of these can be evaluated **(VCCCTR025)**
Level 7/8: English: Create imaginative, informative and persuasive texts that raise issues, report events and advance opinions, using deliberate language and textual choices, and including digital elements as appropriate **(VCELY420) Biology:** Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations **(VCSSU090) Ethical capability**: Explore the extent of ethical obligation and the implications for thinking about consequences and duties in decision-making and action **(VCECD017)** Examine how to select appropriate criteria and how criteria are used in clarifying and challenging arguments and ideas **(VCCCTR039)**