Serendip Sanctuary Education Program

Ranger-led activities



Acknowledgement of Country

Victoria's network of parks and reserves form the core of Aboriginal cultural landscapes, which have been modified over many thousands of years of occupation. They are reflections of how Aboriginal people engage with their world and experienced their surroundings and are the product of thousands of generations of economic activity, material culture and settlement patterns. The landscapes we see today are influenced by the skills, knowledge and activities of Aboriginal land managers. Parks Victoria acknowledges the Wadawurrung people as the Traditional Owners of the lands and waters of Serendip Sanctuary and recognises their continuing connection to this place and their ongoing role in caring for Country.

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Sharing Nature's Stories

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Program logistics

| | Cost | \$8.50 per student. Supervising teachers attend for free. An invoice will be sent via email after your visit to the park. |
|---|----------------|---|
| | Location | Serendip Sanctuary 100 Windermere Rd, Lara VIC 3212 |
| | Year levels | Foundation – Year 12 |
| | Learning areas | Science Geography VCE Environmental Science |
| Ĩ | Accessibility | Please inform education staff at the time of booking if students have specific access or other requirements. A social script is available for participants on the autism spectrum. Using plain text and images, the social script describes what children may see and experience during their visit to Serendip Sanctuary. View this resource here - <u>https://www.parks.vic.gov.au/get-into-nature/all-abilities-access/autism-friendly-visits</u> |
| | Contact | To book or discuss your school needs, please email <u>SerendipEducationCentre@parks.vic.gov.au</u> or contact the Education Officer on 8427 3486 |

Additional resources to support your learning

Visit <u>http://www.parks.vic.gov.au/get-into-</u>nature/learning-in-nature/plan-your-learning

On the day

- Ensure students bring sunscreen, a drink bottle and pens/clipboard.
- Students must wear suitable clothing and sturdy covered footwear (no thongs or crocs).
- Local weather may vary from regional forecasts. Check the local weather and dress accordingly.
- The healthiest food for wild animals occurs in nature do not feed or encourage animals to take any human food.
- Leave as little trace of your visit as possible take all rubbish out of the park and keep to existing tracks.
- Plants, animals and other natural features, objects, and cultural sites in the park are protected by law and must not be disturbed or removed.



About the park Serendip Sanctuary

Serendip Sanctuary is a wildlife oasis close to Melbourne where you can see kangaroos, wallabies, and a huge variety of birds including emus. Close to Geelong, the sanctuary showcases the open grassy woodlands and wetlands of the volcanic Western Plains, making it an ideal spot to see birdlife and learn about wetlands ecology. The bird hides help visitors to see some of the 200 bird species that breed at, or visit, Serendip Sanctuary.

Curriculum-aligned education sessions at Serendip offer students an excellent opportunity to learn about the many habitats of the Western Volcanic Plains and how the park plays an important role in safeguarding threatened species.



Primary school programs

Minibeast discovery

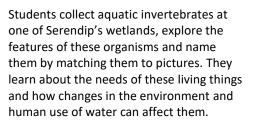


Levels F-2



Learning area Science

Location Ponding site, Serendip Sanctuary





Learning outcomes:

VCSSU042, VCSSU047, VCSIS053

Links to UN Sustainable Development Goals:



Creature features



Levels

Time

60 minutes

3-4



Science

Learning area

Location

Ponding site, Serendip Sanctuary



Time

60 minutes

Students collect aquatic invertebrates at one of Serendip's wetlands and investigate the observable features of these organisms. They learn about relationships between invertebrates and other animals, and the aquatic conditions important for survival. Students make predictions about the health of the wetland and compare



their findings with these predictions. They discuss how changes to wetland health can impact organisms and what they can do to help.

Learning outcomes:

VCSSU057, VCSSU058, VCSIS070



Links to UN Sustainable Development Goals:



Minibeast adaptations



Levels

5-6



Learning area Science



Location

Time

60 minutes

Ponding site, Serendip Sanctuary Students collect aquatic invertebrates at one of Serendip's wetlands and investigate the structural features and adaptations of these organisms. They learn how the growth and survival of these organisms are affected by the physical aquatic conditions of the wetlands. Students make predictions about the health of the



wetland and compare their findings with these predictions. They discuss how changes to wetland health can impact organisms and what they can do to help.

Learning outcomes:

VCSSU074, VCSSU075, VCSIS086

Links to UN Sustainable Development Goals:



Water quality testing



Levels

5-6



Learning area Science

Location

Ponding site, Serendip Sanctuary



Time

60 minutes

Students assess the health of one of Serendip's wetlands by testing the water for turbidity, pH, electronic conductivity and temperature. They predict and describe the effect of changes to the aquatic environment on the survival of living things. By applying the scientific method, students pose questions, record



and organise data, analyse patterns and relationships, and learn that testing the water is essential for maintaining or improving water quality.

Learning outcomes:

VCSSU075, VCSIS082, VCSIS083, VCSIS085, VCSIS086





Secondary school programs

Assessing grassy woodland habitat



Levels 7-8



Learning area Science



Location

Picnic area, Serendip Sanctuary



Time 60 minutes Students learn about the impacts humans have had on grasslands and species like the Eastern Barred Bandicoot, including strategies to maintain remaining grassland ecosystems. They conduct a habitat quality assessment of a grassy woodland ecosystem and assess if it is a suitable area for an Eastern Barred Bandicoot release.

Learning outcomes:

VCSSU093, VCSIS108, VCSIS111

Links to UN Sustainable Development Goals:





Exploring wetland health

Learning area



Levels 7-8

Science

Location

Ponding site, Serendip Sanctuary



Time

60 minutes

Students assess the health of one of Serendip's wetlands by testing the water for turbidity, pH, electronic conductivity and temperature. They investigate how water as a resource cycles through the environment and is important for the survival of living things. Students plan and conduct their fieldwork investigation,



collecting data to evaluate the health of the wetlands. They learn that testing the water is essential for maintaining aquatic ecosystems that have been impacted by human activities.

Learning outcomes:

VCSSU090, VCSSU101, VCSIS108, VCSIS111





Climate connections



Levels 8-10

Learning area



Location

Picnic area, Serendip Sanctuary



Time

60 minutes

Students investigate the interconnections between people and nature and contribute to the study of climate change by becoming citizen scientists for the day. Using the concept of phenology, or the study of cyclic and seasonal natural phenomena, students walk the Climate Watch trail and make observations about



the life stages of various local flora and fauna, their behaviours and where they are found in the park. Students also investigate the adaptations of the plants and animals they find. After completing the walk, students reflect on the importance of collecting data at different times of the year to monitor the impacts of climate change on local ecosystems.

Learning outcomes:

VCSSU090, VCSSU091, VCSSU121, VCSSU129, VCGGK147

Links to UN Sustainable Development Goals:



Assessing the health and function of grassy woodlands



Levels 9-10



Science

Learning area



Location

Picnic area, Serendip Sanctuary



Time 60 minutes

Students learn about the impacts of environmental change on biodiversity and the health and function of grasslands. They explore the interactions within ecosystems that allow animals like the Eastern Barred Bandicoot to survive there. Students then conduct a habitat quality assessment of a grassy woodland ecosystem and assess if it



is a suitable area for an Eastern Barred Bandicoot release. They are encouraged to think about the impacts of climate change and other human activity on ecosystems within Victoria.

Learning outcomes:

VCSSU121, VCSSU128, VCSIS135





Waterwatch investigation



Levels 9-10

Learning area Science



Location

Ponding site, Serendip Sanctuary



Time

60 minutes

Students assess the health of one of Serendip's wetlands by testing the water for turbidity, pH, electronic conductivity and temperature. They investigate how the quality of water and nutrient cycling can be influenced by human activity. Students plan and conduct their fieldwork investigation, collecting data to evaluate



the health of the wetlands. They learn that testing the water is essential for maintaining aquatic ecosystems that have been impacted by human activities.

Learning outcomes:

VCSSU121, VCSSU128, VCSIS135

Links to UN Sustainable Development Goals:



Protecting biodiversity in grassy woodland habitat



Levels

VCE Environmental Science



Learning area Unit 1 (AOS2/3) or Unit 3 (AOS1)



Location

Picnic area, Serendip Sanctuary



Time 60 minutes

Students learn how the environment within Serendip Sanctuary has changed over time and explore the diversity of species within grassy woodland habitats of the Western Volcanic Plains. They learn how scientific practices such as land management contribute to the protection



of biodiversity. Students plan and conduct a habitat quality assessment, using a range of scientific instruments and materials, to determine the quality of grassy woodland habitat within the sanctuary. They evaluate the suitability of the site for Eastern Barred Bandicoot release and identify ways to protect the habitat and other associated species.





Human impacts on local wetland ecosystems



Levels

VCE Environmental Science

Learning area

Unit 1 (AOS1/3) or Unit 2 (AOS1)



Location

Ponding site, Serendip Sanctuary



Time

60 minutes

Students assess the health of one of Serendip's wetlands by testing the water for turbidity, pH, electronic conductivity and temperature.

They investigate how the quality of water, nutrient cycling and interactions between abiotic and biotic components of



ecosystems can be influenced by human activity. Students conduct their fieldwork investigation, collecting data to evaluate the health of the wetlands. They determine the impact of pollutants on Earth's systems and consider a range of options for managing the impacts of water disturbances. They learn that testing the water is essential for monitoring ecosystem disturbances and health, which has flow on effects for the biosphere and hydrosphere.



