

Lysterfield Park

An excursion and fieldwork resource for schools



Congratulations for taking the leap outdoors!

Excursions and field trips are an important part of the educational experience for students, offering hands-on, concrete experiences that are important for reinforcing key concepts taught in the classroom.

Our aim is that every student leaves a park or reserve with a greater appreciation not only of its unique values, but how these are connected to other places and larger issues, and a desire and the know-how to get involved in making a difference.

Our excursion/fieldwork resources aim to help students:

- develop a sense of wonder, curiosity and respect for our parks and the people and environments they support
- develop their knowledge of their own locality and region and how places are connected
- understand the changes that are occurring in our parks and what strategies are being employed to manage these changes
- consider some of the complex interrelationships between the physical environment and the flora, fauna and fungi that live in our parks
- become informed, responsible and active citizens who contribute to the protection of our special places

This resource is designed to provide teachers with ideas for planning exciting and experiential learning activities out in our beautiful parks, reserves and waterways.

We would love to hear about ways we can improve this resource to support teachers who take their lessons outdoors. Please contact education@parks.vic.gov.au with your feedback.

Why visit?

Perhaps best known for its mountain biking trails, Lysterfield Park is located approximately 35 kilometres south-east of Melbourne, and has a unique history. Originally a water storage supply, the park was opened to the public in 1986 to cater for a wide range of recreational activities.

This hidden treasure of native bushland and wetland is home to kangaroos, echidnas, egrets, herons and swans, to name a few species and provides an insight into what Melbourne looked like less than 150 years ago when it was covered in bushland. Lysterfield Lake is very popular for canoeing, sailing, paddle boating and surf skiing. There are also numerous walking tracks including three trails that are linked for a brisk two-hour walk around the lake, where students can take note of the hydrology, fire management and native plants and animals.

For teachers

This self-guided excursion is designed to be linked to the Victorian Curriculum for the subjects of geography, science and history, but can be enjoyed by a wide range of students who want to explore, discover and learn about our parks. It is suitable and scalable from Levels 5–10. Some suggested linkages to the Victorian Curriculum are provided below:

Subject	Level	Content descriptions
Geography	5–6	Factors that shape places and influence connections
	7–8	Water in the world Landforms and landscapes
	9–10	Environmental change and management
Science	5–6	Biological sciences
	7–8	Biological sciences Earth and space sciences
	9–10	Biological sciences
History	7–8	Aboriginal and Torres Strait Islander peoples and cultures

The excursion can be done in 2–3 hours, or you can opt to spend half a day completing multiple activities in the park.

For additional information on the park, download the park [visitor guide](#) or visit the [Lysterfield Park](#) webpage for additional information including facilities, activities and maps.

Before you go

Make sure you have reviewed the information provided for planning an excursion at <http://parkweb.vic.gov.au/learn> for safety and permit requirements and have checked the facilities available.

All groups are required to let us know you're coming. Please complete a Group Activity Statement downloadable from <http://parkweb.vic.gov.au/learn> and email to: groupactivities@parks.vic.gov.au at least four weeks prior to arrival. This will assist us to alert you to any park closures, storm damage or management activities such as planned burning or pest animal programs that may affect your visit. It also forms part of your group's emergency management plan and provided quick access to emergency contacts, should your group need assistance.

You will be visiting the home of many species of plants and animals, some found in only a few other areas. Please remember to keep to the paths, don't pick or take any vegetation and take your rubbish home with you.

Collecting data

We encourage you to gather primary data during your excursion to support a truly immersive and hands-on experience. Pictures, drawings and records of sightings are all easy to take and don't require a research permit. If you'd like to do something that involves moving off the paths, including transects or quadrats, you may need to complete an [application for a research permit](#).

Structuring your excursion

The park is open from 8am to 7pm during daylight savings time. You can access Lysterfield Park from Horswood Road. From the main carpark, where bus parking is available, there are several trails leading around the lake, which offer multiple opportunities to conduct fieldwork, social studies of park use or impact assessments, examine fire and weed management strategies or to discover the many species that call the park home. There are also plenty of toilets and picnic facilities if you'd like to extend your stay.

Learn and discover

1. Landscapes and landforms

Less than 150 years ago the Melbourne region was covered by natural bush and forest, but today there are very few areas of bush left. Lysterfield Park, and nearby Churchill National Park, fortunately retain a valuable portion of what was once a common landscape.

The rolling Lysterfield Hills within the park drain water via several small streams to fill the lake. The highest point is at Trig Point (218 m) where views to the north take in the Dandenong Ranges and to the south and west Westernport Bay and Melbourne. The ridgeline and major spurs of the hills have many large exposed granite rocks that form impressive vantage points.

The soils of the area are generally light grey, gritty sandy loams over mottled yellow clay and have low bearing strength in wet conditions. Erodibility ranges from very high on the upper slopes to moderate/high on the middle to lower slopes. Soils along the western shoreline of the lake are very prone to erosion and access is prohibited. Sections of the south-eastern and south-western shoreline area are actively eroding through wave wash, steep gradients and concentrated stormwater runoff. Unformed tracks and some steeper management tracks and horse riding trails become unstable under wet conditions, accelerating erosion.

2. Water in the landscape

Between 1936 and 1975 Lysterfield Lake supplied fresh water to the Mornington Peninsula. A large area surrounding the lake was purchased from farmers in the early part of the century and fenced off to protect the quality of the water. The State Rivers and Water Supply Commission established eucalypt plantations around the lake and protected the remaining remnant native forest.

After 1975, Cardinia Reservoir became operational and Lysterfield Lake was no longer required as part of the water supply system. In 1986 the area was opened to the public as a recreational facility. Today the lake provides a protected wetland habitat for wildlife, as well as unpowered boating and swimming sites to the south.

3. People on the land

The area now known as Lysterfield Park is located within the traditional land of the Wurundjeri and Bunurong tribes. The adjoining Police Paddocks Reserve contains important Aboriginal archaeological features. A significant feature of the early history of Victoria, this site is where early Aboriginal-European interaction occurred.

The Lysterfield area was settled in the early 1850s and much of the land was cleared for farming. There are remains of an early settler's homestead and orchard in the northern section of the park on a north-facing slope above Monbulk Creek, by Dargon Track.

The site of the homestead is marked by the ruins of the fireplace (or perhaps kitchen hearth). It is a stone and brick structure. Nearby there is an area with extensive heaps of bricks and other building rubble, much covered in blackberry and other weeds. Nearby is a flat area that may have once contained a building, and another larger area to the east that also appears disturbed. Extensive plantings survive near the homestead including two large pines, a Norfolk Island Pine, a cypress, and a windbreak. There also appear to be other conifers some distance away from the homestead site that may form part of a cultural landscape.

Around 1880 another early settler established an orchard and cannery at the site that was to become a horse stud and then in 1935 the Church of England Boys Society Boys Farm, where 14–15-year-old boys learnt to become farmers. The original house became the manager's house, and a dormitory and a new dairy were constructed. In 1944 the land was bought by the government and the structures were removed.

The Boys Farm Heritage Walk takes you through the former Boys Farm site, with interpretative signs explaining the remains including house foundations, cistern, a fireplace base marking the dormitory, and remnants of a dairy.

4. A unique ecosystem

Lysterfield Park is a regional site of botanical significance. The park is a refuge for many native species and contains regionally significant species that are uncommon in both the Eastern Highlands and Gippsland.

Lysterfield Park consists of approximately one third remnant vegetation and two thirds plantation. Within these areas about 300 plant species have been recorded. The park is also a major component of habitat linking the Dandenong Creek Valley and the Dandenong Ranges.

Eight regionally significant vegetation communities have been identified in the area: Herb-rich Forest (14%), Valley Forest (3.3%), Shrubby Foothill Forest (3.9%), Damp Sclerophyll Forest (4.1%), Heathy Woodland (7.2%), Riparian Forest (1%), Swamp Scrub (6.0%) and artificially created wetlands. Some stands of relatively weed-free Swamp Scrub are the most undisturbed examples of this community in the Melbourne region.

Lysterfield Park is an especially significant area for an amazing variety of birdlife. About 140 species have been recorded in the park. The birds are attracted by the different types of food and environments; woodlands, forest, the lake and grassy open spaces. The most obvious birds include: parrots, honeyeaters, wrens, thornbills, cockatoos, and Bell Miners (commonly known as Bellbirds).

The wetland provides opportunities for feeding, breeding and refuge for at least 37 species of waterbirds, including the migratory Latham's Snipe (Japanese snipe) and regionally significant waterbirds such as the darter, little egret, pied cormorant, eurasian coot, great crested grebe, eastern swamphens and red-necked avocet.

Many of the mammals in the area are active only at night; you may catch a glimpse of Eastern Grey Kangaroos and Black Wallabies. Echidnas are also common, foraging around in the daytime looking for ants and grubs in the ground and under the bark of trees. In the summer, Green and Golden Bell-frogs may be found basking in the sun. At night, the park comes alive with Brushtail and Ringtail Possums, Sugar Gliders and various species of bats and owls. You may be able to see evidence of their passing.

5. Managing weeds and pests

There are numerous threats to maintaining the ecological values of the park. These include introduced plants and animals (weeds and pests), impacts from recreational uses and bushfires. Parks Victoria manage these threats through the park management plan (downloadable from www.parks.vic.gov.au).

When introduced or non-native plant species (weeds) occur close to park boundaries, seeds can be carried by wind, birds, tyre treads and the soles of shoes, and end up inside the park. Weeds compete with native plants for space, nutrients and sunlight. They change the natural diversity and balance of ecological communities and can affect the function native species have in providing nutrients and habitat for other species.

Over 130 species of non-indigenous plants occur in the park, most of which are the legacy of clearing, grazing and timber and firewood cutting. Blackberry, the most significant weed from a management perspective, restricts access across gullies and lower slopes of the Lysterfield western extension. Mapping of weed infestations helps park rangers monitor and prioritise works. The Global Positioning System (GPS) and mapping software are useful tools for determining the location and size of weed infestations.

Severe dieback of Messmate trees in the north-west part of Lysterfield Park may be caused by [Cinnamon Fungus](#) or Bell Miners. Another issue is that plantation species, particularly of Southern Mahogany and Spotted Gum, are spreading into the native vegetation. At least 10 species of introduced animals occur in the park. Foxes, feral cats, dogs, rabbits and pigs are all major pests. Many domestic animals enter the park through the fences of neighbouring properties.

The long-term effect of invasion of non-native species into the park is the possible extinction of remnant bushland species, and of wildlife species that depend on native plants for their survival. Additionally, invasion of non-native species creates a visually unattractive landscape as these plants spread throughout the park.

6. Managing fire

Fire preparedness works are undertaken by park rangers to help protect lives, homes and the environment, reduce the intensity and rate of spread of bushfires and to increase the likelihood of successful firefighting operations.

Fire preparedness works includes planned burning as well as the removal of vegetation in preparation for a planned burn, the creation and maintenance of tracks and fuel breaks and may also include hazardous tree management for both public and firefighter safety.

Fuel breaks and fire access tracks are used by firefighters to help control bushfires or conduct planned burns. They also serve as a buffer between vegetation and nearby houses and are maintained on an ongoing basis through an annual slashing (mowing) program.

Fire protection tracks and fire breaks are used for fire management within the park and on adjacent land. Slashing of strategic fire breaks is the major fire pre-suppression work performed. Areas with identified flora values need to be avoided.

Fuel reduction burning is restricted to small areas of the park. Fire management includes the deliberate use or exclusion of fire to achieve conservation objectives, such as protecting or promoting certain vegetation communities or wildlife habitats.

Discover and reflect

You might like to enhance your excursion with some activities and inquiries that help students record and extend their learning back into the classroom. You might like to complete one or more of the following:

1. Take photos to create an annotated photolog or poster of your field trip to share with classmates. You could use social media to share it with friends.
2. Create a short video that helps tell about one significant aspect of Lysterfield Park.
3. Map your field trip using software such as Scribblemaps or Tour Builder, annotating what you've learned at various points.
4. The Acacia Nature Trail interpretative signage highlights significant aspects of the indigenous vegetation. Describe the plant communities that the Aboriginal peoples walked through toward what is now the lake but then would have been a creek.
5. Create a sound map of various points around the park, taking a series of 30-second audio recordings, referenced back to points on a map. Students can also record their audio observations on paper, using lines made from a central point to indicate the direction, type and frequency of sounds they hear, and whether it adds or detracts from the environment.
6. Describe the landscape within Lysterfield Park. A topographic map will be helpful (see the Mountain Bike trail map) or see a colour tone map at <http://en-au.topographic-map.com>.
7. Predict the impact of a period of extensive drought and/or a time of heavy rains on the lake and the park.
8. Throughout the park there are many dead trees either standing or decaying on the ground. Describe why these trees are still important to the ecosystem within the park.
9. Study the recreational facilities provided in the park. Assess whether the facilities cope well with the number of visitors on week days/weekends and in summer/winter.
10. Use Google Earth to discover the external pressures on Lysterfield Park. Annotate the aerial image with labels such as Wellington Road, power supply lines, urban growth, orchards, farmland, waste transfer station, recreation facilities. Include in each annotation a brief description of the pressure on the park.
11. Without the government buy back of this land, suggest what the landscape of this area might look like today. Justify your description.
12. Interview the park ranger or friends group member about their connection to the park. You could do this via Skype before or after the field trip.
13. Discuss the role parks play in connecting people to their environment, or influencing peoples' personal relationships to nature.

Get active

Contact the [ParkConnect team](#) if you would like to get your students involved in some hands-on volunteer activities in Lysterfield Park.

Parks Victoria respectfully acknowledges the Traditional Owners of what is now known as Victoria. For many thousands of years they have lived in harmony with, and carefully managed the Country for which they have a deep spiritual connection. Contemporary Aboriginal people are proud of their ancestry and in addition to their inherent rights, they have spiritual and cultural obligations to ensure that their ancestral land and culture is managed responsibly and appropriately.