

8. Living Bush Nature Trail Activities

Aim

This activity introduces students to the forest communities (wet forest and dry forest) found along the Living Bush Nature Walk, Ferntree Gully unit, Dandenong Ranges National Park. It also illustrates some of the management problems faced by the national park.

MATERIALS

- Activity sheet 8: Living Bush Activity Trail.

ACTIVITIES

Walk Length: 3 kilometres.

Walk Time: 1.5 hours.

Select from the following activities those you want your students to undertake along the trail.

Just prior to the commencement of the activity trail, remind the students of the following:

- Stay on the track at all times while completing the activity.
- All plants and animals in the park are protected.
- Live plant material should not be picked.
- If rocks or logs are turned over for inspection, they should be returned to the exact position they were found in as they are animal homes.
- All litter should be taken home.

Contact the park office prior to your visit to obtain up-to-date information about the Living Bush trail.

The stop numbers listed in the activity trail refer to numbered posts along the trail. These numbered posts may be removed and replaced by signs so check with the ranger before your visit.



Living Bush Nature Trail Activities

Remember to stay on the track at all times while completing this activity.

In the Gully (Stop 1)

Ten years ago only introduced grasses and other weeds grew in this gully. In some places the ground was trampled bare. Notice that the area lacks an understorey and only a few plant types are present.

Weeds like blackberries, ivy and introduced grasses may still be present and if left unchecked could spread.

List 3 management strategies that you can see park rangers have used to minimize environmental damage in this gully.

Tree Ferns (Stop 2)

Look for treeferns along the creek. One treefern near the top of the track has a Blackwood growing in it and a Kangaroo Fern on its trunk. These plants begin to grow when a seed falls into the soft, fibrous top of a treefern and germinates.

Look for spores on the underside of fronds. Treeferns are considered primitive plants as they do not reproduce by seeds but by fine red-brown dust-like particles called spores. Their trunk is not a true trunk but a central core surrounded by matted rootlets.

They are very slow growing - the growth rate is approximately 2 cm per year. Some of the treeferns in this gully are likely to have begun growing before European settlement.

Calculate the age of the treefern that holds the Blackwood.

Mountain Grey Gum (Stop 3)

The towering trees with white trunks are eucalypts called Mountain Grey Gum. Mature trees provide homes and food for many animals. Brushtail possums and rosellas live in hollows in the trunk and branches, while bush rats and lizards live in holes among the roots. Mature trees play an important role in the working of a forest.

Select a mature tree and list some animal homes you can see in and around it.

What animals can you see using the tree?

What evidence of animals can you find?

Relics from the Past (Stop 4)

Look for stone foundations along the track – these are the remains on an animal sanctuary. Around fifty years ago, echidnas, wallabies, wombats and birds were kept here in a cage area for visitors to see.

In those days the people responsible for the park planted European trees such as oaks and poplars in the picnic area. You probably noticed these when you came into the park.

Why would caged animals and exotic trees be considered inappropriate for this park today?

The managers of the Dandenong Ranges National Park have left these 'remains' of the past within the park. Suggest reasons for their decision.

Blackened Stump (Stop 5)

Look for a blackened tree stump. It is most likely all that is left of a Mountain Grey Gum burnt in a bushfire in 1968. The January 1997 fire also burnt part of this Nature Walk.

Fires started by lightning have been a part of the Australian scene for many thousands of years. But since European settlement, bushfires have become much more frequent, and this can have serious results for a forest environment.

Most Australian plants are adapted to fires.

List 2 advantages fire has for a forest.

List 2 disadvantages fire has for a forest.

Fern Gully (Stop 6)

Treeferns dominate the edges of the gully. Understorey trees and shrubs include Hazel Pomaderris, Blanketleaf and Blackwood. Mountain Grey Gums tower overhead and form the canopy of the forest. This type of forest is limited to certain areas of the park.

List 3 factors that are likely to influence the presence of this type of forest community.

Stop 7

Forest Storeys (Stop 8)

Draw a clearly labelled diagram of the forest view to show the distinct vegetation layers. Label each layer with the name of the plants, using the terms ground cover, understorey and canopy. (You may wish to use a separate sheet of paper.)

Higher and Drier (Stop 9)

The forest on the drier slope is quite different from the forest in the gully.

Instead of Grey Gums, the tall eucalypts here are a species called Messmates. Messmates can be identified by their leaves. Look at a leaf from a Messmate. The two halves join the stem at a different point, forming an oblique angle. This gives them their scientific name *Eucalyptus obliqua*.

The main understorey plants are Prickly Moses (a small spiky wattle) and Hop Goodenia (a low shrub). These trees and shrubs have adaptive features that enable them to cope with the drier conditions on these slopes.

Looking at these plants closely, identify two adaptive features that help them to cope with a dry environment.

Junction with Acacia Tack

Valley Views

Find a place near this track junction where you can look through the surrounding trees to the suburbs of Melbourne that border the western and northern slopes of the national park. Most of the ridgeline of the Dandenong Ranges is now built upon. This urban development, so close and within the ranges, presents many problems for the park and its management.

List 3 problems the park is likely to face because of urban development to its boundaries.

What management strategies could be used to minimize these problems?

Back To Picnic Ground.