

12. Visitor impact and management strategies

Aim

This activity assists students to consider ways in which visitor activities affect the park, and then suggest ways these impacts could be reduced.

Materials

- Resource sheet 12: Human activities and their effect on the environment.
- Resource sheet 11. Visitor use - effects and management (in Section 4B: Grampians National Park).

Activities

1. Working in small groups, read the resource sheet: Human activities and their effect on the environment. Use this information to complete a table similar to the one below.

2. In column two of the table, note the environmental impacts this activity may have if not properly managed.

3. Look at your completed table.
a) Which three activities have the highest impact on the environment? Which have the highest impact on biodiversity?

b) Which three activities have the lowest impact on the environment?

4. Working in small groups, discuss possible management actions that could minimise these nine impacts caused by park visitors. Write them down in column three.

5. Discuss these actions as a class then add additional suggestions to your group's table.

6. Choose a visitor activity that could have a high environmental impact on a park. Design an information brochure or display to inform people of the implications of their actions. Remember to clearly identify your audience and design your brochure to communicate effectively to them.

Visitor activity	Environmental impacts this activity can cause	Possible management actions
Scenic viewing	• •	• •
Walking		
Cycling		
Camping and caravanning		
Picnicking		
Horse riding		
Fishing		
Swimming, surfing & beach activities		
Other activities (add your own)		

12. Human activities and their effect on the environment

Scenic viewing

Scenic viewing opportunities are of high priority in park management. Sealed roads to major sites such as Twelve Apostles and Loch Ard Gorge in Port Campbell National Park carry over 100,000 cars per year. If roads and car parks are not constructed to carry high levels of traffic, their condition may deteriorate and eventually require upgrading to cope with the volume of vehicles.

Drainage and trampling near car parks can lead to environmental problems such as erosion. If large numbers of people visit at the same time there may be to overcrowding of the viewing site and car park. Car parking outside designated car parks can damage the site through erosion and soil compaction. Access to some outstanding sites may need to be limited because sandy or erodible soils make the area unsuited to road or car park construction.

Care also needs to be taken so that visitor access facilities do not intrude visually into the very landscape the park has been designated to protect. This suggests car parks should be sited away from viewpoints but within a short walking distance.

Walking

Obviously the construction of walking tracks requires the removal of some vegetation and compaction of soil. The more walking tracks there are in a park, the greater their impact, so the location and number of walking tracks (short walks and overnight tracks) in a park needs to be carefully managed.

Walking off-track can damage vegetation and disturb or compact the soil. This makes it hard for plant roots to grow and adversely affects drainage and increases

erosion. Walking off the track to avoid a wet or muddy section can damage the environment, especially if visitors repeatedly use this 'by-pass'. Walking off-track across sand dunes can easily damage sensitive vegetation and leave the dune more vulnerable to erosion.

Walking tracks need to be properly constructed and maintained so that the track surface can cope with the wear and tear of numerous feet. In sensitive environments such as mangroves or edges of wetlands, boardwalks may be needed.

Walkers are encouraged to 'stay on the track' for their own safety and to avoid trampling plants and creating erosion problems.

Cycling

Cycling is allowed in some parks on some tracks. Similar to walking, cycling can cause erosion and drainage problems and so is restricted in sensitive areas.

The 'Mountain Bike Code' released by the Department of Natural Resources and Environment provides guidelines for safe cycling and for minimising the impacts of cycling on park environments.

Camping and caravanning

Camping and caravanning is allowed in many parks. In some cases, privately managed campgrounds exist near parks and provide alternatives if camping facilities are not provided in the park itself.

Camping within a park means that appropriate facilities such as toilets, picnic tables, fireplaces, fuel for fireplaces and even shower blocks and laundries need to be provided and maintained, and sites need to be regularly cleaned of rubbish. Sewerage and waste disposal needs to be managed so as to care for visitor health and maintain the natural environment.

Camp grounds are not provided in some locations or small or narrow parks because they can impact too greatly on the natural values of the park or increase the risk of fires caused by camp fires.

Picnicking

Many visitors go to national parks for picnics. Facilities that need to be provided to meet this visitor use include picnic tables, fireplaces or BBQs, fuel for fireplaces, and toilets. These facilities need to be regularly maintained and sites cleaned of rubbish.

Impacts of picnicking include the removal of trees or limbs, and the collection of fallen timber for firewood. This removes habitat from the site.

Horse riding

Horse riding is usually restricted to specific areas of a park or in some cases not allowed at all.

Under certain conditions, horse riding can be a threat to soils and vegetation and can conflict with other recreational activities. Horses can increase the spread of weeds in a park.

The 'Horse Riding Code' released by the Department of Natural Resources and Environment provides guidelines for safe horse riding and for minimising the impacts of horse riding on park environments.

Fishing

Fishing leads to the removal of fish from waterways and marine ecosystems. State Government regulations require all anglers over 16 years of age to have a fishing licence. Fishing licenses and fish size and bag limits are some of the ways of managing fishing impacts, as well as promotion of the catch-and-release concept.

Access to fishing sites needs to be via routes that do not trample vegetation, create erosion or threaten wildlife. Anglers need to take care when cleaning and disposing of fish and bait that they do not pollute the site. Fishing tackle or rubbish left behind can injure wildlife or other park visitors.

Access to some beach sites by people, dogs or horses may be detrimental to wildlife. Hooded Plovers, a threatened species of seabird, nest on a few beaches in Victoria. Their breeding can be disrupted if their nests are accidentally disturbed or damaged.

Swimming, surfing and beach activities

When beaches are crowded, there is potential for conflict between swimmers and other activities, for example between boaters, surfers or divers. People seeking access to more remote beaches have sometimes caused erosion damage by trampling vegetation, or by bringing dogs to beaches with consequent pollution or wildlife disturbance problems.

All activities

The presence of visitors at any site within a park, if not carefully managed, can potentially disturb wildlife. For example, birds may abandon their nests if disturbed too frequently.

Feeding of wildlife by visitors can lead to the death of wildlife by disease or malnutrition, and can put visitors at risk of injury or disease from wildlife.

