

22. Port Campbell National Park management issues

Aim

Based on their observations during their fieldwork, talk from a park ranger or their own research, students review park management issues and solutions.

Materials

- Student fieldwork data.
- Resources sheet 22a: Zoning in Port Campbell National Park.
- Resources sheets 22b-i: Management issues and solutions.

Activities

1. Based on your observations or information provided during your fieldwork, or by reading the resources sheets, compile a list of park management issues

and solutions for Port Campbell National Park. Use the resource sheets to help you select factors that park managers need to consider.

Your findings could be compiled as a table or as a report, using visual material collected during fieldwork.

If preferred, pairs or small groups could select one issue to investigate and share results with all groups in the class to compile an overall review of the park.

2. Individuals or groups present their report to the class. Include:

- A description of the issue.
- Ways the problems can be managed.
- How the zoning scheme for the park can assist park management.

Table: Management issues and solutions for Port Campbell National Park

	Specific location(s) if any	Potential issues or problems	Park management solutions
Visitor safety			
Visitor requirements			
Native vegetation conservation			
Native animal conservation			
Weeds and pest animals			
Geology and landscape protections			
Cultural heritage conservation			
Other (describe)			

22a. Zoning in Port Campbell National Park

With the ever increasing numbers of visitors to Port Campbell National Park, Parks Victoria has to find ways of balancing the demands of visitors with protection of the landscape, flora and fauna of the area.

The park's management zoning scheme (see next page) helps indicate the types of activities and levels of use appropriate in different parts of the park.

In addition to zoning the park to limit recreational uses to appropriate areas, various management strategies have been instigated to limit the impact of visitors on the park.

Four management zones have been developed for the park:

- The Conservation Zone focuses on conservation management. The Conservation Zone has minimal impact recreation activities and simple visitor facilities.
- The Conservation and Recreation Zone caters for sustainable recreational opportunities in areas considered less sensitive.
- The Recreation Development has high use visitor nodes and tourist facilities.
- The Education Zone caters for education activities not permitted in the Conservation Zone or suitable for high visitor sites in the Recreation Zone.

Challenges for park management

Parks Victoria aims to manage Port Campbell National Park to:

- preserve and conserve the rich biodiversity, varied ecosystems, highly significant geological features and cultural values, sense of remoteness and outstanding scenic features of a long narrow coastal strip threatened by intense visitor pressures, the powerful forces of the Southern Ocean and inland development;
- to develop and implement visitor management infrastructure and systems which ensure that park visitors gain access to the outstanding scenery and wide range of other recreation opportunities, and receive the services and facilities that enhance their experience of the park, while ensuring minimal impact on the natural values of the park;
- to further develop the contribution of the park to the local and regional economies;
- to involve Friends groups, neighbours, and the local and wider communities in supporting sound management and promoting the outstanding values of the park.

Source: *Port Campbell National Park and Bay of Island Coastal Park Management Plan*. 1988.

Port Campbell National Park Management Zones

	Conservation	Conservation & Recreation	Recreation Development	Education
Area/ location	Port Campbell National Park 1156 ha, 66% of park. Bay of Islands Coastal Park, 840 ha, 88 % of park Semi-remote areas of Port Campbell National Park; semi-remote areas of Bay of Islands Coastal Park	Port Campbell National Park 193 ha, 11% of park. Bay of Islands Coastal Park, 110 ha, 12 % of park Glenample Homestead, 8 ha. Loch Ard public cemetery. London Bridge, Loch Ard Gorge area including Sherbrook camp and Twelve Apostle visitor areas with Port Campbell National Park. Childers Cove and area south of Greta Ocean Road from Boat By to Petersborough within Bay of Islands Coastal Park.	Port Campbell National Park 6 ha, < 1% of park. Port Campbell Foreshore, Caravan park, existing Visitor Information Centre, possible alternative sites for the proposed Tourist Centre within and outside the park.	Port Campbell National Park, 395 ha, 22% of park. Section of Sherbrook Block recommended as an Education Area by the LCC (1978).
Values	Coastal habitats of high conservation significance.	Important natural values and visitor facilities.	High-use visitor nodes with park management facilities.	Discrete area of high education value.
General management aims	Protect sensitive natural environments and provide minimal impact recreation activities and simple visitor facilities, subject to ensuring minimal interference with natural processes.	Protect less sensitive natural environments and provide for sustainable dispersed recreation activities and modest scale visitor facilities without significant impact on natural processes.	Provide primarily for high use visitor nodes with a concentration of recreations and/or interpretation facilities.	Provide primarily for environmental education in a relatively undisturbed setting.

Source: *Port Campbell National Park Management Plan 1998.*

22b. Vegetation management in the park

Managing the native vegetation in Port Campbell National Park involves:

- Conserving native vegetation and habitat values.
- Protecting significant plant communities and species.
- Controlling introduced plants.
- Fire management.

Port Campbell National Park contains several plant communities that are of particular conservation significance because of their relatively undisturbed condition and the richness of species within them.

Tools available for vegetation management in the park include prescribed burning and using herbicides to control introduced species. However, inappropriate use of these tools can severely damage plant and animal communities.

Indigenous plants

Plant species of conservation significance are scattered throughout the plant communities in the park. Any development in the park requiring clearing of vegetation may threaten significant species so it is essential that a detailed botanical survey of the site be carried out before any vegetation clearing.

Two species of national significance occur in the park, the Clover Glycine and Metallic Sun Orchid. Both are listed under the Flora and Fauna Guarantee Act 1988.

A small population of Clover Glycine is known to occur in the park, and exists in only four other conservation reserves. These rare plants are threatened at this site by tramping and rabbit grazing.

Metallic Sun-orchid is known to occur in only two other biological reserves in Victoria: Lower Glenelg National Park and Bay of Islands Coastal Park.

Pest plants

Some 14 pest plants species occur in the park. They include pines, thistles, blackberries and non-native grasses including Marrum Grass and Buffalo Grass. All have considerable potential for spread, and there is the threat of introduction into uninfested areas.

Activities such as road and track construction works and horse riding can contribute to the introduction and spread of pest plant species into and within the park. Most pest plant infestations are found near roads, tracks and firebreaks.

Pines, Marrum Grass and Buffalo Grass are three species of particular concern as they have the ability, if unchecked, to alter native plant communities. Pines that have spread from pine plantations, particularly in the Sherbrook Block area have to be monitored and action for control regularly undertaken.

Marram Grass, a species that was planted to stabilise foredunes now occupies areas that could support native species such as Hairy Spinifex. Similarly Buffalo Grass was introduced to cleared areas on the inland slopes of dunes at Clifton and it now dominates the vegetation of large areas.

Park management aims to control or eradicate all these pest plants where possible, as well as less common species. Strategies include cutting, hand pulling or digging out the plant. Herbicides are also used where practicable.

Part of the weed control program includes attempting to re-establish native plant cover.

22c. Animal management in the park

Clearing of vegetation

Removal of vegetation destroys the habitat on which animals depend. Small areas of native vegetation may be cleared at various sites along the coast, as part of the construction or reconstruction of roads, car parks and walking tracks for the expected increasing numbers of visitors. Unless carefully planned, clearing could have a severe impact on the rich small mammal populations found in the coastal heaths and grasslands.

Sites of significance

Three sites of particular significance to small mammals have been identified in the park, based on findings from small mammal trapping. The sites either have a high species diversity, or contain species that are rare or threatened in Victoria or have a limited distribution in the park. These include open heath around Loch Ard Cemetery, open heath near London Bridge, and open scrub in dunes at Two Mile Bay.

Impacts of visitors

Disturbance by visitors is a problem for some species of birds. Fragile habitat can also be disturbed through trampling by visitors. Vulnerable habitats include streams and estuaries, which contain a rich variety of species.

The coastal cliffs and beaches provide habitats for species of conservation significance, including the Peregrine Falcon, the Little Penguin and the Muttonbird. The relatively poor access to these sites has served to help protect these habitats.

Peregrine Falcons are found at a number of sites along the coastal cliffs and offshore rock stacks. This species was in rapid world-wide decline. In Victoria it has stabilised and may have made a slight recovery in recent years. It is sensitive and easily disturbed prior to and during the breeding season, and disturbance at this time threatens eggs and young in the nest.

A number of Little Penguin colonies occur in the park, on rock ledges, among fallen rocks, in dune sand, or at the base of coastal cliffs. These are active in most months except May. Any interference with the birds or burrows, especially during breeding, will disrupt the colony. Fortunately most colonies are small and completely inaccessible to visitors without special equipment.

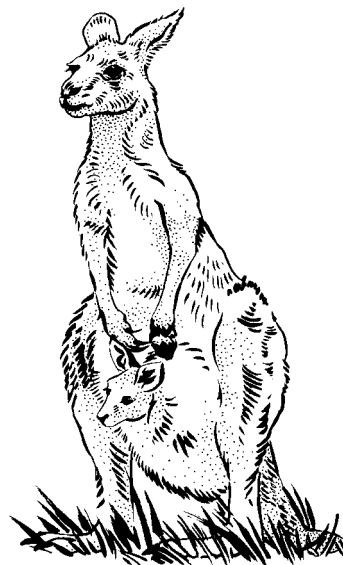
Park management aims to avoid damage to fragile habitat and interference to animals through the placement and maintenance of gates and fences, scientific research, and minimisation of publicity concerning the penguin colonies.

Pest animals and domestic pets

A significant number of tourists on the Great Ocean Road travel with their pets. Pets are permitted in cars on roads and car parks at major visitor sites.

Feral cats, and cats from farms and the local townships, are a potential threat to the small mammal, bird and reptile populations in the park.

Mammal populations in areas around Port Campbell are most at risk, including mobs of the Eastern Grey Kangaroo in the Water Reserve and the section of park east of the township.



Kangaroo and joey © MT

Foxes threaten small mammal and bird populations, especially Penguins, Mutton-birds and Terns. Foxes are widespread in the area but are seen only occasionally in the park.

Rabbits are widespread and relatively common, despite continuing control programs. Rabbits increase rapidly in good seasons and if not quickly controlled become a major threat to the park and nearby private property. Past rabbit grazing and burrowing has severely

damaged coastal vegetation and soils in areas now included in the park, destroying small mammal habitat.

Park management aims to control pest animals and control domestic pets. Emphasis is placed upon education of dog and cat owners to ensure they accept their responsibilities as an owner and know of the harm that can occur. If necessary, dog owners will be prosecuted when their dogs are found in the park. Rabbit control programs are run in cooperation with adjacent landowners.

Resource sheet 22d

22d. Fire management in the park

Fire management involves:

- protection of the park and surrounding areas from damage by fire, and
- the use of fire to maintain vegetation types and habitat for particular species.

Prior to the establishment of the park fires were frequently lit, especially on the coastal plain, to improve grazing or to protect farms in the area. The frequent fires caused substantial change to some vegetation types. Since the park was proclaimed in 1964 wildfires have occurred

less frequently. A number have been deliberately lit and very occasionally, lightning is the cause of wildfire.

The maintenance of heath communities and rare plants such as Clover Glycine and Metallic Sun Orchid depends upon regular burns. Where possible, low intensity fires in autumn are undertaken. These are done in such a way to create a mosaic of vegetation of different ages across the park, to provide habitat for the different animals that live in young, middle-aged and old heath vegetation.

Resource sheet 22e

22e. Visual resources management in the park

The park's landscape and visual aspects are the most important features for visitors. It is essential that they be protected.

Most works disturbing the natural environment are very obvious to visitors. These include clearings, disused gravel pits, disused road alignments, the Rifle Range, firebreaks, planted and cleared areas, and unnaturally eroding areas.

Good access routes and recreational facilities are important for the welfare and enjoyment of visitors. While some additions will be necessary, any new facilities and roads must be designed to minimise visual impacts. This can be achieved by the careful selection and siting of facilities and the use of an appropriate design to suit the location.

22f. Geology and erosion management in the park

This coastal park is fragile. Natural weathering processes from rainwater as well as the relentless wave action on the cliff face are progressively weakening the soft limestone cliffs. Periodically large slabs of rock collapse into the sea, often with little warning.

The existing coastal facilities present a number of soil management problems. Many sealed roads and car parks were poorly located because their prime aim was to serve the needs of visitors. Most car parks are originally located close to the cliffs. Run-off from sealed surfaces considerably increases the rate of soil

erosion. At many sites some visitors do not keep to the walking tracks provided, causing trampling, loss of vegetation and soil compaction. Barriers have been carefully sited to discourage visitors from walking off track.

Tracks on clayey soils are generally unsuitable for wet weather use. A few visitors ignore the 'Dry Weather Only' signs and drive on the wet tracks, deeply rutting the surface. In places vehicles driven off the track to avoid rough sections have damaged soils and vegetation. At some sites the highly erodible cliff top soils have been damaged by vehicles driving beyond the end of the formed tracks.

Resource sheet 22g

22g. Historical and cultural heritage management in the park

Known Indigenous culture sites in the park include shell middens and the steps cut into the soft limestone cliffs. The Aboriginal Heritage Unit (formerly Victorian Archeological Survey) has recorded some archaeological sites (VAS, 1981).

Park management aims to avoid disturbing sites with evidence of Indigenous occupation. They also encourage research, particularly with VAS to identify and protect existing and further sites of Indigenous occupation.

The wrecks and relics of the Loch Ard and Schomberg have been declared Historic and are protected under the provisions of the Commonwealth Historic Shipwrecks Act. Under this Act divers finding shipwrecks or relics have to notify the authorities.

Resource sheet 22h

22h. Voluntary assistance

Supporters of national parks and volunteers make valuable contributions in finances and labour towards the protection, conservation, maintenance and development of parks. Conservation Volunteers Australia (formerly called Australian Trust for Conservation Volunteers) as well as other local environmental groups have assisted with revegetation works in Port Campbell National Park.

Port Campbell National Park has a Friends group that is actively involved in the park. The Friends facilitate the use of volunteers in projects to protect, conserve, maintain and develop the park. It also requests funding to assist major developments in the park.

22i. Other management issues in the park

Unauthorised uses of the park

Unauthorised uses include the dumping of rubbish and the presence of domestic pets, particularly dogs. Some visitors also use parts of the park as a toilet where there is no toilet block provided at a site. This problem is also linked with that of people sleeping overnight in their cars, usually in carpark areas of less frequented sites.

Port Campbell Rifle Range

The Port Campbell Rifle Range is found on the coastal strip otherwise included in the Port Campbell National Park. It is leased to the Commonwealth and used by the Port Campbell Rifle Club.

Shooting on the range constrains the planning of activities in adjacent sections of the park which would otherwise have considerable potential for visitor activities. However an advantage is that the site is regularly maintained as a firebreak. The regular slashing also encourages the growth of a number of orchid species including the rare Metallic Sun-orchid. On average the rifle range is used about two or three times a year, hence the warning flag is rarely flying.

Stone extraction and management

Certain road making materials are difficult to find in the Port Campbell area however stone and gravel extraction activities usually have a negative impact on landscape values.

In the past, small amounts were extracted from many sites scattered along the coastal strip and many disused sites are now located within the boundaries of the park. Currently limestone gravel is being taken from several pits on road reserves and private property adjacent to the park. Not only are these activities highly visible, some travellers consider these sites to be part of the park.

Road construction and management

Access to all major visitor sites in the park is gained from the Great Ocean Road. Roadside conditions along the Great Ocean Road tend to dominate initial impressions of the area and the park and can have a substantial impact on conservation values.

Sections of the roadsides are unsightly for various reasons including roadside gravel stacks and maintenance operations.

Port Campbell township and nearby areas

Port Campbell National Park includes parts of the township such as Port Campbell Creek estuary and banks, coastal areas and most of the section outside the Port Campbell Creek valley to the west. There has been increased pressure for fire protection works to protect residential development and certain recreational facilities on public land.

The Port Campbell Consultative Committee was established in 1993, made up of representatives from the Progress Association, tourist groups, the Shire and Surf life saving club. This group allows for a coordinated and informed approach to local township issues.

Similar issues exist at Peterborough and Princetown, townships that abut the west and east edges of the park.

Because these towns border onto the park, local planning authorities and the park's managers need to cooperate to preserve the landscape of the park and surrounding areas.