

Mount Remarkable National Park Summit Hike



Healthy Parks
Healthy People



Government
of South Australia



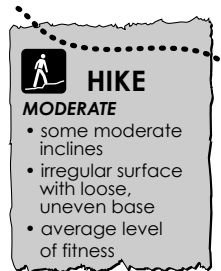
Mount Remarkable Summit Hike

Mount Remarkable summit lies towards the southern end of a long north-south hill referred to as the Mount Remarkable Range. It is easily identifiable in the landscape from north, south and east and is characterised by long scree slopes on the eastern side. The walking trail climbs the steep eastern slope on a gentle grade. There are excellent views across Willochra Plain from vantage points along the walk.

Just below the summit, there are views to the west across Spencer Gulf.

Apart from the visual delights of distant vistas, there are sounds and scents - birds to listen for include kookaburras and a variety of parrots, and after rain or on warm days the smell of curry bush and eucalyptus oil. There are always inquisitive ants to watch, as well as lizards such as dragons, skinks and goannas.

Around Melrose, river red gums dominate the creek banks providing habitat for many bird species including corellas, galahs and parrots.



Estimated Time* -

5 hours return

Distance -

12.2 km return

* Time is generously estimated for an average walking speed of 3 km per hour - allow extra time for resting and sightseeing.

Access

From Melrose township. This hike, which starts on private land by courtesy of the owner, is mostly within Mount Remarkable National Park. It begins at the War Memorial Monument, which can be reached by a road that winds up behind the Melrose Caravan Park campground. Distance markers are placed every 200 metres along the trail.

Altitude Range

390 m (Monument) to

960 m (Mount Remarkable summit)

Some glimpses of the past

Mount Remarkable lies within the area of the Nukunu Aboriginal Tribe. The Nukunu name for the mountain was Wangyarra - 'arra' meaning running water.

In 1840 Edward John Eyre gave the mountain its current name. He wrote on 27 June 1840,

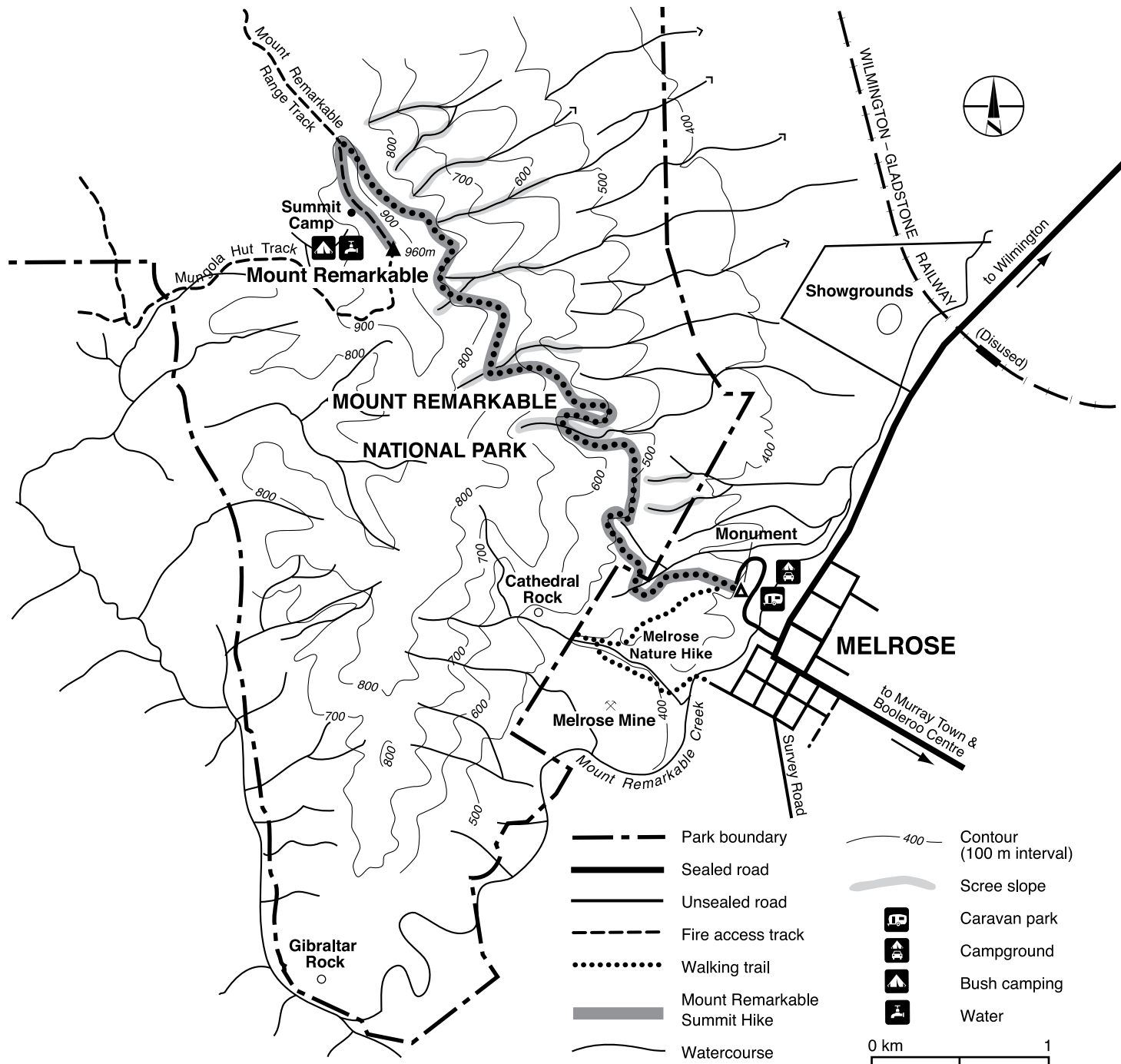
'From our present encampment a very high pointed hill was visible far to the north-north-west. This, from the lofty way it towered above the surrounding hills, I named Mount Remarkable.'

The town of Melrose grew from a police depot, established at the foot of Mount Remarkable in 1848, and the empty promise of copper in the nearby hills. Proclaimed a town in 1853, it is the oldest in the Flinders Ranges and became the business centre of what was then the 'Far North'.

Following settlement, timber cutting was a significant activity on the wooded slopes. By the 1960s the National Trust was eager to see some of the remaining woodland permanently protected. The Mount Remarkable Wildlife Reserve was dedicated in March 1966, later to become part of a larger Mount Remarkable National Park.

The monument at the start of the hike was built to commemorate those killed in the First World War. The white column is a notable landmark.

The National Trust has prepared a leaflet describing a heritage walk which includes the Police Station/ Courthouse (now a museum) and Jacka's Brewery.



Hike Notes

The views

On the hike to the summit there is ample opportunity to take in the magnificent view. Some of the features you may see are - starting in the north -

- the sawtooth hills of the Yappala Range and the hogback of the Yourambulla Range near Hawker
- the Horseshoe Range characterised by twin peaks at the entrance to a small pond
- the flat Willochra Plain crossed by Willochra Creek, with the small town of Booleroo Centre and its silos in the distance.

At some locations and on clear days to the south you may see The Bluff (with communications towers) which overlooks Port Pirie.

On the summit ridge there are views, glimpsed through the trees, of the western ranges of Mount Remarkable National Park, Spencer Gulf and the low hills on northern Eyre Peninsula.

Distance in kilometres from Monument Trailhead

- 0.0 Trailhead - War Memorial Monument. Views over the historic town of Melrose.
- 0.1 Track junction; bear right.
- 0.4 -
- 1.4 There are a number of fine gravelly patches which are the nests of meat ants (*see Ants on Mount Remarkable*); these fast-moving and inquisitive ants will nip if you interfere with them.
- 1.0 Mistletoe on low side of track, in small tree; many trees contain bunches of this golden pendulous foliage with red flowers. It is a parasitic plant; the berries attract mistletoebirds which spread the plant to other trees.

1.4 View over the Willochra Plain and showing the roads of the subdivisions. The first Government surveyor to work in the area was H C Rawnsley who fixed the position of prominent features so that pastoralists could define their runs. He first climbed Mount Remarkable on 17 March 1851. He applied to the Surveyor General for a special allowance to cover the extreme wear on his boots - the request was refused!

The big rock you walk past is a rough piece of breccia originating in a diapir (see *Story of the mountain*), quite different from the Rhynie Sandstone of the scree you will soon see.

1.6 A large sugar gum stump; it must have been centuries old, before being killed by fire. Nearby is the bright green native cherry and grass tree in a mixed woodland of South Australian blue gum and sugar gum,

1.8 Porcupine grass - this grass was deliberately burnt during times of drought to encourage new, soft shoots for stock feed.

2.0 -

2.2 Scree patches have developed as fractures (joints) deep within the rock; as these became exposed by erosion, the rock fragments separated resulting in huge slopes of loose rock. Plants of interest on the scree are scented groundsel and rusty pods. Velvet daisy-bush occurs here and in other locations.

3.5 Melrose Showground visible from main trail, as are the silos on the outskirts of the town.

3.7 Now, just over half way to the top, you may have noticed changes since you began the hike in the peppermint and grey box woodland.

The eucalypts here are long-leaved box and sugar gum, there are fewer grasses and more shrubs, while the birdlife consists of smaller bush birds such as honeyeaters, fairy-wrens, thornbills, silvereyes, grey fantails and perhaps a scarlet robin. Larger birds include the Adelaide rosella and grey Shrike-thrush.

4.2 Scree slope, with the purple-flowered rusty pods near the post here and at 4.4.

On 3 July 1980 a light aircraft heading for Adelaide crashed into Mount Remarkable.

A search located the wreckage here the following day. There were no survivors.

4.6 Hike continues over large scree - sheets of coarse boulders. Some rocks show clear layers of ilmenite, a black mineral, which is a source of titanium. A good place to look for dragons, skinks and spiders.

5.4 Trail joins a fire access track and the walk continues along this to the summit.

5.8 Mount Remarkable Summit Camp. A small water tank is provided for walkers camping at this site. Permits need to be obtained from DENR.

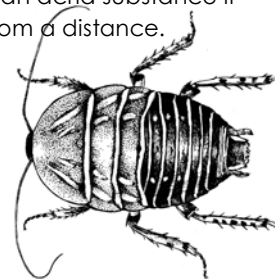
6.1 Summit. The trig at the summit was a major reference point in the survey of the area, but the surveyors' view is now obscured by the long-leaved box trees which have regrown since the survey.

A colourful cockroach

The red-brown cockroaches in your kitchen have bad press, but you may see one of these delightful native cockroaches on your walk. It is found across the wetter parts of the state and lives under leaf litter, foraging for morsels of food there. Egg cases are buried in holes which they dig.

This attractive cockroach, called Mitchell's diurnal cockroach (*Polyzosteria mitchelli*), is active during the day, and may exude an acrid substance if picked up. So best look from a distance.

Mitchell's diurnal
cockroach
(*Polyzosteria mitchelli*)



Ants on Mount Remarkable

There are at least twenty species of ant on Mount Remarkable. Most of them live on carbohydrate from nectar and starch, but protein is collected to feed growing larvae by preying on other insects. Primitive ants (eg inch ants) sting the prey to sedate it; more advanced ants, including meat ants, spray a sedative over the prey from an organ at the hind end of their body.

The meat ant (*Iridomyrmex purpureus*) is the most common ant on Mount Remarkable. It is up to 10 mm long with a reddish head and thorax, a dark abdomen and a bluish iridescence overall. These ants construct slightly raised nests which may extend over 1-2 square metres.

The surface is covered by gravel which the ants either transport to the site or bring to the surface when excavating galleries below the soil.

Meat ant nests have several entrances and the lively ants will pour out of these if you loiter too long in their vicinity. A nest may be very old (hundreds of years) and should not be broken into.

All the ants you will see are workers (sterile females) and they are organised to perform various functions. Some stay in the nest to tend the queen and brood. Other ants are foragers, some specifically foraging in trees and shrubs, while others work over the ground surface, returning to the same area daily. Other workers defend the colony, which may contain a number of nests.

The biomass (living material) of meat ants contained in a nest may be equivalent to the weight of half a sheep.

Meat ants have a mild bite, which is not poisonous.



Story of the mountain

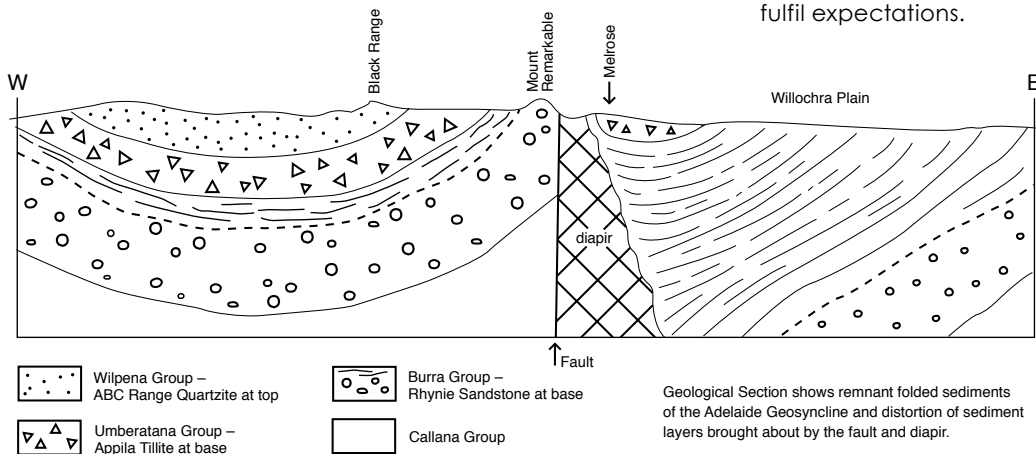
Origins

About 800 million years ago a deep trough, known as the Adelaide Geosyncline, formed along a weakness in the earth's crust. This gradually filled, with mainly marine sediments thousands of metres deep.

The trough was later uplifted to form an enormous mountain chain which stretched from the present Flinders Ranges through the Mount Lofty Ranges into Antarctica, all then part of the ancient continent of Gondwana.

Since then, alternating periods of erosion and uplift have occurred. The present Mount Remarkable area was uplifted about 50-60 million years ago.

Once about twice its present height, Mount Remarkable is a long, relatively narrow ridge of resistant quartzite which once formed its core. One of the oldest sediments deposited within the Adelaide Geosyncline and known as the Rhynie Sandstone, this quartzite has withstood the erosion that has reduced the adjacent Willochra Plain and Alligator Gorge to their present levels. To the east the Rhynie Sandstone is buried deeply beneath younger sediments of the Adelaide Geosyncline.



What you can see

Several massive faces of quartzite appear along the line of the faults which determine the shape of the mountain. On the eastern side, Cathedral Rock rises 100 metres, and to the south, Gibraltar Rock towers 60 metres above Mount Remarkable Creek.

The most striking feature of Mount Remarkable is the scree which covers many of the slopes, particularly on the steeper eastern side. It consists of angular rock fragments which have fractured off the quartzite. This was brought about by weathering, especially by cold and heat. These fragments gather on the slopes until they become unstable and gradually work their way downslope.

Some rock found between the mountain and the township of Melrose puzzled early geologists. It consists of crushed and distorted limestone rocks containing a jumble of many other rock types of various ages. It is now recognised as a 'diapir' which is the result of the upward movement of deeply buried rocks of low density which have forced their way through the overlying rocks. Outcrops of this material occur on the side of the mountain and can be seen along the trail.

Copper minerals are known to be associated with diapiric zones (eg. Blinman Mine) but the Mount Remarkable Copper Mining Company's Melrose mine (1846) failed as traces of copper did not fulfil expectations.

About the plants

Mount Remarkable is clothed with a dry sclerophyll (hard leaved) forest. Spectacular falls of scree (fragmented rock) provide breaks in the forest cover.

A woodland at the foot of the hill includes mallee box, grey box and peppermint box. White box, which occurs occasionally, is confined to this district in South Australia and is more widely distributed in Victoria, New South Wales and Queensland. Interspersed are thickets of the golden wattle which appeared as dense regrowth following a bushfire in 1988. This regrowth is now beginning to die as the wattles are relatively short-lived. Further up the track the box woodland is replaced by South Australian blue gum and sugar gum and finally by stands of long-leaved box and sugar gum. Occasionally there are dark coloured drooping sheoaks and bright green native cherries, both of which appear 'leafless'.

The scree slopes are habitat for several unusual plants which grow where soil has collected. These include rusty pods (which occurs mainly in New South Wales and Queensland), scented groundsel (normally a coastal plant), the rather drooping rusty bush-pea (a plant of more southern climates), velvet daisy-bush, pomax and logania (all characteristic of well-drained rocky areas). The notes point out where you may see some of these.



There is a great variety of other flowering shrubs, herbaceous and bulbous plants which occur along the trail. A list of commonly seen plants is provided.

Velvet daisy-bush
(*Olearia pannosa*)

Trees

Peppermint box (*Eucalyptus odorata*) mallee form to 12 m, narrow leaves, thick flaking fibrous bark

Grey box (*Eucalyptus microcarpa*) tree to 20 m, or mallee, with fine grey fibrous bark

Mallee box (*Eucalyptus porosa*) tree or mallee to 14 m, with rough brown bark

White box (*Eucalyptus albens*) tree to 20 m, light grey fissured bark, bleaching paler

Long-leaved box (*Eucalyptus goniocalyx*) tree to 15 m, with long dark green leaves

South Australian blue gum (*Eucalyptus leucoxydon*) tree to 20 m, smooth grey bark flaking to cream patches

Sugar gum (*Eucalyptus cladocalyx*) tall tree to 25 m, smooth bark off-white, grey-buff patches, canopy characterised by clumps of foliage

River red gum (*Eucalyptus camaldulensis*) large tree to 40 m growing in creek lines, smooth bark, grey, cream

Golden wattle (*Acacia pycnantha*) small tree to 4 m, golden balls of flowers in spring

Drooping sheoak (*Allocasuarina verticillata*) tree to 9 m, canopy of pendulous 'leafless' branchlets

Native cherry (*Exocarpus cupressiformis*) tree to 6 m, dense canopy of bright green 'leafless' branchlets



Long-leaved Box
(*Eucalyptus goniocalyx*)



Mallee Box
(*Eucalyptus porosa*)

South Australian Blue Gum
(*Eucalyptus leucoxydon*)

Sugar Gum
(*Eucalyptus cladocalyx*)

Shrubs

Christmas bush (*Bursaria spinosa*) white flowers in summer

Logania (*Logania vaginalis*) green shiny leaves, white flower heads in spring

Bitter-pea (*Daviesia leptophylla*) yellow pea flowers with red marking

Curry bush (*Cassinia laevis*) white flowerheads in summer

Sticky cassinia (*Cassinia uncata*) pale cream flower heads in summer

Velvet daisy-bush (*Olearia pannosa*) large white daisies in spring

Scented bush-pea (*Pultenaea hispidula*) drooping foliage, yellow flowers in spring

Scented groundsel (*Senecio odoratus*) yellow flowers in spring

Rusty pods (*Hovea purpurea*) violet pea flowers in spring

Twiggy bush-pea (*Pultenaea largiflorens*) yellow-and-red pea flowers in spring

Cockies tongue (*Templetonia retusa*) red pea flowers in spring

Fringe myrtle (*Calytrix tetragona*) pink/white star-flowers in spring

Guinea flower (*Hibbertia exutiacies*) yellow flowers in spring

Lavender grevillea (*Grevillea lavandulacea*) red spider flowers in late winter/spring

Finger flower (*Cheiranthra alternifolia*) deep-blue flowers in spring

Herbs and bulbous plants

Early Nancy (*Wurmbea dioica*) white red-striped flowers in spring

Native leek (*Bulbine bulbosa*) yellow flowers in spring

Chocolate lily (*Arthropodium strictum*) violet flowers in spring

Bluebell (*Wahlenbergia stricta*) blue flowers in spring - summer

Orchids (late winter to mid-spring)

Pink fingers (*Caladenia carnea*) pink petals, flowering stem without hairs unlike Pink Fairies (*C. latifolia*).

Scented sun orchid (*Thelymitra nuda*) blue or white flowers

Blue fairies (*Caladenia deformis cyanicula*) short stem with single blue flower

Spider orchid (*Caladenia patersonii*) greenish filamentous petals

Daddy-long-legs (*Caladenia filamentosa*) long red filamentous petals

Acknowledgements

Thanks are due to members of the following organisations for preparing the information in this brochure:

- Field Geology Club of South Australia
- Staff and volunteers of the South Australian Museum
- Walking South Australia
- Walking Trails Support Group



Walk Safely

Be prepared when bushwalking:

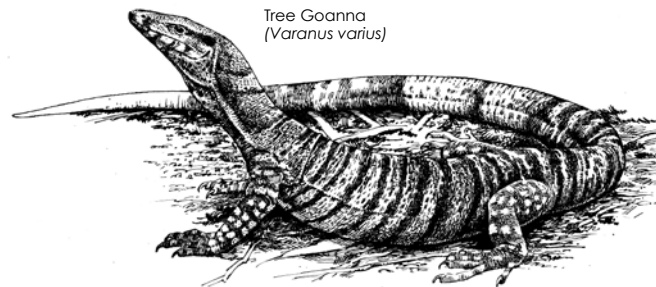
- Wear sturdy shoes, hat and sunscreen.
- Carry sufficient food and drinking water. Allow 4 litres of water per person per day.
- Do not rely on tanks or creeks in the park for drinking water.
- Keep to the defined walking trail.
- Inform a responsible person of your proposed route and expected time of return.
- Weather conditions can change quickly, ensure you have appropriate wet-weather clothing.

The National Parks Code

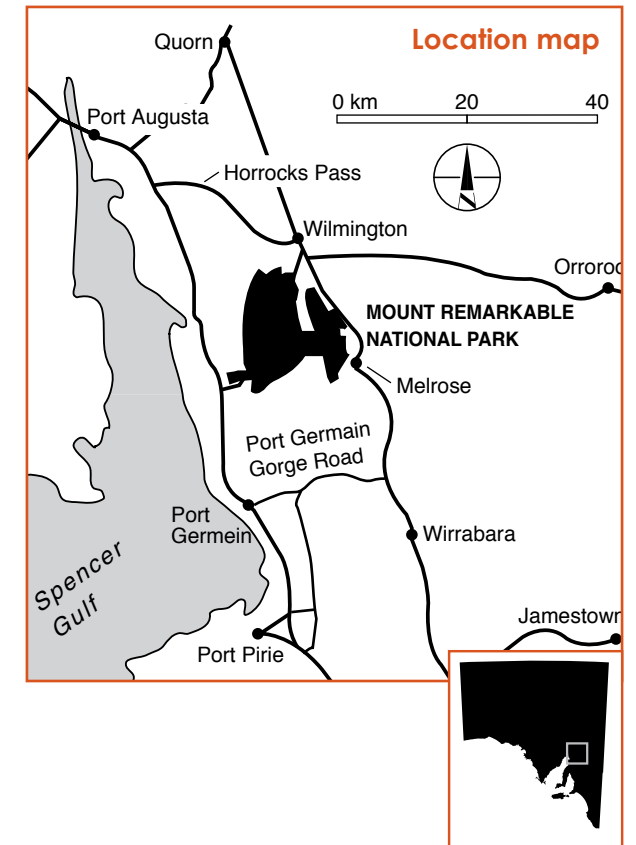
Help protect your national parks by following these guidelines:

- Leave your pets at home.
- Take your rubbish with you.
- Observe fire restrictions, usually 1 November to 30 April. Check CFS hotline 1300 362 361.
- Conserve native habitat by using liquid fuel or gas stoves. Solid fuel fires are prohibited.
- Camp only in designated areas.
- Respect geological and heritage sites.
- Keep our wildlife wild. Do not feed or disturb animals, or remove native plants.
- Keep to defined vehicle tracks and walking trails.
- Be considerate of other park users.
- Firearms and hunting are not permitted.
- Bury toilet waste away from watercourses.

Thank you for leaving the bush in its natural state for the enjoyment of others.



Tree Goanna
(*Varanus varius*)



For further information contact:

Department of Environment and Natural Resources
Mount Remarkable National Park
PMB 7 Mambray Creek
via PORT PIRIE 5540
Phone (08) 8634 7068 Fax (08) 8634 7085
Email mrnp@sa.gov.au

Phone Information line (08) 8204 1910
Email denrinformation@sa.gov.au
Website www.parks.sa.gov.au

Cover: Rusty pods (*Hovea purpurea*)
ISBN: 1 921238 88 7

© Department of Environment and Natural Resources
June 2010 • FIS 90757 • Printed on recycled paper