

Mount Brown Conservation Park Summit Hike



Healthy Parks
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Mount Brown Summit Hike

The wooded slopes of Mount Brown provide plenty of interest for bushwalkers, from distant landscapes to closer views of plants, birds and other animals. This hike is of special interest to geologists as the trail passes through various rock formations. The footslopes to the west of the trail are of particular interest, as the rock in Waukarie Creek contains evidence of a kilometre-deep canyon formed some 600 million years ago. The canyon cuts down into the coarse, heavy-mineral layered sandstones of the ABC Range Quartzite. Sediments of the Wonoka Formation (sand, silt, limestone, shale and calcareous siltstone) fill the canyon and extend beyond it to comprise the slopes crossed by the trail. Similar canyons occur elsewhere in the Flinders Ranges.

The rather bare shale and limestone slopes of the Wonoka Formation are quickly crossed before entering the Grey Box woodland on the quartzite for a gradual climb to the summit – a notable spot in South Australia's history.

Here, there is a commemorative lookout for Robert Brown, naturalist on Matthew Flinders' voyage of exploration on *HMS Investigator*. The hike returns to Olive Grove down a similar ridge to the east.

HIKE

MODERATE

- some moderate inclines
- irregular surface with loose, uneven base
- average level of fitness

There are two hikes (no steep sections) to choose from:

- Loop hike including the spur trail to Mount Brown
15 km loop – *7.5 hours return
- Return hike to Mount Brown
11.6 km – *6 hours return

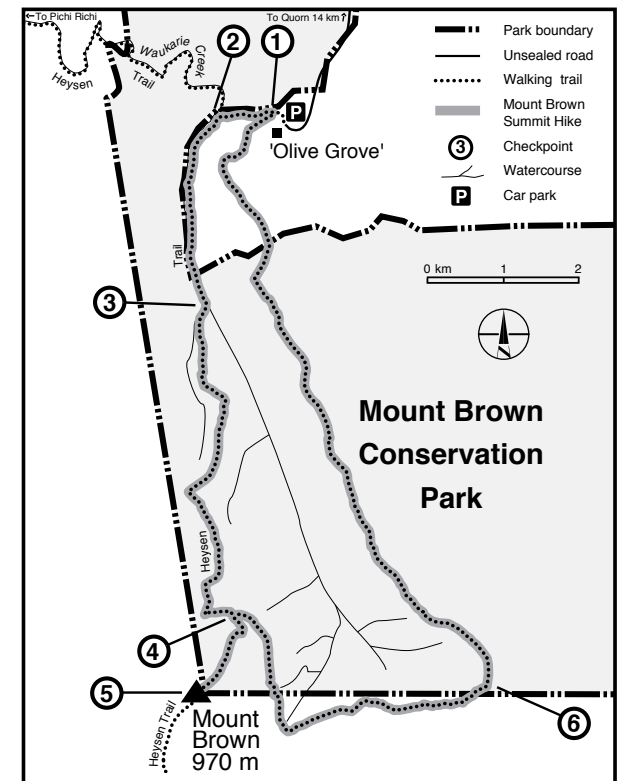
* Time is generously estimated from an average walking speed of 2 km per hour – allow extra time for resting and sightseeing.

Access

Mount Brown Conservation Park can be accessed from Quorn township. At the Quorn Mill, travel south following the signs to Richman Valley and Waukarie Falls. Drive to the southern end of Richman Valley Road, a total distance of about 14 km. The hike starts at the Olive Grove Trailhead, situated 200 m from Olive Grove gate (map ref. 193 037).

From the Olive Grove Trailhead, walk 50 m down the trail to Checkpoint 1 near Waukarie Falls, where distance measurements start.

Distance markers are placed every 200 metres along the trail.



For more map detail see 1:50 000 scale Topographic Map sheets Quorn 6533-3 and Wilmington 6532-4

Altitude range

410 m (trailhead) to 970 m (Mount Brown summit)

Distance in Kilometres from Checkpoint 1

0.0

Checkpoint 1 – near Waukarie Falls
(map ref. 193 038)

There is often water in Waukarie Creek; an old tank and mill indicate the approximate site of a spring. Big river red gums, sedges and cumbungi (bulrush) take advantage of the moisture in the creek bed. Along the banks of the creek is woodland typical of quartzite hills consisting of white cypress-pine, grey box, drooping sheoak, with shrubs of Christmas bush, narrow-leaved hop-bush, sennas and occasional showy speedwell. Despite a history of sheep grazing, native kangaroo grass occurs on these slopes.



Kangaroo grass
(*Themeda triandra*)

0.4

Checkpoint 2 – tributary creek enters Waukarie Creek from the south (left) - (map ref. 189 038)

Leave Waukarie Creek and walk up the tributary. Heysen Trail (red markers) joins here. This tributary is located on a fault, which the creek follows up to a point east of Mount Brown at 5.9 km.

0.57

A timber-lined well has been fenced off. With a well and spring not far away, this area would always have been useful for stock. Pale coloured soil indicates that we are now on Wonoka Formation which, as explained earlier, is derived from carbonate sediments laid down in deep oceans.

0.8

The route follows an old woodcutters track. Very old stumps remain of trees that have been cut.

1.0

The characteristic vegetation of the Wonoka Formation includes the round, bushy wallowa (a wattle), dryland tea-tree, mallee, and shrubby Twinleaf. In the creek and on the quartzite slope opposite, are river red gums, curry bush with white flowerheads, narrow-leaved hop-bush, with fragrant saltbush usually under trees. Patches of the small native creeper, Tom Thumb, (often planted in lawns) also occur.

2.0

Checkpoint 3 – small gully enters from west
(map ref. 188 023)

Follow round the slope of the hill to the west.

2.25

Compared with the quartzite ridge to the east, the Wonoka Formation here, as elsewhere in the Flinders, has few large trees away from creeks. On this slope are spear-grass, lemon-scented grass, fanflowers and wallowa as well as many introduced weeds.

2.8

Grey Box woodland starts where the Wonoka Formation begins to peter out and is replaced by ABC Range Quartzite.

3.0

The woodland which clothes the quartzite includes Grey box, drooping sheoak and Christmas bush.

Below the trees are many shrubs and herbs including thorn wattle, guinea-flowers, narrow-leaved hop-bush, curry bush with grey-green foliage, sword rush, porcupine grass, spear-grass, Irongrass and native cranberry.



Narrow-leaved Hop-bush
(*Dodonaea viscosa* var. *angustissima*)

3.6

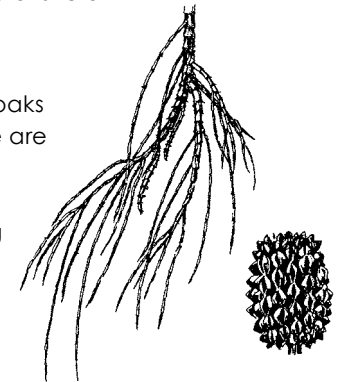
With increasing altitude the vegetation changes. Other plants to notice are sugar gums, gorse bitter-pea, twiggy bush-pea, the uncommon coil-pod wattle and woolly goodenia.

4.0

The slopes of Mount Brown consist of boulders or scree. Compression of the original sediments caused the development of hidden fractures (joints) deep within the rock, but as weathering proceeded and these became exposed, blocks separated along the joints resulting in scree slopes. Some rocks clearly show the bedding layers (picked out by dark minerals) and some have pebble-sized pock marks where balls, probably of clay, have been weathered away. These are characteristic of ABC Range Quartzite.

4.1

Stands of drooping sheoaks such as those near here are more or less even-sized, suggesting that they all grew together following a fire. Sheoaks are fire sensitive and frequent fires do not allow them to grow into large trees.



Drooping sheoak
(*Allocasuarina verticillata*)

4.76

Checkpoint 4 – spur track to Mount Brown summit
(map ref. 109 001)

Follow distance markers up to the summit; it is **2 km return** to this spot.

Between here and the summit there are rough outcrops of quartzite, with plenty of grass-trees, increasing amounts of long-leaved box growing as a mallee, tree violet, clumps of spyridium and native cherries.

5.8

Checkpoint 5 – the summit (970 m)

(map ref. 188 993)

The summit of Mount Brown carries a trigonometrical station. A lookout has been erected over this to honour naturalist Robert Brown who, with a party of others from Matthew Flinders' *Investigator*, climbed Mount Brown on 10 March 1802. This is a significant heritage site for South Australia and information panels on the platform give the history of the site and surrounding country. Solar-powered radio installations have been installed and there are two other plaques to read.

The long-leaved box trees have been cut from time to time for survey purposes and fences. Also of interest are a few plants of scented groundsel, a shrub with bright yellow daisy-flowers in spring, which normally grows on southern coasts but is isolated inland both here and on Mount Remarkable.

The view includes (all bearings are magnetic):

Wilpena Pound	27°, 115 km
Horseshoe Range (Moockra Tower)	65°, 39 km
Mount Remarkable	149°, 36 km
Point Bonython	196°, 58 km
Whyalla	210°, 71 km
Devils Peak (below horizon)	344°, 10 km
The Dutchmans Stern	344°, 22 km
Richman Valley, Quorn	360°, 8 km, 18 km
Coonatto Creek and Hammond	86°, 30 km
Watts Sugarloaf in the Black Jack Range	27°, 60 km

Return to Checkpoint 4; at this point you can either return to Olive Grove the way you came or continue around the loop; distances continue as from Olive Grove Trailhead.

4.8

The route traces east round the foot of Mount Brown. The shrubs and grass-trees under the grey box disappear and porcupine grass becomes dominant.

5.9

This saddle is at the head of the tributary to Waukarie Creek that we entered at Checkpoint 2 and is on the same faultline. Wind, past fire regimes and grazing have probably ensured that this area remains free of shrubs and trees. This location is composed of softer siltstones. Here, fine sediments were deposited in a calmer, deep-water environment, rather than in estuaries and deltas like most of the ABC Range Quartzite. The trail continues across a slope of porcupine grass.

6.0

From this point, there are good views of Richman Valley and Quorn to the north, and beyond to the sawtooth Yappala Range near Hawker, the Elder Range, Rawnsley Bluff and Wilpena Pound.

7.3

On the ridge there are fine views south across Willochra Plain to Wilmington and Mount Remarkable.

7.5

Checkpoint 6 – ridge junction; change in direction (map ref. 209 996)

There are more broad views north and east across Willochra Plain. Look out for ridge-soaring wedge-tailed eagles. Proceed north down the ridge following the markers.

7.6

The shrubby understorey on this slope gradually opens up to more grassy areas. Included amongst the shrubs here is a different curry bush (or sticky cassinia) which has compact heads of cream flowers. There are views of by now familiar features – Mount Brown (west), Moockra Tower (east-north-east).

10.4

Views between the trees – north up Richman Valley, west to the Northern Power Station, and north-west to Tent Hill beyond Port Augusta on clear days.

Richman Valley was part of the pastoral holding originally taken up by John Richman in the 1860s. His head station was 'Itali Itali'; off the Quorn-Wilmington Road. He drove his sheep to Port Augusta via Waukarie Creek and Pichi Richi Pass.

11.0

Views – north up Richman Valley, to Devils Peak and the Dutchmans Stern range.

12.4

Grassland of porcupine grass and kangaroo grass.

13.0

Checkpoint 1 – near Waukarie Falls

The Robert Brown lookout was erected as part of the Encounter 2002 celebrations, an initiative of the South Australian Government through Australian Major Events, a division of the South Australian Tourism Commission. This celebrated the bicentenary of the voyages of exploration by the British, under the command of Matthew Flinders, and the French under the command of Nicolas Baudin and the meeting between the two commanders at Encounter Bay, south of Adelaide. Principal sponsors for the lookout were Encounter 2002, National Parks and Wildlife South Australia and the Royal Geographical Society of South Australia.



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.

Mount Brown Plant List

Christmas bush (*Bursaria spinosa*) medium shrub, white flowers in summer

Coil-pod wattle (*Acacia pravifolia*) shrub to 1 m, small dark green triangular leaves in winter

Cumbungi (bulrush) (*Typha domingensis*) rush to 2 m, brown cylindrical flower spikes

Curry bush (*Cassinia laevis*) loose clusters of tiny white flowers, late summer

Curry bush (sticky cassinia) (*Cassinia uncata*) compact heads of tiny cream flowers, late summer

Drooping sheoak (*Allocasuarina verticillata*) tree to 9 m, pendulous leafless branches

Dryland tea-tree (*Melaleuca lanceolata*) tall shrub, dense canopy, white flowers in summer

Fanflowers (*Scaevola albida* and *S. humilis*) blue flowers in spring and early summer

Fragrant saltbush (*Rhagodia parabolica*) greyish bush, insignificant flowers, at any time

Golden wattle (*Acacia pycnantha*) golden balls of flowers in spring

Gorse bitter-pea (*Daviesia ulicifolia*) shrub over 1 m, flowers yellow and dark red in spring

Grass tree see Mount Lofty Grass-tree

Grey box (*Eucalyptus microcarpa*) large tree with grey, fibrous bark

Guinea-flower (*Hibbertia exutiacies*) low shrub, yellow flowers in winter/spring

Irongrass (*Lomandra densiflora*) clumps of tough, pale-green leaves

Kangaroo grass (*Themeda triandra*) 0.3 m, rusty, nodding flower heads in summer

Kangaroo apple (*Solanum simile*) shrub to 2 m, dark shiny leaves and blue flowers

Lemon-scented grass (*Cymbopogon ambiguus*) grey-green leaves, lemon-scented when bruised

Long-leaved box (*Eucalyptus gonicalyx*) long dark green strap-shaped leaves, to 15 m, yellowish-grey, fibrous bark

Mount Lofty grass-tree (*Xanthorrhoea quadrangulata*) shrub to 2 m, crown of long spiky leaves, 1.5 m flower head with cream florets in late summer

Narrow-leaved hop-bush (*Dodonaea viscosa* var *angustissima*) bronze/purple hops in spring

Native cherry (*Exocarpus cupressiformis*) dense canopy of bright green 'leafless' branchlets

Native cranberry (*Astroloma humifusum*) low shrub with red tubular flowers

Pale turpentine bush (*Beyeria lechenaultii*) pale green rounded shrub to 1.5 m

Porcupine grass (*Triodia irritans*) cushions of spiny leaves

River red gum (*Eucalyptus camaldulensis*) large tree to 20 m, dappled white and grey bark

Scented groundsel (*Senecio odoratus*) bright yellow daisy-flowers in spring

Sedges (mostly *Cyperus gymnocaulos*) grass-like, to 0.5 m, star-shaped flower heads

Silver senna (*Senna artemisioides*) shrub to 1.5 m, linear/broad leaflets yellow 'buttercup' flowers in late winter

Showy speedwell (*Derwentia decorosa*) low shrub, white flowers streaked mauve in spring

Shrubby twinleaf (*Zygophyllum aurantiacum*) low shrub, yellow flowers with four petals only

Spear-grasses (*Stipa* spp.) feathery flower heads in spring and early summer

Spyridium (*Spyridium phlebophyllum*) shrub to 1 m, flower heads small but surrounded by white woolly 'leaves'

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

Summer red mallee (*Eucalyptus socialis*) multi-stemmed tree to 10 m, smooth, pale grey bark

Sword rush (*Lepidosperma laterale*) broad-leaved 'rush' with dark brown flowers

Thorn wattle (*Acacia continua*) low shrub, golden balls of flowers in spring

Tom thumb (*Dichondra repens*) creeper, kidney-shaped leaves 5 mm across

Tree violet (*Hymenanthera dentata*) spiny shrub to 1.5 m, tiny, yellow flowers

Twiggy bush-pea (*Pultenaea largiflorens*) shrub to 1 m, small yellow and red pea flowers

Wallaby grass (*Danthonia* sp.) 0.1 to 0.2 m, white fluffy flower heads

Wallowa (*Acacia calamifolia*) balls of yellow flowers in spring

White cypress-pine (*Callitris glaucophylla*) cypress like tree to 15 m

Woolly goodenia (*Goodenia robusta*) herb with rosette of grey-green leaves, bright yellow flowers



Laughing kookaburra
(*Dacelo novaeguineae*)

Fire Danger Season

The Fire Danger Season usually extends from 1 November to 30 April. Check CFS Hotline 1300 362 261. The following regulations reduce the potential for bushfires and enhance visitor safety:

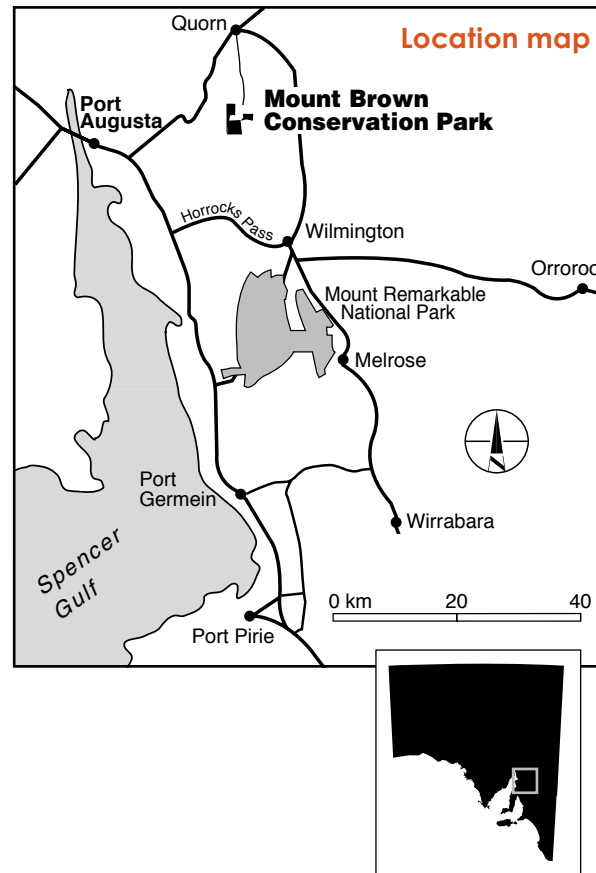
- Mount Brown Conservation Park is closed to visitors on Total Fire Ban Days in the Flinders District.
- Wood fires are not permitted in the park. Use liquid fuel or gas stoves only.

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.



For further information contact:

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FLINDERS RANGES BUSH WALKS

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