

Barossa Walks

Hale

1.3 km Track turns sharp right, but a lookout is to the left, from which you can see . . .

Devils Nose (Para Wirra)	275°
Williamstown suburbs	300°
South Para Dam wall	265°
Mt Gawler	225°
Mt Lofty	205°

The sandstone on which you are standing consisted originally of layers of sand deposited by a river on an alluvial fan (see introduction). Some of the original layers can now be seen as raised ridges on the rock surface.

Notice that the ridges are not parallel and run into each other. This effect is known as cross-bedding and is caused by layers of sediment being deposited at different angles by currents of variable direction. On some of the cleaner rock surfaces you can see black bands a few millimetres thick; these are made up of sand-sized grains of the mineral haematite washed down from rocks of the ancient escarpment and concentrated into layers by water currents. Sand wash on the track includes black haematite (very obvious after rain).

Return to the ridgetop track. The open scrub on either side is most attractive in spring with a great diversity of shrubs and orchids to be seen. There are also distant views of the South Para Reservoir.

1.0 km. The site of the Mt Crawford refractory clay



P. D. Canby

Southern Brown Bandicoot

mine can be seen ahead on the other side of the valley (due east). This mine was opened in 1914 as a source of refractory clay (fireclay) for the Broken Hill Associated Smelters Pty Ltd at Port Pirie. Such clay has high temperature uses in porcelain for spark plugs, and as a filler in paints and plasterboards.

Checkpoint H2 is at the junction with a fire track; turn north (left) and walk down to the gate at the bottom where ...

0.0 km. ... your car is parked.

PLANTS YOU MAY SEE ON THE WALK

Blue Pincushion *Brunonia australis* herb with blue pompom of tiny flowers on a tall hairy stem

Common Rice-flower *Pimelea humilis* shrub 0.5 m, with few stems and nodding cream flower heads

Downy Mintbush *Prostanthera behriana* tall shrub with aromatic leaves and masses of white/mauve flowers in spring

Finger Flower *Cheiranthra alternifolia* straggling shrub with large bright blue flowers; yellow anthers all on one side

Flame Heath *Astroloma conostephioides* shrub to 1m, red tubular flowers late winter-spring

Flinders Ranges Bottlebrush *Callistemon teretifolius* straggling shrub, narrow cylindrical leaves, red bottlebrush flowers in spring

Guinea Flowers *Hibbertia* spp. A number of species all with bright yellow flowers

Kangaroo Thorn *Acacia paradoxa* large straggling wattle with sharp thorns

Long-leaved Box *Eucalyptus goniocalyx* tree to 15 m with dark green strap shaped leaves, rough bark

Silver Banksia *Banksia marginata* large shrub or small tree, with yellow candle flowers

Messmate Stringybark *Eucalyptus obliqua* tree up to 40 m, stringy bark, barrel shaped fruit

Oyster Bay Pine *Callitris rhomboidea* slender cypress-like tree with sharp-angled cones

Native Currant *Acrotriche depressa* low bush with festoons of dark red fruit close to the ground in autumn

Red Parrot Pea *Dillwynia hispida* low straggling shrub with bright red/orange pea flowers

Tufted Grass-tree *Xanthorrhoea semiplana* crown of long tough leaves, generally without trunk

Walk is in a Conservation Park managed by the Department of Environment, Water and Natural Resources. It is presented here by the Walking Trails Support Group. www.walkingtrailssupportgroup.org.au

Interpretation is based on the Royal Geographical Society of South Australia's guidebook Exploring the Barossa available from Tanunda Visitor Information Centre.



Flinders Ranges Bottlebrush
Callistemon teretifolius

This short walk in Hale Conservation Park is best done in Spring when there are plenty of flowers and some water in the creek.*

The underlying rock is Aldgate sandstone, deposited about 800 million years ago as sand and pebbles in alluvial fans developing at the foot of an escarpment that lay to the west. This occurred within a huge depression known as the Adelaide Geosyncline. At this time a shallow sea lay to the east covering what is now eastern Australia.

About 500 million years ago this sandstone was heated and compressed as a result of movements in the earth's crust. This changed clay particles, deposited with the sand, into mica. (The walk passes old diggings with large mica flakes.) At the same time mineral-rich fluids were injected along cracks in the sandstone to form quartz veins and pods of mixed minerals called pegmatites, which may yield gemstones such as beryl.

Look out for birds, termite mounds and associated Echidna scratchings, changes in rock or vegetation type and large tree-stumps, which suggest how big the trees were before they were cut for timber in the nineteenth century.

* Herbert M Hale was a Director of the South Australian Museum and Commissioner of National Parks and Wildlife until 1963. The park was established in 1964.

Distance and time:

4 km circuit; allow 2 hours.

Access: From the Williamstown - Birdwood road (Warren Road). About 2.4 km from the main T-junction in Williamstown, on the western (right) side of the road there is an obscure turning leading to a galvanised gate and stile with a National Parks sign. Parking is available here.

Notes are written for an anticlockwise circuit

Track

Generally an AS2156 Class 3; that is, a defined natural surface, gentle grades, marked distances decreasing as you approach the trailhead. Some sections of exposed rock (not steep).

For your safety

-) This is a walk in a natural area; beware of inherent hazards
-) Walk in a party of at least four, advise a reliable person of where you are going and when you expect to return
-) Wear strong comfortable boots and take adequate food and clothing
-) Take at least 2 litres of water per person, more if it is hot
-) Protect yourself from the sun and carry a First Aid Kit

Seasons come and go, and plants and animals mentioned in the notes may not always be there.

Start at Warren Road Trailhead,

Checkpoint H1 From this point to 3.6 km the trail runs parallel to the eastern and northern boundaries of the park where past disturbance has been greatest. This is reflected by dense thickets of Kangaroo Thorn beneath the Long-leaved Box trees.

Further up the hill, heath plants are more common including Flame Heath, Guinea Flowers, Native Currant, Red Parrot Pea, Common Rice-flower and a variety of orchids. Tufted Grass-trees are common, especially where water seeps from cracks in the rocks up-hill.



3.4 km An outcrop of Aldgate Sandstone carries Downy Mintbush and the so-called Flinders Ranges Bottlebrush, which is common in parts of the Mount Lofty Ranges. Rocks provide good habitat for plants with long roots which reach deep into rock fractures where moisture is held.

3.2 km From a position on the saddle farming land is visible north and Roseworthy wheat storage facilities. (on clear days).

2.8 km Through the trees at this point, pines of the SA Water catchment and South Para Reservoir are

visible as is Mount Gawler. On this side of the ridge Messmate Stringybark and Oyster Bay Pine are mixed with Long-leaved Box, and Kangaroo Thorn is ever-present. The steep side-slope down to the creek has mosses and ferns and Blue Pincushion, indicating a more sheltered habitat.

Just before the waterfall, on the left is an exposure of quartz and quartzite-pebble conglomerate. This indicates the basal portion of the Aldgate Sandstone. During deposition, pebbles were incorporated with the sand layers, giving rise to this cemented conglomerate rock. It contains characteristic thin black lines of heavy minerals. After rain, water pours through the notch of the small waterfall, into a plunge pool. Dense undergrowth in the gully is good cover for bandicoots.

2.3 – 1.7 km The gradual climb to the top of the hill through Messmate Stringybark, takes you past other rocky knolls which, as before, have different plants to the general slope. Flinders Ranges Bottlebrush and the bright blue Finger Flower are striking examples in spring.

1.6 km Thirty metres back from the post is a good spot for a break, overlooking

South Para Reservoir	260°
Mt Gawler	220°
Mt Lofty	200°

1.5 km The diggings near here have exposed white quartz and mica, in a now overgrown and not easily accessible spot. The shiny, flat mica layers are characteristic. Mica had a variety of uses because of its electrical insulating properties, but its use in electronics has been eclipsed by miniaturisation and solid state circuitry (silicon chips). However, finely ground mica is used extensively in wallpaper, paint, rubber and fillers. This hole may have been an exploratory digging for gold.

1.4 km Water run-off here feeds into the rock clefts and soil, providing favourable conditions for Oyster Bay Pine, Flinders Ranges Bottlebrush and Silver Banksia. Gritty sand layers in the sandstone are clearly visible.