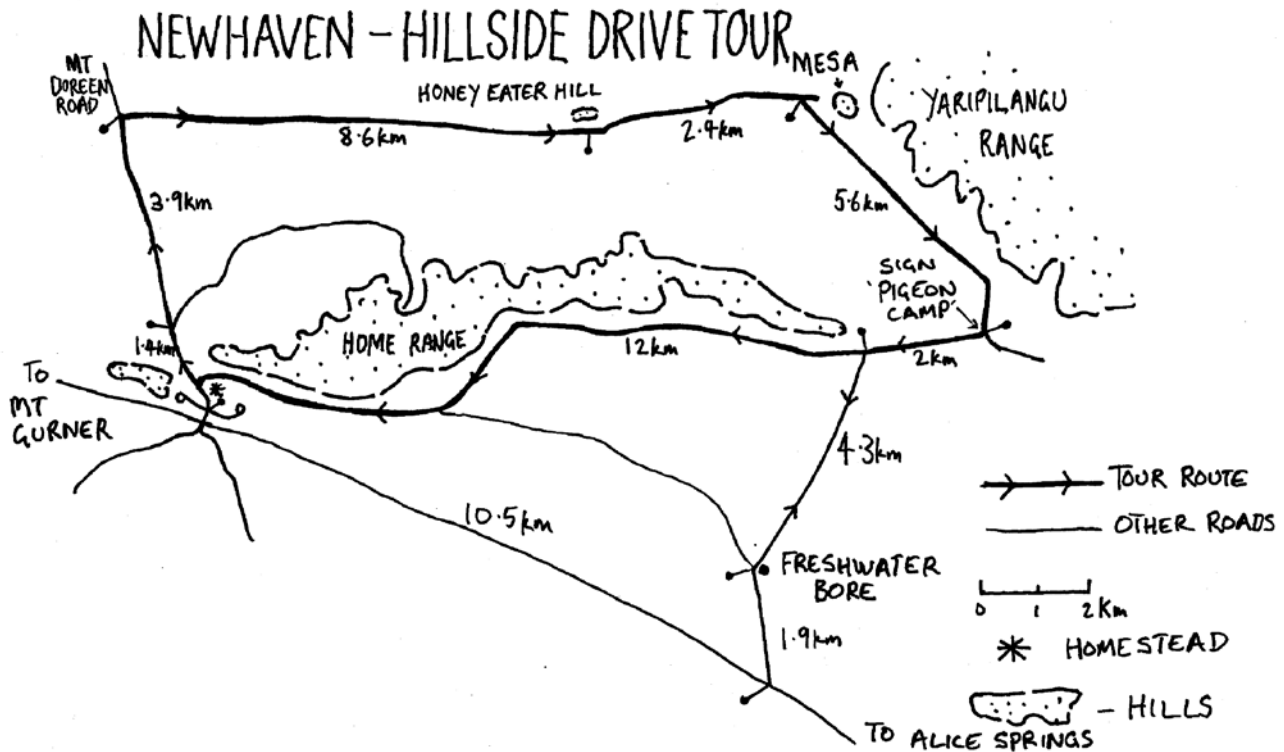


Newhaven Wildlife Sanctuary Hillside Drive Tour

Please Note: Newhaven Sanctuary has a vast number of tracks and firebreaks. Not all of these are open to the public. For safety please keep to designated tracks. Always carry plenty of drinking water. Whilst on Newhaven please use UHF channel 3 duplex.

Hillside Drive Tour Summary

These notes describe a drive-and-walks circuit that explores the Yaripilangu Range and the eastern and southern sides of the Home Range. The total distance is 50 km. Depending on the amount of walking and climbing done, it will take 4-6 hours. The returning leg can either be along the southern side of the Home Range or via Freshwater Bore and then via the main road.



Tour Notes

0.0 km - Bird Box:

This Tour begins at, and is distance-referenced from, the Registration/Information Shelter ('Bird Box'). Start from here after noting the odometer or resetting the trip meter. Head west towards western campground, then take the first right then left turns. This will take you past the tank stands and to a Y-Junction within 300m.

0.3 km - Y Junction:

FRESHWATER BORE is to the right. **HILLSIDE TOUR** is both right and left. Take the left fork. This is Mount Doreen road.

1.4 km - Gorge Turn off:

Continue north, past the signed turnoff to **THE GORGE**. The Mount Doreen road heads NNW out of Newhaven Sanctuary towards Mount Doreen cattle station. You are travelling towards, but will not quite reach, the northern boundary of Newhaven Sanctuary. No watering points could be established out on this sandplain therefore the country has been effectively ungrazed.

Soon after **THE GORGE** turnoff you leave the mulga woodlands and enter spinifex calcrete plains. You will now see fewer trees, plains of spinifex and abundant shrubs. This is one of many vegetation communities on Newhaven.

Twenty three vegetation communities have been mapped on Newhaven, using aerial photographs to interpret broad patterns of landscape, followed by on-site identification of the species which occupy the different landforms. The mapping and identification of vegetation communities is essential information for responsible fire management.

On this circuit, you will pass through seven different vegetation communities: Mulga woodlands, spinifex calcrete plain, mixed acacia sandplain, feathertop spinifex sand dunes, feathertop spinifex sandy slope, bloodwood sandplain and blue mallee sandplain.

4.0 km - View to left:

On the LHS (west) the large bluff, 684 m above sea level, of Robbs Hill should be visible. This 8km long teardrop-shaped outcrop is a part of the larger Vaughan Springs quartzite geological structure that has produced the Mt Gurner, Dingo Hill, Castle Hill, Home Range, Honeyeater Hill, Yaripilangu Range, and Siddeley Range.

5.3 km - Right Turn:

The turnoff to the right is signed as **HILLSIDE DRIVE**. Take this turn. The road is now bearing due east. You can now see Yaripilangu Range straight ahead. You will notice signs of past wildfires and by the vegetation contrasts across the road, it is obvious the road has served as a firebreak. Several of the *Acacia* species adopt a characteristic shape after being killed, but not incinerated, by wildfire. The shape is described as 'clasped hands' and is created by branches folding upwards after the shrub has died. As illustrated, both tall and short species take this shape.



14 km - Honeyeater Hill:

This hill is a small, flat-topped, rocky outcrop. From the top you will appreciate how just a few metres of elevation dramatically extends your visual horizon, and how landscape patterning becomes obvious. If you look from Honeyeater Hill to its small nearest neighbour to the east, and to the much larger flat top mesa and ranges looming further on, you will see that all have essentially the same geological structure. This structure is simple: on the top, layered rocks that are highly resistant to weathering; under that hard cap, a softer, more easily weathered rock. Here, both layers are nearly horizontal, so the resistant rock protects the softer rock underneath. This results in a durable capped outcrop.



Despite the protection of the resistant cap, over millions of years the softer rock layers weather. As the bottom layer is weathered away, support for the hard overlying cap disappears. At its edges, the cap collapses, leaving a sharp rock edge. A small version of a sharp bluff face is present on Honeyeater Hill and much larger versions line the faces of the Yaripilangu and Home Ranges. Collapsing bluff faces create many crevices and caves: small ones are occupied by raptors, larger ones by Black-footed Rock wallabies, while the largest were found by people to be suitable shelters and painting sites.

As you climb down, examine the rocks towards the base of the hill. This is a soft rock, a type that is more readily weathered. Looking closely at it, you will find it is made up of small whitish rocks, marble-sized and shaped, cemented together in a red rock matrix. This rock type is a conglomerate. It was formed at the bottom of a shallow sea more than a thousand million years ago.

Your route from here continues eastward towards the Mesa and the Yaripilangu Range

16.1 km - Cross Road:

The road crosses a rarely used N-S track, which leads to Yaripilangu Outstation.

16.4 km - Mesa Detour:

The road turns right (south). Straight ahead is a short detour to a car park at the foot of a large flattop hill, or mesa. A sign here reads 'Warnapi'.

The entire Yaripilangu Range including this



Mesa holds important cultural significance for local Aboriginal people. Please treat this place respectfully.

Because the mesa is at least 100m above the surrounding plain, the views from the top are breathtaking. It is an excellent way to appreciate the country you have just driven through, and where you are still to go

Returning to the main track, turn left (south) and head off through the mulga woodland that skirts the mesa. This woodland has burnt in patches. The road bears east, skirting the footslopes of the Yaripilangu Range. If you watch, listen to, and feel the road surface, you will note strips of rounded cobbles washed across the road. These are the weathered remnants of the hard quartzite cap from the surrounding hills.

17.4 km - Caustic Vine:

On your left here are some great examples of Caustic Bush (*Sarcostemma viminale* ssp. *australe*). They are a dense, leafless, multi-stemmed, succulent vine or shrub. The stems are silver-green and pencil like, sometimes forming a dense upright shrub and sometimes climbing into trees and forming a dense thicket. The closest one to the road is a large specimen climbing over two meters up into a Black Gidgee. The white latex sap from the plant has been used extensively across Australia as a medicinal skin wash.

17.9 km:

At this point, the road is very close to the footslope of the range. On your left there are few trees and mostly tall shrubs. These shrubs benefit from runoff from the hills, the ground storey is dense and diverse.

On the right of the road the vegetation community is known as bloodwood sandplain. This is characterised by the presence of limestone deep under the surface, sometimes appearing in small outcrops, dense spinifex (usually *Triodia basdowii*) and Bloodwoods. As usual these communities are not always discrete and often intermingle with other communities especially mixed acacia sandplains. Some bloodwoods have swollen 'coconuts' hanging in their branches. These 'coconuts' are galls – the tree's involuntary protective response to invasion by a moth larva. If you split open a live sample, you can find the white grub in the centre of the growth. The grub and the inner flesh of the gall can be eaten. Bloodwood bark has a beautiful tessellated pattern, and they are photogenic. When they flower, they almost drip nectar, and honeyeater species appear to squabble over whose tree this really is. So intense is the squabbling, that often little notice is taken of a slowly approaching bird enthusiast/photographer.



As you drive on, watch for the two interesting ant activities along the road. One ant species builds large conical nests in the centre of the road – and defends them strongly. Another species is responsible for the presence of aboveground pipes of cemented sand grains crossing the road (image below). A small black ant constructs these pipes, drinking-straw size, using resin from soft spinifex (*Triodia pungens*) and sand grains. The pipes create shelters for sap sucking insects, which feed on the spinifex, and are 'milked' by the ants. Their protective shelters can also be found in the foliage (adjacent image).



22.1 km - Right turn at 3-way Intersection:

At the intersection, signed **PIGEON CAMP**, turn right. You will now be heading west back towards the campground along the southern side of Home Range. The road heading south, swinging to the east, is the start of the (90 km) Siddeley Range Tour. Because of its many attractions, a dedicated full day is recommended for this tour.

23.2 km - Y Junction:

The road veering to the left, signed **FRESHWATER BORE**, takes you to that bore (3.4 km). From the bore you can backtrack to here and continue the tour along the base of the Home Range, or continue south for a further 1.9 km to intersect the main road, a right turn here will bring you back to the Bird Box in 10.5 km.

There is an abundance and variety of birds to be found at Freshwater Bore. The bore taps high quality groundwater, hence its name, and fills a large cattle trough located in a set of trap yards. This trough, and a nearby puddle, is a magnet for flocks of small seed eating birds, principally Zebra Finches and Budgerigars (*Melopsittacus undulatus*). Many animals drink here. Look for tracks. Those of dingoes are common, while those of foxes or cats are worth reporting to the Sanctuary manager.

Freshwater Bore is located on an ecotone between mulga woodland and bloodwood sandplains. It is a beautiful diverse area with patches of long unburnt vegetation. It is well worth a bit of time spent walking into the mulga to the north east of the yards.

As you walk around, please avoid walking through buffel grass, as doing so may spread the seeds of this serious weed.

If you choose to return to the campground via the main road, then about 500m south of the bore there is a clump of beautiful old Ghost Gums. This is a site of significance to local Aboriginal people, and is a designated Protected Area. Please, respect this

Return north to the **FRESHWATER BORE** and **HILLSIDE DRIVE** signed intersection. After noting/resetting the odometer, take the road to the west, which runs along the edge of the Home Range. The contrasting vegetation on each side of the road shows that this road has recently served as a firebreak. Depending on the preceding summer rainfall, populations of interesting fire enhanced plants will be growing.

1.8 km:

About this point, the bluff faces of the Home Range rise slowly up from beneath the sand sea. As you travel, their height and complexity increases. However, a basic pattern is there: a cap of hard, resistant, quartzite rock underlain by layers of less resistant rock. The footslope is formed from weathered less resistant rock. Undermined, the capping eventually breaks off and rolls down the footslope as very large cubes. On the sand plain, you will encounter blue mallee, with its unusual blue foliage and (if you are lucky) its striking flowers. Mallee are a remarkably fire tolerant species.



3.0 km:

From here to the gap at Newhaven Homestead, the bluff faces of the Home Range roughly remain at a constant height, but the depth of the capping layer varies. Where it is thick, the rock walls are sheer. Where it is thin, the rock walls are creviced and broken.

During storms, torrents of water are shed downhill, often gouging channels so straight that they appear to have been bulldozed. Stained rocks indicate small and large waterfalls and seeps. At the join of the capping and underlying rock layers, water penetrates deeply into fractures, and the roots of trees and shrubs follow. This is the most likely area to find Rock Figs (*Ficus brachypoda*), where they grow along with several other tree and shrub species including Spear Bush (*Pandorea doratoxylon*).

Spear Bush is a favoured food of the Black-footed Rock-wallaby. This wallaby is considered to be 'near threatened' in the Northern Territory. Yarripilangu Range and possibly the Siddeley Range support a remnant population of the Black-footed Rock-wallaby. Though occasionally drinking when water is present, they can survive without water. They usually emerge in the late afternoon or early evening to feed.

Appropriate fire management of the Black-footed Rock Wallaby's habitat is crucial for the survival of this isolated population. Reducing fuel loads in adjacent spinifex communities with the aim of excluding hot fire in the ranges and associated gorges is a key management requirement.

On the steepest rock faces, many of the caves and ledges show the white stain of bird droppings indicating occupancy by raptors.

If you wish to climb up the footslope to the capping rock, you are advised to first use binoculars to find an interesting site, such as one with Rock Figs and large caves. Then select the easiest (and most stable) route up and down. Climbing the footslope may be strenuous. Do not attempt climbing the capping rock ledges. The view from even a halfway climb is rewarding. Depending on viewing conditions, the distant Mount Liebig is visible in the south, often shimmering in a mirage.

6.6 km - LOOKOUT ROCK / ALEX'S LOOKOUT:

Straight up the slope from this sign is a large block of capping rock that can be climbed to view the country to the south. Alex Coppock, the original lessee of Newhaven, used the rock as a lookout when Newhaven was a cattle station. Alex used this vantage point to look over the country that he loved. He lived on Newhaven for over forty years. Lookout Rock has been commemorated because it was here in October 2001 that Newhaven reserve was officially launched by the then federal Minister of Environment, Senator Robert Hill.

South from this rock there is a large longitudinal patch of Desert Oaks. Desert Oaks, like spinifex are the ultimate fire survivors. Thick bark and the ability to regrow foliage after fire when they are young means that fire has little effect on these trees. The young trees will appear to become dormant after reaching about three meters in height. They can stay like this for as long as twenty years. During this time they are drilling further down with their roots looking for water. Roots as deep as forty meters have been recorded. Once this water is found the tree above the ground again begins to grow, branches out and becomes the beautiful tree that we know. Some say they just indicate too much fire...others say what brave trees they are.

10 km:

Nearing the Homestead, the road comes close to the edge of the footslope, the bluff reaches its highest point at 732m above sea level, and the runoff water supports an increasing population of ghost gums. It is a truly beautiful sight at all times of the day.



12.1 km - Campground:

We hope that you have enjoyed this tour.