TUTANNING WALK TRAIL (NORTH LOOP)

Tutanning Nature Reserve is on a ridge, which separates the Avon and Hotham River catchments. An ancient lateritic upland has been eroded in places down to the underlying bedrock, producing a patchwork of plants and soils. Like a layer cake, lateritic ironstone, sand and gravel overlie a mottled and pale clay over bedrock. Steep cliffs called breakaways may separate laterite uplands from underlying granite soils, or one may merge into another gradually on slopes. Lateritic areas support many native plant species, particularly on sandier kwongan (shrubs with few trees) patches.



The bedrock is mostly granite (which forms sandy surfaced soils and sandy gravels), with lines of black dolerite rock (that forms red brown loams and stony ironstone).

Frequent changes of soil formed over the layers or washed downslope support a large variety of native plants and animals.

Vegetation is often a good indication of underlying soil, except for Rock Sheoak trees (*Allocasuarina huegeliana*), which have invaded many well-drained vegetation communities since regular burning ceased and many small marsupials became extinct.

For more information scan the embedded QR codes.



QR Sheoaks



Green = upland lateritic sands and gravel. Pink/red = granite/dolerite soils. Uncoloured = woodland soils on slopes **Trail Notes** for 2.2km northern section of the grade 3 walk trail

1 The first 300 metre passes through sandy (granitic) and red-brown loamy soils (from dolerite a mafic rock) formed from fresh bedrock, with small granite outcrops. These are the most fertile and best water holding soils, favoured by early farmers. Trees are mainly Rock Sheoak (*Allocasuarina huegeliana*), with Wandoos (*Eucalyptus wandoo*) in loamy areas. In deeper soil on edges of the reserve York Gums grow on red-brown loams.

This is a good area for orchids, everlastings, and poison pea plants but they may be overrun by weeds. Because this area hasn't been burnt for a long time, dead sheoaks have suppressed some of the plant understorey. Only a few pea-flower shrubs are poisons. Because poisons kill livestock, farmers fenced these areas off, and we can thank these plants for the many wildflowers remaining now.





2 There is a sudden change to a gravelly slope, which marks a change to a lateritic upland. Note how dense poison peas and prickly shrubs on the slope, change to sparser shrub plants on the slope which is a gently sloping plain containing kwongan sand and gravel soils. Later in the walk keep an eye out for more vegetation changes, which vary from gravelly slopes to breakaways. *QR breakaways*



3 At the top of the slope, you are on a sloping plain with lots of *Proteaceae* shrubs and other plants with attractive flowers that grow on sandy laterite soils. Sparse trees with grass trees and shrubs on white sandy gravels change to tall kwongan shrubs on pale deep sand. Attractive Drummonds Mallee is often found on yellowish sands



Plants make gravels

QR kwongan Did you know that lateritic sands and gravels are created by plants and microbes?

4. You are walking to very stony soils which marks the edge of the old lateritic plateau. Pale sand-stony soil with scattered wandoo and powderbark trees with few shrubs (granitic ironstone), changes to very stony red brown ironstone (formed on dolerite) with scattered powderbarks (*Eucalyptus accedens*).

5 A change to large wandoo and rock sheoak trees and underlying wildflowers mark a change to loamy and sandy soils formed on fresh basement rock. Good orchid and everlasting country.

6 Large granite rock outcrops have many mosses and rock lichens, and prickly resurrection plants. Gnarled red-flowering *Kunzea pulchella* grows in rock cracks. **Walk carefully** to avoid crushing delicate plants and don't disturb loose rocks, which are homes for rock dragons. Look for Sundews, everlastings on shallow soil spots and orchids in surrounding rock sheoak woodland. Caution – wet areas are slippery. From here turn right on the road to return or continue to walk the whole trail.

7 As you walk back down Bandicoot note the line of steep breakaways on the left, which marks the edge of an ancient laterite mesa. The southern section of the walk trail goes up, around and down this mesa. Dark-coloured smooth bark trees on the breakaway slope are Brown Mallet (*Eucalyptus astringens*), which grow on clay breakaway slopes, and keep the slopes bare.



QR brown mallet

Can you find these wildflowers? (a few of the many there)





Stackhousia monogyna



a Verticordia acerosa

Chamaescylla corymbosa



Grevillea tenuiflora Acacia multispicata



Caladenia flava