

**Brian Everingham
Birthday meandering**

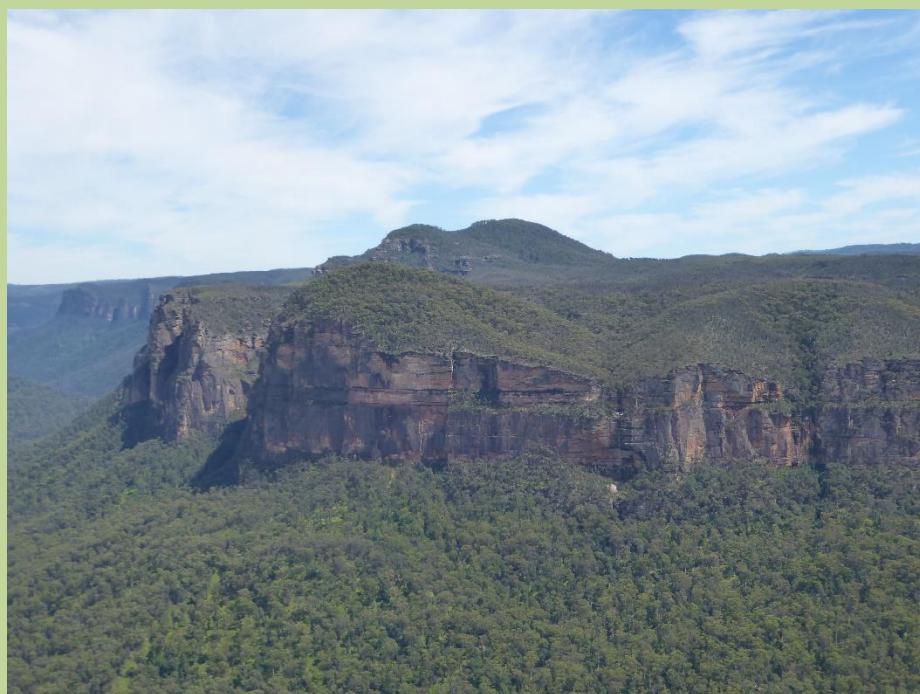
Butterbox Point – Mount Hay

Blue Mountains National Park



Tuesday 12th January 2021

And where else would someone want to go for one's birthday but to the mountains! In this case the Butterbox Point-Mount Hay section of the Blue Mountains National Park, overlooking the Grose Valley and looking down onto that sacred shrine to conservation: the Blue Gum Forest!





But I could go on all day with scenery shots of this area and in its post-fire world its landscape is so visible!



In fact we came to see the Pink Flannel-flowers.¹



¹ <http://anpsa.org.au/a-for.html>



With the added desire to see a Giant Dragonfly²



Giant Dragonfly (*Petalura gigantea*)

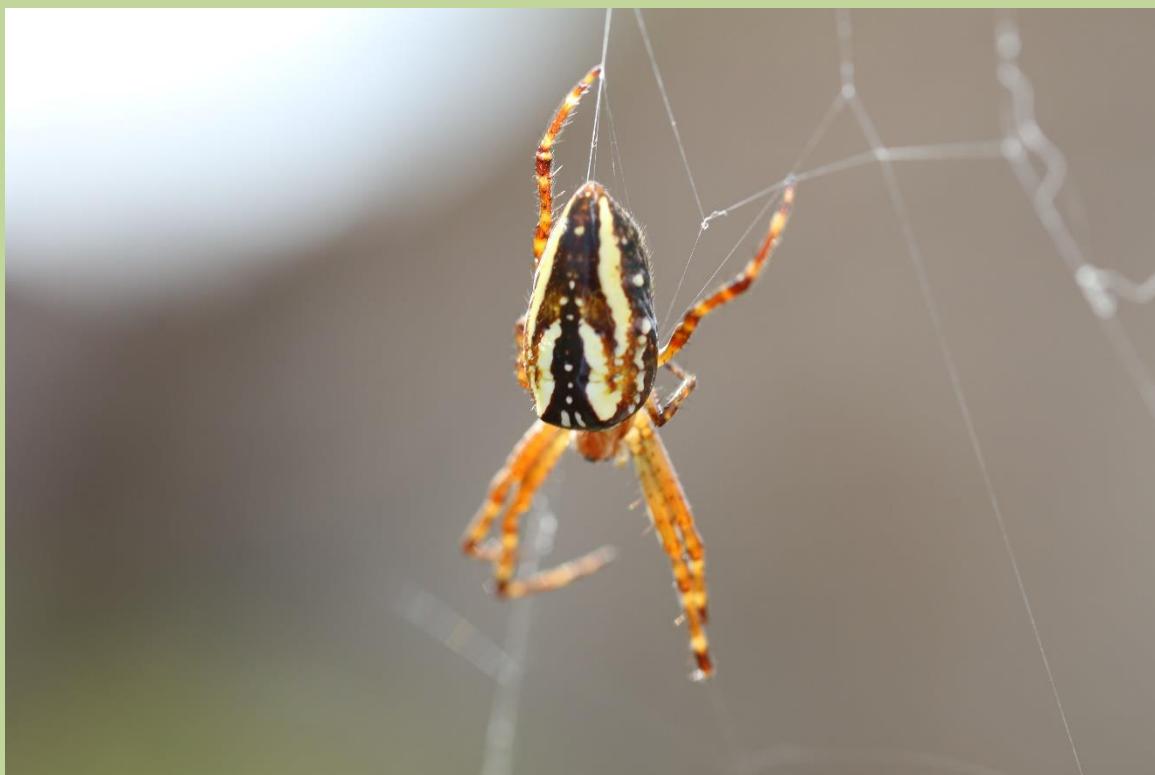
² <https://www.environment.nsw.gov.au/savingourspeciesapp/project.aspx?ProfileID=10600>

Having seen both targets within 20 minutes everything else was a bonus! Just sit back and enjoy!





Blandfordia cunninghamii – Mountain Christmas Bell



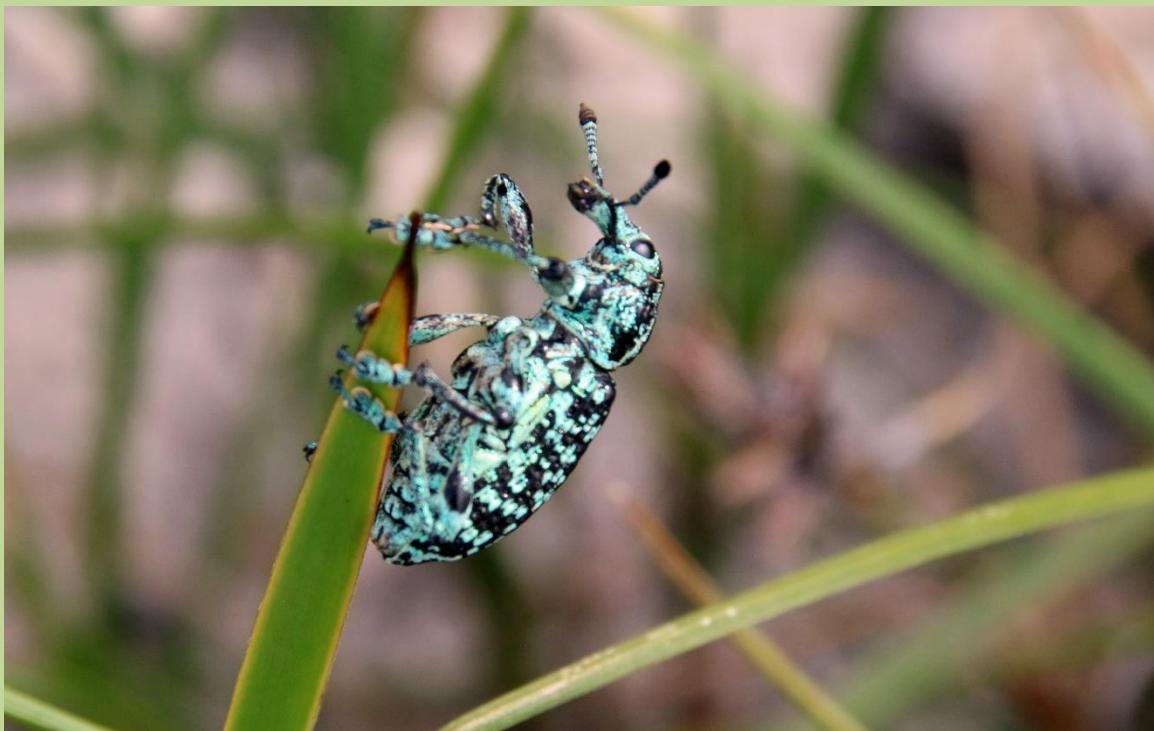


Hybanthus monopetalus



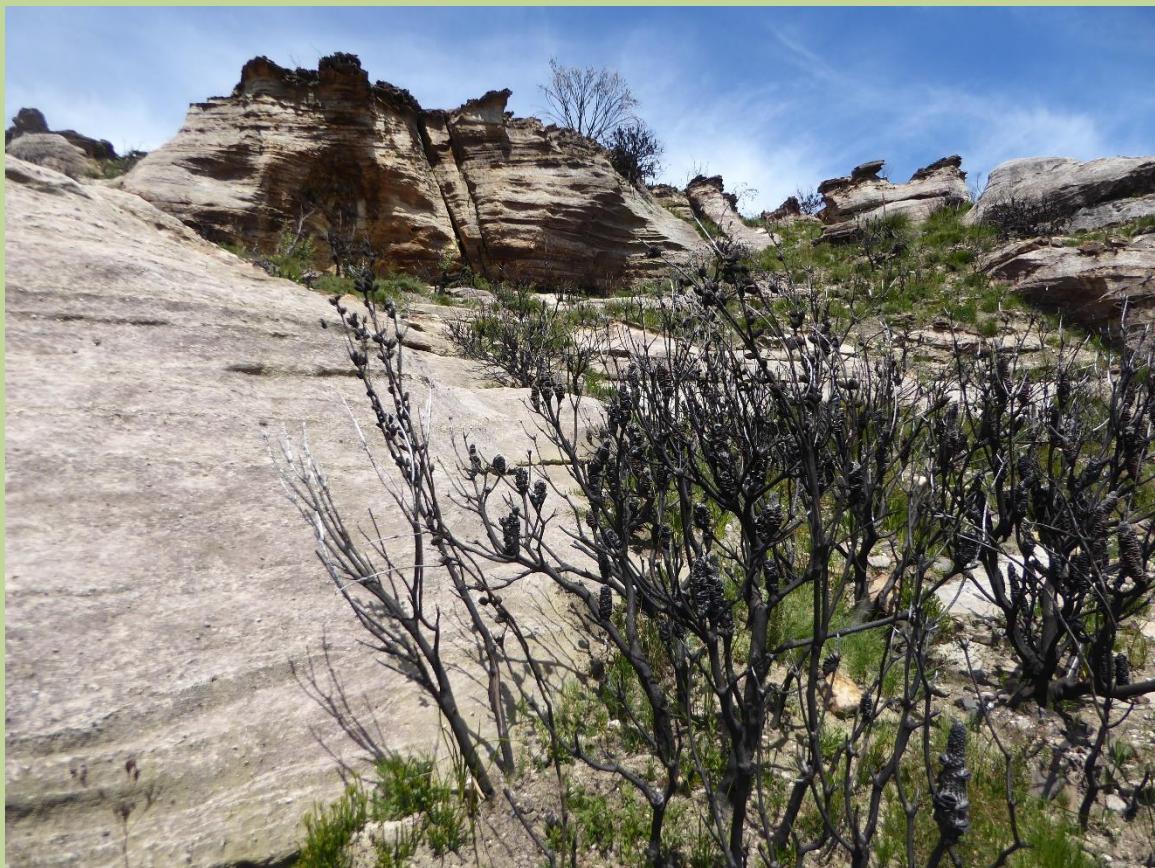
Comesperma sp

Probably
Comesperma sphaerocarpum or *Comesperma defoliatum*



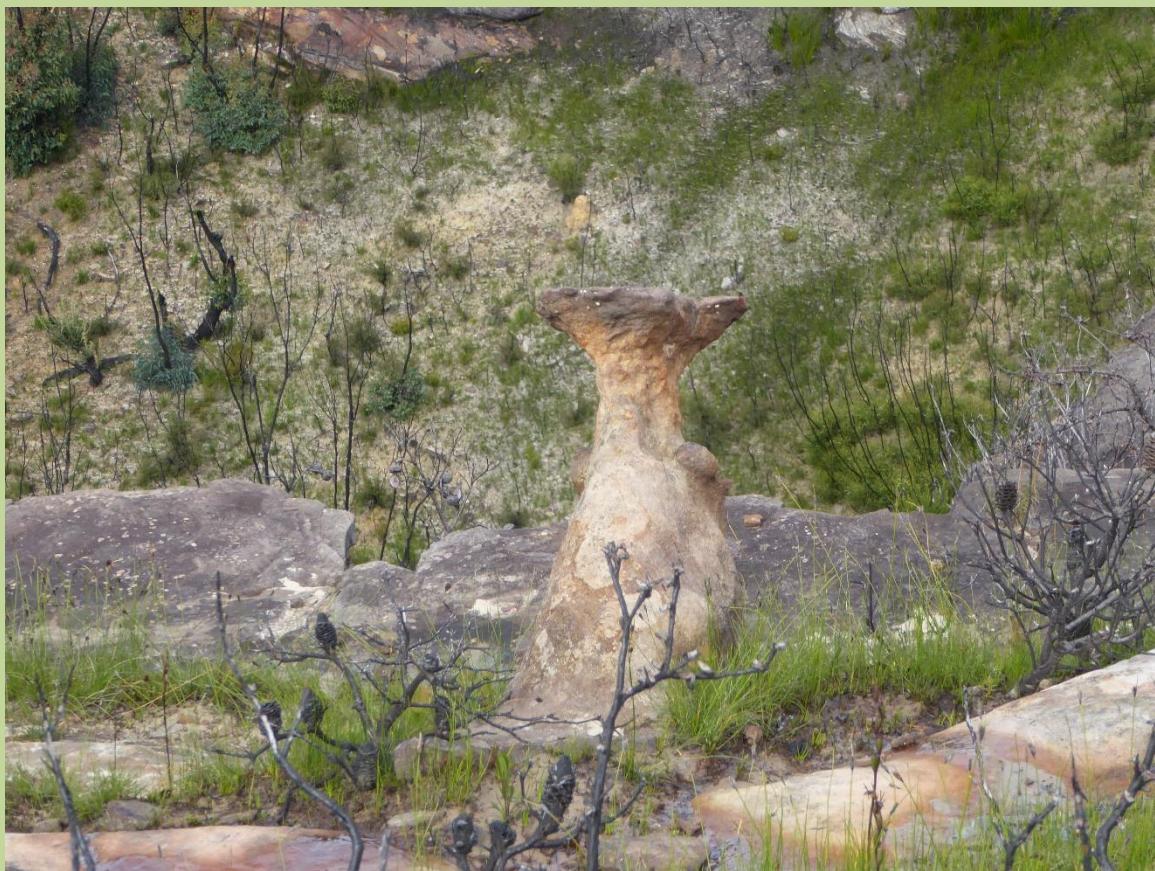


Orthoceras strictum – Horned Orchid









Finally we climbed Mount Hay and in that last part of the climb we emerged out of sandstone and into soils derived from olivine basalt³. The vegetation changed immediately.



The sandstone plateau with the rounded Mount Banks, olivine basalt cap, in the distance

³ <http://www.geomaps.com.au/scripts/bluemountainsoverview.php>

About 170 million years ago the various sand layers ceased and forces deep down in the crust started pushing the rock strata skywards. That's the plateau we see today! "The plateau was highest on its western margin, reaching elevations of over 1,000m, and sloped down to an abrupt downturn at its eastern edge."

"The uplift wasn't necessarily a calm, gradual affair. It featured some dramatic volcanic activity, probably starting around 150 m.y. ago. A number of volcanic necks, called diatremes, flowed up through the cracks in the sandstone and shale. Then, more recently, basalt lava poured from vents and spread over the landscape. By analysing the radioactive minerals in this basalt rock, geologists have found that some of these flows are around 17 m.y. old. The uppermost rock layer consists of olivine basalt remnants, formed from cooling lava and now confined to tops of higher peaks of the western Blue Mountains like Mt Hay, Mt Wilson, Mt Irvine, Mt Banks and Mt Tomah which is capped with a layer of 14 m.y. old basalt that is up to 140m thick."



Solanum sp in the basalt soils



Wahlenbergia



