



Friends of Sturt Gorge

Newsletter

No 38 : October 2017

This edition: Snakes, Rock Ferns, Controversial Trails, Weather...

Snakes are Alive!

Andrew Goldie

I came across this 2 metre specimen of the Eastern Brown Snake (*Pseudonaja textilis*) on the walking trail heading up from Horners Bridge. There was an article in 'The Advertiser' on 28th September 2017 claiming bragging rights for the first spring sighting. Sorry, but I got there first!



The recalcitrant brown snake

On a more serious note, it's important to watch for snakes at this time of year and, when you see them, to give them some space and time. Brown snakes aren't aggressive but will react to a perceived threat. When I came across this individual sunning itself across the

walking trail the first thing I did was to stop.

As the DEWNR website notes: *"Snakes tend to be inconspicuous. They will try and avoid confrontation with a human by either moving away and hiding, or lying still until the person has moved away. However, like most wild animals, snakes will defend themselves if they are startled, feel threatened or are cornered."*

This individual's preferred exit (uphill / downhill) wasn't obvious so I waited for ten seconds before moving forward a step at a time.

Suddenly, in half a second, it zipped around 180 degrees and disappeared downhill. If I'd blinked, I'd have missed its escape.

The moral of this tale is *"Be patient if you don't want to end up as a patient"*.

I'd also alert members to the fact that juvenile snakes are as venomous as their parents but are not as sensitive to humans. So the smaller the snake, the greater the caution required on our part.

Editor comment ; I can personally vouch for snake activity. Whilst recently walking a trail in the Blackwood Hill South 'Bush for Life' site I didn't see a 2 metre long Eastern Brown in the afternoon shadows until I nearly trod on it. Fortunately it moved at the right time!

Annual Rock Fern

(*Cheilanthes austrotenuifolia*)

Andrew Goldie

This is the most commonly seen native fern in the Gorge, and is widely distributed across south-eastern Australia. In our State it's found in the moister (also known as agricultural) regions of the Yorke and Eyre Peninsulas, the Mount Lofty Ranges and the South East.



A patch of Annual Rock Fern

In our part of the world you'll find it on creek and river banks and on open woodland slopes above them, so the "Rock fern" name is a bit of a puzzle.

I've noticed that in sunny locations it tends to keep a low profile, but in shadier patches it will reach about 40 cm in height. It's rare to see individual plants because the fern has a rhizome structure under the ground, and this explains why it flourishes in dense patches of a few metres' width.

The fronds die back annually but come to life in late winter and spring. Luckily, this year has seen a spectacular growth cycle.

The fern copes with full sun or deep shade and appears to be unfazed by its orientation to any point of the compass.

A useful website for local native ferns is: <http://www.fobhm.org/cheilanthes.htm>

Trails Contretemps

DEWNR correspondence

It is worth noting the response from DEWNR to our recent initiative in constructing a new east-west trail on the northern side of the Sturt River, in the vicinity of Horner's Bridge. It read in part;

"The trail network in Sturt Gorge Recreation Park, following very thorough planning and assessment processes, is sustainable, caters a large range of interests and abilities, and considered adequate. No further trails are to be constructed without written permission from the Ranger in Charge, Adelaide and Central Hills District. Construction of new trails without this authorisation is considered a breach of the National Parks and Wildlife Regulations (National Parks 2016, Section 30 (b) and (c)) which state that;

'A person must not, without the permission of the relevant authority dig or otherwise intentionally disturb any soil of similar material in a reserve or intentionally disturb any wood, mulch or other dead vegetation...'

Obviously our Group needs to heed the DEWNR message, to both maintain the

positive relationship, and not to jeopardise future work on the trails. It is worth acknowledging that the work done on improving the trail to the west of the trash rack has been well worthwhile, given the state of the adjoining fire track (uphill) and trail (downhill). At the same time, it is probably fair to accept that the trail running east from Horner's Bridge on the southern bank of the river is sufficient for general access.



Early work on the controversial track near Horner's Bridge

Weather in the Gorge

Andrew Watson

Weather conditions in the Sturt Gorge over the past 3 months have been wetter and windier than usual, but with temperatures close to normal. The Craighburn Farm rain gauge recorded 309 millimetres of rain over the three month period, which is 30% ahead of the average of 239 millimetres. More than 100 mm was recorded in both July and

August. Rainfall frequency and amount tailed off in the latter weeks of September with conditions becoming milder and more spring-like.

Overall temperatures were marginally higher than normal, with July warmer than average by a degree, and August cooler by a similar margin. September became warmer as the month progressed, but was close to average overall.

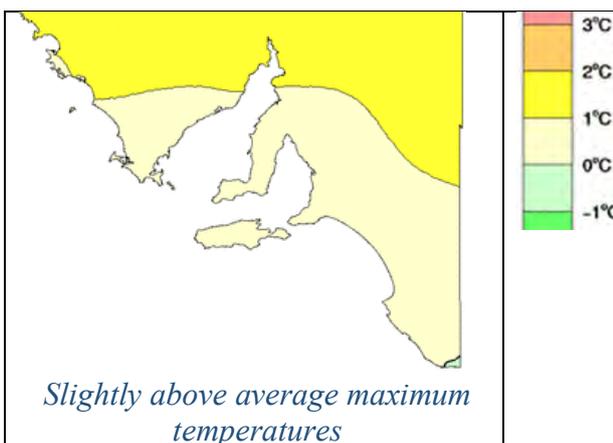
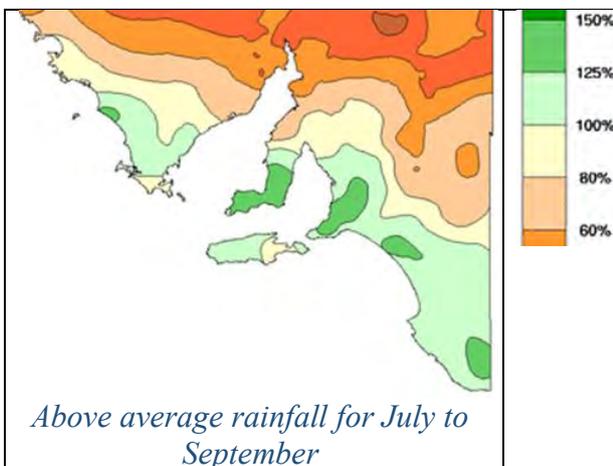
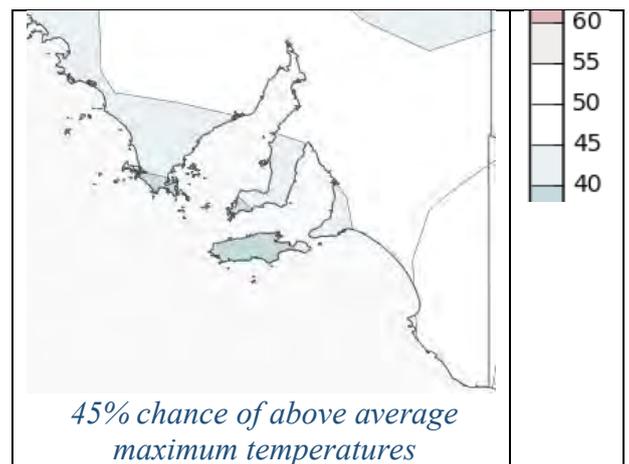
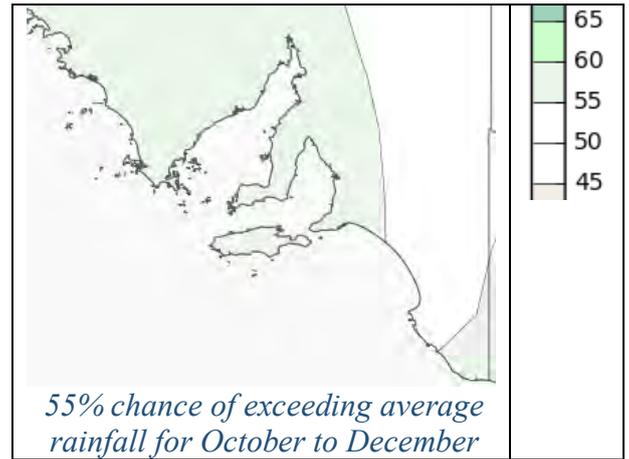
The good rainfall has meant that soil moisture in the Gorge is higher than normal for this time of year with flows in the Sturt River stronger than would be in an average year. That augers well for vegetation health and spring growth. On the back of the wet 2016, it should mean that there is plenty of moisture in reserve for the inevitable hot, dry periods of the coming summer.

It's also been notably windier than usual through all three months, by around 15% overall. The table on page 5 compares the rainfall, temperature and wind speed for the past 3 months with the average.

The weather outlook for October to December indicates that the decline in rainfall frequency that we've seen in the latter part of September will continue, with a general indication of near average totals. The broad-scale climate signal for the Australian region continues to sit at 'neutral' which translates to near average weather conditions. In the shorter term there is likely to be some further useful rain events, with October likely to be above average. Beyond that

the outlook is for less regular rainfall episodes and lower totals.

Temperatures in general are also expected to be close to normal. We will naturally see some hotter periods as we move further into spring. Inland areas of the state have recently experienced some exceptionally hot conditions, and it only needs a northerly airstream of some strength to transport that hot air into the Gorge area. Because spring weather systems usually move rapidly the warm spells are likely to be short-lived, as frontal changes quickly sweep in cooler air. We can expect some more windy days as well, which are often coincident with rapidly moving spring weather systems.



Summary of Sturt Gorge Weather

July to September

Month	Jul	Aug	Sep	Total
Rain (mm)	129.4	108.8	70.6	308.8
Average	100.9	77.2	60.9	239.0
Max Temp (°C)	16.4	15.9	19.4	17.2
Average	15.3	16.7	19.1	17.0
Wind Spd (km/h)	23	23	24	23.3
Average	19	21	21	20.3

Rainfall data from Craighburn Farm, temperatures from Kent Town, wind from Adelaide Airport

The table shows that over the past three months, the Gorge has had almost 30% more rainfall than average for the three month period. July was the wettest month although August was more than 40% higher than normal. Overall daytime temperatures were slightly above normal, with July warmer than average by more than one degree, and August cooler by a similar amount. Each month has been windier than normal, based on 3pm data, with the overall anomaly being about 15%.

A line of thunderstorms which moved through the Hills around midday on 27th July produced some fascinating cloud formations. An unusual 'roll cloud' formed ahead of the storm with many people photographing the phenomenon. This photo shows the



cloud as it passed over Echunga around midday. Roll clouds form as air cooled by rain pushes out ahead of the storm, creating a linear cloud formation which can extend for many kilometres. The storm produced some powerful lightning strikes and thunder in

Flagstaff Hill, with many homes adjacent to the Sturt Gorge temporarily losing power. Two men were injured by lightning strikes on the Adelaide plains, but happily the injuries were not life-threatening.