

November 2013 in Our Catchment

That first burst of wonderful rain, that all soaked in, and then it came again, and again... Everything looks so much healthier than it did a month ago. Even places like Flemington Pond really don't look that bad after a wash and a good drink! It was really good fun doing the chase around with Tim Yiu and the young ladies from ANU to capture the macroinvertebrates in the urban catchment. Some places were delightful, most were good and even the top of Sullivans Creek looked encouraging.

Your Results

Parameter	Where it comes from	How it affects things	Local events
pH	The country rock is largely responsible for water pH; acid over granite or sandstone, alkaline over basalt or limestone	pH helps keep the main minerals dissolved in the stream or pond; too acid, too much sulfur; too alkaline too much phosphorous	Three urban pH readings on the alkaline side, even with the rain can be worrying.
Electrical Conductivity	The ground water and soil determine the EC	Limey soils are naturally more conductive, more dissolved CO ₂ ; waterlogging also increases mineral content.	Chimney Ck and Whiskers Ck were both low, but Stony Ck was still very high. That some up some down pattern is across the catchment.
Turbidity	This is how much light can penetrate the water.	Silt and dissolved humus change turbidity	A few rain related high turbidities, but Teloepa Ck must be collecting from the new Manuka Oval!
Oxygen Saturation	Oxygen gets into water through flow, wave action and plants growing.	More than 120% saturation causes embolisms in animals, big or small; below 60% and it is hard for things to breathe.	Low flow areas, like the bottom of Sullivans Ck are always likely to give poor readings.
Phosphorus	Phosphorus is found in small amounts in disturbed soil; the other source is fertilizer.	Every cell needs P to carry its Oxygen: excess leads to rapid growth of planktonic algae.	Toad Hall pond on Sullivans Ck in the ANU probably gets its high P from lawns and the GPT. The high reading for the upper Queanbeyan may indicate a breakaway somewhere between Boolboolma Crossing on the Tinderry Rd and <i>Sunnybrae</i> at Urila.
Algal Growth	Most algae, planktonic and benthic, are seasonal; blanket weeds are perennial	Smothering and blooms interfere with biodiversity	There is blanket-weed in Weston Ck and Teloepa Ck and something in Yarralumla Ck by the time it gets to Curtin.

Just some Musings...

When I spied a medium sized cicada on a fencepost in a carpark last Wednesday, and brought it back, singing, to the car I was summarily reminded that I was rather older than five! In my defence that curiosity with anything that moves is vital to the way in which I view this world of ours. You can learn so much by keeping your eyes and ears open and the inner small child alive.

So far it has been a great year for butterflies and moths. I've swept up more Bogongs than I have for a few years now. Another couple of warm evenings and I'm sure they will be in again. The woodland round here has been happily peppered with Painted Ladies and Yellow Admirals in the past month. Some of the orange or chestnut on the wings of the Painted Ladies living in the woodland round the reservoir in Queanbeyan has been very striking. Someone planted a desert apricot (*Pittosporum phylliraeoides*) in my backyard. This year it flowered well, and I'd come home to a small flotilla of admirals enjoying the nectar. It is finished now. Can you tell a Common Brown from Solander's Brown, and how do they differ from a Meadow Argus? You need to be quick to count the 'eyes' and where they are. Then it helps to get a good look at the closed wings...but can you see them against the leaf litter. I'm no expert, but I do have fun trying.

I've seen the occasional Footballer among the Honey Bees and the Hoverflies this spring. I'd love to see more. Blue Banded Bees (or Footballers as the kids in the mallee referred to them) are native to Australia and the region. They are buzz pollinators. This is important for many native plants, including the guinea flowers and the grevilleas, but they are also highly prized by tomato growers and lucerne growers. There are plenty of other native bees – look out for them.

It is fast becoming time for ***Dragons & Damsels!*** While we were counting macroinvertebrates at the top of Woolshed Creek two weeks ago we met several large dragonflies with light and dark banding...but they move so fast! It is only when you can get them to settle for a moment that you can make a stab at an identification! The damsels are usually more obliging, and settle, often in tandem, on any convenient spikerush. The ones on Thursday were a male with a red thorax and head and a blue and black abdomen, and a faun coloured female. This appears to be the Red and Blue Damsel, while the female was still maturing to full colour. The diversity and population size in our dragons and damsels provides a further indication of how well our waterways are coping.

All these observations help to fill out the picture of the environmental health of all parts of the Catchment. No observation is really wasted. If you were sitting at your sampling spot surrounded by bulbine lilies nearly all finished and full of swelling fruits and Poa tussocks newly feathered with flowers it is worth mentioning it...the place must have quite good riparian condition!



The desert Apricot *Pittosporum phylliraeoides*

Calendar

8 th December	QAQC	Queanbeyan River Park, Morisset St low bridge, Queanbeyan. 2:00–4:00pm
21 st /22 nd December	Waterwatch Monitoring	Your sites

Most of you have out-of-date calibration fluids or have run out. Please come to Morisset St on Sunday afternoon or drop into the Queanbeyan office on or after next Tuesday, 10th December! Those who came to Scottsdale, thank you, and wasn't it a magic day!

Stephen Skinner

Catchment Officer, Molonglo Catchment Group

The operation of the Molonglo Catchment Group is assisted by the Australian Government's Caring for our Country and the ACT Government. Some administrative assistance is provided by the Australian Government's GVESH0 program.