March 2011 in Our Catchment

We have had a milder than usual summer with a gentle autumn to follow. The butcher birds are singing ... I haven't seen any King Parrots, but then I have been elsewhere! I can assure you that Tasmania was very pleasant.

Your Results

While one of the rural creeks has slowed to a trickle and one of the top arms of Sullivans Creek is dry again, most of the rivers and creeks are flowing, some with continued vigour! I suspect that while the weather has been mild, the elevated water temperatures indicate more about the pace of recovery from flood scouring than any damaging temperature effects in our waterways. Electrical conductivity and pH are presenting the same pattern as most autumns, with Stony Ck in the hills behind Queanbeyan giving a high reading for geological reasons, and Yarralumla Ck up as usual, for urbanisation reasons. The spike in Phosphorous at Mitchell is probably linked to land development, as turbidity at the site is very high. There are a few elevated Nitrate readings, which we will watch. The algal reports suggest similar growth to spring. The general impression from all these results is that for autumn the Molonglo catchment is functioning normally.

Cassie Hancock is working on a survey of Holdens Creek, Weston Creek and the Molonglo River in the reach below Scrivener Dam. Her reports so far indicate that the river copes well with inflows from those two creeks and Yarralumla Ck, and appears to be in good condition below the dam wall, except for a quite high (20–25 mg/L) level of nitrates. This may be an urbanisation effect, or a post flood effect. Weston Ck has elevated phosphate readings from above the shopping centre to Cotter Rd. As there is little building in that area, this may well be garden runoff. We will be interested to find out more about Cassie's survey as it proceeds.

Freshwater Leeches

Leeches are strangely fascinating creatures. That they are blood suckers makes them morbidly interesting. There is a primeval mistrust of them because the arrival of one in your sock or belt-line when in the field is only noticed when the animal is already happily engorged. So we regard them with both loathing and wonder.

Hirudinid leech

Leeches in macroinvertebrate samples are really quite common. As they are given a SIGNAL score of 1, they are far from choosey about water quality. At the same time they do choose their living areas to maximise their likelihood of meals. The occurrence of Hirudinid or medical leeches in the pools of Upper Tuggeranong Creek is a good indication that the spot near Lienhop St Bridge is a frequent watering point for kangaroos, rabbits and other mammals. My boots

were crawling with them in the reed beds at Taylors Creek, near the wind farm, because the causeway is a cattle crossing. Hirudinids are usually dark coloured, with clearly visible body-length stripes, and can be 10 cm long and 0.5cm across.

Erpobdellid leeches are smaller and often brightly coloured. They stretch to twice their length, and swim in a snake-like manner. They are usually less than 2cm long and about 1–2 mm across at most. When you get to see the head, they have several pairs of eyes. These 'snake' leeches often turn up in the vicinity of reeds and rushes.

Erpobdellid leech, note 3 pair of eyes

Glossiphoniid leeches

Glossiphoniid leeches are small, pale and spotty...at least the ones round here are! Like all leeches they 'inch' their way across the substrate, and stretch the head end to do this, but the wider body stays quite plump. They are whitish, pinkish or grey, more or less see-through and have a pair of distinct eyes in the middle of the head. You can count the 32 segments in the bigger ones by counting the rows of pimples. They commonly turn up where there are plenty of other invertebrates, especially bottom feeders like yabbies and caddis larvae, as these are their preferred prey. They also benefit from the murkiness of litter on the bottom of ponds.

Calendar

The **QA/QC** is being held at **The Valley Pond in Gungahlin** on **Saturday 16th April**, from **2:00 to 4:00pm.** It is very important, to retain your credibility as a Waterwatcher, that if you haven't been to a QA/QC for more than 12 months that you make the effort to attend. We are always happy to check people's equipment and technique at the office, but it is much more rewarding to go through things with your fellow Waterwatchers.

Saturday 16th April	2:00-4:00pm	QA/QC	Scout Hall, Gungahlin (cnr Gungahlin Dr & The Valley Way)
16th-17th April	all day	April Sampling (MCG)	if you'd like to include a Macroinvertebrate survey, please contact me for equipment.

Stephen Skinner

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