Hi All,

In Late February and March we have seen some poorer WQ results in the Ginninderra Catchment with lower DO in parts of the creek and wetlands such as Giralang pond causing minor blackwater events. I have had many concerned calls from the community about the creek and some ponds. We often see these sorts of events at the end summer and particularly when we have these longer hot dry periods. The good news is that much of the creek seems to have improved with some more recent rain. Please note QA/QC info below and remember you need to attend at least one each year. And check out the latest On your spoon edition over the page so you will be even more prepared for Bug sampling.

**Catchment Catch Up**
Thanks to everyone who uploaded data for March and for anyone who has not yet just a friendly reminder that we are keen to have the data on the site as early as possible because it is being used more and more not just for the CHIP report.

**The Autumn Water Bugs season is upon us.**
I will be out on the following dates
Week days April 11th to 15th and the 25th to 28th
Saturday 23rd morning at Lake Ginninderra and Sunday 24th full day.
These are the dates I have pencilled in so if one of these days suits you and you want to monitor bugs let me know and I can lock a time and site in.

**Waterwatch QAQC**
Cultural Centre - Canberra
Sunday 15th May 2016, 10am-2:00pm
10:00am-Midday: QAQC
1. Mystery solution tests for Nitrates, Total Phosphorus, Electrical Conductivity, pH and Turbidity There will be a station for each parameter overseen by a Waterwatch coordinator. This will be the first time we have quality checked Turbidity so it will be interesting to see the results!
2. All QAQC forms will need to be checked at each station and given to Woo or another Waterwatch staff member at completion of all four tests.
3. Remember to bring your bottles to update your EC calibration solution. Also pick up a copy of the updated manual if you don’t already have one.
12:00-1:00pm: Lunch will be available during this time allowing for people to complete their QAQC forms
1:00-2:00pm: Small Fish ID Presentation
Waterwatch’s Scientific Officer, Dr Danswell Starrs, has a background in fish ecology. He will present a talk about identifying small fish, both native and feral, in our region. This has resulted from a number of enquiries to the Waterwatch team about distinguishing between Gambusia and some of our small natives such as Western Carp Gudgeon and Mountain Galaxias. Such information will help enable volunteers to confidently report on the fish they observe while out Waterwatching.

**WHERE:** Cultural Centre, 245 Lady Denman Dr, Canberra Central
**RSVP:** Wednesday, 11 May to your Waterwatch coordinator or Woo O’Reilly 6207 2246. Please let us know if you are coming to QAQC and if you are staying for lunch and the presentation.

ON YOUR SPOON
True Bugs Order: Hemiptera

The Hemiptera order includes over 5600 species from three different suborders. These include back swimmers, water boatmen, water striders, creeping water bugs, water measurers, needle bugs and others. Common features to all aquatic and semi-aquatic bugs is their piercing and sucking mouthparts (can be hard to see by eye in smaller species). Body variation occurs from elongated and boat-shaped in back swimmers to leaf-like in water scorpions. Waterboatmen and backswimmers in particularly have widened hind legs that are covered by swimming hairs.

**True Bug or not True Bug, that is the question.**

A simple question on paper but more difficult on your spoon and one that many people have difficulty with.

First step is an easy one, does your bug have six legs?
Next is to look for wing covers, some other species like dragonfly or damselfly may have wing buds but true bugs and adult beetles have wings and covers to protect them.
Now for the tougher bit, the main confusion is between Beetles and some of the true bugs like Waterboatmen, Backswimmers and Creeping water bugs for this distinction you need to have a close look at the wing covers if they are hard (mostly shiny) they are Beetles, true bugs have leathery flattened wing covers. You can also usually see that beetle wing covers have a join line down the middle of the back (symmetrical) . True bug wing covers overlap resulting in an asymmetrical appearance.

As with all waterbugs appearance is just one id tool.
Watching how they move and where they like to be in your tray helps a lot also. Waterboatmen will move around freely in open water and in cover. Creeping water bugs prefer to move more slowly along the plants or detritus. Waterboatmen and backswimmers swim with a jerky erratic motion caused by the oar-like method of swimming whilst diving beetle swim more smoothly and consistently through the water.

Information has been sourced from The Waterbug Book for more information and some really cool videos visit [http://www.thewaterbug.net/book.html](http://www.thewaterbug.net/book.html)