



Hi All,
HNY!

Reminder

Monthly Monitoring is this week Have fun!!

Welcome to a new and exciting year for Waterwatch.

I have thanked you previously for your great work providing data for the CHIP report but just thought I would say it again. I have been told by many people lately what a great document it is. Our aim is to continue to improve this report so let us know if you have any ideas.

Be sure to check out the newly revamped Upper Murrumbidgee Waterwatch Site

<http://www.act.waterwatch.org.au/> for resources and information on regional Waterwatch. Including the 2014/15 CHIP report.

Yass Volunteers

Welcome to our 2 newest volunteers Ginny and Jane who have started monitoring on the Yass river we have had a really great response to a call for volunteers to help with the Yass River Catchment. And I look forward to improving our coverage so we get more understanding of the condition of this catchment and raise awareness about the projects helping to improve the Yass river catchment.

Catchment Catch Up

Thanks to everyone who uploaded data for January 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 will be upon us soon so please let me know if you want to help to sample bugs or if you want me or a CIT team to do them. If you want me to help you I will set aside times and will send out some days that I will be out sampling. Very keen to accommodate anyone who wants to do their own sites so let me know what you would prefer. See over page for the first edition of ON YOUR SPOON which will highlight some of the bugs we find when sampling.

Clean Up Australia Day March 6th

Fast approaching and plenty of sites to join in at. Check out sites near you see below links for Ginninderra Sites or Yass Sites

<http://www.cleanupaustraliaday.org.au/join/?kw=&location=&state=ACT&offset=0>

<http://www.cleanupaustraliaday.org.au/join/?location=Yass&kw=>

There are lots of registered sites around Ginninderra and I will be helping out at Giralang Pond so if anyone is looking for sites to help out at jump on the website and join a site.

State Of the Environment Report ACT

The ACT State of the Environment report has just been released and includes a Case Study on Waterwatch if you are keen to have a look click the link below. And if you have any comments let the ACT Gov know or send through to me and I'll pass them on.

<http://reports.envcomm.act.gov.au/actsoe2015/downloads/index.html>

Please let me know if you need any equipment or information, it's my job and I love it!

Cheers
Damon

ON YOUR SPOON

Dragonfly Larva Order: Odonata, Suborder Epiproctophora

Order Level

Sensitivity Rating 3 (3-9 Family level variation)

Moderately Tolerant



Dragonfly fossils have been found in rocks from the carboniferous period (around 320mya) with some very large adults having wingspans of 60cm. Not sure if they found any larva in the fossil records.

Dragonfly larvae are predators, generally slow moving and rely on camouflage and some amazing mouth parts to catch food.

Like most animals Dragonflies are variations of a simple structural theme, with some very familiar body parts. To identify this group we need to look for the things that are unique to this Order or a group of features or habits. We can usually fairly quickly identify Dragonflies by some of these key features and habits. In the picture above firstly we note six legs and the large eyes on the head which makes the head wider than the thorax. In some families like that above the 3 anal spikes are very clear and if we see this we can be confident in calling it a Dragonfly. However we still might be thinking it could be a Damselfly if we have mistakenly called the spikes 3 tails but if we look at the Abdomen it usually bells out unlike the Damselfly which has a more slender abdomen that tapers down to 3 distinct tails (terminal gills). Dragonfly larva draw water into their body to pass it through internal gills in the abdomen which take oxygen from the water. After extracting the oxygen they then expel the water through their rears, if threatened by a predator or Waterwatch spoon they can expel this water at such a rate that they are effectively a jet propelled submarine. If you see a waterbug that moves like this it is a dragonfly.

The lower jaws are long, hinged structures that fold up underneath the head. This structure in some families is called the mask as it covers the upper mouth parts. When hunting the lower mouth parts shoot out (unfold rapidly) to capture prey and draw it back to the mouth where the mandibles are used to cut up the food.

In really healthy waterways you might expect a large range of dragonfly genera to be present from a range of families. In urban wetlands we often find the more tolerant of the family groups and often only a couple of species.

Information has been sourced from *The Waterbug Book* for more information and some really cool videos visit <http://www.thewaterbug.net/book.html>

