

Catchment Connection



Regional wrap—Autumn

North Central Waterwatch & Community Stream Sampling Project update

It has been a very busy Autumn with some major events and projects being implemented. Saltwatch Snapshot Week was a huge success...perhaps even the biggest one so far for the North Central region! Schools continued to join up with the River Detectives Program, and new community monitors joined the now very large water quality monitoring network. A wonderful achievement stemmed from the second season of Bibrons Toadlet targeted surveying which revealed new populations of this threatened frog species in areas where there were previously no records of them existing! WELL DONE!

We have been involved in the Community Stream Sampling Project (CSSP), administered through the Bureau of Rural Sciences (BRS), since July 2006. Sadly our funding for this project will conclude at the end of this financial year. We are yet to be notified if there is more funding available to continue this project, but rest assured that we will continue to support those monitors who joined up for the project. Thank you to the team at BRS for their support during the CSSP...it has been great working with you!

On a personal note we have some exciting news...there will be two North Central Waterwatch weddings in the near future! Jennelle Carlier is getting married in her home town in Canada in a couple of months...and I (Melanie Barrot) recently got engaged.

Please note that Jennelle will be on leave for around 6 weeks from mid July until the start of September so if you have anything that needs attending to during this period please contact her beforehand if possible, however we will endeavour to cover her position as best as we possibly can during her time off.

Important dates!

QA/QC Week—

21st-27th July

National Water

Week—

19th-25th October



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Saltwatch Snapshot Week

Despite the continuing drought Saltwatch snapshot week 2008 was a massive success with a total of over 1000 participants ranging from primary school students to adult community monitors. The Waterwatch team were out and about running salinity sessions across the region with 44 schools visited! Students brought in samples from their local waterways and waterbodies for testing during their Saltwatch session. They also joined in with discussions about salt, taste-tested different samples of made up salty solutions, played games to demonstrate the important role that trees have in ensuring the watertable is maintained at appropriate levels, and generally had great fun learning about salinity! Many community monitors also participated in this special event by testing their regular sites between 4th-10th May. Below, and over the page, are some photos taken during Saltwatch Snapshot week.



Jennelle Carlier teaching students from Welton PS about salinity

Above left: getting ready for some taste testing.

Above right: tasting salt...Eew.

Right: Using an electrical conductivity meter to test water samples





Melanie Barrot teaching students from Tarnagulla PS all about salinity

Above: Taste testing...I'm not sure I want to do this anymore...

Middle: Sowing the seed...much harder than it looks!

Below: Creeping watertables...go trees!



Above: Learning about the water cycle

Middle: testing a water sample from the Loddon River

Below: testing a water sample from the Loddon catchment



A huge thank you to all those who participated in Saltwatch 2008!



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BIBRONS TOADLET TARGETED SURVEYS



Autumn saw the return of the Bibrons Toadlet Targeted surveys across the North Central region. Frog monitors set out in search of new populations of the Toadlet...holding their breath in anticipation, with recorders in hand.

The wonderful news is that we now have another 7 confirmed new populations of Bibrons Toadlets in the region, which adds to the 50+ populations that were found last season! 5 of these populations were found in the Tarnagulla area while the other 2 populations were discovered in near by Dunolly. We are not aware of any records indicating that this frog species has previously been found in these areas which makes the news even more exciting!

Well done and thank you to everyone who was involved in this seasons targeted surveying. If you have any completed frog data sheets please pass them onto your facilitator as soon as possible. Please also advise your facilitator if you wish to continue monitoring for other species– otherwise voice recorders should be handed back, and may be handed out again later in the year.



John, Jan, Anne and Heather out in search for suitable Bibrons Toadlet habitat



Jan, Fred, Brain and Shane at a site where the Toadlets were heard calling



Liquid Gold Feeds Life into Magnificent Island



Beautiful, refreshing water was released into Gunbower Island this autumn to help rejuvenate the important drought-affected ecosystems. Gunbower Creek is a 120 km long anabranch of the River Murray, so between the two waterways is essentially an island, Gunbower Island! The island has wetlands of international significance, important cultural heritage values and is a great place to enjoy a beautiful camping spot or a day trip to check out an abundance of life. The Gunbower Forest is a large Red Gum forest covering 19,450 hectares. It's floodplain ecosystem relies on flooding to maintain it's communities in a healthy condition. However, river regulation has resulted in a reduction of important flooding during winter and spring. Because of the threats to the health of this valuable ecosystem, it is important that the watering regime for the forest is improved.

Water was released on April 29th and continued to flood parched red gum areas until the 3rd week of May. In total, 7.7 gigalitres of water was released through two regulators on Gunbower Creek to targeted wetland complexes, Little Gunbower Creek Complex and Little Reedy Lagoon. Overall, more than 860 hectares were watered!

The environmental flows team is surveying the changes resulting from the flooding such as bird, frog and fish surveys. They will be keeping an eye on emerging vegetation and what inhabits the wetlands to seek refuge from the drought. What is especially exciting for the Waterwatch team is an opportunity to be out there conducting macroinvertebrate surveys (yes, I know, we're nerds)!

The wetlands are beginning to transform into beautiful habitats and will be harbouring a plethora of life for months to come! If you have a chance to visit this special event, I highly recommend it, you will not be disappointed to have witnessed the new life breathing from the special place we call Gunbower Island.



Data use—Autumn 2008

Data collected by community monitors and schools, through the Waterwatch Program and Community Stream Sampling Project, was used for the following purposes during Autumn:

- Rob Loats reported the water quality status of his monitoring sites in the Buloke Times each month for the whole community to see.
- The NCCMA Environmental flows team continue to use the data collected on the Loddon River as part of their low flow monitoring program.
- Frog distribution data was forwarded to DSE and Parks Victoria to assist in effective environmental management.
- All data collected through the Community Stream Sampling Project was forwarded to the Bureau of Rural Sciences for incorporation into their on-line database.
- Murray Human Services in Echuca forward their data onto Echuca Landcare Group for publication in their newsletter.
- Monthly water quality data collected by Marion DaCosta and Fred Watts, along Burnt Creek and Pretty Jane Creek, is published in the Dunolly newsletter 'The Welcome Record'.
- Water rat and platypus sighting results were sent off to the Australian Platypus Conservancy to assist with their program.
- All existing water quality data in close proximity to identified localised assets, across the North Central region, was provided to NCCMA staff for baseline condition information.
- Tafe students continue to request data for various waterways such as Sheepwash Creek to complete management plans for their assessment tasks.

All data collected through the Waterwatch Program and Community Stream Sampling Project is entered into the regional Waterwatch database.

This data is available upon request— we are always happy to help and make use of the data collected!

Contact the regional coordinator or your local facilitator for further information.

We need your data, even if there is no water!

Many waterways monitored by Waterwatch and Community Stream Sampling project volunteers in the North Central Region have not flowed for some time. While it is impossible to do water tests with no water, it's still **VERY** important for us to know that the waterbody is dry.

Please remember to send us your monthly results sheet letting us know that there is no water— 'dry' or 'none' in the flow conditions section is sufficient.

This information provides us with valuable flow (or lack of it!) data, but also helps ensure that the Waterwatch program will receive continued funding.



Keeping an Eye on Our Urban Ecosystems

Conservation and Land Management students from BRIT TAFE in Bendigo have had a blast monitoring various condition indicators for their 'Urban Lakes' project on lakes Neanger and Tom Thumb.



As part of their project, the students were required to collect information about the local vegetation as well as chemical, physical and biological information about each lake. They also had a group set up to ensure the proper quality control procedures were in place (just what Waterwatch likes to see!). They spent 2 days at the lakes collecting all of their data.

Waterwatch were called upon to help the students learn the proper methods to sample for macroinvertebrates in the field. Later in the lab, we helped with identifying the little

critters and using this information to indicate the condition of the lakes. Lake Tom Thumb scored higher for macroinvertebrates (the main difference being the presence of mayflies) compared to Lake Neanger, even though the two lakes are directly opposite each other. It will now be up to the students to look at all of the data collected and come up with theories as to why the two lakes varied in macroinvertebrate diversity, and then make suggestions about what could be done to improve the condition of the lakes. Well done to those involved in this project. We hope that with access to the results from last years sampling it will be possible for the students to build a comprehensive report on the status of the lakes!



Stay tuned for snippets of the report in the next newsletter...



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Platypus back in their element

The North Central CMA and the local community are aware of the declining health of Birch's Creek. "Birch's Creek has high environmental values and inhabitants, such as the River Blackfish, whose distribution has decreased over past years, due to the on-going drought".

On a recent site visit to Birch's Creek community member, Ron Cosgrove and North Central CMA Environmental Flows Officer, Michelle Bills sighted a platypus in a shallow pool near Smeaton, indicating the resilience of the creek during drought times.

"In times during drought it is very easy to forget the fact that we must have a commitment to the environment. It is during these current times of prolonged drought, that we lose sight what is valuable to us and these may never be able to be re-created or replaced. Plant life, wildlife and other water creatures are being taken for granted" Mr Cosgrove said.

Goulburn Murray Water and the North Central CMA have been working closely on managing the creek with a recent increase in flow releases to improve the condition of the creek. The increased flow is aimed at freshening the pools and improving the water quality of the creek.

The North Central CMA have undertaken a vast array of activities to rehabilitate the creek, including an environmental flows study, willow removal, fencing, revegetation, Blackfish surveys and habitat reinstatement.

North Central CMA and G-MW will continue to jointly monitor the water quality of the Birch's Creek system to ensure that common interests including water security, water availability and the protection of the creek environments deliver maximum benefits to the creek under the ongoing drought.



Birch's Creek over summer 2007-08
[Photo courtesy: Ron Cosgrove]



Water being pumped into pools downstream
as the 'freshening' release falls short
[Photo courtesy: Ron Cosgrove]



One happy platypus takes a dip as the
water level increases and pools reconnect
[Photo courtesy: Ron Cosgrove]



Goodbye, good luck & thank you for the data...

The team at North Central Waterwatch would like to extend our deep gratitude and appreciation to Ian Lonsdale from Langley Primary School for his extraordinary effort and dedication to the Waterwatch program.

Ian has been a passionate Waterwatcher since the program commenced and has been keen to pass on his knowledge and enthusiasm for the environment to his students and the broader community that he lives and works in. He has been impressed with the community response and interest in river health issues. This was especially evident during events such as Saltwatch Week when parents would send in a large number of samples to test; the results of which were eagerly awaited.

Ian has observed significant changes along his site on the Campaspe River over the years; in particular the removal of large infestations of willow and other weeds has led to improvements in water quality and habitat for native species. Being a keen fisherman Ian laments that the prolonged drought has had a detrimental impact on fish populations in the area however he remains optimistic that this will turn around sometime soon.

We wish Ian all the best in his new endeavours as he commences his retirement and say **THANK YOU** for all his efforts for engendering care and respect for the environment within his community.



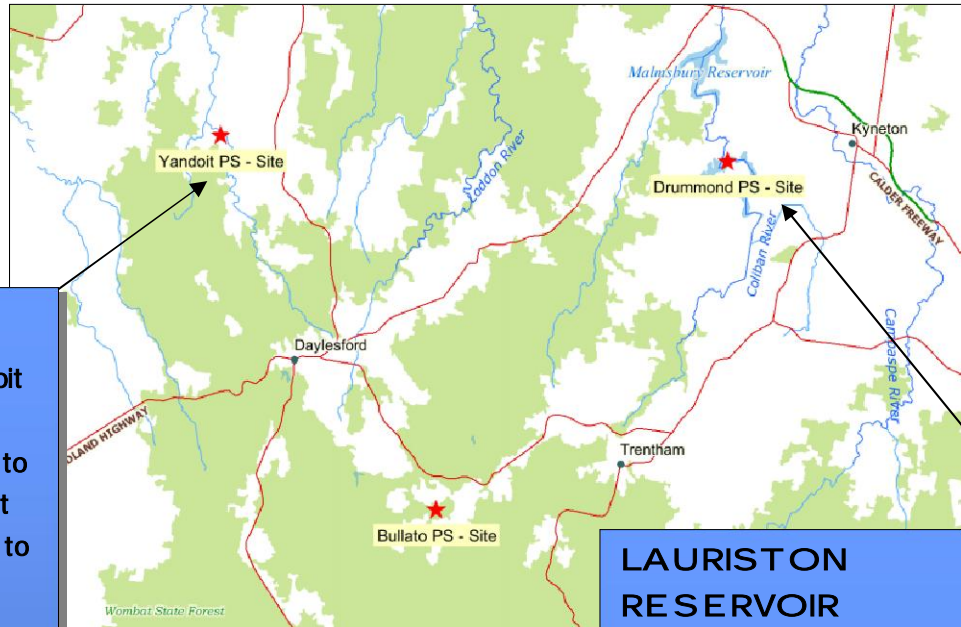
Ian Lonsdale, Langley PS



Upper Loddon and Campaspe catchment tour

"The best part was probably when we learnt where all the water was"

Lizzie, Prep



JIM CROW CREEK

On Monday May the 12th Yandoit and Drummond Primary Schools came to Bullarto Primary School to have a look at Kangaroo Creek. It was cool when we went on the bus to Jim Crow Creek. We saw lots of willow trees at Jim Crow Creek. The water was dark like tea and shiny with little pebbles. There were no smells and no sign of animals except for a yabby claw in the water. On one of the parts of the creek a whole lot of reeds grew all over the side of the creek. It was not polluted badly but it was pretty good with the clear water and pebbles. When we left Jim Crow Creek we went to Lauriston Reservoir and got off the bus. We immediately saw a dead kangaroo. It took a while for me to notice it.

Eamon Whitehouse
Grade 3

"It was really interesting to see the water testing sites from the three schools. This was because they were all so different"

Miranda, Grade 3



LAURISTON RESERVOIR

On Monday May the 12th Bullarto, Yandoit and Drummond primary schools went to Reservoir. It was eroded and dry. The bank was eroded. There was no in stream cover. There was a dead kangaroo, other wise there where no signs of animals. The land was compacted so not much could grow. There were a few trees and some bushes by the bank. There was a lot of grass. Lauriston Reservoir was bad and totally degraded compared to all the other places. I didn't like it but there was some educational value in seeing a degraded river. There was a no camping sign but I don't think anyone would want to camp there.

Oscar Izard
Grade 5



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KANGAROO CREEK (refer to Bullarto PS site on map)

On Monday, May the 12th, Yandoit Primary School and Drummond Primary School came to our school to see our creek. First of all we went through a gate into a paddock. It took us a while to get down there because we had to climb over a cow's fence.

When we got there we had to look at what was there. Also we had to tell Yandoit and Drummond how we test the little river and all that stuff we do to help the environment be a healthy place. On the way down there we saw some mushrooms and fungi and when we got down we also saw lots of plants and trees. At kangaroo Creek there are not many weeds except holly. Some people would have smelt the fresh air, and touched some plants such as ferns and moss on the trees and logs. We heard laughing jackass, (kookaburra) and we heard all different types of birds.

Our river was different to the other creeks we went to. It was different to the other creeks because of how small it was. The land was all wet and soggy. That's why we wear gumboots down there. The creek is beautiful, don't get me wrong. The kids from the other two schools thought our creek would be much bigger, but they got a shock because it's just the start but when you go down further its different. The water was very healthy and it was flowing at a medium level but it was sort of clear. There were no water bugs in the water. The ground has been damaged by us walking and jumping over the creek. This creek isn't like other creeks because people don't really go down there because it's fenced off. How we test the creek is we get a little bit of water in the bottle then we tip it out down stream and put more water in the bottle then we go back to school usually. Now when we are back we do pH, phosphorus, salinity, water temperature, air temperature, turbidity and rainfall in the last 48 hours. Water tests are very important to see if the river is healthy or not. I think the river is clean most of the time when we go down there but the other times it is murky.

I think this trip showed the other kids what a baby creek looks like. Also it showed them how healthy some creeks and environments are – unlike the ones they have to test.

Nicky Pedley

Grade 5

"It was fun going out into the bush to learn about water, instead of doing the work in the classroom"

Thomas, Grade 3



Animal of the Quarter

The Red-browed Finch

Scientific name: *Neochmia temporalis*

Family: Passeridae

Order: Passeriformes



Courtesy of the
Australian Museum
AMS406; SG Lane
Collection, Item 662

Red-browed Finches are characterised by a bright red eyebrow, rump and beak, on an otherwise green and grey bird. Upperparts are olive green with grey underneath. Red-browed Finches are also known as Red-browed Firetails.

The Red-browed Finch occurs mostly east of the Great Dividing Range, between Cape York in Queensland and the Mount Lofty Ranges in South Australia. They are often found in grassy areas interspersed with dense understorey vegetation, commonly along creek lines. They are regularly observed in small flocks that will fly into dense undergrowth when disturbed.

The nests of this species are large and domed, with a side tunnel for entry. It is a rough construction of twigs and grass stems built in dense shrubby areas, 1-2 metres off the ground. Both parents share nest-building, incubation of the eggs and feeding of the young when they hatch. Breeding season extends from October to April.

From a local perspective, the distribution and abundance of this species may be influenced by the absence/presence of various woody weeds, particularly gorse or blackberry, and when considering the control of these weeds (e.g. grooming, cut and paint, spraying) consideration should be given to whether a population is using these plants for habitat and appropriate measures put in place to ensure any impact is minimised.

What am I???

**As a juvenile (larvae) I am a fierce predator with large sickle-like mandibles (mouthparts), which I use to suck out the dissolved flesh of my prey;
In my adult form I am very streamlined, which allows me to move fast through the water;
My hind legs have paddle-like tarsi (final segment of the leg) with a dense fringe of swimming hairs;**

I belong to the Dytiscidae family;

I am a D _ _ _ _ _ Beetle



PIC OF THE QUARTER

A Perons Tree Frog sitting pretty.

Notice his cross pupil and emerald green specks- typical features of this species. They are also well known for their ability to change colour very quickly depending on where you find them and their environment...what an amazing creature!



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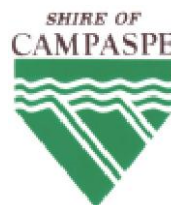
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Rochester Campaspe
Water Services Committee



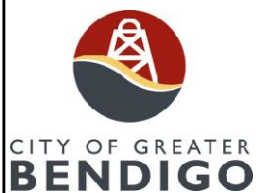
Australian Government

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action
Salinity & Water
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What am I? A Diving Beetle



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