



## National Science Week

National Science Week is an annual nationwide celebration of Australian achievements and capabilities in Science. Now in its 11th year, National Science Week 2008 was held between 16—24 August. During this time, the H-CR Waterwatch Coordinators took the opportunity to further promote the Waterwatch program and were busy demonstrating water quality monitoring procedures in high schools throughout the region. Ingrid and Amanda demonstrated methods and discussed reasons for testing Temperature, pH, Electrical Conductivity, Turbidity, Available Phosphate and Dissolved Oxygen.

One school which benefited greatly from this learning opportunity was Linuwel School in East Maitland. Linuwel is a Steiner school located between Morpeth and East Maitland, which has its own wetland pond. The school had been involved with the Waterwatch Program in the past, but had not performed any monitoring since 2007. Teacher Doc Strachan and three senior students were very excited to get back into regular monitoring to find out the health of their wetland pond.



Left to right: Laura Russell (work experience with HCR Waterwatch) Eliza Kelly, Holley Ryan, Rachel Bose (Linuwel school students) & Teacher Doc Strachan at Linuwel School's Stormwater Wetland for National Science Week 2008.

### CATCHMENT DETOX

#### A National Science Week Project

Is an amazing online game where you manage a virtual catchment and try balancing three different factors:

- ◆ the health of the environment
- ◆ the economy
- ◆ population growth

The game includes resources, such as pod casts and facts and figures, to help you make the best decisions for your catchment.

The project is led by the ABC, in conjunction with CSIRO, eWater and National Science Week, and ABC Local Radio will be broadcasting a Catchment Detox series between 25 August and 5 September.

The game commences 16 August and all entries must be received by 5 September.



### Important

We have developed a new safety sheet which should be kept in your kit. If you do not have a copy please call the Waterwatch team on 02 4930 1030 and we will send you a laminated copy of the sheet for your kit.

### Waterwatch Fact Sheets

New Waterwatch Fact Sheets are available on the [fact sheet page](#) on the CMA website or by calling the Waterwatch Team on 02 4930 1030.

- FACT SHEET 1 - [What is Waterwatch](#)
- FACT SHEET 2 - [Water Quality Parameters & Indicators](#)
- FACT SHEET 3 - [How to Report Water Pollution Incidents](#)
- FACT SHEET 4 - [Water Quality & Riparian Vegetation](#)



You could win a trip to the Kimberleys, and if you play as a school team you could win \$1000 of ABC Shop books and DVDs for your school.

For more information go to:

[www.catchmentdetox.net.au](http://www.catchmentdetox.net.au)

#### Inside this edition

- ◆ National Threatened Species Day Page 2
- ◆ Spotlight on: The Giant Dragonfly Page 2
- ◆ Waterwatch and National Tree Day for Schools Page 3
- ◆ Funding Opportunities Page 3
- ◆ Water What? Waterwatch trivia Page 3
- ◆ Let's go paperless... Page 3
- ◆ Important Waterwatch Dates Page 4



# Spotlight on: The Giant Dragonfly

High quality water is imperative to the survival of the Giant Dragonfly. The larval stage of this insect can be found in most aquatic habitats, although they are not often found in badly polluted waters. The main threats to the Giant Dragonfly are **decreasing water quality**, loss or modification of their swamp habitat and changes in natural water flow.

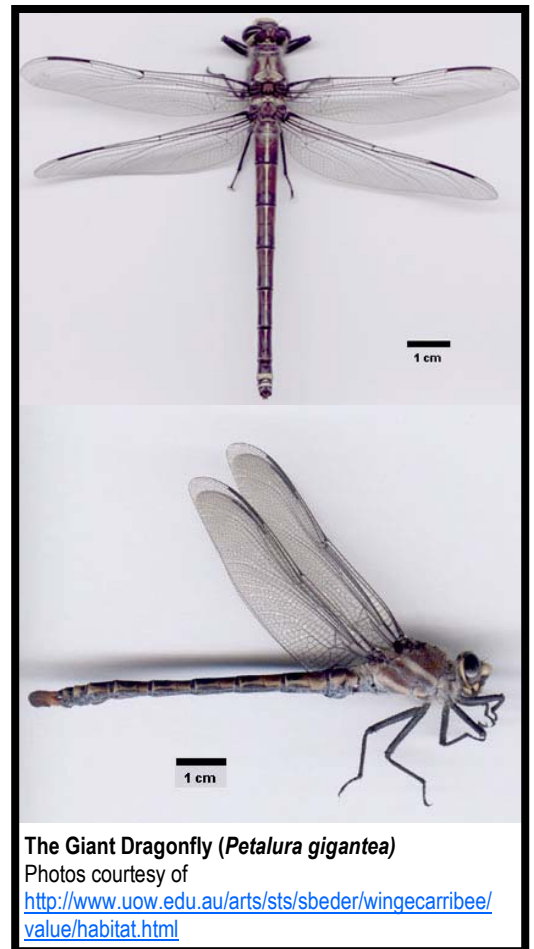
The Giant Dragonfly (*Petalura gigantea*) is an endangered species found along the coast of NSW and east of the Great Dividing Range. It inhabits permanent swamps, bogs and wetlands with some free water and open vegetation. In this CMA region, the Giant Dragonfly has been recorded at coastal wetlands and lagoons at Port Stephens and on the Central Coast.

Larvae are slow growing and can stay in the larval stage for ten years, while adults only live for one summer after emerging in late October. Females lay their eggs into moss or other soft vegetation bordering the swamps. The larvae make long networks of tunnels under the swamps and emerge in the evening to feed on insects and other invertebrates at the water's surface. When they emerge, the adults remain at the swamp, flying over the swamp and its margins, hunting for flying insects.

## What can be done to recover the Giant Dragonfly?

- ◆ Return natural water flows to swamp environments
- ◆ Protect swamps from pollution, modification and disturbance
- ◆ Minimise use of pesticides in and adjacent to the swamps

If you or your school/community group are fond of this wonderful insect, perhaps you should get out soon and use your Waterwatch kit and find out if the Giant Dragonfly larvae might be calling your water body home..



The Giant Dragonfly (*Petalura gigantea*)  
Photos courtesy of  
<http://www.uow.edu.au/arts/sts/sbeder/wingecarribee/value/habitat.html>

**If you are not already involved in Waterwatch, please contact the Hunter-Central Rivers Waterwatch team on 4930 1030 and speak with your friendly Waterwatch Coordinators.**

The following website was used as research for this article and contains further information:

<http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/profile.aspx?id=10600>

## National Threatened Species Day

National Threatened Species Day is held every year on the 7th September, with the aim of encouraging the community to protect our threatened plants and animals and improve Australia's biodiversity. Activities are organised across the country and range from exhibitions and festivals, to displays, guided walks, workshops and a range of other community education and promotional activities.

One event for primary school age children is the Golden Paw Award drawing competition, sponsored by Dymocks. You need to research a threatened animal and draw or paint it. Entries close 7th September 2008. **There's some great prizes for winning students and their schools.** For more information, go to; [http://www.fnpw.org.au/Golden\\_Paw\\_Award/Golden\\_Paw\\_Award\\_2008/oldenpaw2008.pdf](http://www.fnpw.org.au/Golden_Paw_Award/Golden_Paw_Award_2008/oldenpaw2008.pdf).

### Ideas for starting your own threatened species activities:

- ◆ Find out what threatened species occur in your local area by searching the BioNet Website [www.bionet.nsw.gov.au](http://www.bionet.nsw.gov.au)
- ◆ Find out more about the species and what habitats it prefers from the NSW Threatened Species Website [www.threatenedspecies.environment.nsw.gov.au](http://www.threatenedspecies.environment.nsw.gov.au)
- ◆ Share your information with your local community by telling your friends and family, or even by making a flier for your neighbours.

For more information on threatened species, go to <http://www.wwf.org.au/ourwork/species/tsn/> or <http://www.environment.gov.au/biodiversity/index.html>

# Waterwatch and National Tree Day for Schools

## 25<sup>th</sup> July 2008

National Tree Day for schools this year was made even more successful by an exciting initiative of the CMA's Waterwatch team to add a water quality focus. The Waterwatch team joined in the celebrations at two local schools to explain the importance of healthy native vegetation to water quality.

Wollombi Public School planted close to eighty natives on an eroding slope of the school grounds and in the school gardens. The CMA's Waterwatch Education Officer guided the students down to Wollombi Brook to conduct water quality testing and to inspect the revegetation works completed by Wollombi Landcare. The students were amazed at the amount of work completed by Wollombi Landcare. During their visit they determined the reason for the trees growing sideways to be due to last years flood and they identified that the problems for the Brook would have been greater if the trees were not there to hold the soil together and stabilise the banks during the heavy flow.

Waratah West Public school students were also busy planting trees for the rehabilitation works at the newly named Koba Creek that forms the back boundary of the school. The name Koba comes from the Awabakal meaning "Place of Belonging". Prior to the Waterwatch visit the Lord Mayor of Newcastle Cr John Tate Councillor visited the school to conduct the formal name giving ceremony. The Waterwatch coordinators conducted the water quality testing with forty of the senior students. The test results were pleasing however there was a very high reading for salinity; this is thought to be because the stream is fed by an underground spring.



Involving Waterwatch in National Tree Day for Schools in 2008 was an extremely successful initiative and due to its success involvement is planned for Tree Day 2009 and well into the future.

### WaterWhat? Waterwatch Safety Trivia

1. What are the safety documents called that describe first aid, storage and toxicity for chemicals?
2. Name two pieces of safety equipment that must be worn when performing chemical tests.
3. How should you dispose of liquid waste after performing chemical Waterwatch tests?
4. What is the number for the Poisons Information Centre?

Answers: 1. Material Safety Data Sheets (MSDS), 2. Safety goggles & rubber gloves, 3. In your liquid waste container, dilute your liquid waste with twice the volume and flush it down the toilet 4. 131 126



#### Dilmah Water Quality Funding

Funds will be used to provide access to water quality monitoring kits and training, as part of community Landcare plans to improve water quality. Grants of up to \$1650 (including GST) are available for schools and community groups. Applications close 31 October 2008. Ingrid will be happy to assist you in completing your application 02 4930 1030. Application forms are available on [www.landcareonline.com](http://www.landcareonline.com)



#### Junior Landcare Grants Program

The program funds local projects through schools and/or youth groups across Australia. The program targets major issues relevant to our natural environment. Round four closes 24th October 2008. For more information: [www.landcareonline.com](http://www.landcareonline.com)



#### Australia Post / Landcare Community Development Grants Program

Community groups can now receive financial assistance to help them make a difference to their environment and community. This program provides funds of up to \$3300 (including GST) for local community projects across Australia. Round one closes 19 September 2008. For more information: [www.landcareonline.com](http://www.landcareonline.com)

Funding Opportunities



#### Let's go paperless...

If you receive this newsletter by mail, we would like start sending it to you by email.

We understand that not everyone has an email address, but if you do we would love you to help us save some paper.

Please call or email us with your email address. Call Margo Slaven on 02 4930 1030 or email [hcr.waterwatch@cma.nsw.gov.au](mailto:hcr.waterwatch@cma.nsw.gov.au) (with 'Water Watcher Newsletter' in the subject)



# Important Dates 2008

## August

- 16 - 24 **National Science Week**  
[www.scienceweek.info.au](http://www.scienceweek.info.au)
- 25 **Keep Australia Beautiful Week**  
[www.kabnsw.org.au](http://www.kabnsw.org.au)  
Keep Australia Beautiful  
Peter McClean 02 9633 3380

## September

- 1 **Port Stephens Schools Environment Awards**  
Entries Open  
Port Stephens Council  
Melinda Anderson 02 4980 0251
- 1-7 **National Landcare Week**  
Contact your local Council for events
- 5 **Lake Macquarie Schools Environment Awards**  
Entries Close  
Lake Macquarie City Council  
Pamela Baker 02 4921 0144
- 7 **National Threatened Species Day**  
[www.environment.gov.au](http://www.environment.gov.au)

## October

- 19 **Catchment Day at the Hunter Wetlands Centre**  
Hunter Water Corporation  
Kate Farmer 02 4979 9647
- 19-25 **National Water Week**  
Waterwatch  
Ingrid Berthold 02 4930 1030
- 22 **Spring Water Bug Survey**  
[www.bugsurvey.nsw.gov.au](http://www.bugsurvey.nsw.gov.au)  
Waterwatch  
Ingrid Berthold 02 4930 1030

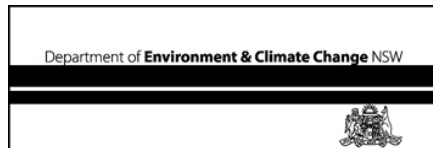
## November

- 16-22 **Phosphorous Awareness Week**  
Waterwatch  
Ingrid Berthold 02 4930 1030
- Mid Nov **Lake Macquarie Environmental Education Grants**  
Opens  
Lake Macquarie City Council  
Rachel Honnef 02 4921 0458

## December

- 1-7 **Coastcare Week**  
Contact your local Council for events

Hunter-Central Rivers Waterwatch is funded and supported by:



To subscribe or unsubscribe to this newsletter, call 02 4930 1030 and ask for the Waterwatch Team or email [hcr.waterwatch@cma.nsw.gov.au](mailto:hcr.waterwatch@cma.nsw.gov.au).

[www.waterwatch.nsw.gov.au](http://www.waterwatch.nsw.gov.au) *Have you logged on?*



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