

Landcare Link

Quarterly Newsletter of the Queensland Murray-Darling Committee
October 2009

Earth Smart Science Schools

The Earth Smart Science (ESS) Schools program is an election commitment by the Queensland Government to expand the number of environmentally sustainable schools in the State from 60 to 1000 by 2012. This also includes the declaration of **2010 as the Year of Environmental Sustainability**. The ESS program will be implemented through the Queensland Environmentally Sustainable School Initiative (QESSI) regional hubs. The process of supporting schools to become more environmentally sustainable will be based on a whole-of-school approach to sustainability as outlined in the National Environmental Education Statement for Australian Schools. As part of this program schools will develop and implement School Environmental Management Plans (SEMPs).

QMDC is one of the QESSI hubs that will be supporting schools through the ESS program. QMDC and our partners will deliver training to staff, provide resources and other support to assist schools. To facilitate the sharing of information and support between schools and to ensure the greatest efficiency in the delivery of services the program will happen through a cluster approach.

QMDC will be delivering information sessions on ESS and what it means for schools in the region. The sessions will be delivered in both an online and face-to-face format. To register your interest and for more information please contact QMDC.

Key education for sustainability documents to investigate:

- **United Nations Decade for Education for Sustainable Development-2005-2015**
It aims to ensure that education is founded upon the creation of a peaceful, just and sustainable future.
- **National Environmental Education Statement for Australian Schools-Educating for a Sustainable Future** - Provides a nationally agreed description of the nature and purpose of environmental education for sustainability through all years of schooling, including a vision and a framework for its implementation.
- **Earth Smart Environmental Sustainability Strategic Plan 2008–2012** - Outlines the Department of Education and Training's commitment to reducing their ecological footprint, educating for sustainability and our natural environment.
- **Destination 2010** - Education Queensland's action plan that establishes the state-wide strategies and performance measures that focus the State's and each school's commitment in providing quality education and training. Outcome SC2 reflects Education Queensland's commitment to environmental sustainability. Schools are required to implement strategies and actions in partnership with the community and within the school to reduce the school's ecological footprint.
- **MACER Report-Education for Sustainable Futures: Schooling for the Smart State** - In December 2006, the Ministerial Advisory Committee for Educational Renewal made 13 recommendations including the development of a sustainability strategy for Queensland schools, teacher professional development and the inclusion of sustainability in core student learnings.
- **Earth Charter** - The vision is to establish a sound ethical foundation for the emerging global society and to help build a sustainable world based on respect for nature, universal human rights, economic justice and a culture of peace.

For more information or to download a copy of any of the documents visit Education Queensland's Environmental Education for Sustainability page <http://education.qld.gov.au/curriculum/learning/sustainability.html>

*Enough for all forever through caring for self, others and place -
Education Queensland vision*

*"When we tug at a
single thing in
nature, we find it
attached to the
rest of the world."
- John Muir*





Green and Healthy School Awards announced

Congratulations to the winners and participants in the 2009 Keep Australia Beautiful Green and Healthy School Awards. Freestone State School was awarded the Greenest and Healthiest School in the Darling Downs and Yowah State School as the Greenest and Healthiest School in South West Queensland.

Freestone State School impressed judges with their 'Getting Down and Dirty' program focusing on the school's vegetable garden and the 'Grow It, Cook It' book which was sent to every family to share good health and nutrition with the community.

Yowah State School may only have four students but the whole school community has pulled together to make a difference. School activities include gardening projects, energy conservation initiatives and waste reduction and recycling activities. The students are also very active in their community.

Outstanding achievement awards were also awarded to the following schools:

Darling Downs:

- **Dalveen State School** - Environmental Protection Award
- **Pilton State School** - Low Carbon School Award
- **Yangan State School** - Partnerships Award
- **Ballandean State School** - Resource Recovery Award
- **Toowoomba Grammar School** - School Spirit Award
- **Hannaford State School and Amiens State School** - Fit and Active Award
- **Crows Nest state School** - Waterwise Award, Thinking Caps Award and *Judges Commendation* Award
- **Freestone State School** - Health and Nutrition Award
- **Gabbinbar State School** - Litter Prevention Award
- **Steven Plant** (Crows Nest State School) - Outstanding Achievement Award
- **Hugh Duffie** (Toowoomba Grammar School) - Young Legends Award

South West Queensland:

- **Yowah State School** - Environmental Protection Award, Partnerships Award, Resource Recovery Award and Young Legends Award
- **Dirranbandi State School** - Low Carbon School Award, School Spirit Award, Waterwise Award and Health and Nutrition Award
- **Surat State School** - Fit and Active Award, Litter Prevention Award and Thinking Caps Award
- **Scott and Barb Shorten** (Yowah State School) - Outstanding Achievement Award



Some of the Darling Downs region awardees at Crows Nest State School.



South West region awardees and presenters at Surat State School.

Weedbusters week was held in September. The Weedbusters website <http://www.weedbusterweek.info.au/> features fact and activity sheets and other resources for schools. A draft middle primary unit called Weeds in Action based on the Primary Connections' five Es model (engage, explore, explain, elaborate, evaluate), has been developed and teachers are sought to trial this unit. For more information contact the Weedbuster coordinator on 3224 7704 or email petra.skoien@deedi.qld.gov.au

Living Greener
A new Australian Government website providing a starting point for information about living more sustainably and reducing your environmental impact. It also includes information on government programs and financial support. www.livinggreener.gov.au/



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Students take the sustainable house design challenge

Toowoomba State High School (TSHS) Year 10 Super Science students undertook the task of designing a house that uses resources in a sustainable way considering energy use, water use and climate control. The unit was supported by a Queensland Museum learning kit. As part of the kit the museum provides a model of a sustainable house and teaching and learning notes including activity sheets. The TSHS students and teacher, Michelle Tebay, also communicated with Queensland Museum staff via a blog. If you would like further information about the Sustainable House kit please contact Allan Morrison at the Queensland Museum (allan.morrison@qm.qld.gov.au).



New Water: Learn it for life!

Preparatory Unit

The new Prep unit, Water is Special aligns with the QSA Early Years Curriculum Guidelines and contains extensive play-based suggestions and resources. The Year 1 unit, My Friend Whizzy, aligns with the Science and SOSE Essential Learnings.

The resource can be downloaded at www.derm.qld.gov.au. A CD version can also be ordered online. Updated versions of the Years 2 & 3, 4 & 5 and 6 & 7 resources are also available.

Waterwise Professional development (PD) for teachers

If you are interested in a free cluster-based Waterwise PD for Prep to Year 7 teachers contact waterwiseschools@derm.qld.gov.au for workshop session options.



Professional Development Opportunities

If you have a group of teachers interested in a particular topic related to sustainability or natural resource management please contact QMDC (reneef@qmdc.org.au) to discuss the possibility of running a workshop in your town.

Regional Science and Technology Forum

Date: Monday, 19 October

Location: Toowoomba State High School - Mt Lofty Campus

Cost: No charge for EQ participants and university students, \$40 non-EQ

Program: The forum is for primary, secondary and pre-service teachers, scientific operations officers and administrators. The program will consist of a keynote address by **Chris Cheng**, Sydney-based author, previous primary teacher and Taronga Zoo education officer. He will also be presenting a workshop on "Scientific Literacy and the importance of getting it right".

The Forum also consists of ten workshop strands including:

- Environmental science,
- Leaders in science education,
- Scientific literacy and pedagogy,
- Primary Connections,
- ICT's in Learning.

QMDC staff will also be delivering a session at the Forum, **Making Your School Sustainable**, outlining key actions you can undertake in both your classroom and general school operations to help your school become more sustainable. A program and session summaries are available at www.learningplace.com.au/events/showitem.asp?eid=5537. Registration is also via this link. Contact Kay Lembo on email at klemb1@eq.edu.au to for more information.

16th Biennial Conference of the National Association of Agricultural Educators

Date: Sun 10th-Thurs 14th January, 2010

Venue: University of Queensland, Gatton Campus

Registration: \$540 (includes all meals and accommodation), registration closes Friday, 27 November 2009

Program: Delegates can look forward to a wide range of practical workshops and excursions. The keynote speaker will be Prof. Barry McGaw, Chair of the National Curriculum Board.

Target Audience: Secondary teachers of Agriculture and Horticulture; primary teachers who wish to use agricultural projects as a context for the teaching of Science and/or SOSE; secondary teachers of Sciences and/or Humanities who wish to deliver their learning outcomes in the dynamic context of agriculture and careers teachers/training providers who wish to learn more about employment opportunities in the primary industries sector.

For further information please contact Nigel Grant, The SCOTS PGC College, phone 4666 9802, email: nigel.grant@scotspgc.qld.edu.au.



Awards and Competitions

Sustainable Living Challenge

The Sustainable Living Challenge is open to teachers and students from any subject area in any secondary school around Australia. The program asks both teachers and students to identify a challenge and then take steps towards researching, designing and taking action to address it. Project submissions will be considered in five categories, and champions of sustainability will be selected on the basis of how projects demonstrate a vision for a sustainable future. All projects must be submitted by **30 October 2009**. To register and for more information visit www.sustainableliving.com.au.

Teach Sustainability Award

This annual award seeks to recognise innovative sustainability education teaching programs. To enter, a teacher submits their own sustainability education teaching program to the Teach Sustainability website by the end of **November 2009**. (Usually in word or PDF format.) Prizes include a sustainability book pack from the UNSW Bookshop, membership to the Australian Association of Environmental Education. For more information visit www.teachsustainability.com.au.

Junior Landcare Pumpkin Challenge

Open to individual and groups under 16 years of age. Similar to 2008's Watermelon Challenge, participants this year will compete to grow a pumpkin. Registrations close **Friday, 16 October**. Visit <http://juniorlandcarechallenge.com/Pumpkin/Home.htm> for more information.

Coles Plastic Bag Challenge

Open to individuals, school/youth groups and businesses. Participants collect used or discarded plastic shopping bags and then deposit them with Coles for recycling. Prizes are awarded for the most bags collected including a compost bin, projector, bokashi bin and Nintendo Wii. Coles will also donate money to Junior Landcare for bags collected. The competition closes **Friday, 16 October**. Visit www.juniorlandcarechallenge.com.au/coles/bags.htm to register.

Low Carbon Diet Challenge

Householders Options to Protect the Environment (HOPE) is supporting schools to take the Low Carbon Diet (LCD) challenge to reduce their carbon footprint. HOPE staff can provide resources such as HOPE's booklet "Low Carbon Living at Home" and school visits. For registration details and general information about the LCD program visit www.climatesmart.qld.gov.au. For further information about how HOPE can assist phone 4639 2135, email office@hopeaustralia.org.au.

Grants and Funding Opportunities

National Solar Schools Program

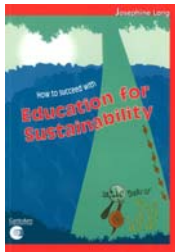
Don't forget to register for the National Solar Schools Program to ensure you are eligible to receive \$50,000 in funding to contribute to increased energy efficiency in schools. The program is being delivered in partnership with the Queensland Government Solar and Energy Efficiency Schools Program. The program is not only delivering solar panels in schools. Schools will also be able to choose from a range of other renewable energy technologies (including wind turbines, solar or heat pump hot water systems) and energy efficiency measures (including lighting efficiency retrofits, sensor timers, insulation, skylights, door closes and seals, sun shade, ceiling fans). To register visit <http://education.qld.gov.au/facilities/solar/register-nssp.html>.

Junior Landcare grants

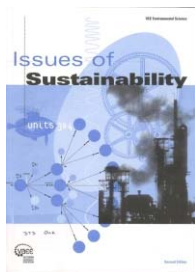
Coles Junior Landcare School Garden Grant - Schools and youth groups can apply for grants of up to \$1000 (ex GST) to create gardens in their school or community such as bush tucker gardens, waterwise gardens or vege gardens.

Yates Environmental Management Planning Grant - Schools and youth groups can apply for grants of up to \$1000 (ex GST) to undertake School Environmental Management Plans (SEMP) or to undertake works identified in an earlier SEMP. Closing date for the final 2009 round is **Friday, October 23**. To download application forms and for more information visit www.landcareonline.com/

Library Resources



How to Succeed with Education for Sustainability focuses on building capacity within the school community to create a sustainable future. This book is a practical reference book which provides a framework to assist school communities to implement education for sustainability.



Issues of Sustainability is a Victorian VCE text for senior students. It covers the two main areas Energy and Global warming and Diversity in the Biosphere. The resource is textbook in style and provides detailed background information on topics covered, includes practical exercises (experiments) and study questions.





Crows Nest students argue for chickens

Year Seven students at Crows Nest State School examined the construction of arguments and wrote the following in favour of the school purchasing chickens.

Our Landcare Group firmly believes that Crows Nest State School should purchase chickens to improve sustainability practices at the school. Having chickens at Crows Nest State School will be a very positive move. Purchasing chickens will give an educational experience for students, solve the schools compost problem and improve responsibility.

Raising and caring for chickens would be an educational experience for students. Students could research the life cycle, do projects, study behaviour of chickens and calculate feed, budget and organise egg use. Collection of data regarding egg production could be kept. Activities could involve maths, English and science. Keeping chickens would provide educational opportunities for students.

Purchasing chickens will solve the school's compost problem. Due to the open compost system vermin and smell have become an issue. Compost is not breaking down quickly for use on gardens. Hens eat the food scraps, therefore eliminating the need for a compost heap. Poultry effectively process scraps faster and manure is available for gardens. Chickens will resolve the compost problems at Crows Nest State School.

Chickens will improve responsibility at Crows Nest State School. Responsibility will be improved by having to care for the chickens. Students will have to feed the chickens, collect their eggs, give them water, clean their cage and ensure that the poultry is looked after. Having chickens at Crows Nest State School will improve the school greatly.

In conclusion, purchasing chickens will benefit the school positively. They will give children an educational experience, solve compost problems and improve responsibility. Having chickens at Crows Nest State School will be a great addition and improvement. Crows Nest State School should purchase chickens!

We welcome examples of student work highlighting how sustainability related topics can be linked to the curriculum. Thank you to Crows Nest State School for sharing this persuasive argument.



Resource profile:

The following resources are available for loan through the QMDC library.

- **PowerMate Energy Meter** - This small tool can tell you the energy consumption of individual electrical appliances. Appliances are simply plugged into the meter and readings can be given for electricity consumed and greenhouse gases produced. The meter will convert data into amounts per hour, day month and year.
- Labeled life size **compost and worm farm models**, made from durable plastic.
- **Waste kit** - This kit contains a set of scales, tarpaulins, containers and other resources needed to conduct a waste audit.
- **Soils kit** - This kit contains soil pH kits, salinity meter, and other materials that enable you to conduct hands-on soil/water interaction activities investigating topics such as erosion, infiltration and water holding capacity.



QMDC library resources are now able to be searched via the web.

To access the online catalogue visit the QMDC website – www.qmdc.org.au – and go to 'QMDC Library Services', a menu item on the left hand side of the screen.

Primary Connections Kits for loan

The Southern Queensland Science Centre of Innovation and Professional Practice (SCIPP) has developed resource kits to support our local Primary schools implement Primary Connection Science units. There are 13 Primary Connection units supported with loan kits and a number of these deal with environmental science topics.

Kits available include:
 Stage 1 - Schoolyard Safari
 Stage 2 - Plants in Action
 Stage 3 - Marvellous Micro-organisms and Package it Better

A full list of kit contents, along with cross referencing between Primary Connection Units and the Essential Learnings are available at www.learningplace.com.au/en/ddsw/smen



Events Calendar



October

- International Walk to School Month** www.iwalktoschool.org/
- 1-2 - **NSW Environmental Educators Conference**, Coffs Harbour
www.aaeensw.org.au/nsw_ee_conferences.htm
- 2 - **World Walk to Work Day** www.walk.com.au/wtw/page.asp?pageid=207
- 5 - **World Habitat Day** www.unhabitat.org/categories.asp?catid=490
- 12-14 - **International Teachers' Conference on Teaching Current Climate Change in Secondary Education**, Copenhagen, Denmark
www.ice2009.org
- 14 - **National Ride to Work Day** www.bv.com.au/ride-to-work/
- 18-25 **National Water Week** www.nationalwaterweek.org.au/
- 18-20 - **MDBA International River Health Conference**, Canberra.
www.onelifeoneworldourfuture.com/index.php?pageid=419
- 19 - **Regional Science and Technology Forum**, Toowoomba
www.learningplace.com.au/en/ddsw/smen
- 22-24 - **Engage Enact, Empower: Sustainability and the Early Years**, Melbourne www.eeec.org.au

November

- 9-15 - **National Recycling Week** <http://recyclingweek.planetark.org/>
- 15 - **Steve Irwin Day** www.steveirwinday.org
- 21 - **World Fisheries Day** www.gdrc.org/doyourbit/21_11-fisheries-day.html

December

- 7-13 - **Coastcare Week** www.coastcare.com.au

Library Resource



Inspiring the next young environmental leader. This book and the accompanying DVD are about developing environmental leaders and providing an alternative model for education. The resource features case studies and provides a suggested approach for developing your own student-led environmental project or running your own environmental education event. Written by Arron and Richard Wood.
<http://qmdc.cmeweb.libcode.com.au/>

Funded by:



Australian Government



Queensland Government

We want to hear from you!

Have your students produced some artwork relating to a school sustainability project or have they composed an interesting short story or poem they would like to share?

The *Landcare Link Newsletter* would love to feature inspirational pieces from students across the region.

We are also interested to receive information from teachers on the projects and learning activities being undertaken.

Students that contribute work will receive an encouragement prize for their efforts!

Send your contributions to reeneef@qmdc.org.au or pipb@qmdc.org.au today.

