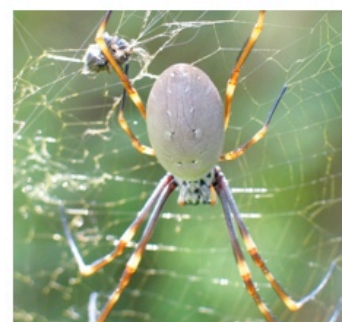
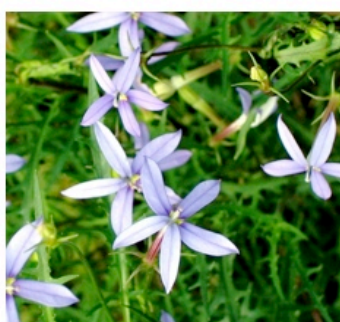
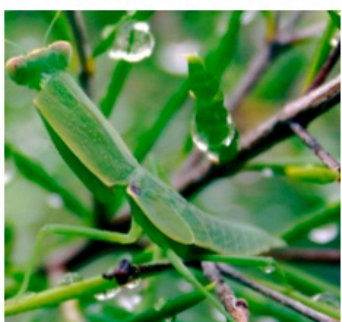
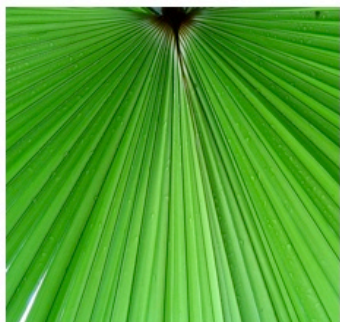
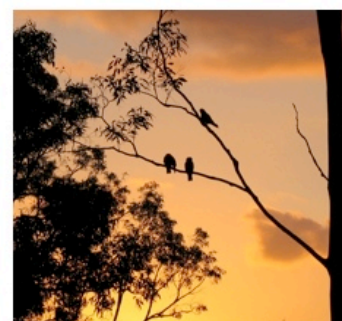


# 2011 Annual School Report

## Field of Mars Environmental Education Centre

NSW Public Schools – Leading the way



## Principal's message

One of the key roles of the Field of Mars Environmental Education Centre (EEC) is to ensure students have quality experiences in natural settings. Research suggests that when students experience quality time in these environments there are a range of measurable benefits including increased creativity, increased resilience and reduced stress. Students are calmer, they are better at critical thinking, their behaviour improves, attention improves, signs of attention deficit disorder are reduced and finally the students tend to do better in standardised tests.

During 2011 the centre increased its emphasis on the provision of new and innovative ways to deliver sustainability education throughout NSW. This included professional development activities for teachers, special events and a range of new programs.

I certify that the information in this report is the result of a rigorous school self-evaluation process and is a balanced and genuine account of the school's achievements and areas for development.

Steven Papp

Principal



## School Context

The Field of Mars EEC is one of 25 Environmental Education and Zoo Education Centres supported by the NSW Department of Education and Communities (DEC).

The centre is located in a reserve of remnant urban bushland in East Ryde. It offers programs to support schools and their communities with environmental and sustainability education. Programs are conducted on site at the Field of Mars Reserve, at other sites such as local reserves, in school grounds and via connected classrooms video conferencing technology.

The centre also provides support, advice, training and resources for teachers. It is used as a workshop venue for schools and other professional learning meetings.



## Visitor profile

The centre provides professional learning for teachers and learning activities for students in many different formats, including incursions, excursions, units of work, video conferences, theme programs and mandatory fieldwork.

Percentage of visit days per stage groupings:

	2011	2010	2009
Stage ES1 - 3	83%	84%	76%
Stage 4 – 6	17%	16%	24%



#### Percentage of incursion and excursion visits:

	2011	2010	2009
Incursion	47%	52%	47%
Excursion	53%	48%	53%



#### Comparison of incursion and excursion student numbers by term:

	2011	2010	2009
Term 1	4041	3301	1975
Term 2	3230	3342	2434
Term 3	2434	3507	2247
Term 4	3169	4423	1577
Total	12874	14573	8233

#### Virtual student numbers:

	2011	2010	2009
K-12	2026	735	NA

#### Greenspeak student numbers:

	2011	2010	2009
K-12	350	NA	NA

#### Learning for Sustainability Video Conference Festival participant numbers:

	2011	2010	2009
K-12	9988	6375	NA

#### Student leadership numbers:

	2011	2010	2009
Primary	180	NA	NA
Secondary	116	NA	NA



#### Teacher Professional Learning numbers:

	2011	2010	2009
K-12	923	763	545

In 2011 there was a decrease in student numbers from incursions and excursions. This is an acceptable yearly variation and has followed previous cycles.

An increasing emphasis on the provision of student leadership and connected learning has provided opportunities for students to participate in centre programs beyond our traditional audiences. Participation rates in these new programs and initiatives increased significantly in 2011.

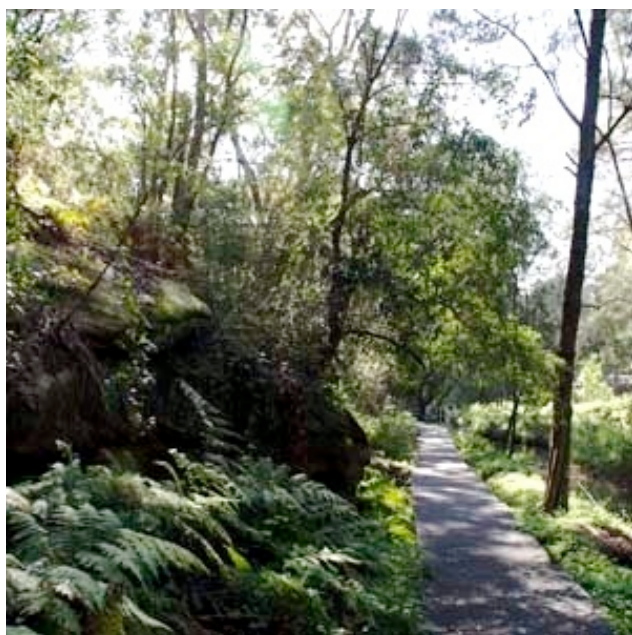
Requests for visits that could not be accommodated have remained consistent. In 2011, 33 such requests involved an estimated 2343 students.

## Staff information

It is a requirement that the reporting of information for all staff must be consistent with privacy and personal information policies.

The principal and teacher are supported by valuable input from a variety of specialist casual teachers, a school administrative manager and a general assistant. This variety of staff greatly increases the creativity of responses to new curricula, provides a greater pool of knowledge, experience and self assessment options and ensures consistent delivery of programs. All staff are highly experienced in both classroom teaching and environmental education in a variety of contexts.

Position	Number
Principal	1
Classroom Teachers	1
Total	2



## Staff establishment

### Staff retention

There has been no change in the principal and teacher positions. The principal was seconded to the Northern Sydney Region Head Office for the second half of 2011 and was replaced by the teacher operating at a higher duties level.

### Indigenous staff

There are no indigenous staff currently working at the centre.

### Teacher qualifications

All teaching staff meet the professional requirements for teaching in NSW public schools.

Qualifications	% of staff
Degree or Diploma	100
Postgraduate	50



## Financial summary

This summary covers funds for operating costs and does not involve expenditure areas such as permanent salaries, building and major maintenance.

Date of financial summary: 30/11/11

**Income** \$

Balance brought forward	48590.37
Global funds	32431.31
Tied funds	50083.02
School & community sources	130739.34
Interest	2182.61
Trust receipts	0.00
Canteen	0.00
Total income	264026.65

### **Expenditure**

Teaching & learning	
Key learning areas	74378.18
Excursions	0.00
Extracurricular dissections	11994.21
Library	681.99
Training & development	3418.25
Tied funds	55290.32
Casual relief teachers	0.00
Administration & office	36005.14
School-operated canteen	0.00
Utilities	5204.53
Maintenance	1821.20
Trust accounts	0.00
Capital programs	14125.00
Total expenditure	202918.82
<b>Balance carried forward</b>	<b>61107.83</b>

A full copy of the school's 2011 financial statement is available. Further details concerning the statement can be obtained by contacting the centre.

## School performance 2011

### Significant programs and initiatives

The centre collaborated with a range of education providers from DEC and non-government organisations to successfully expand the Learning for Sustainability Video Conference Festival.

The centre coordinated the Climate Clever Energy Savers Program. Through this program, 13 primary schools and 33 teachers have collaborated to develop energy efficiency focused teaching and learning programs.

Be Energy Efficient a new Stage 3 incursion was developed and trialed. This program is based on

the Sustainability Action Process and is focused on energy reduction at school and home.

Centre staff worked with Northern Sydney Region (NSR) teaching and learning consultants to integrate education for sustainability and environmental education into teacher professional learning activities.

### Student leadership

The centre collaborated with Gibberagong EEC to design and implement two successful student leadership events. The Year 7-10 Enviro Forum at Macquarie University and the Year 3-6 Enviro Expo at Gibberagong EEC were attended by 296 students.

Greenspeak is a new video conference event that has been piloted in term 4 2011. Greenspeak provides a platform for students to showcase sustainability successes from their school. Students design and run the session for other interested students from schools across the state. This event is based on the kids teaching kids model. The pilot Greenspeak event featured five sessions hosted by students with a viewing audience of approximately 350 students from 14 schools.



## Aboriginal Education

Aspects of Aboriginal culture are integrated into most of the centre's programs.

The centre offers specific programs that educate students about the traditional Aboriginal inhabitants of the area, their relationship with the land and their use of bush resources.

The centre also supported Gibberagong EEC with the delivery of Caring for Country, a teacher professional learning program focusing on Aboriginal land practices and ways of integrating the Aboriginal Education Policy into curriculum.

## Multicultural Education

All EEC programs are developed to be suitable for students from various cultural and religious backgrounds.

## Other programs

### Environmental Management

In 2011 we continued to focus on initiatives that resulted in saving water, increasing energy efficiency and increasing biodiversity. These initiatives were highlighted as exemplars of sustainability in schools.

The centre continues to use 100% green energy that resulted in zero tonnes of carbon being emitted into the atmosphere.



## Progress on 2011 targets

### Target 1

To strengthen the capacity of EEC staff and NSR teachers to implement environmental and sustainability education programs based on the new Sustainability Education Policy for Schools and NSW Quality Teaching Framework.



Our achievements include:

- Providing environmental and sustainability focused professional development workshops for 923 teachers.
- Implementation of NSW Institute of Teachers accredited professional development courses Waste Basics, Biodiversity Basics, Literacy and Sustainability and Climate Clever Energy Savers.
- Successful development and implementation of student leadership programs.
- Delivery of professional learning using video conferences focusing on policy, resources and sustainability.
- Provision of support and advice to schools on education for sustainability.

Future directions:

To focus on the provision of quality professional learning that meets the needs of teachers and the implementation of the new NSW Board of Studies (BoS) syllabus.

## Target 2

Increase the use of interactive technologies for learning, teaching and for teacher professional learning.



Our achievements include:

- The development of Greenspeak a new student-led video conference program with 350 students from 14 schools.
- Successful implementation of the Learning for Sustainability Video Conference Festival. Over 5 days the festival featured 56 video conferences delivered by teachers, students, environmental education centres and other government and non government sustainability providers. This year approximately 10000 students and teachers participated in the festival making it the largest video conference learning event in Australia. This is an increase of 25% over 2010 participation numbers.
- The development of video conference outreach lessons with participation from 2026 students from across NSW.
- Supporting schools with developing Environmental Trust Eco Schools Grant applications through a series of video conferences delivered to 111 teachers state wide.
- Implementation of the Green Room teacher professional development video conference series with participation of

over 210 teachers.

- Professional development and support to regional and EEC network staff.

Future directions:

To develop new professional learning and curriculum based programs that support the use of connected classrooms and mobile technologies to enhance student engagement and support classroom learning and teacher professional learning.

## Target 3

Implement a differentiated student-centred program and incursion on energy efficiency using the Sustainability Action Process for Stage 3 students.



Our achievements include:

- A review of existing energy units, web resources and the Sustainability Action Process.
- Development and publication of a comprehensive 10 week unit of work, Be Energy Efficient, for Stage 3 students, which follows the Sustainability Action Process, resulting in action projects that improve energy efficiency at school.
- Development of supporting resources to enhance student engagement, including energy-related science investigations.



- Development and trial of two sequential incursions using the Be Energy Efficient unit resulting in positive and constructive teacher feedback.

Future directions:

Promote the Be Energy Efficient unit as an incursion program as well as a discreet unit of work.

Revise the introductory incursion to increase student engagement, and consider using a dramatic story-thread approach in this session.

## Key evaluations

It is a requirement for all NSW public schools to conduct at least two annual evaluations – one related to educational and management practice and the other related to curriculum. In 2011 our school carried out evaluations of the Bush Christmas program and staff proficiency.



## Curriculum

### Bush Christmas Program

#### Background

Bush Christmas is an incursion which combines story, song and craft to reinforce an awareness of Australian animals and their habitats. This program, originally targeted at Early Stage 1 and Stage 1 students, was trialed in November and December 2010.

Fourteen schools and 1632 students participated in the 2010 trial. All participating teachers were emailed an online evaluation survey following the program and Field of Mars EEC staff conducted a self-evaluation.



## Findings and conclusions

Teachers provided very positive comments anecdotally and in the survey. In the survey, 92% percent of respondents said that the students were highly engaged during the program. The survey suggested that the program was best suited to Kindergarten and Year 1.

Half found the session of 1 hour to be perfect and the other half found it to be a little too short. Comments included, "The session was very well run, good value for money and enjoyed by all." According to the students, highlights of the session were the printing, live leaf insect, colouring a leaf card and singing with instruments.

The majority of respondents indicated that the program achieved its aims:

Program Aims	1 (low)	2	3	4 (high)
Create an awareness of native Australian animals	0%	0%	42%	58%
Develop basic understandings of the needs of animals	0%	17%	33%	50%
Encourage students to respect and care for living things	0%	0%	42%	58%



Evaluations demonstrated that the Bush Christmas program was a success and would continue to be offered in the last four weeks of Term 4 for Kindergarten and Year 1 students only. Due to timetabling limitations, sessions will be limited to 1 hour with a maximum of 25 students per session.

#### Future directions

Bush Christmas will continue to be offered as an incursion program to Kindergarten and Year 1 during late Term 4. In 2011 the program was booked out within a few days of advertising with attendance of 1487 students from 66 classes across 13 schools.



## Educational and management practice

### Staff Proficiency Audit

#### Background

Field of Mars EEC employs a range of specialist casual teachers to assist with delivery of EEC programs. Each program requires specific professional learning of staff to ensure quality delivery. Accordingly, in 2011 the centre conducted a review of staff competencies and identified needs and opportunities for staff professional learning.

#### Findings and conclusions

Using a staff experience self-assessment matrix and collegiate discussion the centre identified strengths and weaknesses in collective program experience.

The self assessment document also allowed all teaching staff to identify personal opportunities for

growth.

Collective staff input indicated several programs that had a limited number of staff competent at the required level.

This allowed staff to collectively plan teaching programs and specific internal professional development sessions that fit both centre staffing and individual needs.

#### Future directions:

Time has been allocated in 2012 to ensure professional learning occurs for all staff around the area of program delivery.

Staff will update their program experience levels on a common document. This will inform the staffing of excursions and incursions and content of staff development activities.



### Professional learning

Professional learning is provided to all permanent and casual staff in the centre through in-house workshops and sharing sessions or via other professional learning providers.

Centre teachers attended the NSW EEC Annual Conference in Avoca. This provided the opportunity to increase knowledge and skills in environmental education and education for sustainability with a focus on the Learning for Sustainability Curriculum Framework K-12.

## Professional Learning Expenditure

TPL \$2240 (tied grant)

PL \$3830 (global funds)

Professional learning included attendance at:

- World Environmental Education Congress
- Australian Association for Environmental Education NSW Conference
- Adobe Connect training
- iPads in Education
- Video Conferencing and Brigit training
- Leadership Forums
- SASS Conference
- SASS GA Conference
- Senior First Aid



## Parent, student, and teacher satisfaction

In 2011 the centre sought opinions of parents, students and teachers about the centre.

Discussion and unsolicited feedback indicates a high level of satisfaction with the centre's programs and our interactions with staff and students.

In particular comments indicate that experiences are engaging, memorable, informative and relevant.

## School planning 2012–2014

### Priority 1 - Student Learning

#### Outcome for 2012–2014

All students will be provided with quality differentiated sustainability education programs that support increased achievement in literacy and numeracy.

#### 2012 Target

To increase the diversity of quality sustainability education programs aligned with new NSW BoS Syllabus and the new Sustainability Education Policy.

Strategies to achieve this target include:

- Audit of new syllabus documents and review current centre programs.
- Collaborate with NSR teaching and learning consultants and Gibberagong EEC to develop new or revised programs aligned with NSW BoS syllabus and the Quality Teaching Framework.
- Develop supporting digital and interactive whiteboard (IWB) resources to enhance student engagement in new programs.
- Participate in collegial professional development sessions focusing on the delivery of environmental education in a variety of educational settings.





## Priority 2 - Connected Learning

### Outcome for 2012–2014

To expand the use of new digital technologies to enhance communication, professional learning and student engagement in environmental and sustainability education.

#### 2012 Target

Increase student engagement in authentic learning through the use of mobile devices.

Strategies to achieve this target include:

- Develop or modify centre programs to increase the use of mobile devices such as iPads in fieldwork and specialist excursions and incursions.
- Collaborate with Gibberagong EEC, Taronga Zoo Education Centre and Bicentennial Park Field Studies Centre to develop new programs using mobile technologies.
- Develop high quality digital resources to support centre programs.



## Priority 3 - Professional Learning

### Outcome for 2012–2014

To strengthen the capacity of teachers, schools and regional offices to lead the integration of environmental and sustainability education through blended teaching and learning programs.

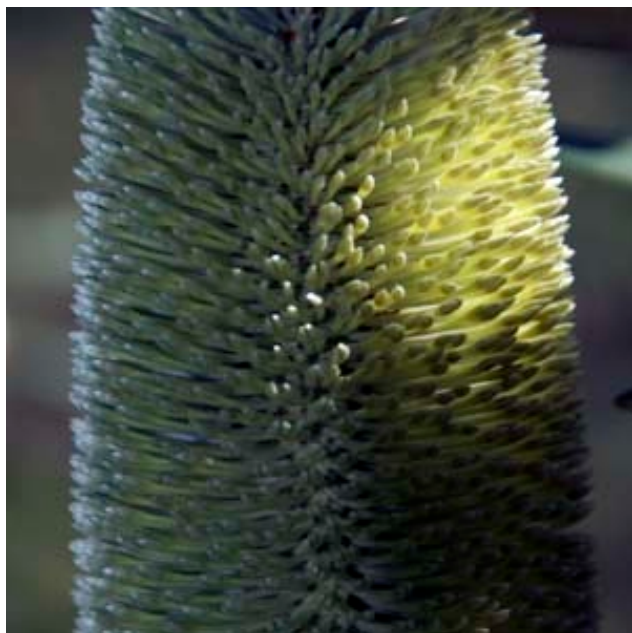
#### 2012 Target

To build teacher leadership capacity in environmental and sustainability education through the provision of quality professional learning.

Strategies to achieve this target include:

- Collaborate with Gibberagong EEC and Taronga Zoo Education Centre to provide professional learning for centre, school and regional staff to support differentiated learning and the integration of environmental education through the new Sustainability Education Policy.
- Collaborate with regional teaching and learning consultants to develop exemplary professional learning programs focusing on quality teaching, leadership and environmental and sustainability education.
- Participate in professional learning to develop pedagogical skills and curriculum knowledge.





### **About this report**

In preparing this report, the self-evaluation committee has gathered information from evaluations conducted during the year and analysed other information about the school's practices and student learning outcomes. The self-evaluation committee and school planning committee have determined targets for the school's future development.

Steven Papp – Principal

Pat Spiers – Relieving Principal and Teacher

Gaye Braiding – Teacher

Tristen Vella – Teacher

Cate Fredrickson – Teacher

Julie Overton – Teacher

Jodie Murphy – Teacher

Jacqueline Cleary - Teacher

Lyn Crossley – Administrative Manager

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School Code: 5428

Parents can find out more information about Annual School Reports, how to interpret information in the reports and have the opportunity to provide feedback about these reports at: <http://www.schools.nsw.edu.au/asr>