

# Environmental Education



The journal of the National Association for Environmental Education (UK)  
Promoting education for Sustainable Development

## Natural play Toddlers outdoors



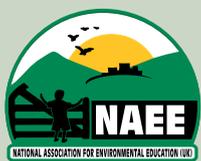
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# National Association for Environmental Education (UK)

NAEE UK has, for over fifty years, provided support for educators and education professionals to supply and deliver all aspects of environmental education across all levels of the curriculum.

NAEE (UK) is a voluntary organisation, with no state funding, run by experienced teachers from a wide variety of educational institutions. We use funds raised from subscriptions and donations to promote the teaching of environmental education across the curriculum as well as education for sustainable development.

## Membership

Membership is open to those directly involved in environmental education or those with a related interest.

There are different categories of membership.

<b>Student:</b>	<b>Free</b>
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## Benefits of membership

- *Environmental Education* e-journal and NAEE publications
- advice and information about all things 'EE'
- share good practice online on facebook and twitter community
- know you are helping to bring children closer to nature!



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**National Association for Environmental Education (UK)**

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**Contributions:**

The editor welcomes articles and reviews by members and supporters. See page 7 or contact [editor@naeeuk.plus.com](mailto:editor@naeeuk.plus.com) for details

**Books, DVDs and other materials for review should be sent to the NAEE office above.**

The opinions expressed in the articles of this journal are those of the authors and do not necessarily represent those of the NAEE.

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Cover photos: Tots with stones; Student in Pakistan assessing water content; Pupils at Whitehead school prepare to plant trees; Joy Palmer.

**100 issues of Environmental Education**

The executive would love to hear from our members about the ways in which they can contribute to our special 100<sup>th</sup> issue, out in June 2012. Please contact the office on the details above.

## Climate Change vs Curriculum Change?

We reprint here a letter originally featured in the *Time Educational Supplement* by Chris Southwood, Director of Learning2BSustainable



**W**hy has the inclusion or omission of climate change from the new national curriculum attracted the attention of the national media? Is the assumption that someone has unofficially made teachers of geography, science and design collectively responsible for educating our young people about the health of the planet? If climate change is removed, is the worry that our students will be unprepared for dealing with our energy guzzling society or will be disadvantaged in the global race for 'green' jobs and developing new technologies? Do they think that these small bites of curriculum time are already sufficient to impact on our worldly woes and that our existing provision is adequate and should be left unchanged? Isn't the real question about how education responds to the impact our modern society is having on the planet and whether that response has been adequate anyway over the last 25 years? Education for sustainable development (ESD) has not exactly been a popular news item even when the UN Decade for ESD was launched in 2005 or at anytime since.

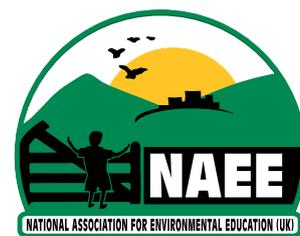
ESD is a complex, multi-faceted area of learning and deals with climate change related matters amongst many others but few teachers are properly trained for it, few have experienced it during their own education and most lack confidence in tackling it. Leadership courses often fail to overcome the barriers to implementation and many teachers feel happy to leave the matter to those subjects that have a specific curriculum role. When asked, many pupils want their schools to do more ESD so is the provision we currently have worth keeping in most schools? It is like assuming that all pupils need for a comprehensive sex education is to study the anatomy of a pair of rats. Climate change bits currently in the curriculum have some value perhaps but it is very strictly limited compared to the complexity of the whole matter.

Quality ESD is not something for just a few of the teachers in a school. Properly planned and coordinated it is a whole school issue offering exciting and challenging opportunities for learning. It really does link social, economic and environmental matters with the school featuring as a hub of local activity. The value of ESD is recognised by OFSTED and approved by DfE with

the Sustainable Schools Framework documentation still being available. It should not be left to chance as it is at the moment with schools choosing whether to be involved or not. Fingers are crossed that pupils will experience enough activities here and there during their education to provide them with the understanding to make the choices their adult lives will demand. ESD is not a statutory requirement but ironically most schools do not realise how much they already do in an ad hoc manner. It is most successful when a school develops its own action plan adapted to their existing priorities and preferred topic areas.

The belief that ESD is a good thing to do and offers excellent learning opportunities is apparent from the large numbers of schools keen to register for award schemes like EcoSchools and resources programmes sponsored by corporate organisations. Sadly, the numbers of schools making long-term progress beyond the initial enthusiasm is about 10% and all sorts of barriers can hinder progress. Corporate funding does not last forever and the lack of training can lead to cases where misconceptions, myths and personal prejudices of teachers gain respectability and acceptance among their pupils. Parents often assume schools do provide ESD activities but few ever seek clarification on the how well the school has planned what they are doing.

**S**urely, the most important thing is that ESD is included in the education provided by all schools, offering an exciting, informative and challenging learning experience that is not left to chance. Every child's future counts and it must not be assigned to a few areas to carry the can for everyone else because their subjects happen to have some involvement. Maybe it is better for climate change not to be in the national curriculum but taught well in schools where its value is properly understood and appreciated than to be included simply to tick a particular box and end up as someone's nightmare task. Best of all would be for ESD to be an entitlement for all pupils but if it is included it must be integrated and supported across the whole school by everyone to demonstrate a way of living for the future and quality training must be provided. It should not be seen as a weight for hanging around the necks of a few subject teachers who happen to teach relevant subjects and are then assumed to be ESD experts.



# Putting 'you' into what 'we' do

Dear Colleagues,

Welcome to this, your second 'new' *Environmental Education* e-journal. We say 'your', since 'EE' aims to be NAEE's main vehicle of regular communication. We have had some comments from you, our readers, about the new online format of 'EE' and these are positive. We'd like to hear from more of you about how we can improve content and presentation, how we can make it even more user-friendly online. Let us know via [info@naee.org.uk](mailto:info@naee.org.uk) or use the office address on page.

Education is, once again, facing dilemmas: with tightening budgets, cut backs, and the very nature of environmental education being questioned (yes, again!)—visit our twitter and facebook pages and 'Bill Scott's blog' (written independently, by our president)—for the latest.

Despite this, NAEE holds firm—and is moving forward in several ways.

NAEE's vision has been recognised and with a Kenrick Fund grant, we are enabling school children who might otherwise not be able to, to visit an environmental education centre. See more on this and our updated constitution, in our new section—The Bulletin.

Another 'new'—we have launched [www.naee.wordpress.org](http://www.naee.wordpress.org) which provides rolling news. Check this out for the latest on the Curriculum Review and its expert panel's recommendations.

Inside this edition, our executive reports on 'Tiny Tots' scheme focused on Early Years (**page 14**), ideas for outdoor poetry (**page 22**) and the New Zealand earthquakes (**page 11**) for use in the Primary sector. From Pakistan, we have investigations about weather and tap water (**page 18**)—this school is also asking for links with local Secondary schools. As always, we bring you the latest books and websites using the environment, in our review section.

Looking ahead, we have an exciting **100<sup>th</sup> edition** planned, celebrating 'the best of'—case studies, books, articles, websites and resources, all about re-connecting children and young people with their natural and built environments. Where do 'you' come in?

- If you are a partner group, with an article to contribute, do get in touch
- If you are a teacher with questions or comments, give us a call or email .

Let's put even more voices into what NAEE does! We look forward to hearing from ... 'you'!

Gabrielle Back

Henricus Peters

NAEE Co-Chairs



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# The curriculum review

A practitioner's perspective and a comment on the curriculum review from NAEE President Bill Scott

## Curriculum Review—the word from the coalface

Letter from a member in response to NAEE question: "What is happening to Environmental Education in the Early Years/ Foundation Stage?"

Dear NAEE,

We do not know until the new Framework is published this spring.... It looks like there will be prime areas and specific areas of learning. 'Environment' is mentioned under 'Understanding the World'—one of the Specific Areas of learning. It states:

"Understanding the world involves guiding children to make sense of their physical world and their community through opportunities to explore, observe and find out about people, places, technology and the environment."

Ms Tess Fenoughty  
Early Years practitioner

Just before Christmas, an expert panel report was presented to the Department for Education (DfE)<sup>1</sup> which recommended five high-level aims for the school curriculum:

*The school curriculum should develop pupils' knowledge, understanding, skills and attitudes to satisfy economic, cultural, social, personal and environmental goals.*

The panel noted:

*These purposes reflect the enduring concerns of society and are well documented historically and comparatively. Although the various strands of our own history emphasise some purposes more than others, they are all evident in some measure.*

In coming to its recommendations, the panel commented that many 'high-performing jurisdictions'<sup>2</sup> had recently conducted reviews of their curricula and introduced a reference to sustainability. In the light of this, and the UK government's policy of ambitious carbon reduction targets to 2027, the panel recommended (as the fifth aim) that the school curriculum should aim to:

*promote understanding of sustainability in the stewardship of resources locally, nationally and globally.*

I welcome all this, whilst regretting that the panel was not more certain<sup>3</sup> about the significance of the 5th aim, and the important contribution that this will make to young people's learning and their ability to make a positive contribution to society.

In addition to the points about high-performing jurisdictions and UK policy synergies that the panel made, as to why this should be included as an over-arching aim of the school curriculum, I'd say there's a third reason which I'd put first. It's this:

At this juncture in the early 21<sup>st</sup> century, when it is clear that our economic development is adding to pressures on the biosphere and its services, and risking its ability to support human and other life, it is crucially important that young people are able to discuss such issues in the measured and informed pedagogical contexts that schools can so expertly provide and, through doing so, can develop appropriate dispositions, understanding and skills, and hence both want, and be able, to play their part as citizens, as we all work to resolve the issues for the benefit of everyone on the planet.

This seems the very least we can ask.

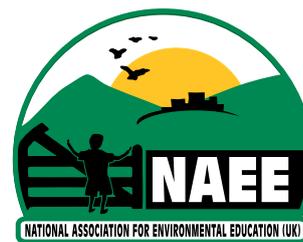
Professor William Scott,  
NAEE President

1. The Framework for the National Curriculum—<https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-00135-2011>
2. Think Singapore, South Korea, Finland, etc.
3. Actually, it said: "... we suggest the government considers a recommendation that ..."



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# The bulletin



A snapshot of what's happening at the Association  
compiled by *Henricus Peters*, NAEE Co-Chair

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## Benefits of becoming a member

- *Environmental Education* e-journal and NAEE publications;
- advice and information about all environmental education matters: case studies, lesson plan ideas, contacts;
- join a growing online community of teachers, lecturers, advisors, universities, schools and centres to share good practice and solve problems common to all of us;
- knowing you are helping to bring children closer to nature!

## Contributions to *Environmental Education*

We welcome articles and items from members, supporters and readers. These may occasionally be reprinted either on their own or with other articles in NAEE publications.

Please ensure you have permission to use any photographs and send them a separate jpeg files.

Please contact [editor@naeeuk.plus.com](mailto:editor@naeeuk.plus.com) with your submission.

NAEE receives no government funding and relies solely on membership, donations, bequests and grants.

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## Executive News

At the February Special General Meeting, the Executive Committee adopted an updated NAEE Constitution. The aim of this was to bring it up to date to meet with requirements of the Charity Commission including ensuring that particular office and organizational processes and procedures were clarified; that we have a useful number of administrative posts to support our ongoing work including special projects such as the Kenrick Fund; clarifying the Board of Trustees; confirming recent changes to streamlining membership categories. These are strategically very important steps, so that we are clear about the function of the Executive as the main decision-making body of the Association, supported by a small number of key sub-committees and advised by Presidents/Vice Presidents. Note that all of the Executive Committee are totally voluntary, supported by a part-time National Coordinator.

## Presidents and Vice Presidents

Eagle-eyed readers will have noticed a few changes to the line-up, with Professor William Scott the new president and Professor Mick Waters becoming a new Vice President. Over time, we will be profiling these and other 'environmental education champions' including executive committee members.

We appreciate the advice they bring to the work of the Executive Committee, especially regarding strategic development when funding is tight—NAEE receives no government funding and relies solely on membership, donations, bequests and grants.

## New Zealand Conference

David Fellows, our Treasurer, spends part of the year in New Zealand and was able recently to attend the biennial conference of the NAEE's equivalent in that country, NZAEE.

## Request for school links – Pakistan

Nature Club of Pakistan, one of our key and valued partners in Asia – their project reports regularly feature in the pages of this journal – are looking for schools to create links with.

They work in secondary school with many projects – weather studies, tap water, flower projects – and are keen to have comments about these projects, plus ideas for new ones.

To get in touch with Muhammad Raza Khan, their President, contact them via our office: [info@naee.org.uk](mailto:info@naee.org.uk)

## Online media growth

Since the launch of our facebook and twitter pages account, we have successfully gained a considerable number of supporters. At the time of going to press, we have 350 facebook and 500 twitter followers. A big thank you to all these new supporters who are helping us to spread information, highlighting the vital importance of environmental education ideally within the curriculum, or alongside it. In this way, NAEE is raising its profile.



On facebook – please 'like' us at [www.facebook.com/NAEEUK](http://www.facebook.com/NAEEUK)



On Twitter – please follow us at [http://twitter.com/NAEE\\_UK](http://twitter.com/NAEE_UK)

## Profile: New NAEE Programme

### Association funds an Environmental Education Project in Birmingham

By Sue Fenoughty and Nina Hatch, NAEE Executive

Since the demise of Environmental Education as a cross curricular theme in the mid-1990s, NAEE has continued to press for its return to the current curriculum, and is supporting a recommendation from the Expert Panel for the current National Curriculum Review which states under its 'Aim 5' that the curriculum should 'Promote understanding of sustainability in the stewardship of resources locally, nationally and globally'.

Without an Environmental Education focus teachers and pupils alike have struggled to understand 'sustainability'. This was introduced as a non-statutory element of the curriculum twelve years ago under the title of 'Education for Sustainable Development'. NAEE argues that if our young people are to understand why they should adopt a more sustainable lifestyle they need to understand far more about our dependence on the earth's resources, for example - that plants are our ultimate food source. Similarly that our reliance on fossil fuels for most of our energy needs not only has a polluting effect on the environment but also is a finite resource.

The loss of EE elements in the curriculum means that many of today's school children have little idea about where their food comes from. This is particularly true of city children, many of whom do not have the opportunity to visit a farm or allotment to see how their food is produced. They rarely spend a day away from city streets and tarmac playgrounds with little opportunity to observe and understand wild life, the balance of nature and how food chains work.

Until now, NAEE has been an 'enabling' organisation, providing up to date information and news for teachers on the world of environmental education. Some schools have valiantly hung on to an EE provision, either through the curriculum, or through extra curricular activities. However this year NAEE is launching a pilot project to provide city children (initially from Birmingham) with the opportunity to visit one of the remaining

environmental centres operated through the City Council Outdoor Learning Service. These facilities are either in the city or within easy reach and include a working dairy farm and Botanical Gardens. Funding donated by a local Charitable Trust will enable 9 schools in the first year to have all expenses paid visits. This is quite a consideration as the centres have to charge a day rate for a visit. In addition schools have to find transport costs for their pupils. The project is starting this summer, so there will be more information later on our website and in the journal. Participating schools will also be expected to provide a report on the environmental work that results from the visits.

It is hoped that this project will help to raise awareness of the need for environmental education to help equip our young people with the knowledge and understanding they will need as future 'stewards' of our planet.

For more details about the project or if readers would like to donate, email [info@naee.org.uk](mailto:info@naee.org.uk)

## Profile: Professor Joy Palmer

*We continue our series about NAEE's people by inviting Joy Palmer Cooper J.P. M.A.; M.Ed.; PhD.; D.Litt, to write for EE.*

I have been associated with the NAEE for some four decades. I have had the privilege of sitting on the Executive Committee for 14 years and serving as National Chairman. My professional life has seen many changes since my initiation into the NAEE, but my commitment to the environment and to environmental education has never faltered. During the early years of my career I taught environmental education and became Head of an Environmental Studies Centre in Birmingham. I made regular residential visits to the Devonshire and Cumbrian countryside with pupils from the inner city, and realised without doubt just how significantly these young people were affected by education in the world of nature. Memories of the profound impact of environmental education on these young lives without doubt influenced my later research on significant life experiences that affect attitudes and behaviours towards the environment.



From Birmingham I headed to Durham and held various positions in the university including Dean of the Faculty of Social Sciences and Pro-Vice-Chancellor for research. During these years I had the pleasure of teaching courses on education for sustainable development for the teachers of the future, and continuing my research on environmental cognition.

In more recent years I have moved into the realm of sustainable development of international communities that have endured significant natural disasters or severe poverty. In 2005 I became Director of Durham University's Project Sri Lanka, but relinquished this post in 2011 in order to become Chairman and Director of the independent registered charity Project Sri Lanka. This role provides ample opportunity for witnessing at first hand models for international interventions in communities in need, and to research the effectiveness of engaging with local communities in order to enable environmental understanding and sustainable development.

## Debates and updates

*Garbrielle Back, NAEE Co-Chair*

### Field Study Centres and Outdoor Education

Field study and outdoor centres offer young people vital opportunities to learn outside the classroom, providing them with experiences that are not available in school. This might include many sporting activities such as climbing, water sports or undertaking fieldwork to investigate the environment. Many centres receive funding from local authorities and pupils are able to visit them at a subsidised rate. In June, the Field Studies Council (FSC) published a survey by the UK's leading outdoor providers showing that centres used by more than 320,000 children each year are currently under threat. Some dozen had already closed, and the future of another 60 is being discussed. More than half of the threatened centres are run by inner-city councils; most subsidised visits to all those children from less well-off families to attend.

Research this summer by the BBC found that 95% of all local authority funded outdoor educational centres in England and Wales were losing their entire local authority funding and a third were concerned that the centre would close. The FSC states that many of the centres could survive given time to adapt, however, with councils often making decisions quickly, centres are unable to seek out alternative funding to become financially stable in time and so are forced to close.

This is a topic close to the heart of NAEE and at a time when understanding of the complexity of the environmental issues is paramount we oppose the closure of outdoor and field study centres, depriving future generations of school children of their recognised academic and social benefits.

NAEE has initiated a local programme for school bursaries for visits to outdoor centres in and around Birmingham and schools are being offered support to take their pupils to outdoor centres for hands on learning opportunities in the natural environment. By supporting designated outdoor learning services centres in the region, schools will help to ensure that they stay open and continue to help tackle social mobility problems, giving children new and exciting experiences that inspire them to reach their true potential and experience a more natural environment away from city streets and buildings.

For more field centre information, contact the Field Studies Council [www.field-studies-council.org](http://www.field-studies-council.org)

## Fuel Poverty

This is becoming a major issue in view of the recent increases in energy prices. Since 2004, the number of households in fuel poverty has doubled to 5.5 million. These are households that spend at least a tenth of their income on utility bills. The vast majority, 4.5 million, are classified as vulnerable households – those containing an elderly or disabled person, children, or someone with long-term illness. Energy bills for the average household have increased by 33% in the last year alone, reaching £1,200 per annum. That's twice the average bill of five years ago. Concerns about raising energy prices have also increased, with the release of figures showing that energy company profits per household had increased from £15 in June 2011 to £125 in October.

Last March 2011, the Government appointed a fuel poverty tsar, Professor John Hills, to undertake an independent review of fuel poverty, starting with a definition of the problems and including current measures and the extent to which fuel poverty is distinct from overall poverty and the detriment it causes. His interim report noted the "human cost was high" with 2,700 lives claimed every year.

The Government is introducing the Green Deal to transform the country's homes to make them warmer and cheaper to run. From 2012, people will be able to access up to £10,000 upfront to pay for energy efficiency work, repaying the costs through savings on energy bills. A new obligation on energy companies will come into effect at the end of 2012.

To obtain more information, contact:

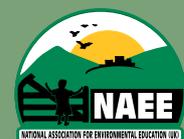
Department of Energy and Climate Change—0300 060 4000—[www.decc.gov.uk](http://www.decc.gov.uk)

National Energy Action—0191 261 5677—[www.nea.org.uk](http://www.nea.org.uk)

**Send contributions to these pages, to: [Henricus.peters@gmail.com](mailto:Henricus.peters@gmail.com) with the subject heading 'NAEE Bulletin'**

## Get involved!

NAEE is looking for a volunteer web developer to assist in re-launching our website. We are also looking for NAEE members willing to become representatives in Scotland and Wales, to help create links with current and potential partner organisations there. And we would love to hear from our members about the ways in which they may want to contribute to our special 100<sup>th</sup> issue of Environmental Education, which will be out in June 2012. For details, please contact Tom West, Coordinator, at [info@naee.org.uk](mailto:info@naee.org.uk) or tel: 01922 631200.



# Earthquake!

## From terrible times to new opportunities

NAEE Co-Chair *Henricus Peters* visits a city whose face has changed



Henricus Peters surveys one area where reconstruction is taking place

**Henricus Peters**  
Co-chair  
NAEE

**J**ust as Christchurch, New Zealand, was beginning to recover from the huge impact of 4 September 2010 earthquake, a massive aftershock delivered an even more deadly and destructive blow to the city. News reports of the Anglican Cathedral, minus its characteristic tower, flashed across the internet and newspapers. In January, I returned to the city to see my family and the devastation.

'Out of sight, out of mind' is such folly, as we all now know, when it comes to nature. Many

Cantabrians probably thought a major earthquake would not happen in their lifetime, despite occasional warnings from scientists, council planners, engineers, and civil defence workers that there was still a good chance it would.

The threat, it was thought, may be from the Alpine Fault, which runs through the western spine of the South Island. Instead, it was hidden or 'blind' faults, under the Canterbury Plains. What happened on Saturday 4 September 2010 at 4.35am and continued on Tuesday 22 February 2011 at 12.51pm, proved damaging....Canterbury's fertile plains are the result of millions of years of mountain building, glaciation and river action. These deposits masked the greywacke bedrock with its tell-tale splinters and cracks resulting from the pressure of the colliding Australian and Pacific tectonic plates<sup>1</sup>. >>



**563 million**  
hits on GeoNet in the six days after  
4 September.

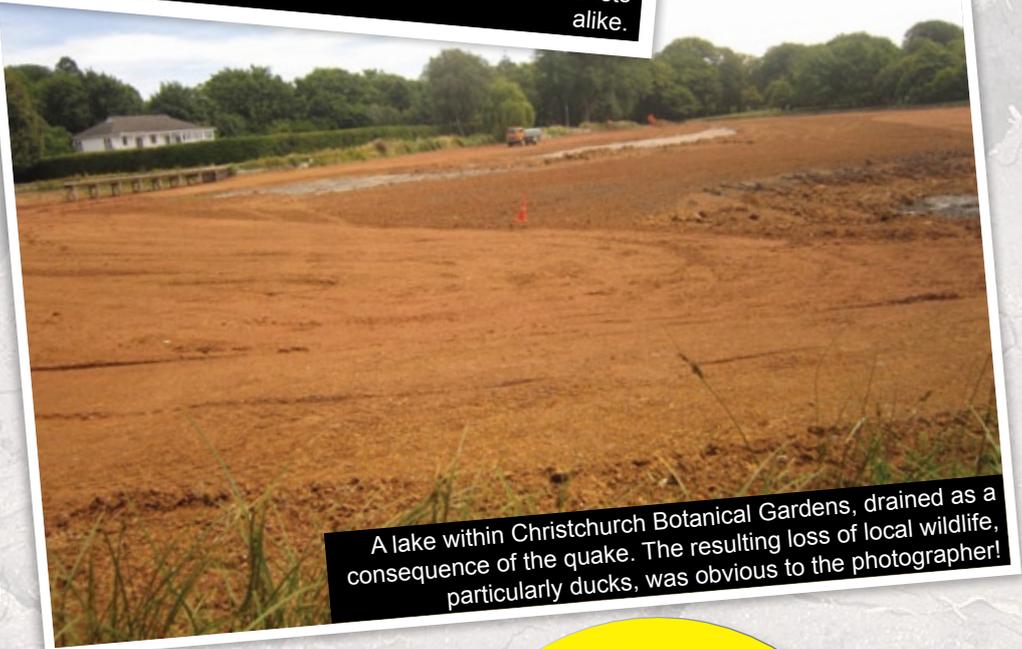
The 'Gap' Project, making use of the physical spaces where buildings once stood but have had to be demolished, has reinvigorated the local art scene. The project provides a series of environmental trails which are of interest to both locals and tourists alike.

**V**ast amounts of energy was released in the first few hours of 22 February, changing the shape of Christchurch. The Port Hills are 40 cm taller in places, and Port of Lyttelton is now several centimetres closer to the city.

Everyone has been affected by this natural disaster, turned human disaster for all those who have lost loved ones and property. Schools are sharing premises, as their locations have been devastated and are now 'red zoned'—the areas cannot be occupied.

182 people died as a result of 22 February. This was because a shaken city was now rocked and people were inside these already-affected structures.

Christchurch has been presented with a rare opportunity. We have the chance to build a better city. Christ's College<sup>2</sup>, where my brother teaches, has lost a large number of buildings. They are now designing far better, more sustainable premises, which will benefit future generations of students.

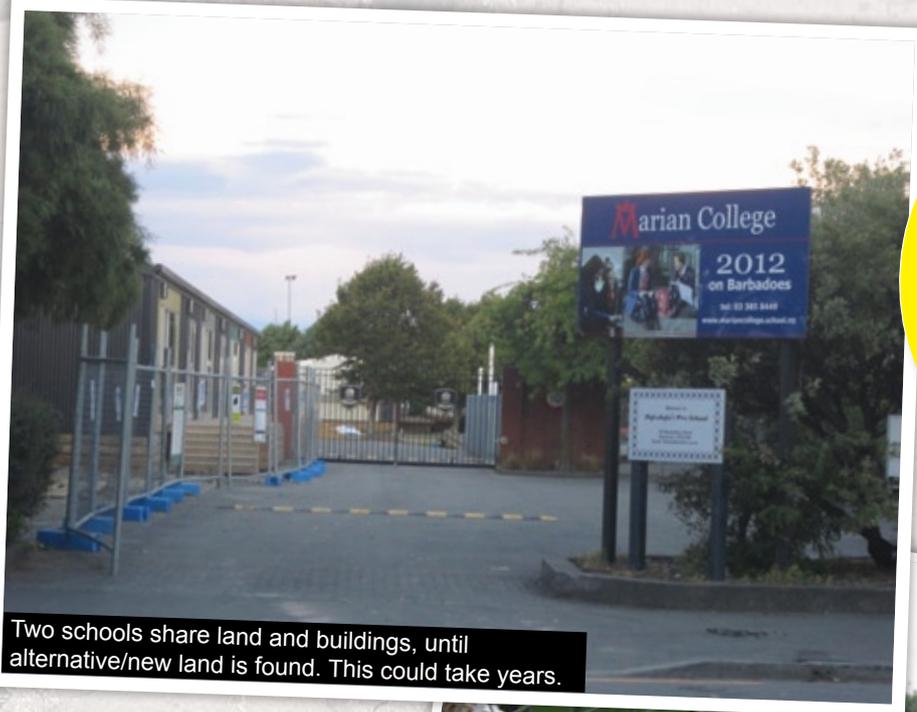


A lake within Christchurch Botanical Gardens, drained as a consequence of the quake. The resulting loss of local wildlife, particularly ducks, was obvious to the photographer!

**247**  
earthquakes exceeded  
magnitude 4 since 4 September.

**Notes—**

1. *Earthquake* by Chris Moore; The Press.
2. <http://liturgy.co.nz/christchurch-earthquake/3901>



Two schools share land and buildings, until alternative/new land is found. This could take years.

**6,016**  
earthquakes detected in  
Canterbury since 4 September.

**182**  
people died as a result of 22  
February. This was because a  
shaken city was now rocked  
and people were inside these  
already-affected structures.



Red Zones are located throughout Christchurch city - no-go areas due to the loss of buildings and generally being totally unsafe. The whole of the Central Building District, including the central library, city council and schools, is closed.

**21**  
earthquakes exceeded  
magnitude 5 since  
4 September.



Church school with the church that will hopefully be rebuilt

All pictures by Henricus Peters

Henricus blogs at [www.environmentaleducationuk.wordpress.com](http://www.environmentaleducationuk.wordpress.com) and <http://learnfromnature.net>

# The story of Nature Tots

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## Harriet Menter

Education Manager

Scotswood Natural Community Garden

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### Background

Nature Tots is a weekly group for under 5s and their parents and carers at Scotswood Natural Community Garden (SNCG). It is run by education staff from the garden, alongside play workers from Surestart who fund the group. The group started in May 2010 when staff at SNCG were approached by Surestart to develop a programme of gardening activities for under 5s and their parents. The education manager was keen to expand the scope of the group beyond gardening activities and argued that children and their families would gain more from a wider range of outdoor play and nature exploration activities which would suit different learning styles, developmental stages and provide opportunities for different types of play and interactions.

The benefits of outdoor play and exploration in terms of social and emotional development, as well as areas such as development of cognitive skills and fine and gross motor skills are well documented<sup>1</sup> and there is an increasing recognition of this among early years professionals. Megan Pacey, Chief Executive of Early Education (The British Association for Early Childhood Education) said recently

*The outdoor environment can provide more freedom for a greater range of play and learning. Nature itself provides endless variety, more space, flexible free resources, multi sensory stimulation, physical and cognitive challenge opportunities for exploration and problem solving, physical health benefits through a greater range of activity, mental health benefits, inspiration for creative projects and the opportunities to develop independence and risk management.* ([www.early-education.org.uk/new\\_resource.htm](http://www.early-education.org.uk/new_resource.htm))

The aim of the Nature Tots programme is to deliver these benefits to the children and young people involved, and also to support local parents in developing their confidence to use the many outdoor spaces for recreation with their children. The garden is based in the ward of Benwell and Scotswood, which is ranked as one of the most deprived wards in England according to the Government's Indices of Multiple Deprivation, and health deprivation is high. It is hoped that providing opportunities for active outdoor play will bring a health benefit to both children and adults.

### The sessions

Each session has a nature based theme that provides an internal coherence to the different activities. Themes so far have included; spiders; water; butterflies; leaves; mud; recycling; wind; rainbows; birds and hedgehogs. During each session we provide a range of activities to provide opportunities for different types of play such as



Paths are for following



Creating shapes with wood and stone

group play, individual play, quiet play, noisy play, still play and active play; and to allow for different learning styles and create different moods. However the sessions always follow the same format so that children can become familiar with the flow of the session, helping them to adjust their mood accordingly (for example, knowing that there will be time for running around later on, may help them sit and concentrate on a craft activity).

The sessions start in an enclosed garden area, where various free play "springboards" are provided. These include baskets of sensory natural objects for children to explore, messy play opportunities such as sand, mud, and water, and other props related to the theme of the day. There is also a craft activity set up in this area which children and parents can participate in if they chose to. The low raised beds where the children have planted their vegetables and wild flowers (to attract the bees) are also in this area and many children choose to water their plants upon arrival.

Once everyone has had a chance to enjoy these opportunities, we invite families into the rest of the 2 acre site, with an exploration activity such as a scavenger hunt, minibeast hunt, natural crown making, butterfly or bird watching, earth walk activity<sup>2</sup>. Some children choose to take part but many choose to explore the garden in their own way, and we encourage parents to follow their children's lead, and engage with them in whatever has captured their imagination today.

The group is brought back together for movement play in one of our meadows including parachute games, music and dancing, and other nature inspired movement such as pretending to

be a bird pecking its way out of an egg shell and learning to fly! After this we sing songs together, before the end of the session.

### What has worked and what hasn't worked

In some senses the group has been a great success. It is one of Surestart's best attended sessions. The evaluations we have carried out show that parents really value the exposure to nature their children experience and the opportunity to learn about nature and the seasons. One young boy was afraid of touching grass when he started coming and would not venture beyond the back garden area. He now confidently leads his sister out to explore the whole garden, and recently really enjoyed an activity making a nest out of the grass that had been cut on one of our meadows.

The group ran all the way through the winter, and staff were keen to encourage parents to enjoy the outdoors in all weathers, by thinking about weather appropriate clothing. Lack of funding meant we were unable to buy a set of outdoor suits which we felt would have helped families enjoy being outside in the winter months. The numbers during the cold winter fell to two or three families for some sessions.

The educational objective of the programme is to impart in children an affinity for nature that can be complemented later on with more in depth knowledge and understanding. However during the sessions staff will explain things to children and parents about the flora and fauna in the garden, or the elements. The evaluation showed that the parents and carers have really



enjoyed learning about nature, and feel that their children have also learned.

The children that come regularly have really taken ownership of the garden, finding their own routes and special places. During open days they often bring other family members along and enjoy showing them around. It is of course hard to measure impact in terms of cognitive and emotional development as there is no control group. However the parent questionnaires showed that parents felt their children had become more sociable and more physically confident as result of coming to the garden.

The biggest challenge has been attracting local parents to join the group, especially those parents that do not currently make use of green spaces for recreation. Many of the families that use the group either come from outside the area, or are families that seem to be confident already in the use of outdoor spaces for recreation. Surestart have an outreach team who have spent a lot of time contacting local families with young children to encourage them to make use of the group, using leaflets, posters, telephone calls and door knocking and whilst we are having some success, it has been limited.

### Notes—

1. *The National Foundation for Educational Research review* of 150 outdoor learning studies worldwide between 1993 and 2003 found evidence that outdoor learning offers a huge range of benefits including reinforcing links between affective and cognitive providing a bridge to higher level learning, positive impact on long term memory, increased self esteem, improved behavior and social development.
2. *Earthwalks and Snow-walks* Kirk Hoessle with Steve Van Matre. Available from the Institute of Earth Education: [www.ioe.ac.uk](http://www.ioe.ac.uk)



The tools of the trade

## Example sessions

(Running time: 2 hours)

### Theme: Rainbows

- Freeplay: water with food colouring in, bubble wands, coloured playdough
- Craft activity: children use mixed media (collage including cotton wool, water colour paints, wax crayons) to create rainbow pictures
- Exploration Activity: Broken rainbow—children have to help the guardian fix the broken rainbow by finding all the colours in the garden
- Movement: Parachute games based on colours
- Circle time and singing
- Tidy up time

### Theme: Hibernation

- Freeplay: den making equipment provided—
  - sheets, willow withies, pegs;
  - sand pit available for burying things in;
  - natural autumn materials available (dry leaves, pine cones, mossy wood)
- Craft activity: children colour in a picture of a hedgehog and then stick dry leaves over it
- Exploration activity: children carry baskets around the garden collecting dry leaves and then choose an appropriate place in the garden to make a hedgehog habitat
- Movement: Children find places to hibernate and act out snuggling down to sleep, then waking up with the spring, play “squashed sardines”
- Circle time and singing
- Tidy up time

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# Staycations: guilt-free holidays

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**Lady Cobham**  
Vice President  
NAEE

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**I**t's safe to say that people go on holiday to get away from normal routine. They don't always consider the continuation of their daily rituals of recycling, reducing their energy or watching their fuel consumption.

In fact, research from South West Tourism suggests that only 17% of consumers actively seek "green holidays". This has led to some businesses not fully engaging with the sustainability agenda or a more recent phenomenon: "green hushing", or playing down sustainability actions for fear of disengaging people.

The market is responding and enlightened businesses are focusing their consumer-facing activities on promoting a greater sense of place and local distinctiveness. Ensuring the experience a visitor has typifies what makes the area special, while contributing directly to the local economy and without causing any adverse environmental damage.

VisitEngland, the national tourist board, is responsible for leading and driving forward the quality, competitiveness and sustainable growth of England's visitor economy, in partnership with public, private and third sector stakeholders. Ultimately, we aim to inspire visitors to choose to holiday in England.

Experience tells us that visitors can be engaged and their behaviour changed to be more environmentally focused, but it has to be fun and part of the experience. Take Venus Beach Cafes in Devon and Cornwall as an example; every piece of packaging carries interesting facts and activities for children that will educate them. Or rural self-catering properties that provide a kitchen garden so guests can help themselves; some of these are even working farms, providing an even more unique experience ([www.youtube.com/user/FarmstayUK](http://www.youtube.com/user/FarmstayUK)).

We want to ensure visitors understand that

"going green" on holiday is not about giving up things and experiences, or being frugal. Done right, it's fun and provides a special experience, and it doesn't even have to be in the countryside. An initiative we launched last year to illustrate this was the Green London Map ([www.enjoyengland.com/greenlondon](http://www.enjoyengland.com/greenlondon)). It helps both residents and visitors understand that they could have a fantastic sustainable holiday experience even in a city. The Green London Map features businesses across the capital where you can eat, sleep, shop and have fun while being "green", whatever your budget.

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Visit [www.enjoyengland.com](http://www.enjoyengland.com) for more inspiration on holidaying at home. For corporate information see [www.visitengland.org](http://www.visitengland.org)

## Tips on having a sustainable, guilt-free staycation

1. Help out the local economy by using local shops, pubs and restaurants to buy local food and drink and locally made arts and crafts.
2. Seek out experiences that typify the industries or activities of that area, such as fruit picking in a cider orchard and foraging for mushrooms in a forest.
3. Use public transport, walk or cycle where you can, helping not only reduce carbon emissions but reducing congestion, saving money (especially if your ticket combines travel and entrance to an attraction), and getting some exercise.
4. Talk to the locals. They can be the best way to get to know the area better.
5. Ask your accommodation provider about its environmental policy and what they are doing to minimise their impact.
6. Seek out businesses that have a "green label". This can illustrate that a business is really trying to embrace sustainability. The most popular in the country is Green Tourism Business Scheme ([www.green-business.co.uk](http://www.green-business.co.uk)).

# Tap water tour

**A community programme arranged by the Nature Club of Pakistan for the City School of Iqbal, Campus of Sialkot, highlights the clear importance of our most valuable, life-sustaining resource**

Compiled by **Muhammad Raza Khan**, *Nature Club of Pakistan*, and **Alona Sheridan**, *NAEE*

## Introduction

Nature Club of Pakistan designed this programme for youth to create awareness about the importance of clean water in our life.

We strongly believe that good health requires clean water.

In Pakistan, like many countries where clean water resources are vanishing rapidly due to human-induced water pollution, climate change and poor awareness, the need for raising awareness is more important.

Through this programme we have endeavoured to motivate youth to monitor water quality on a regular basis and to start a campaign to save water for future generations.

## Methodology Adopted For The Cause

Students from selected institutions were invited to carry out this project. Talks were delivered about the objectives of the project. Guidelines were provided for future action to monitor the quality of water.



In the first phase, students were asked to bring two samples of water (Tap Water + Drinking Water) from their homes. Digital Testing meters were provided by the club to measure the PH level + TDS level of the water.

Students who joined this project were very motivated. They brought water samples from their home and examined the physical status, PH & TDS of water themselves.

This made them fully involved in our project and they learned about the quality of water they use in their homes.

Students were determined to continue this water monitoring at regular intervals.

## Students defined TDS as:

Total Dissolved Solids (TDS) are the total amount of mobile charged ions, including minerals, salts or metals dissolved in a given volume of water, expressed in units of mg per unit volume of water (mg/L), also referred to as parts per million (ppm). TDS is directly related to the purity of water and the quality of water.

## Students Defined PH of Water as:

- The pH value is a measure of the acidity or alkalinity of a solution.
- The range of the pH scale is from 0 to 14.
- The pH definition: the negative logarithm of the H<sup>+</sup> activity in a given solution.



TABLE 1: DATA COLLECTED FROM WATER SAMPLES OF DRINKING WATER

No:	Address-from where water sample collected	Colour	Taste	Odour	pH	TDS (PPM)	Temperature (Centigrade)	Remarks
1	Class-Jr V: OPPOSITE DARBAR NOSHIAY QADRI, DEFENCE ROAD, SIALKOT	colourless	Little bit salty	Nil	6.7	395	14.5	Households use filter water for drinking purpose
2	Class-Jr-V T: HAKEEM KHADIM ALI ROAD, TAJ PURA SIALKOT	colourless	Sweet	Unpleasant smell	6.4	624	15.1	Drinking water
3	Class-Jr-V- S: JUMMA ROAD VILLAGE DALOWALLI, SIALKOT	colourless	Tasteless	odourless	7.1	236	15.1	Households use filter water for drinking purpose
4	Class- Jr VI-T: VILLAGE GHUINKE & TEHSIL DASKA, DISTRICT, SIALKOT	colourless	Tasteless	Unpleasant smell	7.3	145	15.1	Households use boiled water for drinking purpose
5	Class- JrVI-C: CIVIL LINES, NEAR NAJMA LADIES CLUB, SILAKOT	colourless	Tasteless	Good smell	6	468	15.1	
6	Class- Jr-VI-C: ASKARI COLONY # 1, SIALKOT CANTT	colourless	Tasteless	Odourless	7.1	239	16.6	
7	Said Pur Gondal Road SIALKOT	colourless	Salty	Odourless	7.3	244	15.2	Sample taken from School
8	Class-Jr-VI-S: BLOCK B MAG TOWN SIALKOT	colourless	Tasteless	Odourless	6.7	337	15.1	Households use filter water for drinking purpose
9	Class-VI-N: CHEEMA STREET, RANG PURA, SIALKOT	colourless	Tasteless	Odourless	6.9	170	15.7	
10	Class-Prep-1-T 7th Grade: DURANI TOWN, IQBAL TOWN,SIALKOT	colourless	Salty	Odourless	6.5	249	14.7	Households use boiled water as drinking water

No:	Address-from where water sample collected	Colour	Taste	Odour	pH	TDS (PPM)	Temperature (Centigrade)	Remarks
11	Class- Prep I-T (7 <sup>th</sup> grade) RANG PURA, SIALKOT	colourless	Salty	Odourless	7.3	284	15.1	
12	Prep II –C (8 <sup>th</sup> Grade) TARIQ ROAD, SIALKOT CANTT	colourless	Sweet	Sweet	7.0	160	16.0	
13	Prep II –C (8 <sup>th</sup> Grade) ZAFAR ALI ROAD, SIALKOT CANTT	colourless	Tasteless	Odourless	7.0	158	16.1	
14	Class, Prep II –N (8 <sup>th</sup> grade) MUSLIM BAZAR, SIALKOT	colourless	Tasteless	Sweet	6.7	173	16.7	
15	Class- Prep II-T (8 <sup>th</sup> grade) ASKARI COLONY # 1, SIALKOT CANTT	colourless	Bitter	Oily smell	7.1	237	15.1	
16	Prep IIN (8 <sup>th</sup> grade) STREET NO # 20 B_BLOCK MAG TOWN, SIALKOT	colourless	Sweet	Odourless	6.7	335	16.6	
17	Prep I, (8th Grade) BAJWA STREET LINK AMIRSTREET, MODEL TOWN, SIALKOT	colourless	Sweet	Oily smell	6.9	171	16.1	
18	Class- IX (9 <sup>th</sup> grade) GHAZI ROAD, SIALKOT CANTT.	colourless	Tasteless	Odourless	6.9	238	15.8	
19	Class- IX (9th Grade) QUAIDE-AZAM ROAD, SIALKOT CANNT	colourless	Tasteless	Odourless	7.0	244	15.7	Households use bottled water for drinking
20	Class- IX (9th Grade) ASKARI COLONY # 2, SIALKOT CANNT	colourless	Salty	Odourless	7.8	157	16.0	Households use boiled water as drinking water
21	Class JR VI-C (6 <sup>th</sup> Grade) HAJI PURA DASKA ROAD,SIALKOT	colourless	Salty	A bit bad smell	6.9	173	14.1	
22	Class V-S DALOWALLI, SIALKOT	colourless	Tasteless	Odourless	7.1	236	15.1	

TABLE 2: DATA COLLECTED FROM WATER SAMPLES OF TAP/GROUND WATER

No:	Address from where water sample collected	Colour	Taste	Odour	pH	TDS (PPM)	Temperature (Centigrade)	Remarks
1	Class-Jr V: OPPOSITE DARBAR NOSHIAY QADRI, DEFENCE ROAD, SIALKOT	colourless	Tasteless	odourless	6.5	456	15.1	Tap water
2	Class-Jr-V T: HAKEEM KHADIM ALI ROAD, TAJ PURA SIALKOT	colourless	Not tastable	Muddy smell	6.3	255	15.2	Ground water
3	Class –Jr-V- S: JUMMA ROAD VILLAGE DALOWALLI, SIALKOT	muddy	tasteless	Odourless	7.0	236	14.6	Tap water
4	Class– Jr VI-T: VILLAGE GHUINKE & TEHSIL DASKA, DISTRICT, SIALKOT	colourless	Salty	Unpleasant smell of gas	6.5	235	15.1	Tap water
5	Class- JrVI-C: CIVIL LINES, NEAR NAJMA LADIES CLUB, SIALKOT	colourless	tasteless	Odourless	7.0	217	15.1	Tap water
6	Class- Jr-VI-C: ASKARI COLONY # 1, SIALKOT CANTT	colourless	bitter	Odourless	7.0	240	15.7	Tap water
7	Said Pur Gondal Road SIALKOT	colourless	Salty	Odourless	6.8	276	15.8	Tap water
8	Class-Jr-VI-S: BLOCK B MAG TOWN SIALKOT	colourless	Tasteless	Some smell	6.7	327	15.5	Tap water
9	Class-VI-N: CHEEMA STREET, RANG PURA, SIALKOT	colourless	tasteless	Odourless	6.6	247	15.1	Tap water
10	Class-Prep-1-T 7th Grade: DURANI TOWN, IQBAL TOWN, SIALKOT	yellowish	tasteless	Odourless	9.1	224	14	Tap water

No:	Address from where water sample collected	Colour	Taste	Odour	pH	TDS (PPM)	Temperature (Centigrade)	Remarks
11	Class- Prep I-T (7 <sup>th</sup> grade) RANG PURA, SIALKOT	colourless	Tasteless	odourless	6.3	430	14.7	Tap water
12	Prep II –C (8 <sup>th</sup> Grade) TARIQ ROAD, SIALKOT CANTT	colourless	tasteless	odourless	7.0	217	15.1	Tap water
13	Prep II –C (8 <sup>th</sup> Grade) ZAFAR ALI ROAD, SIALKOT CANTT	colourless	Salty	odourless	6.4	268	16.8	Tap water
14	Class, Prep II –N (8 <sup>th</sup> grade) MUSLIM BAZAR, SIALKOT	colourless	Bit bitter	odourless	6.6	354	17.1	Tap water
15	Class- Prep II-T (8 <sup>th</sup> grade) ASKARI COLONY # 1, SIALKOT CANTT	colourless	Tasteless	odourless	7.0	241	15.8	Tap water
16	Prep IIN (8 <sup>th</sup> grade) STREET NO # 20 B_BLOCK MAG TOWN, SIALKOT	colourless	Oily	odourless	6.6	326	16.1	Tap water
17	Prep I, (8th Grade) BAJWA STREET LINK AMIRSTREET, MODEL TOWN, SIALKOT	colourless	Salty	Oily smell	6.4	492	16.7	Tap water
18	Class- IX (9 <sup>th</sup> grade) GHAZI ROAD, SIALKOT CANTT.	colourless	Tasteless	odourless	6.9	389	15.7	Tap water
19	Class- IX (9th Grade) QUAIDE-AZAM ROAD, SIALKOT CANTT	colourless	Tasteless	odourless	6.2	239	15.1	Tap water
20	Class- IX (9th Grade) ASKARI COLONY # 2, SIALKOT CANTT	colourless	Salty	odourless	6.8	223	16.0	Tap water
21	Class JR VI-C (6 <sup>th</sup> Grade) HAJI PURA DASKA ROAD, SIALKOT	colourless	Tasteless	Oily smell	7.1	236	14.7	Tap water
22	Class V-S DALOWALLI, SIALKOT	colourless	Tasteless	odourless	7.0	236	14.6	Tap water

**Analysis of data**

1. PH levels in water samples collected by the students reflect that Citizens of Sialkot City enjoy good quality drinking water.
2. One sample of Durani Town/Iqbal Town water brought by one of the students (Tap Water) reflects extraordinary high PH Level reflecting alkaline tap water.
3. TDS levels in water samples reflect that People of Sialkot have excellent to good quality
4. Data also shows that one family has higher TDS levels in drinking water but acceptable.

**Recommendations from students**

1. The Local Administration should develop a system of regular monitoring of water quality provided to the people of Sialkot.
2. Students showed their determination to monitor the quality of water of their town after short intervals as community service. Nature Club admired this spirit of youth.

**The Nature Club of Pakistan thanks all the students who took part in this study**

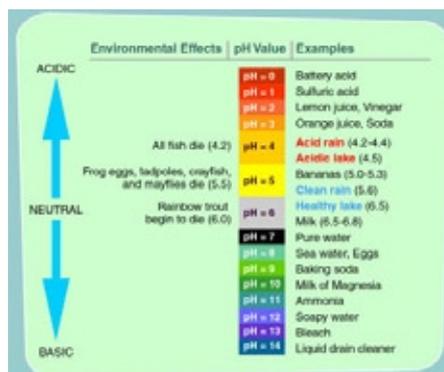
**Standards followed for analysis of data**

Colour	Reasons
Transparent	Clear water
Yellowish/ brownish	Rust in your water main or water pipes
Milky-white or cloudy water	Indicates presence of air in the water bottles
Greenish	Presence of green algae or some alloys

Taste/ odour	Reasons
Chlorine, chemical, or medicinal taste or odours	The addition of chlorine to the water by your public water supplier, or the interaction of that chlorine with a build-up of organic material in your plumbing system.
Sulphurous, decayed, or sewage-like taste/odour	Bacteria growing in your drain
Musty, mouldy, earthy, grassy or fishy taste/odour	Bacteria growing in your drain, or certain types of organisms growing in the public water supply
Metallic taste	Rust in pipes
Salty taste	Due to the presence of naturally occurring sodium, magnesium, and/or potassium

Level of TDS (milligrams per litre)	Rating
Less than 300	Excellent
300-600	Good
600-900	Fair
900-1,200	Poor
Above 1,200	Unacceptable

PH Level of Water  
 Ideal Drinking Water PH Level = 7  
 Lower level means acidic water  
 Higher level means alkaline water  
 Range for good drinking water 6-8.5



# Using the 'Outdoor Classroom' for writing poetry

**"Real experiences are essential to children's development and education and writing poetry is an excellent way to record those experiences. Encouraging them to look carefully and closely for specific details will not only help them to understand and appreciate their environment but, by the use of unambiguous and descriptive language, children can create an effective and lasting image to convey their ideas and emotions."**

*Poetry in Motion:* Roger Butts with Juliette Green

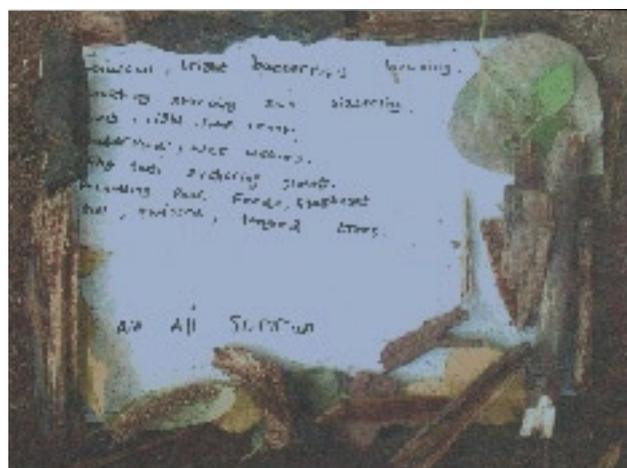
**Juliette Green**  
NAEE Executive

**P**oetry is a form of writing that can be very 'dry' if it's not taught well. It doesn't tend to be very well loved by either teachers or pupils (particularly those in upper Key Stage 2) and, all too often, it can be relegated to a short unit at the end of term, only serving the purpose of 'ticking off' the poetry objectives for that year group. However, poetry can be an excellent medium for encouraging children to really explore language, as it requires them to choose their vocabulary carefully in order to create a vivid, evocative image in a small amount of words.

Poetry is a very sensory medium and where better to engage the senses than the 'great outdoors'? The colours of the changing seasons, the sound of leaves crunching beneath your feet, the smell of the air after a shower of rain, the texture of a piece of tree bark, the feel of the breeze on your skin.

Taking your class outside and encouraging them to really 'look' (and of course this doesn't just mean using their eyes!) at what's around them can produce some fantastic poetry writing. Of course, the 'outdoor classroom' covers a wide range of environments, from the school grounds to the open countryside, towns and cities to rivers and woodlands, seaside to hillsides.

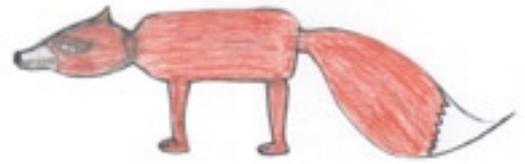
Here are a few handy hints about how to teach poetry



outside:

- Allow children to really immerse themselves in the outdoor environment. Give them opportunities to touch, observe, smell (and perhaps even taste) their surroundings. Tell them to look high and low, close and faraway, to squeeze, stroke and sniff (remembering 'health and safety' of course!). The informal setting should be conducive to imaginative ideas, which can then be honed and developed, either whilst still outside or back in the classroom.
- Provide tools to help them investigate: magnifying glasses, binoculars, pooters to collect invertebrates, wax crayons for bark rubbing.
- Build up a bank of words and phrases as you walk around the outdoor area. Think about the different ways that the children's ideas can be recorded: mini whiteboards, adult scribes, cameras, voice recorders, clipboards for drawing pictures.
- Don't just focus on adjectives; talk about powerful verbs: *the branches tickle the sky, the stream chatters over the stones, clouds tiptoe overhead, a cat slumbers in the shade, boats bob bumpily in the harbour.*

- Encourage the children to look at aspects of the outdoors in a range of different ways. For example, looking up at a tree through their legs, using a mirror to look at what's above as they walk along, lying on the ground in order to get a 'worm's eye view' of the landscape.
- Give them time: great poetry doesn't just happen; it's the result of collecting ideas, then several stages of drafting and redrafting. If possible, allow the children to put their poems away and come back to them a few days later.
- Remember that the 'outdoors' does not just mean the natural environment, but also the urban environment. An awareness and understanding of the built environment can help to develop a sense of place and to inspire pride in the places where children live, particularly those who live in densely populated areas.
- Poetry activities can be easy to arrange and often don't need to cost anything either! For example, you can take a walk along the local high street or visit your local park. These types of activities enable children to find out more about where they live and go to school, as well as encouraging them to build links with local communities: past, present and future.
- If you're travelling further afield, use the journey as an opportunity for writing poetry,

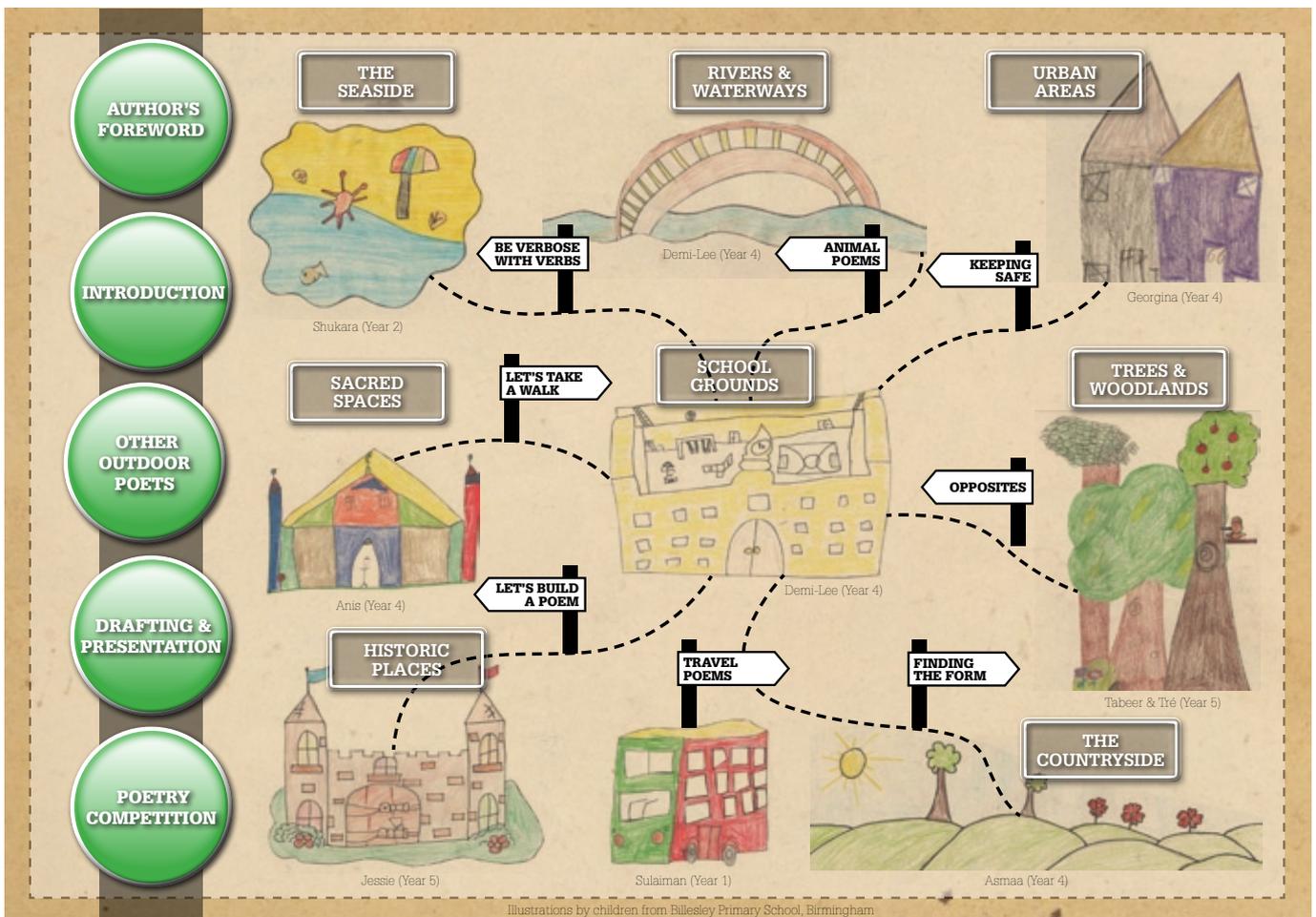


whether it's a short walk or a long coach journey (although, it would be a good idea to have a scribe who does not get travel sick!).

- Experiment with different forms of poetry, such as haiku, pantoums and kennings. However, don't stifle children's imagination by making them stick rigidly to these at the expense of using the best words: the odd extra syllable doesn't really matter!

Juliette Green, *NAEE Executive*, worked with the author Roger Butts—a former primary school teacher, headteacher, advisor and lover of the outdoors—on *Poetry in Motion*, a CD-based resource packed full of exciting and stimulating ways to inspire children to write poetry outdoors and on educational visits.

It is available from [www.lcp.co.uk/primary-school/outdoor-learning](http://www.lcp.co.uk/primary-school/outdoor-learning)



Illustrations by children from Billesley Primary School, Birmingham

# Nottingham is 'world's greenest campus'

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**Liz Goodwin**

Press Officer

*Nottingham University*

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**T**he University of Nottingham is the most environmentally friendly campus on the planet, according to a new league table of sustainable universities.

The University is first in a new international ranking that judges institutions according to their energy management programmes, sustainability-related teaching and research, waste and water management, percentage of green space on campus and the application of eco-sustainability policies and efforts.

The 'Greenmetric of World Universities 2011', produced by the University of Indonesia, features institutions from more than 40 countries.

Nottingham's aim is to become a sector-leading green university in all its activities and the past year has seen staff and students working hard on a range of initiatives to reduce its carbon footprint.

These include the maintenance of its award-winning parkland campuses incorporating green gardening practices, the use of innovative architecture and sustainable design in building new facilities, reducing the environmental impact of its IT use and introducing sustainable procurement practices into contracts with a growing number of major suppliers.

The University launched an environmental strategy in 2010, managed by an Environmental Steering Group, which outlines its aims in achieving excellence in sustainability and has been underpinned by the introduction of a range of initiatives supporting its green agenda.

Professor Karen Cox, Pro-Vice-Chancellor for Environment and Infrastructure, said: "Last year Nottingham was ranked no.2 in the Greenmetric league table, so it's very pleasing that our continuing work has been recognised with a move up into the top position.

"Campus-wide efforts on sustainability have yielded our first-ever reduction in carbon emissions—a cut of over 1,100 tonnes of carbon dioxide on the previous year. Taken against a background of increasing student numbers, new

infrastructure on campus and an extremely harsh winter, this is a considerable achievement.

"I'd like to offer my congratulations to all those staff and students who have worked hard to contribute to our success in this area."

**W**ith 330 acres of rolling parkland, beautiful period buildings and a large lake, University Park is considered to be one of the most attractive campuses in the country. In 2011, it was awarded a Green Flag Award for the ninth year running. Nottingham was the first university to win a Green Flag for its parks and gardens.

A sustainable transport strategy is in place, with new cycle infrastructure, car-parking charges, availability of inter-campus hopper buses and a cycle hire scheme for students.

The University has submitted plans for three wind turbines on land close to the River Trent, near Clifton Bridge in Nottingham, which, if approved, would supply green electricity directly to its University Park campus. The turbines, which would meet one-third of the electricity needs of the campus, would reduce the University's carbon emissions by 7,000 tonnes per year, equating to 40 per cent of the target reductions required by 2015.

The University has a strong research portfolio in environmental sustainability. The Centre for Sustainable Energy Technologies at its Ningbo campus in China is not only a research centre, but also serves as a model building representing cutting-edge techniques for environmentally-responsible, sustainable construction. The Creative Energy Homes project, on the University Park campus in Nottingham UK, features six innovative eco-homes that serve as 'living laboratories' in which new techniques can be tested and demonstrated.

Creative Energy Homes is also a key project within the University's new appeal, Impact: The Nottingham Campaign, which is delivering the University's vision to change lives, tackle global issues and shape the future. Our research today will deliver global solutions to the development of sustainable housing for the future.

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More information on Impact: The Nottingham Campaign is available at <http://tiny.cc/UoNImpact>

# A tree-mendous Jubilee year

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## Rhiannon Bates

Press Officer  
The Woodland Trust

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Community groups and school children across the UK planted a phenomenal 750,000 free trees from the Woodland Trust in autumn 2011. As a result 1,800 acres of trees were planted: equivalent to five times the size of London's Hyde Park.

Over 1,000 packs of native trees were distributed to community groups, enabling local people to transform community spaces in villages, towns and cities. These trees are some of the first celebratory trees to be planted as part of the Woodland Trust's 'Jubilee Woods' project to mark the Diamond Jubilee of HRH Queen Elizabeth in 2012.

Groups received either a small pack of 105 trees or a large pack of 420 trees. Each pack is available in four different themes: year-round colour, wood fuel, wildlife or wild harvest, all of which are ideal for planting as hedging, small woods or copses to fit best within neighbourhood spaces.

Throughout 2012, packs also contain a special Royal Oak sapling, grown from an acorn gathered from a Royal estate such as Sandringham or Windsor, to help people mark the Jubilee with a lasting tribute in their community.

17,500 schools also received free hedge & copse packs this autumn, enabling children to bring natural shade and greenery to their school grounds.

Victoria Hodson from the Woodland Trust added: "We are delighted thousands of communities and schools are using our free tree schemes to plant more trees in their local area. Groups are transforming their neighbourhoods; growing their own fruits and food, creating shade and shelter, and providing new homes for wildlife. Through tree planting, schools are educating children about the benefits of trees and their importance for the environment.

"This year, we are offering more free trees for people to plant in celebration of Queen Elizabeth's



© WTPL/Janette Wickens

Diamond Jubilee and would love yet more communities and children to get involved."

In February, the month of The Queen's accession to the throne, the Woodland Trust got off to a flying start to a year of Jubilee tree planting celebrations by helping plant 1 million trees.

But 1 million trees is just the start for 2012: the Trust aims to plant 6 million trees to celebrate The Queen's Diamond Jubilee, including hundreds of new woods created across all four corners of the UK, from Stornoway in the Western Isles to Penzance in Cornwall.

The February million consisted of 303,109 trees planted by schools through free tree packs, 230,383 trees planted through free community tree packs, 236,185 trees across 60 acres of 'Diamond Woods' and smaller 'Jubilee Woods', along with 43,500 individual garden trees and 200,191 trees planted by partner organisations and at Woodland Trust sites across Britain.

This isn't the first time that the UK has celebrated a Royal occasion by nationwide tree planting. The Royal Record of tree planting captures in fascinating detail the planting undertaken by thousands of schools, parishes, organisations and homeowners in 1936/7 to commemorate King George VI's Coronation.

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Find out more about the project and view the Royal Record at [www.jubileewoods.org.uk](http://www.jubileewoods.org.uk)

# Book Reviews

## The Medical Detective

Sandra Hempel

ISBN 978-1862079373

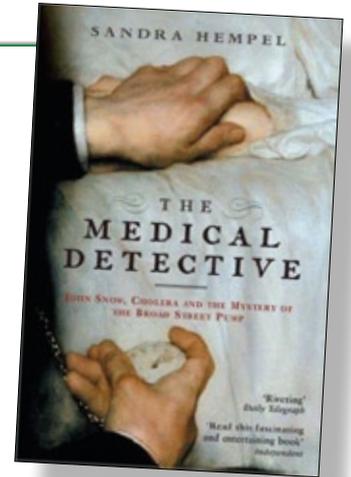
Granta Books, London

304pp, £9.99

Despite the swingeing cuts to local council budgets the mobile library still makes its fortnightly visit to our rural village. On the premise that 'if you don't use it you lose it.', and because the library stock is changed infrequently, you become quite eclectic in your choice of reading.

Chancing on this fascinating read for the first time on the van's last visit *The Medical Detective* plots the story of Cholera from India to the Broad Street pump. This is not a sawdust dry history of the development and understanding of the disease but a well written account skilfully entwined with the personalities and issues involved.

Its appeal to environmentalists will be at least three fold. First is the development and spread of Cholera through Asia and Europe to our shores mirroring present day epidemics such as flu. Second is the dedication and perseverance of committed individuals to a scientific and honest appraisal of the evidence. Thirdly the hypocrisy of establishment figures wedded to existing theories and their alignment with financial and business interests. Alert readers will be able to recall many modern parallels some of which intersect with opinions and facts about global warming. If you haven't come across this read it is well worthwhile taking the trouble to find a copy. But please don't get run over by our mobile library.



Norman Farmer, NAEE executive

## The Lonely Tree

Nicholas Halliday

ISBN 978-0953945986

Halliday Books ([www.thelonelytree.co.uk](http://www.thelonelytree.co.uk))

32pp, £7.99

This book is about an evergreen tree who lived in the New Forest. He was lonely because the rest of the trees were oak trees. An old oak made friends with him and he told him brilliant stories about the forest. He also looked after him until winter came.

I liked the language that was used in this book. For example at the beginning it says that a carpet of bluebells was covering the floor. I thought the book was quite sad but the little tree made a new friend at the end and he could share all the stories the old oak tree had told him.

You should read this book because it is exciting and interesting. Also it has really lovely pictures in it of the different seasons. I enjoyed finding the animals that were hiding on the pages!

Grace (age 7)

## Garden in the Sky

Sue Gill and John Fox

ISBN 978-0-9568583

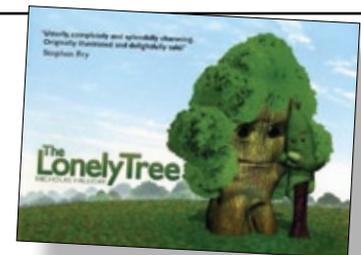
Boardwalk books

16pp, £3.50

This is delightful little book about plants, including some very tiny ones.

Sometimes we overlook the power and quality of most young childrens' eyesight and their ability to note the smallest details. Rosa's grandparents live in a wooden beach house on the edge of Morecambe Bay. When they looked around they found 171 different plants, some cultivated, most wild, growing by the path, along the hedge, on the seashore and even on the roof: the Garden in the Sky. All this diversity within 50 metres of the door! If I have one concern it is that it could easily get lost in a school library but that it would make an excellent little gift for a budding young naturalist or as a reward for your keen school gardeners. Discounts are available for multiple copies.

David Fellows, NAEE executive



## WEB WATCH 19

### Earth Summit and Earthquakes

Compiled by **Henricus Peters**, *NAEE Co-Chair*

***This issue focuses on the upcoming 2012 Conference on Sustainable Development. We follow on from the last e-journal, which looked at children's books, with some online book resources. We also mention some geology resources after the Christchurch quake: see report on page 11***

#### **[www.earthsummit2012.org](http://www.earthsummit2012.org)**

The conference website includes themes and objectives, useful background information.



#### **[www.kidsforsavingearth.org](http://www.kidsforsavingearth.org)**

Set up by 11-year-old Clint Hill who tragically died of cancer. 'Music' includes a quite brilliant 'Promise' song.

#### **[www.outdoor-nature-child.com/child-nature-story.html](http://www.outdoor-nature-child.com/child-nature-story.html)**

Wilderness School, a US not-for-profit organisation, have many child nature stories for sharing. Some are written by Wilderness School members, some collected from other sources. These stories cover a range of subjects: lost animals (tracking), trees, weather, mini-beasts.

#### **[www.childrenandnature.org/naturestory](http://www.childrenandnature.org/naturestory)**

*For KS1 upwards*

Stories about animals, plants, and wild places can be a big part of helping kids connect to nature. Children and Nature Network have created this special section to help you enrich your nature discovery with stories old and new...and even stories told by kids themselves. Wide range of subjects: after dark, making hideouts, nature in the city, adventure.

#### **[www.gruffalo.com](http://www.gruffalo.com)**

Includes 'Activities' has What the Troll Eats? games and many others.

#### **Earthquake Resources**

##### **[www.christchurchquakemap.co.nz](http://www.christchurchquakemap.co.nz)**

A very good interactive map of the areas affected

##### **[http://en.wikipedia.org/wiki/Earthquakes\\_in\\_New\\_Zealand](http://en.wikipedia.org/wiki/Earthquakes_in_New_Zealand)**

A summary of key facts and figures, plus links

##### **[www.tepapa.govt.nz/Education/OnlineResources/AwesomeForces/Pages/overview.aspx](http://www.tepapa.govt.nz/Education/OnlineResources/AwesomeForces/Pages/overview.aspx)**

Designed to support teachers in developing a unit of work about some of New Zealand's natural hazards: earthquakes, volcanic eruptions, and tsunamis. Part of this resource is specifically aimed at students (years 4-10, aged about 8-14). It is highly interactive and includes a game, 'Get Ready for the Big One', that teaches what hazards occur in which regions in this country and what to consider when preparing for and facing them.

##### **<http://earthquake.usgs.gov/learn/kids>**



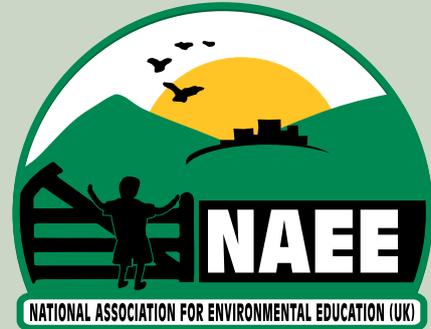
Some of the best interactives about, showing the whys and wherefores of all quake-related topics.

**Send your favourite links to**  
**[Henricus.peters@gmail.com](mailto:Henricus.peters@gmail.com)**  
**and my blog at**  
**[environmentaleducationuk.wordpress.com](http://environmentaleducationuk.wordpress.com)**  
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# National Association for Environmental Education (UK)

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## Benefits of becoming a member



- *Environmental Education* e-journal and NAEF publications;
- advice and information about all environmental education matters: case studies, lesson plan ideas, contacts;
- join a growing online community of teachers, lecturers, advisors, universities, schools and centres to share good practice and solve problems common to all of us;
- knowing you are helping to bring children closer to nature!

### Contributions to *Environmental Education*

We welcome articles and items from members, supporters and readers. These may occasionally be reprinted either on their own or with other articles in NAEF publications.

Please ensure you have permission to use any photographs and send them a separate jpeg files.

Please contact [editor@naeeuk.plus.com](mailto:editor@naeeuk.plus.com) with your submission.

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