

Environmental Education



Those in glasshouses

More schools benefit from the
Hugh Kenrick Days grants
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Supporting



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**BioFarming in
Shanghai**

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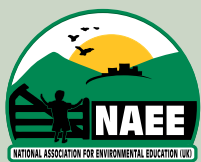
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National Association for Environmental Education (UK)

The key network for all concerned about our relation with the natural and built environments; promoting sustainable education

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.

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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 images

Main Picture: Year 2 pupils from St Augustine's Catholic Primary, Handsworth, survey the plants in the glasshouses at Birmingham Botanical Gardens thanks to a Hugh Kenrick Days grant.

Other pictures (l-r): Pupils at the Shanghai BioFarm get hands-on experience of the food network; Youth climate campaigners making their voice heard at the Doha Climate Summit; Young learners sit on a log circle to discuss their day of learning at Yorkley, Forest of Dean


Letters from the ministers

Responses from NAEE's contributions to the curriculum review



These letters are the responses from the Department for Education and the Department for Energy and Climate Change, in response to NAEE's correspondence about environmental education in the curriculum. Both letters state support for our aims, with Michael Gove specifically stating, "I agree that teaching children about the environment is an important aspect of receiving a well-rounded education."

They then proceed to outline the opportunities for environmental education in the proposed

curriculum, but emphasise the autonomy of individual schools when deciding how these are incorporated. The letters can be read in full on the NAEE website. 

What do you think about the role of environmental education within the curriculum? Write to us at info@naee.org.uk or post on the NAEE facebook.

We all help to make NAEE special



Dear Colleagues,

People make NAEE what it is; people helping to make education—for, in and about the environment—happen.

We are thrilled to highlight two very special members and say 'Happy birthday' to them. We pay tribute to Mrs Anne Kenrick, NAEE Vice President, who turned 90 on 31st December 2012 and whose generosity, via the Kenrick Fund, is enabling NAEE to arrange for Birmingham schools to visit outdoor environmental education centres. Professor David Bellamy, the original 'Botanic Man', our first-ever NAEE Life member, turned 80 last year.

In this journal we investigate what outdoor education opportunities are now being offered to trainee teachers—folk with a key role in connecting between children and nature (page 12). Grace Kimble explains why and how the gap between outdoors and indoors worldwide is being bridged through filming, with the training in, and use of, this useful media (page 18).

From members' requests, we bring news of how trained botanists and tree experts are dealing with the ash dieback issue. Trees in the rainforests are featured in our 'Books About...' series and plants are the focus of Webwatch.

We welcome new Executive Committee member Sarah Simmons and she offers her opinion on environmental education (page 8) following NAEE President William Scott's commentary on what it is to be an environmental educator (page 6).

We are always keen to find out what you, the people that make up NAEE, think about environmental education or how we can do things better. Of course, part of the challenge is our limited funding and we are always on the lookout for opportunities to grow our income so we can do even better!

Our next issue will focus on water in education: case studies of projects, activities, investigations in schools/colleges/universities. Would you be interested in contributing something? The deadline is 24th April 2013: do get in touch if you'd like to contribute.



Gabrielle Back



Henricus Peters

NAEE Co-Chairs



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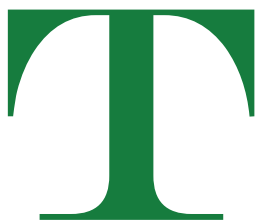
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Why are you an environmental educator?

Stephen Gough and William Scott

Centre for Research in Education
and the Environment
University of Bath



he annual conference of the North American Association for Environmental Education (NAEE) is *the* gathering for people involved in environmental education.

Those attending include school and college teachers, researchers and research students, folk from NGO and business,

and from national, regional and local government agencies. It's a meeting at which thinking about issues of society, environment and learning goes on from a wide range of perspectives. The next meeting is in Baltimore: October 9th to 12th.



Some of those who attend are primarily interested in studying natural processes in order to understand them. Others see nature as a metaphor for a preferred social order, which may be 'competitive' or 'co-operative' according to taste or worldview. This Table is based on observations we made at NAEE conferences over a number of years¹. It sets out nine *categories of interest* which capture the different focuses and objectives of those who espouse and promote what we call environmental learning².

Categories of Interest ...	Focus & outcomes	Exemplified by ...
1. those interested in sharing the joy and fulfilment derived from nature in order to bring about significant life-enhancing and life-changing experiences for learners	Nature <i>values & feelings</i>	non-formal educators and interpreters seeking attitudinal and/or value change; possibly seeking to introduce and extend particular philosophies of living
2. those interested in the study of the processes of nature in order to understand, or to teach about them	Nature <i>understanding</i>	teachers of ecology, (physical) geography, the earth sciences and rural studies; researchers in these (and other) areas
3. those using nature as an heuristic to foster the development of knowledge, understanding, skills and character which, although situated, are transferable to other contexts and through time	Nature <i>skills</i>	teachers, environmental interpreters and field studies officers seeking to develop students' cognitive/conative/affective/psychomotor skills related to environmental work
4. those using the natural and/or built environments as heuristics to achieve conservation and/or sustainability goals	Conservation <i>understanding</i>	conservation/heritage scientists (and others) working for government or NGOs bringing communication and education strategies to bear on conservation and sustainability issues


Categories of Interest ...	Focus & outcomes	Exemplified by ...
5. those advocating/ promoting individual behaviour changes in order to achieve conservation/ sustainability goals	Conservation <i>behaviours</i>	environmental activists and teachers who have clear views on what the problems are, and on their solutions
6. those advocating/ promoting particular modes of social change in order to achieve environmental/conservation/ sustainability goals	Social Change <i>social justice</i>	environmental activists and teachers with clear views on the form of social organisation needed to achieve sustainability
7. those using environmental, conservation and/ or sustainability issues as contexts for the development of skills and knowledge related to the exercise of democratic social change	Social Change <i>democratic citizenship skills</i>	teachers and others interested in helping (young) people acquire democratic and citizenship skills which will enable them to participate in open-ended social change relating to human-environment relationships
8. those promoting nature as a metaphor for a preferred social order – which may be ‘co-operative’ or ‘competitive’, according to worldview	Social Change <i>values</i>	sociobiologists, deep-ecologists, social Darwinists, Gaianists who engage in communication and informal education about the relationship between humans and nature
9. those interested in the study of environmental learning (and environmental education) itself	Learning <i>learning about learning</i>	educational researchers interested in various aspects of learning and teaching related to environmental and sustainability issues

Disposition towards sustainability varies across the categories. Many environmental educators welcome a focus on sustainable development because it provides the opportunity to raise issues of social justice, while others use it strategically to promote particular social change. Of course, any such categorisation has to be a simplification as these categories are not necessarily fully discrete, and an individual might be involved in two or more of them, but it does allow us to consider how those interested in environmental learning can have widely differing assumptions about both purpose and process.

For example:


-  From #1 to #8, interest in nature, *per se*, decreases markedly, along with a shift from a realist view of nature to a metaphorical one. There is also a shift from interest in the individual learner to the social context.
-  From #3 to #7 the environment (natural

and otherwise) is viewed mainly as a means of exploring issues and achieving particular goals.

-  #8 sees the natural world as providing a coherent and liveable philosophy that explains our social and ecological obligations. Some of those in this category may have very little else in common.

We thought that all the perspectives represented by these categories of interest had something useful to contribute to learning about the human condition and our relationship with nature under conditions of complexity, uncertainty, risk and necessity, but that no one perspective provided the full picture. Thus, we all can focus on our own particular priorities and/or responsibilities as environmental educators, knowing that doing so doesn't render other perspectives illegitimate; what is crucial, is that learners are helped to see connections across these different approaches.



So, what are your categories of interest? Where do you stand? Does the Table help you see what you do in relation to what others contribute? And is there anything we have missed? 

Notes

1. This is based on: Scott, W. & Gough, S. (2003) Using the environment as a stimulus to learning: exploring categories of interest; *Environmental Communicator* 33(1) 8. This was

also discussed in our book: Scott, W. & Gough, S. (2003) *Sustainable development and learning: framing the issues*; London/New York: RoutledgeFalmer

2. *Environmental* learning is defined purposefully broadly here as *learning which accrues or is derived from an engagement with the environment or environmental ideas*.



What it all means to me...

Sarah Simmons
Executive Member
NAEE


Growing up in Sussex has made me appreciate and value the natural environment from an early age. My own particular childhood consisted of countless days exploring the local fields and woodland, building dens and swinging on precariously slung ropes across brooks and streams. To me, Environmental Education and Education for Sustainable Development are valuable tools for ensuring all children develop a sense of happiness and well-being, achieve their full potential at school and are able to effectively deal with the future's inevitable environmental, social and economic issues.

The New Economics Foundation (NEF) recently published its Natural Solutions report which concludes that nature is a key tool for ensuring long-term well-being and I wholeheartedly agree with their findings. Within NEF's report the mental health charity MIND uses the term 'Eco-Therapy', claiming that being outdoors and exploring the natural world increases a person's feeling of well-being. In addition to this, it is clear that being outdoors, running about and exploring may also help to improve chronic health issues, such as childhood obesity.

Learning outdoors, or 'Learning Outside the Classroom', is an invaluable educational tool, particularly for those children who struggle to focus in conventional classroom environments. As the Council for Learning Outside the Classroom

(CLOTc) identifies, outdoor learning makes use of a variety of learning styles which may suit a number of children better. For those children who struggle with behavioural issues, outdoor activities may also help to ease their disruptive classroom behaviour in order to make learning an enjoyable experience for pupils and teacher alike.

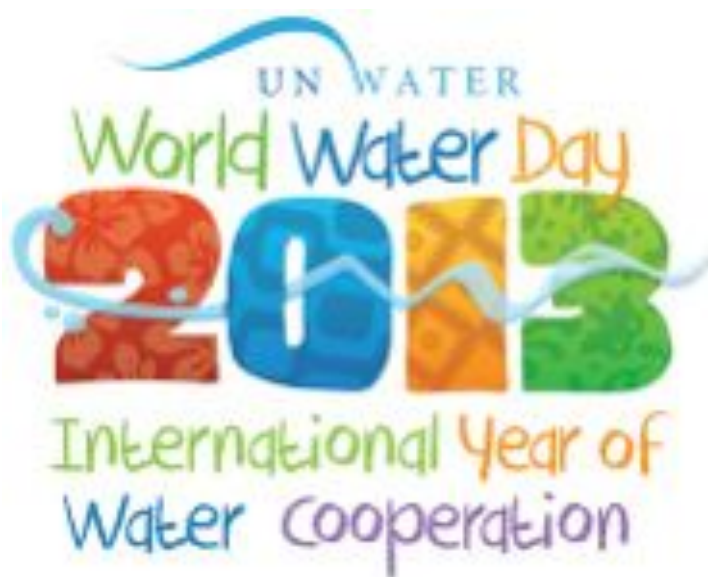
Not only does educating our children about the natural environment benefit them, it also benefits the natural environment. I believe strongly that by engaging with the natural environment, children can develop a passion and understanding for their local area. This in turn elicits endless benefits from children feeling empowered to combat problems facing their neighbourhoods to feeling able to deal with larger global issues, such as climate change. In essence, I feel that we generally care for things we have positive memories of, experience in and are passionate to preserve. Environmental Education and Education for Sustainable Development help to do this whilst also ensuring that children become responsible, caring citizens.

I realise that it is easy for me to sit here whilst looking out onto fields and rolling hills and preach about the importance of enthusing children to explore the outdoors. However working in an inner London borough I am all too aware that not all children have the opportunity to explore and engage with the natural environment. I joined the Executive Committee so that I am able to help children from inner city areas connect with nature. The Kenrick Days Project, which NAEE facilitates, is a fantastic example of the positive work we do to ensure these children are not left out of a vital learning experience. It is up to each and every one of us to work together to engage, encourage and ensure that today's children and future generations are equipped to do all they can to protect our planet and I am excited to be a part of it. 

Liquid gold ... or polluted puddles?

Henricus Peters

Co-chair
NAEE






Water. We all, arguably, take for it granted, yet much of the world's populations do not have access to it...

A Day and a Year

So, the United Nations created the annual 'World Water Day' as a means of focusing on the importance of freshwater and advocating for the sustainable management of freshwater resources.

The Netherlands, a land of major water systems since much of it is below sea level, is to host this year's day. The 2013 event is especially important as it provides a major launchpad for the 'United Nations Year of Water Cooperation'.

Here are some interesting facts about water and World Water Day:

-  The first water day was held in 1993 – not so long ago;
-  In 2012 the theme was 'Water and Food Security';
-  Water and food consumption are inextricably linked. Each of us drinks from 2 to 4 litres of water every day, however most of the water we 'drink' is embedded in the food we eat: producing 1 kilo of beef, for example, consumes 15,000 litres of water while 1 kilo of wheat 'drinks up' 1,500 litres.

Teaching Ideas


There is a range of teaching activities for school teachers and youth group leaders, spread around a range of websites.


Some of these are resources— such as posters, etc.—to promote the Day, for example:


-  UNESCO:
www.unesco.org/new/en/natural-sciences/environment/water/world-water-day/

-  www.worldwaterweek.org

-  Environmental website:
www.greeningtheblue.org/event/world-water-day-22nd-march-2011-0

-  Especially for and from Scotland:
www.educationscotland.gov.uk/resources/w/worldwaterday.asp

-  Others have more specific activities that will help you plan for water-based activities throughout 2013:
www.unwater.org/watercooperation2013.html
www.wateraid.org/uk/learn_zone/default.asp
www.projectwet.org—featured in our 100th edition

The UN Educational, Cultural and Scientific Organisation (UNESCO) is key coordinator, in conjunction with agencies including the UN Conference on Environment and Development (UNCED), the UN Economic Commission for Europe (UNECE) and the Food and Agriculture Organisation (FAO). In the UK, NAEE is working alongside many groups to promote both the Day and Year. 

Call for Water case studies and articles

NAEE is bringing together a wide of selection of case studies, lessons, activities and outreach programmes for our next water themed issue. Examples come from schools, colleges, universities as well as youth and community groups. This will become an important printed resource for teachers and leaders. Advertising and sponsorship are also available.

For further details, or if you wish to contribute, please contact the editor: editor@naee.org.uk or managing editor: h.peters@naee.org.uk



Hugh Kenrick Days

Spring update

Juliette Green

Executive member
NAEE

In Autumn Term 2012, four schools from Birmingham enjoyed day visits to outdoor environmental education centres, thanks to Hugh Kenrick Days bursaries. This term's schools were mainly drawn from inner-city areas of Birmingham, where children have little or no green space on or near to their school site. Here are reports from two of the schools. All the reports will soon be on our website.

St Vincent's Catholic Primary, Nechells

After beginning their theme on rivers, Year 5 and 6 decided to give it a splash! Undeterred by the rainy weather conditions on Friday 21st September, the children explored the River Tame from the safe haven of Hams Hall Environmental Centre, near Lea Marston in North Warwickshire.

The children enthusiastically investigated river features and found evidence of the erosion process, transportation and deposition at work. During one part of our investigation on

transportation, volunteers took part in activities requiring them to time how long it would take for a wooden stick to travel 10 metres. Up stepped one of St Vincent's Olympic throwing champions - Shaquon. Needless to say - he launched it!!! 'My, you've got a throw!' remarked Steve, our tutor for the day, as the stick sailed downstream. However, Shaquon was not the only child displaying their talents. Boubcarr nearly flabbergasted Steve when he correctly identified that the source of the River Tame was in Walsall; helping to make our day a truly memorable one!

Back at school, the trip led on to a range of river-related follow-up activities including following a droplet of water on its journey through the water cycle. The classes also took on board the need to protect our rivers, not only from our own pollution but also from some hostile plant life. The children were fascinated by the balsam plant and were able to describe how it and other non-native invasive plants need to be controlled in order to protect the river banks from erosion.

—Saheda Khan, Year 6 teacher

St Augustine's Catholic Primary, Handsworth

How could I continue to promote curiosity, a love of learning and teaching my students to do their

best on our next topic 'Plants and animals in the local environment'? Well, thanks to our Hugh Kenrick Days grant my Year 2 pupils had a brilliant day out at Birmingham Botanical Gardens. It was a wonderful way to start off our new topic and take learning outdoors!

The class investigated the different types of plants in the different glasshouse habitats. This was made more interesting and extremely exciting by searching for Barnaby Bear in the four glasshouses. The

Pupils from St Vincent's exploring water courses





A pupil from St Augustine's attempts some plant identification


children produced some interesting sketches of plants, trees and fruits on their pursuit, using their observational skills well! The children were able to recall what they learnt about the functions of the different parts of a plant during the earlier classroom session. They spotted the veins on the leaves and talked about why it felt damp and humid in the different glasshouses. "Wow that leaf is big, it can make a lot of food for itself" was a comment from one of the pupils when they saw the banana leaves.

Out exploring the wider parts of the garden, the children got creative by collecting as many natural items as they could to make 'journey sticks'. They made rubbings of leaves and tree trunks and used a range of descriptive language to describe how these felt.

On the whole, the children were totally engaged throughout the day with the super activities and memories that they will cherish forever. The majority of the children said to me: "It was a brilliant day, can we go again Miss?". I was most impressed that the children were still enquiring about the different plants and talking about the trip days later.


—Ly Tran, Year 2 teacher and
Science Co-ordinator


An overview of the visits due to take place in the Spring Term:


 Year 2 pupils from Rosary Catholic Primary School in Saltley will be visiting Mount Pleasant School Farm to investigate how animals provide us with food. (Science and literacy focus).



Hugh Kenrick Days

 Rubery Nursery School will be going to Bell Heath Outdoor Education Centre to hunt for minibeasts and undertake forest school activities. This will link in with the mini forest school that they have started in their school grounds.

 Pupils from Year 6 at St Catherine of Siena Catholic Primary School, Ladywood, will also be visiting Bell Heath, to study food chains and life processes, protection of wildlife habitats and the environment. They will follow this up back at school by creating a small growing area and carrying out activities related to energy conservation and recycling.

Hugh Kenrick Days are administered by NAEE and currently provide funding for Birmingham schools. NAEE is seeking additional funding to be able to increase the number of schools who can receive the bursaries and to extend this project to schools and environmental centres around the West Midlands and the UK. 

To apply for a bursary, please visit our website for more information, www.naee.org.uk or contact j.green@naee.org.uk.







Outdoor environmental education placements for trainee teachers

Juliette Green

Executive member
NAEE

As a teacher who qualified ten years ago, I can't recall any mention of outdoor learning or environmental education during my PGCE course. (Luckily I was already a keen environmental educationalist, so was able to take this enthusiasm into school!). However, several PGCE and BEd courses have now introduced a requirement for their students to complete a placement in an 'alternative' setting where educational practice takes place, such as an outdoor education centre, a museum or a city farm. This is music to our ears here at NAEE, as it means that more Newly Qualified Teachers (NQTs) will now enter the world of education with greater knowledge and experience of the value of learning outside the classroom, and not just teachers like me who already had a particular interest in this field.

The aims of these additional placements are:

-  to give students the opportunity to explore educational settings in the wider environment;
-  to help students to develop the skills and understanding required to plan activities in out-of-classroom or out-of-school contexts;
-  to promote 'hands on' learning and outdoor learning;
-  to develop effective collaborative working skills with other adults in educational settings;
-  to provide evidence towards the Q standards which students will need to achieve in order to gain Qualified Teacher Status (QTS);
-  to enhance students' professional development and employability.

Case Study 1: University College Birmingham

University College Birmingham (UCB) will be trialling one/two week placements in July 2013 for

some students on their PGCE Early Years teacher training programme with the hope that this will be extended to all students from 2014. Although these placements will not be assessed, students will be expected to create a relevant resource which can be used with children within the placement setting and/or in schools.

UCB students also took part in a Forest School taster day at Bell Heath Outdoor Education Centre earlier in the academic year and will be spending a day at Birmingham Botanical Gardens in March, so the college clearly sees learning outside the classroom as a key component of teacher training.

At University College Birmingham, we want our PGCE Early Years teacher training students to be enthusiastic about environmental education and ready to get outdoors with the children in schools as NQTs. For this reason, we are working with several organisations, including the Birmingham City Council Outdoor Learning Service, to develop an environmental education strand in our Alternative Placement project. This will involve students spending two weeks working in an educational setting other than a mainstream school near the end of their PGCE course. The focus will be on developing new and exciting resources to support environmental education in the early years.

—Dr Nicola Smith, lecturer,
University College Birmingham

Case Study 2: University of Wolverhampton

At the University of Wolverhampton all teacher trainees, as part of their PGCE and BEd course, complete a one-week placement in an Alternative Education Setting (AES). The students are expected to set up their placements themselves (with the support of a tutor) and are encouraged to follow their own interests. Although trainees are not expected to carry out any specific directed activities, they are asked to choose three concepts of personal interest and relevance

to the placement which they will explore in depth, in order to provide evidence towards the achievement of their Q standards.

I am a student at the University of Wolverhampton and I am completing my final year of a three-year degree in primary teaching. As part of my course this year I was required to undertake a five-day placement in an alternative educational setting. The setting of my choice was the Birmingham Botanical Gardens.

Whilst being on placement at the Gardens I watched different year groups of children from various schools being taught about plants and habitats from around the world. I observed how the Gardens provides for children's learning by providing engaging activities, relevant teaching, and providing resources and experiences that pupils would not be able to access in the classroom, such as tours around the glasshouses and grounds, as well as investigating products from plants that grow at the Gardens.

Through talking to the teaching staff at the Gardens I gained a deeper understanding of how learning outside the classroom works. This included being shown paperwork that teachers fill in before their visit to inform the setting of the topics to be covered and any other need-to-know information.

The support I received from staff working at the Gardens before and during my placement was fantastic, as I was always kept informed through emails. I was also given different opportunities to learn about how the Botanical Gardens provides for general day to day visitors, as I created resources for visitors to use such as a multiple choice quiz on climate change and a children's trail.


Although the placement was only for a short period of time, I found the experience invaluable and feel that I gained a lot from being at the Gardens. Personally, I believe it is a great experience to undertake a placement in an educational setting other than a school and I am grateful that I was able to complete mine at Birmingham Botanical Gardens. Completing this placement provided me with an insight into how children learn in a context outside of the classroom and how the setting provides for children's educational needs. The placement has been extremely helpful for my academic studies and something that I will draw on throughout my teaching career.

—Emily Broadhurst, BEd student
University of Wolverhampton



Juliette Green with pupils in an 'alternative' setting

Case Study 3: Warwick Institute of Education

Primary and Early Years PGCE trainees at the Warwick Institute of Education (part of the University of Warwick) are required to undertake a one-day 'alternative experience placement' where they shadow the teacher/practitioner leading a day visit. The trainees visit in groups and collect evidence against the various Teachers' Standards which they upload to their online Professional Development Profiles (PDPs). 

I spent an enjoyable and interesting day at the Birmingham Botanical Gardens shadowing two classes of Year 3 pupils. I was particularly impressed that the gardens were able to offer a day of activities for the children even though it was winter and most of the paths around the outside gardens had been closed due to snow and ice. It was extremely valuable to observe the logistics and organisation that goes on behind the scenes before and during a school trip and to see teachers in roles outside the school classroom. I would recommend Learning Outside the Classroom placements to all trainee teachers.

—Laura Shiell, PGCE trainee
Warwick Institute of Education

Welcome to the Public Forest Estate

A learning resource for everyone everywhere

Rachel Giles

National Learning Officer
Forestry Commission England

Imagine a classroom without walls or a roof, where teachers can teach and learners can learn, without books, pens or interactive whiteboards. Imagine a place where you are allowed to walk, run, climb, explore, play, build, search, hide, sit, think, shout, listen. Imagine a place where your children can learn how to walk on uneven surfaces, how to keep warm when it is cold or wet, how to use all their senses to explore. Imagine a whole variety of resources—living and non-living—and a set of equipment for climbing on, crawling under, building with—all free of charge. The forest is an amazing place to learn (and to teach), and with more than half the population living within 6 miles of one of the 1500 forests and woodlands that make up the public forest estate, it is possibly closer than you think.

Learning on the Public Forest Estate

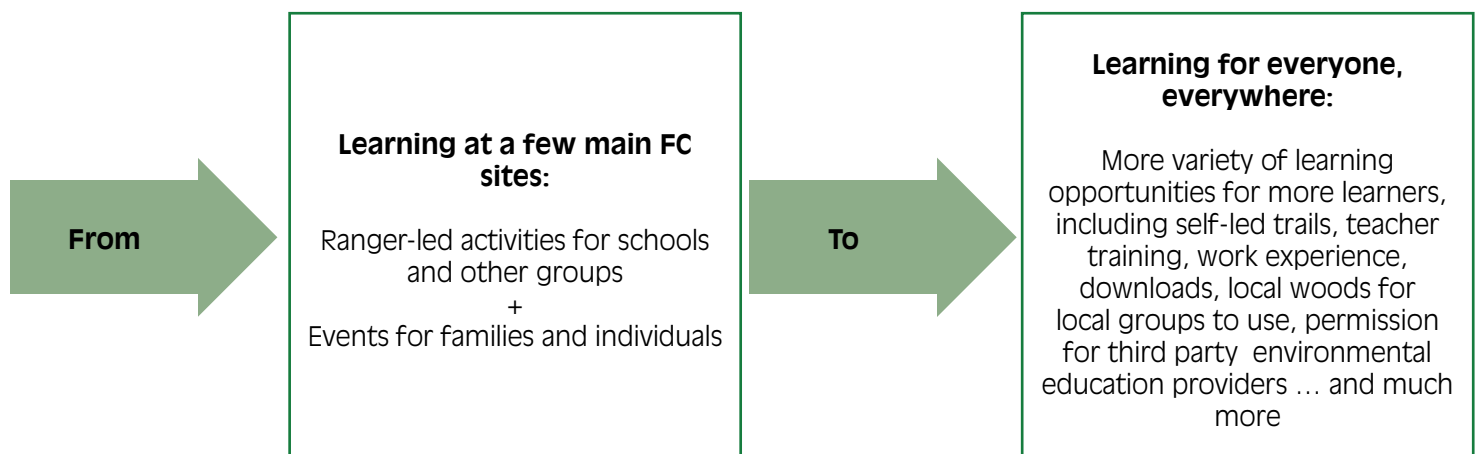
In England, the public forest estate is managed by the Forestry Commission for timber production,

wildlife conservation and for people to enjoy. This Spring, the Forestry Commission will be launching an exciting new National Learning Strategy, through which we want to enable **everyone, everywhere**, to **connect** with the nation's trees and forests so that they **understand** their importance and the role of the Forestry Commission in their management, and **act** positively to safeguard forests for the future.

The Forestry Commission has provided learning activities for schools and other groups for many years: traditional Ranger-led activity sessions have taught tens, if not hundreds, of thousands of children to build dens, identify minibeasts and create natural art. Forestry Commission Rangers have also been responsible for the delivery of family events programmes, Forest School projects and guided walks and talks.

So what's changing?

In the past, most of our educational activities have been led by members of Forestry Commission staff and have taken place at our main visitor sites. We want to enable more people to learn in and about the forest, so we will develop learning activities at hundreds of other sites across the country: providing a range of self-led activities and resources, as well as creating opportunities for third party environmental educators and partner





Forests are full of wonder and surprise for learners


organisations to deliver learning activities on the public forest estate.

All our learning opportunities will have a strong focus on the importance of trees and forests to individuals and society, and how forests can be managed sustainably for people, wildlife, the environment and timber.

What next?

The Forestry Commission's new National Learning Strategy will be launched on March 21st 2013—

World Forestry Day—with a series of learning events around the country.






This Spring, we will be updating the learning pages on the Forestry Commission website (www.forestry.gov.uk), but please bear with us: it is a work in progress at the moment! 

More information—



If you would like to know more about learning opportunities where you are, please email rachel.giles@forestry.gsi.gov.uk.

What could you do in your local forest...



...if you are a teacher / group leader?

-  Visit a main FC site for a curriculum-linked activity session
-  Visit a smaller FC site for an introductory talk, then borrow a box of resources and equipment to use with your group
-  Visit any FC site and plan your own activities, with or without prior advice from the FC
-  Ask about work experience opportunities for your students
-  Attend a training session in a local forest to build your confidence and give you activity ideas

...if you are from another organisation or you are a self-employed environmental educator?

-  Apply for permission to deliver learning opportunities, or events, or birthday parties for groups on FC land
-  Work in partnership with the FC to provide learning opportunities

...if you are a parent / grandparent / individual / child / anyone else?

-  Join in with events at a forest near to where you live
-  Download fun activity ideas to do in your local forest

Ash dieback: the facts

A summary compiled by *Henricus Peters*, managing editor and NAEE co-chair

Description

Chalara dieback of ash is a serious disease of ash trees caused by a fungus called *Chalara fraxinea* (*C. fraxinea*), including its sexual stage, *Hymenoscyphus pseudoalbidus* (*H. pseudoalbidus*). The disease causes leaf loss and crown dieback in affected trees, and usually leads to tree death.

Origins

Ash trees were first recorded dying in large numbers from what is now believed to be this newly identified form of ash dieback in Poland in 1992, and it spread rapidly to other European countries. However, it was 2006 before the fungus's asexual stage, *C. fraxinea*, was first described by scientists, and 2010 before its sexual stage, *H. pseudoalbidus*, was described.

It is believed to have entered Great Britain on plants imported from nurseries in continental Europe. However, now that we have found infected older trees in East Anglia, Kent and Essex with no apparent connection to plants supplied by nurseries, we are also investigating the possibility that it might have entered Britain by natural means—possibly windborne or on birds across the

North Sea and English Channel, or on items such as footwear, clothing or vehicles that have been in infected areas in continental Europe.

Outbreak



1992:

Ash trees suffering with *C. fraxinea* infection found widely across Europe since trees now believed to have been infected with this newly identified pathogen were reported dying in large numbers in Poland.



February 2012:

Found in a consignment of infected trees sent from a nursery in the Netherlands to a nursery in Buckinghamshire, England.



October 2012:

Fera (Food & Research Agency) scientists confirmed a small number of cases in Norfolk and Suffolk in ash trees at sites in the wider natural environment, including established woodland. Further similar finds were confirmed in Norfolk, Suffolk, Kent and Essex. *C. fraxinea* is being treated as a quarantine pest under national emergency measures, and it is important that suspected cases of the disease are reported.



November 2012:

Hundreds of staff from government agencies checked ash trees across the UK for signs of the disease. This was an action of the government's emergency committee, COBRA, chaired by Environment Secretary Owen Paterson.

Distribution

Confirmed findings at 4 January 2013:



Nursery sites: 17



Recently planted sites: 156



Wider environment, e.g. established woodland: 166




Total: 339



Managing infected trees

You are not required to take any particular action if you own infected ash trees, unless you are served with a statutory Plant Health Notice requiring specified actions.

You should, however, keep an eye on the trees' safety as the disease progresses, and prune or fell them if they or their branches threaten to fall and cause injury or damage. You can also help to slow the spread of the disease to other ash trees in your area by, where practicable, collecting up and burning, burying or composting the fallen leaves. 

More information—

An identification guide can be found at : www.forestry.gov.uk/chalara



Some lesson suggestions for investigating woodlands and the health of trees

Foundation Stage / Early Years

Colours / Gardens and Parks / Growing / Plants and Flowers:

Explore school grounds or local park to look at variety of trees and their leaves, colour, shape, etc.

www.naturedetectives.org.uk/download

KS2 Geography / Habitats

School grounds:

What makes an area such as your playground nature- or animal-friendly?

Creative Curriculum (art and geography):

Plants and animals is a combination of geography, design and technology, and ICT, e.g. explore habitats and reinterpret Henri Rousseau's paintings through fabrics.

Woodlands:

Trees provide shelter, landscaping, wood products, habitats for wildlife and game, and fuel. Looking after trees is crucial. Young trees are less likely to be able to withstand weather changes and attack from pests and diseases. They also need to be individually protected against domestic animals and livestock.

www.face-online.org.uk

KS3 Biology / Ecological Relationships

Design a habitat:

Students organise their ideas when creating a habitat, including the most important features to be incorporated, e.g. Healthy trees

www.tes.co.uk/teaching-resources

JOINED UP ACTION

More than 50 professional gardeners and foresters from across Great Britain have been trained in detecting and managing pests and diseases which are threatening gardens, woodlands and the countryside. They will now act as key contacts to cascade training and awareness within their own organisations, and could form part of a wider network being developed in response to the current outbreak of Chalara dieback of ash trees.

Groups and agencies involved—the Food & Environment Research Agency (Fera), botanic and heritage gardens consortium, public parks sectors—have completed training on plant and tree diseases, and best practice in plant health and bio-security. “Our trees in particular are facing an unprecedented threat from pests and diseases, and it is vital that everybody—Government agencies and key non-Government organisations—work together to combat the threat,” said Dr David Slawson, Head of Plant Health Public Engagement at Fera. “Government cannot do this alone, and it is vital that we develop expertise in other organisations to help”.

Workshops were held at the National Trust's Erddig garden near Wrexham; at the Royal Horticultural Society (RHS) gardens at Wisley and Harlow Carr; and at The Royal Botanic Garden Edinburgh.

Focus on being outdoors

Grace Kimble

Researcher

Institute of Education

Film bridges the gap between outdoors and indoors worldwide, bringing iconic imagery from remote explorer to comfortable viewer. Children's early experiences of the spoken and visual elements of the environment are reinforced by media. Ideally this would be in addition to first-hand experience of exploring outdoors, but it is important to acknowledge that not all children have this opportunity.

How can educators build on children's existing

Case study 1:

Wildlife film makers on board the West London Floating Classroom

The Elsdale boat is a floating classroom based in Denham, Uxbridge. The canal cuts through West London close to Heathrow and a voyage on board gives local children a chance to enjoy the 'green lung of Hillingdon'. Whilst working as an education manager here in 2006, I started to use digital video to involve pupils in teamwork with the aim of communicating what they had learnt. From a pedagogical point of view, having a real audience (viewer) was a motivating context to assimilate and synthesise new information. The video clips were produced by groups of children, with role cards for sound technician, producer, presenter, camera crew and interviewee(s). The clips were carried out in a small space (70 x 14 foot boat) with 30 children, accompanying adults and crew: it was important to have a scenario that involved everyone, as there wasn't much room for behaviour difficulties! At this point children made links with shows like *Springwatch* as their inspiration.

experience of wildlife film? Using video in teaching provides an opportunity to motivate pupils who are not initially interested, giving them a new lens through which to view their world.

Think about the first time you went on a school trip to an environment centre or park. Where did you go? What stands out in your memory about the experience? For me, the first time our class 'crocodiled' towards a local open space was for maths, and we had to work out the height of trees using a protractor. I'm sure you're not surprised to hear that I don't recall the height of the oak tree that was the focus of the lesson! It was the fact that we had freedom, a relaxed rule frame, a chance to absorb the atmosphere. I vividly recall the new sensory aspects—the smell of the damp leaves, the sound of the birds (having to be quiet so we could hear them), unexpected discoveries of minibeasts and so on.


Thinking of your parallel, imagine if you had a video of that journey now. As well as for nostalgia, video brings the opportunity for teaching; class discussion and recap, a basis for language development that is critical for today's diverse classrooms if children are to participate actively in conversations about their environment.

In summary, recording environmental explorations will allow you to evaluate your

Case study 2:

The Young Darwin Prize at the Natural History Museum, International Year of Biodiversity 2010

In order to raise the profile of the International Year of Biodiversity in 2010, a number of innovative education activities were hosted by leading nature organisations. The Young Darwin prize asked groups of children to communicate about existing environmental initiatives they were taking part in. The supporting material covered detailed information about choice of viewpoint, storyboarding, and writing the script. It allowed teachers to use the activity for a series of lessons.

sessions, and may help communicate the impact of your work to funders for sustainable programming. Many children now make links with habitats and popular TV shows, such as *Live 'n' Deadly* and David Attenborough's films. Use this association as an opportunity to involve a broader range of pupils in being engaged in exploring the environment. This activity is integrated with exploration, and the activity suggested above should encourage discussion rather than add a virtual interface between pupils and their world. I'm sure you will enjoy seeing young people's interpretations, and I guarantee you will learn something new by looking at your outdoor space through their lens! 













Grace Kimble is a PhD student at the Institute of Education, having worked as a primary teacher, education manager on a boat, Learning Programme Developer at the Natural History Museum and Audience Research Manager at the Science Museum.

Case study 3:

Pupil viewpoint video for evaluation

Through PhD research based at the Institute of Education, University of London, I have been using headset cameras to record pupil journeys through sites such as the Natural History Museum wildlife garden, and London Wildlife Trust's Camley Street Natural Park. The advantage of video over microphone recording for research is that it allows analysis of learning behaviour even when pupils are silent and navigating their way through new spaces. The cameras used for this were chosen to be robust and to have a clear indicator light when recording. A fair process was used to select the pupils who would wear the cameras at random, and this was explained clearly. They adjusted to the new gadgets after about 10 minutes! Behaviours were analysed from video footage, using a coding framework to gather evidence of knowledge, skills, attitudes, enjoyment and progression during the sessions.

Try this out! Work with a small group of children, a nature club or cubs who you know fairly well

-  Use an on-demand TV clip via the World Wide Web to introduce the activity. Arkive is also a great source of clips that you are allowed to use for educational purposes. You can use an iPhone (ideally with a pico projector) if you are outdoors. Projecting the film onto unusual, natural surfaces is very memorable for pupils and makes a surprising start.
-  Ask children what main points they learnt from the clip. Explain that groups are going to make their own nature film clips.
-  Different groups can focus on different habitats/animal types depending on the lesson aims and your area!
-  Hand each group a rucksack with a laminated brief, role cards, a notebook, pencils, a digital camera and a clapperboard. Robust USB flip cameras can be purchased cheaply for education. An adult can look after this whilst they explore the area to research content.
-  Children explore different zones, researching content, supported by staff and your teaching. The scenario of researching a film will help develop their observation skills. This context will also encourage them to stay quiet in order to see wildlife: they will need to be quiet when recording the clips too.
-  Children each write a key point on a piece of paper, with a drawing of the visual information that needs to go with it: what film shot do they want?
-  The group arranges the pieces of paper and numbers them.
-  Groups record the segments in order. Remind them not to worry if they can't find a particular species again: they can draw it and use a drawing to talk about, owing to time constraints!
-  When groups return, ask an accompanying adult to oversee downloading the clips. Ideally get the teacher to bring a USB drive.
-  The clips can be given to the teacher to use for classwork or editing.
-  You may have time to review some clips as a plenary. Ask children what they learnt about the different habitats through explaining them. Finally, ask them to imagine that they have to make a film of a habitat they know well (can be urban) and use talk partners to explain what they might show people. This will extend the learning to their own context. Finally ask them to remember that they have been a wildlife film maker next time they visit that space! Inspire them to perhaps go and make a phone video clip with their families.
-  Add film permission to existing trip permission slips. Many schools now gather film permission at the start of term. Children who may not be filmed can go in a group together and can act out their narrative to others at the end, rather than recording.

Youth in action

Louisa Casson

Communications officer
UK Youth Climate Coalition

At the UK Youth Climate Coalition, we believe that to tackle climate change we need to draw on the energy, determination and spirit of young people to create and work towards an inspiring vision of how we want the world to be. Born in 2008 out of the inspirational stories of other young people who were taking the issue of climate change by the horns all across the world, the UKYCC is run entirely by a team of highly motivated young volunteers, all of whom are between the ages of 18 and 29. We're working together around our other commitments of school, university and jobs to equip young people with the knowledge and skills to empower them to take positive action on climate change.

We know that climate change is the biggest challenge we've ever faced as a species. If we don't take the necessary action in time, it will lead to a spiral of mass migration, water insecurity and human rights challenges. But the point about a challenge is that if you succeed in overcoming it, you reap the rewards. That's why we're working not to avert disaster, but to secure a cleaner, fairer future for people and planet.

While we like to think of all our organisers and the people we work with as heroes, playing a part in the movement for a sustainable society doesn't mean donning spandex and working in isolation from the real world in order to 'save' it. We're building a movement that anyone can feel part of. Everybody has boundless ideas for what this future might be like and this gives us incredible strength. We aim to unite the diverse campaigns and projects that young people are spearheading all across the UK as part of a wider cross-generational movement for change.

That's why we love immersing ourselves in as many arenas for change as possible. Our activities

range from local, community based projects to national campaigns directed at the UK government and even international level through our attendance at UN climate summits. The common thread through all our activities is fulfilling our mission to inspire, empower, mobilise and unite young people to take positive action towards a sustainable, happier future.

2012 marked the year where we kicked off our Youth for Green Jobs campaign with a launch action (complete with green hard hats) outside Parliament on budget day. With environmental and economic problems both affecting young people and their chance of a fulfilling, happy life, we think Green Jobs are a crucial part of the answer: getting young people into jobs that lead the way to more sustainable ways of living. We then toured the country, visiting over 15 cities across the UK on the Climate Jobs Caravan to make young people part of the conversation on the green economy. We ran 'I Want to Be...' installations at South Gloucestershire College, Greenbelt Festival and Envision's 'My London My Legacy' awards ceremony, carting around a giant blackboard to collect the aspirations of UK youth, and organised an action of young people writing to their MPs to demand government departments work together to create more green jobs.

This year, we want to do even more outreach with young people and that's what our Youth in Action for Green Jobs workshop is all about. This training session isn't a careers talk or a lecture. It instead aims to facilitate different groups' journeys, from bringing together an understanding of issues surrounding unemployment and climate change, to knowing what it is they're going to do together to create the future they want. If you want to seize this opportunity to come together and begin to know what amazing capabilities and resources young people have and start hatching a plan of action then sign up on our website: www.youthforgreenjobs.ukycc.org.

2012 was also the fifth year that we sent a delegation of young people to UN climate summits. We don't just take a marginal role here, listening in on what negotiators are discussing in minute detail. These conferences are a hub for



UKYCC campaigners outside Westminster

the international youth climate movement, who come together in person and virtually to share skills and ideas: getting youth voices calling for ambitious, just and urgent action directly to our representatives.

After months of training workshops and fundraising efforts, the UKYCC sent seven young people to November's Climate Summit in Doha, Qatar, while our other volunteers went to Brussels, where European youth came together to follow the talks and put the pressure on European leaders, and stayed in the UK to communicate what was going on internationally back at home.

The UN can seem like it operates within its own distant bubble, but what's being discussed there is anything but removed from real world issues. We've created resources that are available online to anyone who's interested in understanding the UN climate talks and, in the lead up to the conference, we ran workshops at schools and universities around the country on youth participation in international climate change policy.

This year that's more important than ever: this winter's UN climate conference is in Poland, so this is a chance for European youth to create change. Keep your eyes on our website for opportunities to join our delegation of young people this year and if you'd like to see a workshop on any aspect of the international youth climate movement, then get in touch with delegation@ukycc.org.

We also recognise that the grassroots

movement tackling climate change is one of the best elements of the UK's climate movement. In communities across the country, young people are leading innovative and ambitious projects that are integral to solving climate change. By giving communities a stake and a role to play in finding sustainable solutions, we get a whole lot closer to that global vision of a cleaner, fairer future. Last year, we decided to see how we could support this community action as an organisation. The answer: finding young people to act as catalysts for change in their local area.

Anyone can be a local catalyst: our volunteers engage with groups and individuals in their communities and then identify and deliver the support needed by making the most of UKYCC's skills, resources and networks. What excites us about our local work is promoting cooperation between separate groups and facilitating new community projects to catalyse action and collaboration. If this sounds right up your street, then check out www.ukycc.org/local-catalysts/ for more information and how to apply.

If you were waiting for the best time to get involved in the youth climate movement, well – that is now. We're firm believers that together everyone achieves more, and to reach our goal, we'll need a skilled-up and savvy movement of diverse young people working as a team. 🌱

www.ukycc.org

'Farm to fork' in action at Shanghai BIOFarm

Henricus Peters

Co-chair
NAEE

Year 2 pupils from Yew Chung International School visited Shanghai's BIOFarm in autumn last year. The visit, part of a 'farming' unit, was undertaken to enable the 6-year-olds, many of whom are very much 'urban kids', to come to appreciate the important connections between agriculture and their own lifestyles.


The hands-on experience at BIOFarm gave the children the opportunity to consider, and make comparisons between, different farm types and to better understand and appreciate the importance of good practices in bringing food to their dining tables. The processes of how produce goes from 'farm to fork' were thus made much clearer. As well as undertaking a farm tour, the children ate a nutritious farm-grown lunch and were able to take home a bag of vegetables, which they had handpicked, at the end of their day.



Photos by Mr Eric Laurence



Previously a boulder-strewn wasteland with high soil salinity, BIOFarm now has fertile fields producing a hundred varieties each year including organic lettuces, sprouts, edible flowers, organic herbs and others. In order to preserve the genetic diversity of vegetables native to the country, BIOFarm established the first organic seed bank in China. Farm-kept organic seeds are provided for schools to support on-campus organic gardens.

Training courses and bio-education include a partnership with the Organic Institute of Nanjing Agricultural University, the Organic Food Academy of Shanxi Yuncheng Professional Technology College and working with volunteers from Roots and Shoots Shanghai to set up organic gardens in schools. 


www.biofarm.cn/en/nfsj.html



Go Green! Stay Green!

Yew Chung International School (YCIS) in Pudong, China, is one of a handful of international schools to receive the brand new Green Star Award in recognition of their ongoing environmental work.

The award from Roots & Shoots, the environmental education arm of the Jane Goodall Institute, was presented by Dr Jane Goodall to the Ecology Action Team as part of a schools festival at the end of last year.

The Ecology Action Team is organised by Daniel D'Andrea, YCIS Environment Chair, and Henricus Peters, who is co-chair of NAEE. Daniel said: "We were thrilled to receive this award. It shows that the work we do—recycling, a worm bin, environmental assemblies, gardening, as well as raising money and awareness for the Million Tree Project—is being seen in the educational and wider communities. The children are involved about their school environment: learning by doing. This is meeting a very important need in urban Shanghai" 



*photo courtesy of
Ann Dehnbach*

Flora & fauna art workshops

Muhammad Raza Khan

President

The Nature Club of Pakistan

Introduction

The Nature Club of Pakistan is actively working to motivate youth to explore knowledge through a study of nature. We are also motivating children to conserve and preserve nature through a range of activities. We are working for this cause under the slogan 'Love Nature'.

Nature Club of Pakistan annually announces a Flora & Fauna Art Contest in which we introduce flora & fauna through different art media to children and young people.

Pakistan Origami Society

Members of the Nature Club of Pakistan were invited to join this newly established society and learn this art in 2012. A few members came forward and we formed the "Pakistan Origami Society". The Society was used to promote this Japanese art and to use it for generating a love for nature.

To organise our Flora & Fauna Art Contest, we prepared a comprehensive proposal of this event and started developing origami models. Origami is a very new art in Pakistan and little information about it is available here apart from resources on the World Wide Web.

We made 30 origami models of animals and flowers, from beginner to intermediate level. Then we invited children to participate in a "Flora & Fauna Art Contest with Origami". We received a good response from children.

Our first event was organised at Beacon House School, Garden Town, Lahore on 4th April 2012 where forty students registered.

Our second event was organised at Peshawar (Capital of Pakhtoon Khawa Province of Pakistan) with 30 children participating. Representatives of the Pakistan Origami Society arrived at school, displayed origami models in the centre of the hall with seating arranged round the display.

This meant that, on arrival, the students



Pupils display their Origami creations


were able to see the models, which generated excitement. As President of the society, I introduced the art and explained the importance of biodiversity for our planet. I told two stories about biodiversity which the children enjoyed.

Then all students were asked to make three origami models, one of each of the following:

- Fish
- Dog face
- Cat face

After finishing their models, students coloured them in. The event was planned to last only one hour as annual exams were approaching and students could not spare more time away from their studies. However, students were so engrossed in their activities they did not want to stop!

Our next event was held in Faisalabad on 14th May 2012 and we are planning more events in other schools, anticipating the same excitement in each school.

We would also like more origami clubs and societies to join us to expand this art form. In addition, we are planning to hold an exhibition of origami models in Murree, which is a popular hill station of Pakistan, during the summer vacations to introduce this art to a wider public and thus to encourage more people to care about the flora and fauna of the world. 

We are thankful to the school management who gave us the opportunity to motivate youth and to create a love of nature through origami art.

Additional material by **Alona Sheridan**, NAEE

Chance to become a superhero

Dee Rayson

Author


The Arkrealm Project.

When you start a project you have to define your objective. I wanted to create something that emanated positive energy into the world. I knew from working with more than 1000 teenagers for more than 25 years how much they are capable of when they are involved in community projects. They have the youth, stamina and enthusiasm.

As a teenager I became involved with a dance studio that focused on community giving. We did free garden and outdoor stadium shows, and led some of the first flash mobs in Melbourne's City Square. Believe it or not this was in the '80s. These community projects produced a wonderful group of responsible, young adults. They honoured their commitments, respected their team mates, and felt pride in bringing dance to the community.

Years later my writing gravitated towards young adults and community spirit once again. My book series *The Arkrealm Project* is structured to help teenagers, or any reader, realise how special they are, how much difference they can make to the world and, in particular, to the environment.

To do this in a BIG, BIG, way, I decided to create the Arkrealm School Project Series, in which I hope to inspire young adults and honour their fine work. My hope is that this can be a global project that finds the next environmental superhero and a dynamic character for a future Arkrealm novel. The following is an outline of what an Arkrealm project might look like:

 Students are invited to submit fundraising ideas for environmentally friendly projects, or youth development projects to their school. The school picks the project they feel is the best;



The school submits the best idea to The Arkrealm Project for approval. Making sure to include the student's name that came up with the idea. It must be something that creates community or environmental improvement;



If approved, the school will use sales of the Arkrealm books (currently *Arkrealm: The Apprentice*) as a starting point for their fundraising. More books for all ages and merchandise are coming;



Once the school has made their sales they can then increase their fundraising tally by approaching local businesses willing to add to their fundraising tally;




Before the Arkrealm deadline is up, fundraising totals are to be submitted to The Arkrealm Project. The student whose idea wins will have a character, an environmental superhero, named after them in a future Arkrealm novel;



The school that raises the most, as a percentage of the students at their school, will win the annual Arkrealm prize, which will depend on the sponsorship funded for that year. Hopefully, there will be enough funds for another prize for the school with the most unique idea also.

Because *Arkrealm: The Apprentice* is published in several countries we will have to play it by ear on whether we set up the prizes separately for each country. This will depend on where the sponsorship initiates from. I realise this isn't a small dream, but I think it's one that will get teenagers thinking out of the box and about the future of the world, from an environmental stand point. It will also give them a sense of achievement.

The Arkrealm School Project Series will begin and run for twelve months the moment the first school comes on board. 

More information—

Go to the 'Join' page of The Arkrealm Project website:

www.thearkrealmproject.com

Inner city families create urban jungle

Harriet Shone

PR Manager

Spacehive.com

A

charity has launched a campaign to finance an urban jungle play area for south London youngsters by sharing the cost online using a new crowdfunding portal.

Oasis, a Stockwell-based kids charity, is planning to build a forest-garden: an urban jungle where kids can learn about plants, wildlife and biodiversity. The charity wants youngsters in this deprived part of south London to gain first-hand experience of nature.

With public funding for these projects now non-existent in many areas, the concept of crowdfunding, where local people and firms pledge small amounts towards a single idea, is growing in popularity.

The 'learn as you play' adventure garden, known as Stockwell Urban Oasis, will feature a quirky tree house designed by a local artist, as well as useful and edible plants for children to experience.

Oasis also encourage local adults to become involved with the space, be it through gardening or getting involved in projects with the children, which helps the playground to become a more multi-generational space and to generate more volunteers for the charity.


The project has been supported by Spacehive, an online platform that helps anyone design and fund neighbourhood improvement projects. Spacehive's open financing platform allows any local person to contribute towards the costs of making community projects happen and improve their local area. Spacehive is looking to help in the creation of something that will make use of dead and declining inner city sites.

Kam-Lyn Chak, a Project Promoter and volunteer at the Oasis adventure playground said of the project: "Planting this exciting new garden in a space that's already proven popular with



Preparing the ground at the proposed site

local kids will create an array of opportunities for different play and learning activities. This project also benefits the local wildlife and will enhance the natural beauty of an area that deserves a bit more love."

Chris Gourlay, founder of Spacehive.com, the crowd-funding website, said: "Taking grassroots campaigning literally, this is precisely the kind of project that we wanted to see flourish. By using the web to bring people together and find funding for projects that would otherwise never happen, communities can make a real difference to their areas and this is a shining example of what can be achieved." 

More information—

Find out more about how you can support the project at

<http://spacehive.com/stockwellurbanoasis>

Islington mums reclaim the streets

Siobhan Grimes

Campaigner
Climate Rush


Local mothers in Islington took action as part of World Car Free Day. The group of mothers joined eco-activists Climate Rush to take up the space normally occupied by cars in streets and parking spaces throughout the borough.

The unlikely coalition have teamed up to highlight the toxic levels of air pollution in London and to encourage others to leave their cars at home. Children are especially at risk from the ill health effects of air pollution. 1,098 London schools are less than 150 metres away from roads carrying over 10,000 vehicles a day. Scientific research has shown that living near roads that busy could be responsible for 15-30% of all child asthma cases.

Islington is London's second densest borough and is the borough with the least amount of green space. Islington also has some of the highest rates of air pollution in London with over 50% of Islington schools within 150 metres of a busy road. Air pollution from cars is linked to a 15-30% increase in childhood asthma as well as respiratory and cardiac conditions in adults.

Climate Rush spokesperson, Damien Clarkson, said: "Today was about creating an alternative vision for our streets by illustrating how communities could thrive in an environment less cluttered by cars. Our 'clean air cloud' created a rare breath of fresh air for Islington residents used to living with toxic air pollution levels. In a borough with limited green space politicians need to stop encouraging driving in the borough. We're calling for investment in creating better cycling infrastructure, pedestrian-only public spaces and cleaner buses and trains. This would help address the mass inequalities caused by air pollution and car dominated streets. And would undoubtedly lead to happier and healthier

Londoners."

Mother of two Caroline Russell, said: "We live in London's most densely populated borough, with the least green open space and a high proportion of residents suffering obesity and lung and heart diseases. With fewer local trips by car, more of us could travel quickly and easily on public transport or walk and cycle more safely and more healthily." 

www.climaterush.co.uk



A young person reclaims the streets for play
Inset: the families and campaigners

University rewarded for lower carbon emissions

The University of Cumbria has won a prestigious 'Green Gown' award for on-going commitment to carbon reduction.

The university scooped the carbon reduction award for the project to reduce the need for a large fleet of pool cars.

Despite the university having dispersed sites across Cumbria and North Lancashire, they have implemented a number of initiatives since 2007 to help reduce the need for reliance on a pool car fleet, reducing CO₂ emissions from staff business travel by 27% between 2009/10 and 2011/12.

Video conferencing, desktop communication, use of public transport, car clubs and car sharing have been encouraged and embraced by staff.

Events have been held to promote the use of the train service between the main campuses and the use of the Commonwheels Car Club which has a car based at the Fusehill Street campus.

The Green Gown judges commented: "This excellent project incorporated good environmental benefits tackling a difficult area. What made this project stand out was its key behaviour change elements. The significance for the sector is high."

Ian Rodham, Travel Plan Manager at the university said: "We have put a lot of hard work into this project to reduce the number of pool cars on the road and to be recognised within the sector is fantastic."

"We provide learning opportunities from a number of campuses and sites, meaning that we have to undertake a certain amount of travel. A range of IT and travel initiatives have allowed us to reduce the amount of travel that our staff need to do, helping us to achieve a large reduction in carbon and ultimately use our time, energy and money more wisely."

"By the end of November, all of our pool car fleet will be gone and we will use alternative methods to communicate or travel including video conferencing and public transport."

The Green Gown Awards are in their eighth year and they recognise the sustainability initiatives being undertaken by universities, colleges and the learning and skills sectors across the UK.

Run by the Environmental Association for



Cumbria Vice Chancellor Professor Peter Strike in the Commonwheels car at Fusehill Street

Universities and Colleges (Eauc), the awards are the most prestigious recognition of sustainability excellence within the tertiary education sector, as well as the environmental sector.

The university has developed and rolled out a carbon management plan to reduce overall emissions by 45% by 2020, ensuring that the carbon reduction success can be continued. 

More information—

For more information about the awards and a list of winners visit:

www.eauc.org.uk/2012_green_gown_awards

What a turn off!



Brighton Deputy Vice-Chancellor, Professor Stuart Laing, sports the "huge turn off" T-shirt

More than 23,000 students and staff at the University of Brighton are joining the biggest campaign of its kind to cut carbon emissions.

The university is unique in the country in setting a target of reducing emissions by 50% in five years and gatherings are being held to spread the word throughout its campuses in Brighton, Eastbourne and Hastings.

Professor Stuart Laing, the university's Deputy Vice-Chancellor, joined the November launch at the campus in Grand Parade, Brighton, and donned a "huge turn off" T-shirt to encourage students and staff to switch off unnecessary appliances.


He said: "Greenhouse gases pose a critical threat to our planet and it is crucial that all of us take responsibility and help reduce carbon emissions."

The campaign, called c-change, encourages everyone to reduce carbon consumption wherever possible.

This year the university was ranked third out of the country's 145 universities and higher education institutions for sustainability and, to reach its carbon emissions goal, it is investing heavily in low carbon technologies.

Abigail Dombey, the university's environmental manager, said: "We have the opportunity to make a real and lasting change to put Brighton at the forefront of cutting carbon in the UK.

"C-change shows how even small actions can make a difference, these include ensuring all lights and computers are switched off when leaving an office at the end of the day and, if possible, taking the stairs instead of the lift.

"C-change is about enabling and inspiring everyone, staff and students alike, and giving them a chance to make a difference." 

More information—

www.brighton.ac.uk/sustainability/campus/cchange/

Revamping the Sustainable Schools Alliance

William Scott
President
NAEE

The Sustainable Schools Alliance has gone through a difficult period since its birth in 2011, with two of the three parent organisations more or less abandoning it. Fortunately, the remaining one, SEEd, has proved more tenacious, and a re-launch (you can take these birth metaphors too far) is in the offing. As such, it is too soon to know how much of the original structures, vision, etc will remain.

The mission of the original Alliance was ...

To drive change in the education system so that all schools put sustainability at the heart of their curriculum, their campus and their community. The Alliance will seek to achieve this by providing support and resources that help to link agendas around education for sustainable development, development education and health and well-being work in schools.

and the vision was ...

Every child and young person experiences teaching and learning that enables them to feel safe and cared for in a changing world, where they want and are able to live sustainably and encourage others to do the same.

Although the original SSA website remains locked in a time when all three parents cooed (more or less) over their new arrival, the SEEd website provides more up to date information. This reminds us that the government endorsed the Alliance in the 2011 Natural Environment White Paper, although as something of an afterthought. Paragraph 4.19 says ...

Through our delivery partner Keep Britain Tidy, we also support Eco-Schools in England. More than 16,000 schools take part in drawing up action plans on themes such as biodiversity, healthy living and managing waste and litter. Eco-Schools have been at the forefront of the Government's programme to plant 1 million trees. We also endorse the new Sustainable Schools Alliance,

led by the National Children's Bureau and Sustainability and Environmental Education which was launched in March 2011 ...


This was, of course, a Defra White Paper¹, and there is no mention of the Department for Education within it². Thus, the attitude of Mr Gove to all this remains unclear, though some DfE civil servants remain supportive.

Under a heading of Next Steps, the SEEd website says:

To put the management of the SSA onto a more sustainable footing a Management Board is currently being formed of 25 organisations who will support a part time SSA Officer, again supported by SEEd acting as the secretariat as it has been for the past 2 years.

A proposed management board for the Alliance met in late December. It was a solid turn out with a good mix of organisations around the table, including:

Anglian Water, British Gas, Sustrans, NUS, Learning through Landscapes, Bluewave Shift, Modeshift, NAEE, Blue Marble, the South West Learning for Sustainability Coalition, NAFSO, Korueducation, SevernWyeEnergy, IAPS, SWEA, Eco-schools, Norfolk County Council and Peterborough LA.

The value of a management board for the Alliance is that it will bring like-minded organisations together to try to make a system-level difference through the increased influence that collective size and a breadth of interest brings; and to do what otherwise could not be done. It also brings some modest income together for that collective endeavour. There is much to be said for all of this. 

Notes—

1. Defra, is the environment ministry and used to lead for the government on environmental and sustainability education initiatives before the DCSF introduced its sustainable schools initiative. No one does now, of course.
2. There is a footnote in the White Paper to a DfE publication: Department for Education (2010) *The Importance of Teaching: The Schools White Paper*. There is no reference in this to environment, sustainability, the SSA, SEEd, NAEE, ...

That's Life— Putting the buzz back into biology

Robert Winston

ISBN: 978-1405391504

Dorling Kindersley; 96pp; £10.99

Publisher DK aims to 'burst open the biology of our living world to reveal the intriguing secrets of everything'. This lively book succeeds at that in a variety of ways: the playful use of layout, colour and text make the information accessible. The use of cartoons, rather than photos and the addition of speech bubbles to make particular points, whilst making this book more 'fun', does change it from being a strict textbook to an excellent introductory guide for older children.

Right from the outset, *That's Life* pulls together perspectives from both the sciences and humanities – "scientists and philosophers have been asking 'what is life – we don't know'...", "should we create life in our laboratories?". This attitude of openness, or willingness to be open, adds real value to the subjects discussed enabling and encouraging true discussion and debate – the stuff of true environmental education: not just saying 'this is science—this is how it is'.

The book is structured logically, beginning with overviews of life subjects, the plant and animal kingdoms; communities; survival techniques and aspects of being human. The graphical representations of the complex concepts such as evolution, food chains and webs, unseen world of scavengers and decomposers are striking and very engaging.

Pity, then, that some of the layout details did become a little irksome: changing font sizes and having small size text on red and blue background, were a little distracting.

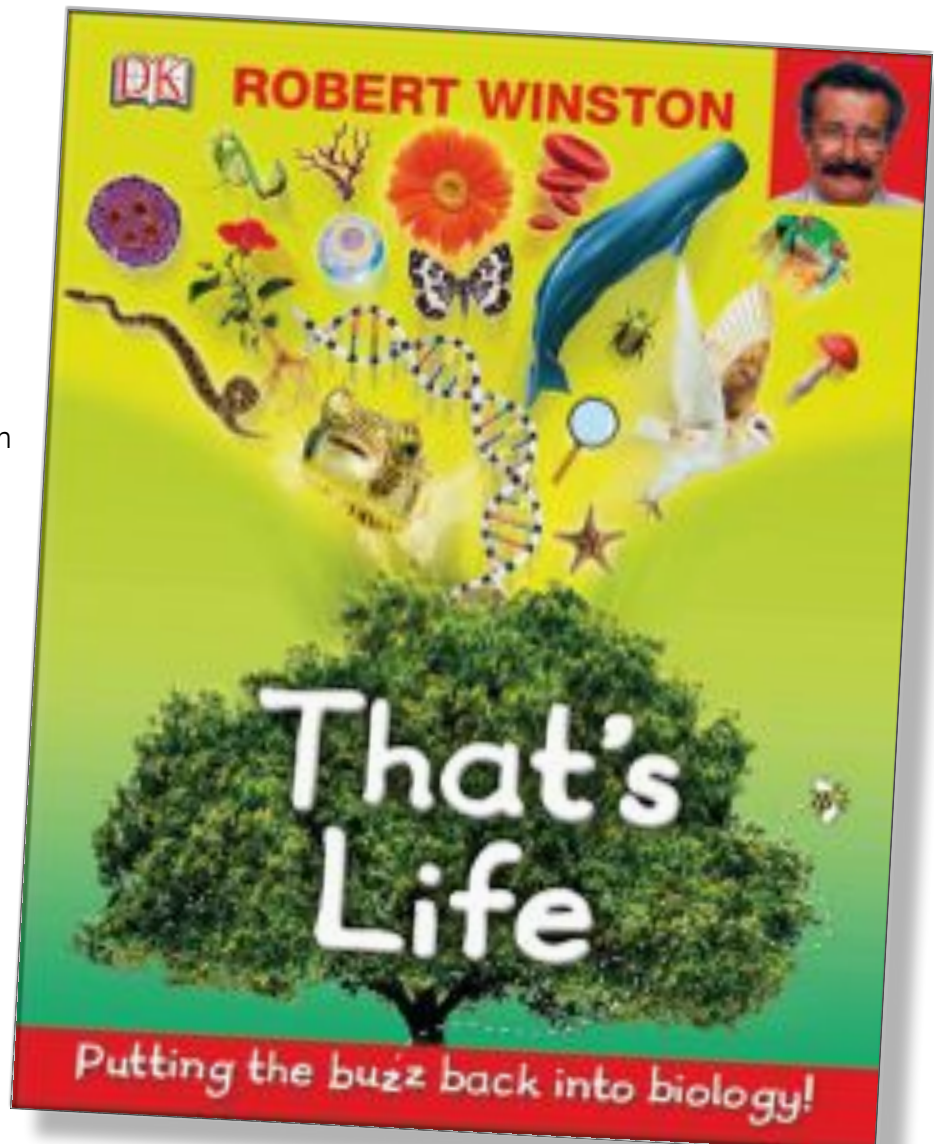
A few other minor criticisms from a teacher's point-of-view: scale was not illustrated well with, for example, a mammal alongside a flower. Also, the few world maps that were included could have been more specific. For the inexperienced or untrained teacher, or biology reader, a standard encyclopaedia may be helpful to sit alongside this.

Highly recommended for the older child to 'fire' their enthusiasm for the all-important life sciences and learning about their world.

Henricus Peters, Managing editor

"I like *That's Life* because it gives you a lot of info and tells you what scientists think and how they find out, which is really very exciting. This really impresses me and shows how important research is. I hoped to read some science projects, but these may be for another book. I wonder if young children who read this will try to do something exciting about a crazy idea they have: science is great, but we need to make sure little kids are safe. I really like *That's Life* because it shows who we share the precious Earth with."

Iona, Year 4 Student



A First Book of Nature

Nicola Davies; illustrated by Mark Hearld

ISBN: 978-1406304916

Walker Books; 108pp; £4.99

First Book of Nature is essentially a scrapbook of the seasons, with each section delivering explanations of natural cycles, including migration, alongside practical activities such as planting and harvesting, making compost, pond dipping, making a bird cake.

A rich assembly of poems are sprinkled throughout with pertinent descriptions of various elements of the natural world. 'Snow Song' and 'Deer in the Dawn' were my favourites.

The scrapbook is an amazing, if eclectic, potpourri of words and images that bring the natural world to life, especially nature's place in town and country.

The downsides are that there is no index and it can sometimes be hard to pick out the poems from the general text.

A good resource for any school or class library.

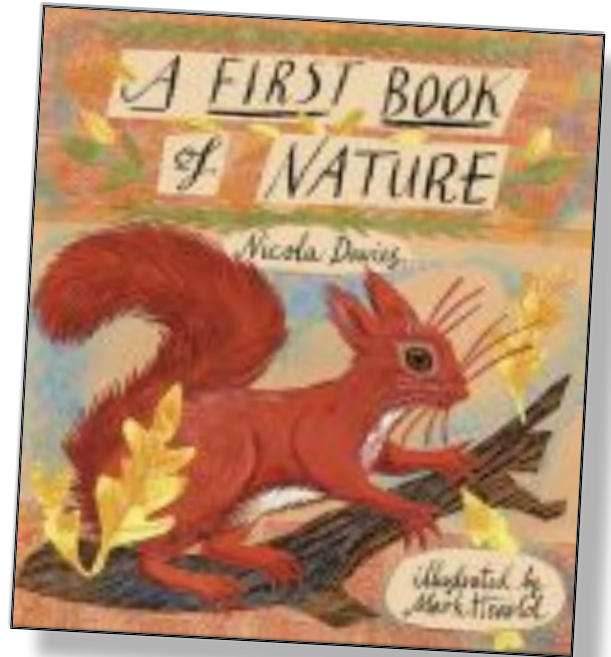
Henricus Peters, Managing editor

"This is a very kind text—chickens are helped in winter! It's imaginative with lots of great poems. I would like to have had different kind of pictures—such as photos, sketches, etc."

Midora, Year 4, aged 8

"This book is extra-special and very colourful. I really like the pictures, the way they are cut out and jump out at the reader."

Sofia, Year 4, aged 8



Children's books about...rainforests

Banish the winter blues and get tropical with these books for helping to teach children about rainforests.

Reviewed by **Juliette Green**, NAEE Executive Member and teacher at Birmingham Botanical Gardens

The Great Kapok Tree

A Tale of the Amazon Rainforest

(Big Book)

Lynne Cherry

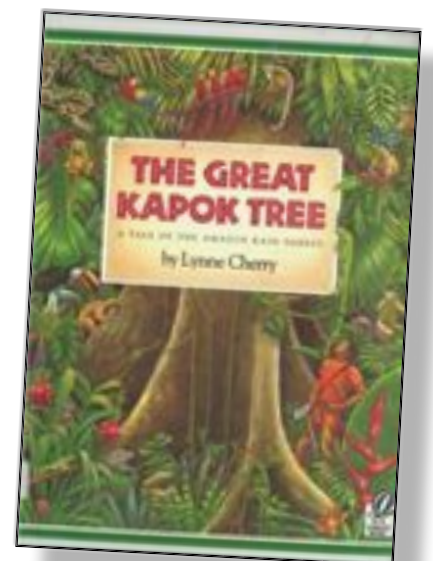
ISBN: 978-0152018184

Harcourt Big Books

36pp; £6.99

This book begins with a man who has tired while chopping down a huge kapok tree and decides to lie down to rest at the foot of the tree. As he sleeps, various rainforest animals (including a boy from the Yanomami tribe) whisper in his ear and tell him all about the importance of conserving the rainforest—mentioning aspects such as food chains, pollination, photosynthesis and soil erosion. The colourful, detailed drawings in this book really evoke the atmosphere of the tropical rainforest and the important conservation message is told in a way that appeals to infant and junior readers alike (just point out to them some of the American spellings, such as 'ax'). There are teaching ideas on the author's website:

www.lynnecherry.com/the_great_kapok_tree__a_tale_of_the_amazon_rain_forest_19411.htm



Bloomin' Rainforests

(Horrible Geography)

Anita Ganeri

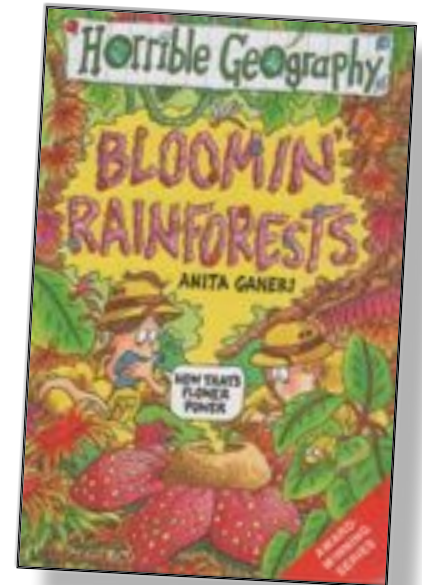
ISBN: 978-0439999496

Scholastic Children's Books

128pp; £5.99

From the award-winning 'Horrible Geography' series, this book teaches all about the plants, animals and people that live in the rainforest and is based on research of the Collections of the Royal Geographical Society. Just like the 'Horrible Histories' books, 'Bloomin' Rainforests' includes facts and figures, jokes, quiz questions and cartoon-style illustrations, and draws out the most gruesome, smelly and funny aspects of the topic.

Guided by Botanist Fern, and helped by other 'experts' such as Major Ray N Forest, the book uses child-friendly language to explain complex vocabulary and concepts such as adaptation. I learnt a great deal of new information from this book!



Over in the Jungle: A Rainforest Rhyme

Marianne Berkes; illustrated by Jeanette Canyon

ISBN: 978-1584690924

Dawn Publications, www.dawnpub.com

32pp; £7.99

This rhyming book introduces young children to a range of rainforest animals while helping them to count to 10 at the same time. The brightly coloured pictures were created from polymer clay and then photographed, which gives a unique look. Unlike many simple counting story books this book also includes further information about each of the animals at the end, plus suggested actions for each animal and a simple overview of tropical rainforests.



Other recommended rainforest titles:

Rainforest Trees and Plants

Edward Parker

White-Thomson Publishing Ltd. (produced in association with WWF-UK)

ISBN: 978-0750238700

Rainforest—Around the clock with the animals of the jungle

(DK 24 Hours)

Dorling Kindersley Ltd

ISBN 978-0756619855

Rainforest Explorer

(Earth Explorers series)

Sue Nicholson

Silverdale Books

ISBN: 978-1840284829

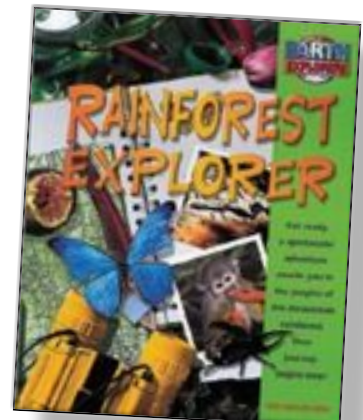
The Great Green Forest

(a story book)

Paul Geraghty

Hutchinson Children's Books

ISBN: 978-0099236412



More rainforest books for children are listed here: <http://kids.mongabay.com/rainforest-books.html>



WEB WATCH 22

Compiled by **Henricus Peters**, *Managing editor and co-chair, NAEE*

Kew Gardens www.kew.org



Mainly focused on information for schools visiting and identification, there are also some very good resources here.

Great plant hunt www.greatplanthunt.org



Created for the 200th anniversary of Charles Darwin's birth, this website has many resources for Foundation Stage to Year 6.

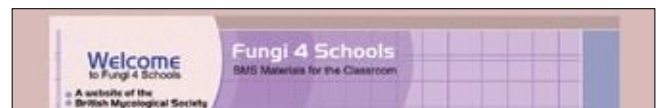
British Mycological Society

www.britmycolsoc.org.uk

Fungi are the focus of this site, with the special 'mycokids' (www.britmycolsoc.org.uk/mycokids/) pages for the youngest children (5 years). A step further is the even broader www.fungi4schools.org which



declares it is "devoted to compensate for the deficiency of there not being any fungi to be found in the UK national curriculum". Given the lack of this important aspect of the curriculum, we are thankful for the site.



Wild about plants

www.wildaboutplants.org.uk

The site is by Plantlife, the charity dedicated to



conserving plant life in its natural habitat. It has good expedition ideas, training opportunities and many village- and parish-based projects. The 'Habitat Wildflower Guides' are suitable for older primary and secondary: great for projects in English, science,

With talk about ash tree disease highlighting the importance of plants (see the article on page 16) we focus on websites about flora.



geography. The downloads section has a good selection of factsheets and ideas to encourage plant photography, poems about plants and nature, reminiscence workshops, out and about and 'feed your senses'.

iSpot

www.ispot.org.uk



This site is a collaboration between the Natural History Museum and the Open University. The site allows and encourages the posting of plant photographs for other site members to identify. The iSpot team have recently (November 2012) introduced a new feature which allows you to connect iSpot with your facebook account. There is also a new iSpot app (for Android phones).

British nature

www.britishnature.co.uk

A site dedicated to the wildlife of Britain, including many pictures and descriptions of plants, animals and fungi.

The Wildflower Society



www.thewildflowersociety.com

The only national group created specifically for those interested in wildflowers. They have 'Young Members' pages which are useful for beginners: middle primary and upwards.

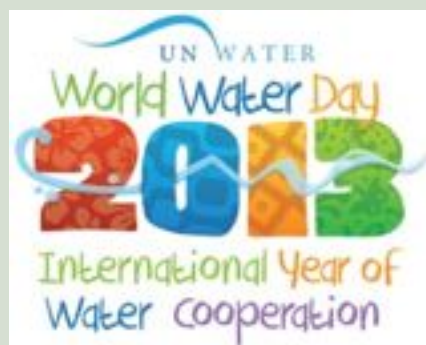
Botanical Society of the British Isles

www.bsbi.org.uk



The leading source of identification information about plants of Britain.

We want water websites!

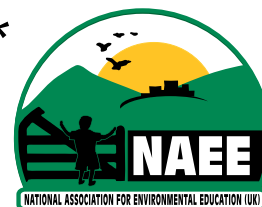


Do you have a favourite site about the water cycle, drinking water, rivers, lakes, even the sea? Let us know for our 'Water Special Issue'. Contact h.peters@naee.org.uk

National Association for Environmental Education (UK)

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Contact Stuart Neyton, NAEE Coordinator:
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or visit the website www.naee.org.uk

*Requires proof of student status

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