

Environmental Education



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

EXPLORING CUMBRIA

**Finding
Flora in
the Fells**



'ENVIRONMENT' BECOMES PART OF JIM ROSE'S PROPOSALS FOR EDUCATION - See pages 5 & 6

Sponsored By:



**Following
Footprints**



Also Inside: Discovering a Yurt | Woodland Podcasts | News & Views | Walling

National Association for Environmental Education (UK)

NAEE (UK)

NAEE (UK) is a voluntary organisation, with no state funding, run by experienced teachers from a wide variety of educational institutions. NAEE uses funds raised from subscriptions and donations to promote the teaching of environmental education across the curriculum as well as education for sustainable development. Through its journal, *Environmental Education*, members and experts in the field share their experience and ideas, and receive up-to-date information on resources and events of interest.

Membership

Membership is open to those directly involved in environmental education or those with a related interest. All members receive the journal three times a year.

There are different categories of membership. All prices quoted include journal postage & packing

Individual:	£25
Institutional:	£30
Student at University of Wolverhampton:	£6
Student at another HE institution:	£9
Corporate (Groups of 6 or more members):	
6-40 members	£10 each
Over 40 members	£9.50 each

(The Group will receive journals in bulk)
Overseas (subscriptions payable in GBP)

Europe:	£40
Elsewhere:	£50

Free membership leaflets available from office

For further information **see our website:**
www.naee.org.uk

Or contact the NAEE office (see details below)

PUBLICATIONS

Copies of previous journals are available. These are some examples only:

Recent issues	£9.50
89 Aut '08 Harrow Schools, Bats, NAEE petition	
88 Sum '08 EE in the Black Country	
87 Spr '08 EE in SW England	
86 Aut '07 S3 Year of Action; Earth & Water; Europe	
85 Sum '07 Sustainable Schools, Leeds; EE in Pakistan	
84 Spr '07 EE in W. Sussex	
83 Aut '06 EE & ESD: London school case studies	

Earlier issues	£4.00
82 Sum '06: Heritage Education outside; climate change; Sweden; Netherlands	
81 Spr '06: Using the Local Environment; New Mexico	
80 Aut '05: Forest Schools; EE in New Zealand	
79 Sum '05: EE case studies across England	
78 Spr '05: EE in E Sussex & Czech Republic	

Other publications on a range of topics including:

Environmental Policy and Action
Curriculum issues
Heritage education
Outdoor Education
Archive material
'Green' poetry & Prose Anthologies
Index of past Journals
2007 - The Environment of Every Child Matters
Every Child's Environment Matters **£2 inc p&p**

For a list of publications with prices, see NAEE website : www.info@naee.org.uk

Or contact the NAEE office

p & p 50p for 1 item, 20 p for each extra item

Send orders to NAEE office (see address below)

MEMBERS INVITED TO CONTRIBUTE

The Editor welcomes articles and reviews by members who are willing to share their experiences and ideas with colleagues. These may occasionally be reprinted either on their own or with other articles in NAEE publications.

APPLICATION FOR MEMBERSHIP

I wish to join NAEE (UK)

Name: Institution (if applicable):

Address:

Post Code:

Telephone: E-mail:

I enclose a cheque for £..... Membership Category (see above):

Send to:

NAEE (UK), University of Wolverhampton, Walsall Campus, Gorway Road, Walsall, West Midlands, WS1 3BD

Telephone: 01922 631200 e-mail: info@naee.org.uk Website: www.naee.org.uk

COMMENT

Editorials <i>David Fellows</i> and <i>Philip Sainty</i>	4
The Barriers to Outdoor Environmental Learning <i>Sue Fenoughty</i>	Cover Story 5
Letter from the NAEE Chairman <i>Norman Farmer</i>	Cover Story 6
Heversham Goes Wild <i>Hazel Blakeley</i> and <i>Vicki Boggon</i>	7
Podcasting in the Woods <i>Steve Jackson</i>	Cover Story 8
Hawkshead Primary, a Sustainable School <i>Joyce Hallam</i>	9
Outside Thinking - Philosophy for Children <i>Liz Ingledew</i>	Cover Story 11
Living Churchyards <i>Debbie Watson</i>	13
Wildlife Workshops <i>Izzy Thorne</i>	14
Learning Local Skills <i>Vicki Boggon</i>	Cover Story 16

NEWS AND VIEWS Including Diary and Resources *Katie Scanlan* 17 - 24

Flora of the Fells <i>Annie Masson</i>	Cover Story 25
Climate Change in Cumbria	28
The Footprint <i>Bernie Fidler</i>	Cover Story 29
The Guildhall Museum <i>Julie Wilson</i> and <i>Julie Wooding</i>	30
Recycling is NOT the Answer <i>Martin Allman</i>	31
Environmental Awareness through Adventure <i>Geoff Cooper</i>	Cover Story 33
Children and Nature in the City <i>Henricus Peters</i>	35

REVIEWS

Reports:	
Brighton and Hove Climate Change Workshop <i>Emily Jacobs</i>	36
"Sustainability and Environmental Education" launch <i>Norman Farmer, David Fellows & Alona Sheridan</i>	36
Book Reviews <i>Andy Cadman, David Fellows, Henricus Peters, Sue Fenoughty</i>	37
Webwatch <i>Henricus Peters</i>	39

Cover photos: Main picture © Geoff Cooper; Flowers © Flora of the Fells; The Footprint © The National Trust; Tarn Hows © Simon Bramwell

President

Prof. David Bellamy

Vice Presidents

Prof. G. Ashworth
Lord Briggs of Lewes
Prof. T. Brighthouse
Viscountess Cobham
Prof. Sir F. Holiday
Mr Philip Neal MBE
Prof. T. O'Riordan
Prof. J. Palmer
Rev Lord Sandford
Prof. M. Skilbeck

Chair

Norman Farmer

Hon. Secretary

Sue Fenoughty

Coordinator, NAEE Office

Heatha Gregory

Guest Editor

David Fellows

Executive Editor

Sue Fenoughty

News & Views Editor

Katie Scanlan

Editor

Philip Sainty

Editorial Board

Godfrey Blunt
David Fellows
Penny James
Henricus Peters
Alona Sheridan

NAEE Website Editor

Juliette Green

Printing

CentrepoinPrint & Design
Ltd., Birmingham

Environmental Education is the termly journal of the National Association for Environmental Education (UK). Issued free to members; £10.00 to non-members. For membership details see opposite or visit our website.

Articles

We welcome articles and items from members and readers. Books, DVDs and other materials for review should be sent direct to: **National Association for Environmental Education (UK), University of Wolverhampton, Walsall Campus, Gorway Road, Walsall, WS1 3BD. Tel/Fax: 01922 631200, e-mail: info@naee.org.uk, website: www.naee.org.uk**

Please ensure you have permission to use any photographs and send them as separate jpeg files
Paper is sourced from sustainable forests and bleached without the use of chlorine

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

ISSN 0 309-8451 © NAEE 2008 Registered Charity No: 313049

David Fellows, *NAEE* Guest Editor



Welcome to this special edition devoted substantially to Environmental Education in Cumbria.

A County of Contrasts

The articles represent just a small sample of the activities and initiatives happening here. We are often perceived as the lucky county - the land of lakes, mountains and pretty villages. However, around the edges of the Lake District National Park, there are areas of serious economic and social deprivation where heavy industry has come and gone. The climate is a hard taskmaster of the farmers who, only a few years ago, were in the front line of the fight against the Foot and Mouth outbreak. We certainly claim to have the most varied environment of all the UK counties - from the extensive extractive industries of coal, gas, rocks and minerals, submarine building, nuclear power and reprocessing to charcoal burners and other woodland crafts; from salt marshes to coastal cliffs; from deep lakes to mountain peaks; from stone circles and ancient village churches to a cathedral, a major Buddhist monastery and temple. We also have Roman remains, monastic ruins, magnificent museums, ports and harbours, working mills, wind turbines, wildlife centres, outdoor centres, lowland and upland farms - and so on - a "County of Contrasts"; a truly "RICH" resource.

Valuable, Varied, but Vulnerable

The great variety of study and adventure opportunities within the County means that we are rightly a magnet for school visits from many parts of the UK and abroad. We are in this sense a microcosm of the problem affecting our world, of humans having too great an impact upon the planet. As

the articles demonstrate, schools and provider organisations are working together to explore and understand our environment in imaginative and enjoyable ways. Enjoyment leads to interest and a developing desire to conserve and protect the world around us.

Conserve or Consume

2008 was a memorable year - if not for all the right reasons. The model of world development through ever-increasing consumption, fuelled by a constant supply of cash, has been found flawed. This adds to the growing evidence that the World's climate is being altered by humanity's activities. In the English educational world we are now seeing important changes to the curriculum being initiated through QCA plans. After two decades of subjects being central, and coming after the previous two decades when teachers responded to Plowden's exhortation that "The Child" should be "at its heart", we are now seeing a balance return.

Sustainability - the Three Classroom Model

400 words before the key word Sustainability is mentioned! But it underlines everything so far said and will appear many times in the following pages. Environmental Education is all about a balanced approach, of giving children effective and efficient learning experiences based on the concept of there being the indoor classroom, the second one in the school grounds and the third resource of the children's locality and the global world beyond. Environmental Education is about getting this balance right too, of enjoying what we have and making sure it is around for future generations to enjoy, or maybe, as some pessimists predict, that future generations will be around to enjoy it!

Philip Sainty Editor



New Years mean new beginnings and it is at these times we are encouraged to take stock of our lives and the lives of those with whom we share this planet.

In this issue of Environmental Education, David Fellows has provided a magnificent insight into the environmental work being done in Cumbria by the schools and organisations that live there. On page 11 we learn about the 'Yurt' and the opportunities this affords for introducing Philosophy for Children (P4C). Traditionally overlooked as part of the English Curriculum until HE stage, philosophy is an important educational tool and it can help to shed light on many of the more awkward problems we environmentalists find ourselves involved in when promoting the need to engage with and conserve the natural world.

On page six, Norman Farmer's letter addresses Jim Rose's proposals for the new curriculum, which moves towards more project-based learning with six 'areas of understanding'. While this has the potential to be yet more pursuance of the skills agenda, let's hope that at least one of these new 'areas' - Human, Social and Environmental Understanding - will give educationalists enough opportunity to pursue the philosophical and practical appreciation of nature, and humanity's relationship to it, that is needed to move forward in this new century.

This, and the sustainable schools initiative, may mean that we can approach this new year confident that our natural world is being treated with the importance that it deserves.

THE BARRIERS TO OUTDOOR ENVIRONMENTAL LEARNING

Sue Fenoughty, *National Association for Environmental Education (NAEE)*, and fellow members of the *NAEE Executive*

Restore environmental education

Just over a decade ago, Environmental Education was one of 5 cross-curricular themes in the national curriculum; by 1997 it had virtually disappeared. Last year, NAEE delivered a Petition to Downing Street (see last autumn's issue of '*Environmental Education*') to ask the government to restore environmental education to the curriculum, to encourage pupils to learn more *about* their environment, through *going out into* the environment (outdoor learning) and in the process, develop the knowledge, skills and attitudes needed to *care* for that environment. NAEE argues that EE is needed today more than ever, to prepare youngsters for their role as tomorrow's stewards of the planet, empowered to take informed action to reduce the harmful impact of human activities on the environment.

Opportunities in the curriculum ...

There *are* opportunities in the curriculum for environmental education and also in some government initiatives such as *Healthy Schools* and *Sustainable Schools* - so why isn't Environmental Education higher on the national curriculum agenda?

... and the barriers

Drawing on my own experience as a teacher and environmental education teacher-consultant, and those of my teacher colleagues at NAEE, I have gathered a list of the barriers facing teachers when they attempt to take pupils out of the classroom to get first-hand experience of their outdoor surroundings.

'Why do you need to go outdoors?'

In primary schools, the focus on literacy and numeracy targets and tests has reduced the time spent on other subject areas, with little or no time to extend learning outdoors as part of the curriculum. Frequently parents and teachers alike regard activities outside as being extra curricular, i.e. 'outside' the normal curriculum and therefore an 'extra'. The emphasis on the core curriculum has weakened senior management support for outdoor learning ("why do you need to go outside?") and budgetary constraints are frequently cited against off-site trips, and even for visiting providers who may be invited to help improve the school's outdoor environment. In-service outdoor learning courses are usually a low priority on the budget for teachers' continuing pro-

fessional development (CPD) and as a result, teachers often have little awareness of the rich environmental resource that lies just outside the classroom door, both on the school site, and in the local neighbourhood. Where teachers do have the opportunity to extend their environmental learning is when visiting providers are involved in school grounds projects, such as creating a garden, but all too often once the 'experts' have gone, the work isn't sustained by the teachers through its inclusion in the curriculum.

'What are wellingtons?'

When an enthusiastic teacher does surmount the above obstacles and decides to take the pupils outdoors, more obstacles follow, with the teacher asking him/herself: '*Did my initial teacher training course prepare me for outdoor classroom management? What are the health and safety risks for taking pupils into the school grounds? Are the school grounds a stimulating resource as an 'outdoor classroom' or is the site just an uninspiring expanse of tarmac and a 'green desert' playing field? How do I fill in a risk assessment form to take pupils out into the local area, or on a school trip further afield? Are extra staff available to help with outdoor activities if needed? Can I justify the expense of this trip? Are we fit enough to walk the mile to the Roman site instead of booking a coach? Have the children got suitable outdoor clothing? (what are wellingtons?)*

Fear of the unknown

Teachers and students alike spend increasing amounts of time indoors and out of touch with the natural environment outdoors. Children's isolation from nature can produce fear when confronted by the real thing - I've seen a 14 year old freeze when she saw a worm, which was then stamped on by the teacher. Unless we, as teachers, can communicate by example our interest and enthusiasm for 'hands-on' outdoor learning, we can hardly expect our pupils to forsake the comfort of learning from secondary sources, sitting in front of a screen. But who, after looking at the pros and cons of outdoor learning above, could really blame teachers for not taking their pupils outside in the current curriculum climate?

A student-centred approach to learning

Environmental Education is a very practical, pupil-centred approach to learning, and



as such, is an excellent method of learning – pupils learn by ‘doing’. Teachers need to be released from ‘teaching to tests and targets’ and given time to stand back and enjoy being outside, learning with their pupils about the surrounding environment which is full of exciting things waiting to be discovered.

STOP PRESS!:

Sir Jim Rose, senior government adviser on primary schools and former director of inspections at Ofsted, published his interim report on 8th December with his plans to overhaul the primary curriculum. He recommends that the current 13 subject areas named in the curriculum should be replaced by 6 ‘areas of understanding’, one of which is ‘*Human, Social and Environmental Understanding*’. NAEe now fervently hopes this recognition by the government of the need for environmental education will herald a new dawn for environmental education. See the *Chair’s Letter*, below.

Letter from the NAEe Chairman

Dear Member,

Recycling has always been high on the agenda of both our executive and of yourselves as members. Those of us who have been involved in education for very many years may feel that the proposals in Sir Jim Rose’s report on the primary curriculum are the productive recycling of much of what our generation of teachers tried to achieve prior to the imposition of the present National Curriculum. The extent to which we were successful is of course debatable.

We should now curb any natural tendencies of scepticism and welcome the attempts of Sir Jim Rose to provide us with the opportunity to develop a curriculum better matched to the needs of children and young people embarking on their lives in the 21st century. Those opponents who still look backwards to the 20th, and 19th, century curricula as patterns for the future need to be reminded of our present social and economic plight.

All of us involved in NAEe will play our part in promoting those aspects of the new curriculum which are particularly relevant to our cause and which will help contribute to a happy and successful generation of young people. We note in particular that one of the proposed six areas of learning includes environmental understanding as well as respect for the environment through personal development. Learning outside the classroom and in the community is emphasised as a means of getting actively involved in learning in a real and relevant context. This helps expand personal experience and control of your own learning.

When we delivered our petition to Downing Street in the spring of 2008 little did we expect that environmental education would be reinstated as a driver in the proposed new national curriculum. Providing these proposals are accepted by government in the spirit in which they have been written, NAEe will be able to start to get back to its real task of helping to translate these proposals into a classroom reality.

Whatever the outcome of the consultations on the report, the result will be opportunities that are offered, rather than being a simple blueprint for the future. Even the National Curriculum as it now stands offers opportunities which those in management and leadership positions never properly exploit. What may well stand in the way of developing new opportunities include sufficiently well balanced curriculum time for all the areas of learning, a generation of teachers trained as technicians in the delivery of a very narrow curriculum, the lack of a basic knowledge of how ecological and social systems work, and all with too little emphasis on child development.

There remain plenty of opportunities for all our members to participate in the forthcoming consultation so please let us have your views and please feel free to write to our new editor.

Yours sincerely

Norman Farmer (Chair)

Environmental education supports school visits to environmental centres

Environmental education in the curriculum would strengthen the reasons for sending pupils on day and residential visits to environmental study centres where students and teachers alike often become inspired to return to school with renewed interest in the environment, determined to put into practice what they have experienced during their visit.

Sharing the vision for environmental education

NAEE’s aim is to restore EE to the curriculum and welcomes links with all people and organisations who share this aim; together we could achieve this vision!

The above article is an edited version of the article that appeared in last November’s Environmental Education Special Edition supplement of the Countryside Jobs Service Weekly. For more information about CJS see www.countryside-jobs.com



HEVERSHAM GOES WILD!

Foundation Stage

Heversham St. Peters School and their Forest School project

Hazel Blakeley, Headteacher, Heversham St. Peters School, Leasgill, Milnthorpe, Cumbria, and **Vicki Boggon**, Tarnside Educational Solutions, Cumbria

All is quiet on the approach to school at the start of the working day, but once a week it’s a different story as the children of the Foundation Stage through to KS1 (previously known as “The Infants!”) prepare to spend a morning learning in the nearby woods as part of its Forest Schools initiative.

It was time to move the school forwards, for something new, different and innovative, something that would make a difference to us. With new directives challenging teachers every day such as the Every Child Matters Agenda and Personalised Learning, Forest Schools “ticks all the boxes”!

Forest Schools are based on an idea that took root some time ago, especially in Scandinavian schools. It builds regular outdoor learning experiences for children and young people into their normal school day.

Backed by the Governors and the Parish Council who own the woodland site, our school set about how to plan and implement the new initiative. We already knew of some Forest Schools operating, but very few in Cumbria, and it was something I really wanted to try out for ourselves. The Parish Council agreed to children using it on a weekly basis. Following a presentation to parents, carers and governors, a ground force morning was organised. Staff underwent Forest School training from Vicki Boggon of Tarnside Educational Solutions and then it was all ready to rock!

The children kitted out in waterproof overalls lead the way to their new woodland classroom with excited chattering. “The forest project has enabled the children to learn and explore in the open air. The children have had great fun sharing ideas, learning and seeing new things in the woods and even digging up worms! It’s lovely to see them exploring and interacting in the natural environment - seeing them play with bugs and worms and getting grubby,” said one of the parents.

Imaginations run wild, as children can be seen making dens for woodland creatures, searching the undergrowth for creepy crawlies, making jewellery from things found on the forest floor, doing sculptures, climbing trees and making swings, whittling sticks, playing and learning together. All activities are child initiated with adults there to support and extend learning. Our year 2 teacher commented that the children have enjoyed learning



Pupils take to the trees

about sound in the woods, recording natural sound and discussing and investigating science out in the open.

Cross-curricular approach to learning

Our year one teacher noted that it is a more realistic and rewarding way to teach personal and social skills but also to develop understanding of all the core subjects as well as all other subjects of the curriculum and a deeper level of appreciation for the natural environment. The skills the children are developing through Forest Schools are making a real difference to how they approach their learning across the whole curriculum. They ask questions, investigate, hypothesize and work together with a confidence and enthusiasm that has grown as the project has developed.

Woodland learning, skills and appreciation transferred to the indoor classroom

Already this relatively new project is reaping rewards as the impact on the children’s learning in the classroom is being monitored and evaluated by the teaching staff. The children are so excited, motivated and ready to learn. They take all their woodland learning and transfer the skills into learning in the classroom. It’s great!

For more information —

Forest Schools: vicks@tarnside.co.uk

More articles about the Forest School movement can be found in *Environmental Education* Vol 80, (Forest School special edition) and Vol. 81, spring issue 2006. Contact NAEe office for these issues (see page 2 for order details).

A WOODLAND PODCAST

Pupils from Coniston Primary School work with the BBC & the National Trust

Steve Jackson, Head Teacher, Coniston Primary School

The children at Coniston Primary were approached by Jessica Warlock, from the National Trust, with a request to "do some podcasting!" This advanced and fairly unusual request was in relation to a project on trees in the beautiful grounds of Monk Coniston, one of their properties, which occupies a lovely position above the lake on the way to Hawkshead. The grounds have recently been made accessible to visitors by the creation of a new path from the head of Coniston Water to Tarn Hows, partly through the grounds of Monk Coniston estate. To anyone not familiar with the Lake District, Tarn Hows is one of the most frequently visited and photographed "natural" beauty spots, which itself is fascinating as it is a collection of small lakes dammed by an industrialist to provide power for a saw mill in the valley. The grounds include some fascinating and unusual species of trees and the Trust wanted to develop an 'up-to-date' way of telling visitors about them and the story of the grounds in which they live.



Pupils working with the BBC to broadcast their discoveries

Jessica took our children to work with the BBC for two days. They therefore had the benefit of learning themselves and having experience of using fantastic BBC quality equipment. Confident children were chosen but it is interesting that even the most assured child can 'freeze' when put before the dreaded microphone. Fortunately, stage nerves were conquered and the children produced some fascinating pieces based on what they had learned. We are sure that their youthful enthusiasm comes through in the podcasts to inspire locals and visitors alike to learn and find out more about the wonderful landscape that we all enjoy. We were grateful for the interest shown by Radio Cumbria who produced a piece about the project for broadcasting.

At school we have excellent links with the National Trust, a Wildlife Club that meets each month and we have links for every class using Guards Wood and Tarn Hows. We also learn about footpath erosion and visitor management so that the children have an understanding of the characteristics, challenges and part they can play in ensuring the sustainability of the Lake District.

More Information —
Contact the school:
admin@coniston.cumbria.sch.uk



Foraging for woodland goodies at Tarn Hows

HAWKSHEAD ESTHWAITE PRIMARY SCHOOL

Supporting the Sustainable Schools Agenda



Joyce Hallam, Headteacher, Hawkshead Esthwaite Primary School, Ambleside, Cumbria

Two years ago I took up the headship of Hawkshead Esthwaite Primary School, a small 56-pupil school where all the teaching and admin staff are part-time, except for myself. The school is located in a conservation area in the heart of the Lake District and when I arrived there was already a well established ethos of working with the community and active involvement in environmental issues. However, there was great scope to develop and move forward in these areas and the school has since achieved the Eco Schools 'Green Flag', a Healthy Schools award, a Sustainable Schools commendation in the Teaching Awards, and has just achieved the *DCSF Full International Schools Award* and the John Muir Discovery award.

Vision: Development of School Grounds

A key development of the last eighteen months has been to develop the school grounds to increase opportunities for outdoor learning and improve biodiversity. We have a good deal of green space as well as a wildlife area next to the school established 15-20 years ago by the community, and known as Fletcher's Field. The grounds, however, lacked any exciting play areas or interesting and varied wildlife habitats and were, in fact, quite 'tatty'!

Undertaking the project

There is not a leadership team as such but all the staff showed a great commitment to supporting the changes despite being part-time. The Eco Schools' programme was introduced very early on to staff, governors, pupils and parents and gave a very helpful framework for a whole school audit. We used also the Learning through Landscapes and Grounds for Awareness materials to specifically audit the school grounds.

Setting up the Eco Committee

It was important to tap into well established local expertise. There existed a Fletcher's Field committee made up of community members, National Trust warden, a governor, parents and pupils. The pupils on this committee and one of the parents became key members of our Eco committee. Views and ideas from all pupils were collected through ques-

tionnaires, assemblies and committee meetings and over the last year and a half we have been able to:

- Instal an assault course for the children - an unexpected opportunity arose when a local school closed offering us their assault course for free. This was transferred and only cost us the installation charge - the job being done by a parent.
- Make a wooden train for KS1 and an outdoor chess set for KS2 with the help of a local carpenter/sculptor.
- Repair dry stone walls and replace a shared slate fence and a hedge with native species. The wall repairs brought in local people which broadened awareness of expertise in the community.
- Develop a large wildlife pond (high on the children's wish list) which required planning permission from Lake District National Park Authority.
- Develop a small woodland area near the school entrance. At a later date woodland plants were planted.
- Edged the outskirts of the playground with tree stumps which prevented further erosion to the grass and acted as seats for the children.
- Replaced a mud area with a walled patio for a quiet 'time out' area and seats.
- Replaced a stony slope with a rockery and herb/alpine garden.
- Reconstructed the concrete and grass areas outside KS1 to allow for the erection of a second-hand Wendy house (donated by a governor and child), a small pond, a boat (free from the National Trust and done up by a local boat yard) and a climbing frame - purchased from a local company. All of this area is shared with our on-site Pre School and ideas were shared through consultations, etc.
- Created a Pre School vegetable garden.
- Added bird tables/pots/baskets/water butts.
- Constructed raised beds for vegetables and a pathway, water butt and new compost area on Fletcher's Field.
- Bought in a local sculptor to work





Investigating the new pond on Fletcher's Field

on a wild animal project for 8 weeks. Using local wood he created sculptures with the children.

- Constructed a ten-metre diameter wildlife pond with natural materials with parental help.

Working with other groups

- Fletcher's Field committee – some fundraising and support of large pond
- Locals and National Trust – development of vegetable beds and greenhouse
- LA Waste Management Officer – education about compost heaps
- Esthwaite Green Link – New apple trees / orchard project
- Cumbria Wildlife Trust – wildflower seeds and mini beast hotels

Keeping stakeholders informed

This was done through:

- Newsletters
- Pupils' Eco Letters
- Governors' reports
- Fletcher's Field/Eco committee minutes
- Eco open day
- Local community – via the Westmoreland Gazette

Benefits

- More opportunities for the development of outdoor activities/being creative.
- Forest schools – pupils love the outdoor area – as there is always so much to do and

therefore less confrontation.

- Masses of opportunity for Cross Curricular work.
- Garden/outdoor awareness – healthy eating (vegetables), very high profile.
- Helped rubber stamp the Green Flag award – pupils are great ambassadors for the school.
- School Improvement Plan areas met and *Every Child Matters* Agenda.

Community

There were many opportunities to involve the community, with parents helping to build the pond. The ECO and Apple Day brought in people from the community, in particular Esthwaite Green Link.

National College of School Leadership

I am currently working with the NCSL doing some research to promote awareness of the sustainability agenda and look at how this framework is led in schools of varying sizes and sectors.

Further information —

Contact the head teacher:
head@hawkshead.cumbria.sch.uk
tel: 015394 36354

The DCSF Full International Schools Award:

www.globalgateway.org.uk

The Healthy Schools Award:

www.healthyschools.gov.uk

The John Muir Discovery Award:

www.jmt.org/john-muir-award.asp

GLOBAL ENVIRONMENTAL EDUCATION OUTSIDE THINKING

A yurt is only a bus ride away

Liz Ingledew, Global Education Officer, Cumbria Development Education Centre

The adventure starts with the bus ride and the view from the windows as it drives out of town and into the heart of the Lake District. These are key stage 1 pupils from Cambridge and Roose primary schools in Barrow-in-Furness and they are meeting up with staff from CDEC (Cumbria Development Education Centre) at Rookhow, a traditional Quaker meeting place in the Rusland Valley.

The event is all about P4GC (Philosophy for Global Citizenship) and everything is designed to be a stimulus for thinking about needs and wants - from shelter to food to water. It's also designed to be fun.

There are introductions (badges with animals on them – find someone else who ...), circle games, a health and safety briefing (thumbs up for "yes, we'll do that", thumbs down for "no, we'll keep away") and then we go outside.

A walk through a shaded wood to find ... a yurt. Let's find out what it's like inside, who might live there, is it cool in summer or warm in winter, where in the world might this type of home be useful ...?

Collecting colours and textures in egg-boxes on the way back to the hall, to illustrate what's been discovered in the way of different sources of shelter and food. Then on to co-operating and getting messy, to making grand designs and showing them off to everyone else.

A story "from the dreamtime", complete with actions (easy enough to follow for adults as well as children) to demonstrate a thirsty, giant frog who drinks up all the water in the world and leaves the other animals perplexed and frightened. What can they do to stop him and get their water back before it's too late? Well, make him laugh, of course.

After the outdoor and indoor activities (designed to cater for a range of learning styles as well as to be fun and stimulating) and lunch, of course – the thinking and "community of enquiry" (dialogue in a circle).



Philosophising over woodland matter

For anyone not familiar with Philosophy for Children (P4C), it's a methodology designed to encourage deep and reasoned thinking and it's acknowledged to grow listening, speaking and reflective skills (see www.cdec.org.uk for local courses and www.sapere.net for the national accreditation body's site).

Philosophy for Global Citizenship (P4GC) is a version of P4C that CDEC promotes as part of embedding a global dimension across the curriculum. For CDEC, thinking critically is an essential skill for a global citizen – such that pupils question their assumptions and challenge generalisations and stereotypes.

Simply put, in P4C you start with a stimulus, think about what it brings to mind, discuss and agree on a question and mull over it as a group, with the facilitator helping the group to dig deeply, elicit reasons, question assumptions and search for clarity of thinking.

So, what does the visit to the yurt or the story about the greedy frog inspire in our 5 to 7 year olds?

The question that young children (or adults for that matter) start with (in a P4C session) is not always overtly philosophical – but the ensuing dialogue can still be so. Here's an extract of how the dialogue progressed with one group: ➤➤



Year One pupils exploring a yurt in the woods at Rookhow

Is the yurt a house?

- No, because it looks like a tent
- No, because it's not the right shape
- A real house has a triangular roof

What does a real house look like?

- Shapes stuck together
- Look at the attic to see if its roof is triangular
- If your house has bricks then it is a house
- It could be a house and a yurt
- It has no tele, no chairs and no bed
- It's still a house because you live in it
- It can be any shape because my uncle lives in Canada in an upside down house
- Your house could be a tent because you can sleep in there

After further discussion based on observing a butterfly at a window:

- If you live somewhere, it is a house

So what did the pupils said they learned from their visit with CDEC to Rookhow?

- To listen to each other more
- About the new philosophy 'thing'
- How to make pictures from natural materials
- What's a house and what's a home

And what did the teachers say about the value of P4C?

"Could have more room for sharing different ideas – so thinking about things differently"

(year 1 teacher)

"Valuable as it develops thinking skills and children begin to consider the opinions of others"

(year 2 teacher)

"It is very new to me but the children really enjoyed it and came out with some great comments"

(year 2 TA)

More information —

CDEC is a registered charity (515020), based at Ambleside and Barrow: **office@cdec.org.uk**, 015394 30231 for general enquiries, including P4C courses and CDEC's resource loans service) and information on the publications used in this exercise.

THE LIVING CHURCHYARD PROJECT

Debbie Watson, KS2 class teacher, Ennerdale & Kiniside C.E. Primary School, Cumbria

We are a small rural primary school in West Cumbria surrounded by beautiful countryside. Surprisingly we have very limited school grounds as the building is sited on a triangle of land bounded on 3 sides by road. We have some tarmac and a few flower borders. This has not deterred us from growing vegetables in pots very successfully, but creating a wildlife area has proved a challenge too far!

The old churchyard

So in January 08 we looked further afield and began exploring the old churchyard in the village. We had permission and plenty of encouragement and help from the church and community – the area is not used now as all burials take place in their new churchyard. The project began small and grew in size and scope as we went on.

The John Muir Environmental Award

The junior mixed age class of 30 (year 3 to 6) were involved and we followed the John Muir Award framework to give structure to our work. This has 4 stages: (i) discover a wild place, (ii) explore it (iii) do something to conserve it, (iv) share your experiences. In 'discovering' and 'exploring', the lower juniors concentrated on the beautiful trees collecting leaves, drawing twigs, measuring girth and height, researching information. The upper juniors looked at the myriads of lichens on gravestones, observing and questioning where they grow, drawing, recording colours and patterns. Each session involved some solo time where they sat still on their own for 10 – 15 minutes and listened, relaxed and looked. These times were as important as all the 'busyness'. Each person had a sturdy notebook provided by the Award and many made personal notes and drawings of their thoughts.

Conservation phase

By the time we reached the conservation phase, they had built up a real interest and commitment to the churchyard and had masses of ideas as to how the environment could be improved for wildlife. With fantastic help from a parent with a bench saw, the

children constructed bat boxes, bird boxes, insect hotels, a squirrel feeder (we still have red ones!) and a hedgehog hibernation box. The school rang with the noise of hammers for several days! They cleared brambles and started planting a fernery in a damp shady enclosure around one old grave to encourage toads and lizards. They found out the best positions for siting their boxes and got them up with help.

Sharing their experiences

Throughout, the children had been taking photos and video clips of their work and this formed the basis of their presentation. In March they made posters and sent out invitations to the local village. They wrote reports of their work and they put together a slide and video show. After the presentation they played host and showed the villagers round the churchyard in small groups explaining what they had done – this was the most nerve-wracking part for some of them!

Environmental art work

Meanwhile, June, our talented teaching assistant had become inspired by the bark, lichens and carved stone and helped the children experiment with many different media to produce some super art work. Even the school secretary was out with her new camera trying interesting angles and light! This work extended into the summer term and these pattern and texture pieces looked great at another church festival and the local show in the summer.

Successful outcome

The juniors all received their well-earned John Muir Award. This is just the beginning of an ongoing commitment to our 'living churchyard' and local community and we hope over the years that we will make a difference to the wildlife that will live there. That reminds me — we need to get our wellies on and clear out the birdboxes; fill the squirrel feeder....

More Information —

John Muir Award:

www.johnmuiraward.org.

An environmental award scheme focusing on wild places. Suitable for junior age pupils and above including families, and it's free to take part.

We found them and the local Cumbrian Wildlife Trust with their Sacred Places Project helpful in discussing our ideas.

www.cumbriawildlifetrust.org.uk

'WILDLIFE WORKSHOPS'

Cumbria Wildlife Trust's New Education Service Inspires the Next Generation



Ready to go a-planting

© Cumbria Wildlife Trust

Izzy Thorne, *Senior Education & Volunteer Officer, Cumbria Wildlife Trust, Kendal*

Cumbria Wildlife Trust has delivered environmental based activities in schools for several years. Largely funded through grants from charitable trusts and Local Authorities, the Trust has in this time developed a reputation for delivering high quality, interactive sessions that complement the demands of the National Curriculum.

Funding Dilemma

With existing projects coming to an end, it became apparent that applying for funding to support our education work was unsustainable in the long term. Grant aid for this kind of work is increasingly hard

to secure. Relying on grant aid also often limits a project to employing one officer, which in turn limits the number of schools we can work with. It also means higher amounts of time travelling around the county as opposed to actually delivering the service. Furthermore, delivering free short-term education projects is financially unsustainable. Although grant aid enables us to deliver a service it often prevents us from charging, thereby disabling us from generating income that could be used once the project has come to an end. Projects also have to keep changing focus in order to qualify for many of the larger funds, thus preventing us from offering an all round consistent service.

What support do primary schools want?

In order to break this funding cycle and retain a strong presence in schools we decided to pilot a new fee-paying service. However before we could start we felt it essential that we carried out some



Trips to the beach are among the activities the Trust uses to engage learners

© Cumbria Wildlife Trust

market research of our target audience – primary schools, of which there are 282 in Cumbria. With the help of a business graduate from the University of Central Lancashire, we sampled 100 schools, out of which 90 responded to the questionnaire. All responded positively to the prospect of Cumbria Wildlife Trust offering environmental based activities within schools. The most important question was however whether schools would pay for this service, bearing in mind that we have previously done this for free. In other words, could the Trust deliver a service that was financially viable? Out of 100 primary schools surveyed: 71 said they would be willing to pay for the delivery of wildlife workshops; most said that they would prefer to pay a fixed cost for the delivery of a workshop rather than per pupil; 89 said that the charges we proposed were reasonable. The final report recommended that the Trust should:

- offer wildlife workshops that were most popular from the research – recycling, story telling with an environmental theme, wildlife gardening, minibeasts and woodlands
- employ a schools co-ordinator who could actively promote a new outreach service to schools
- not offer assembly sessions
- charge approximately £85.00 for a half day session
- charge a fixed rate as opposed to a charge per pupil
- charge per pupil for schools with less than 20 children

The new service was launched in February 2008, with the overriding aim that it becomes increasingly sustainable. However we recognise that it may never become wholly sustainable and that a small amount of investment from the Trust will always be required. An appeal to the members was launched and a couple of grants from the Lake District National Park Sustainability Fund and Cumbria County Council has ensured that all the initial set up costs are met for three years, thus allowing the service to stabilise. Surplus income generated after this time will be used to pay for staffing costs, marketing activities and contingencies.

The new service and what it involves

Cumbria Wildlife Trust now employs a small network of self employed Wildlife Tutors, who each delivers a range of themed Wildlife Workshops. Each workshop lasts for about 2.5 hours and costs £85.00. They range from specific subjects, such as bugs, birds and trees to more general workshops about the development of school grounds. The new service was launched in September 2008 and our Wildlife Tutors are steadily building up relationships with schools in their local area. Bookings for site visits and wildlife workshops are now coming in and we are hopeful that our new service will continue to grow and expand in the years to come.

More Information —

For further information about Cumbria Wildlife Trust's new service, please log on to:
www.cumbriawildlifetrust.org.uk

YOUNGSTERS GET TO GRIPS WITH LOCAL SKILLS

Vicki Boggon, Tarnside Educational Solutions, Cumbria

Youngsters from a Secondary School in Barrow have teamed up with farmer Mark Simpson from Underbarrow, near Kendal, to learn local skills in a bid to help them with their learning in the classroom. The project is part of an innovative scheme initiated by Science Teacher Steve Dewey from St. Bernard's School who wanted '... *something that would help these young people feel good about themselves, boost their morale and help to make their learning relevant and a positive experience.*'

For the first session, the pupils started to learn the craft of dry stone walling. They worked together and helped each other rebuild a section of wall. 'Even though it was pouring with rain for most of the day, everyone mucked in,' commented Mark, 'they got a real sense of achievement!' The children were often heard talking about the environment and the need to look after it and feel proud of where they lived.

Following the walling session, the pupils had a taste of problem-solving and team-building games and are now looking forward to learning some more countryside skills in the autumn term. 'I really loved my day,' said 13 year old Jess, 'and I may even become a waller when I leave school!'



The boys put the theory into practice

PRIMARY : 'FOREST SCHOOL'

Another group of students were lucky enough to work with Key Stage 1 children from Flookburgh school. The aim of this session was again to improve motivation and self-esteem. The students were facilitated in learning the practicalities of the Forest School ethos and some basic activities that will form the foundation for future work with other local primary schools. The students were really excited by their day and ready to put their new-found confidence into practice in the classroom. 'I feel really motivated now,' said Anna, a pupil; 'I've had a brilliant day, no one has ever said that they have enjoyed working with me so much before!'

Both groups of students are looking forward to learning further environmental skills during the next term.

More Information —
Forest Schools: vicks@tarnside.co.uk
More articles about the Forest School movement can be found in *Environmental Education* Vol 80, (Forest School special edition) and Vol. 81, spring issue 2006. Contact NAEF office for these issues (see page 2 for order details).



Learning from Mark's dad Alan

NATIONAL ASSOCIATION FOR ENVIRONMENTAL EDUCATION (UK)

News&Views

SPRING 2009

Volume 90

Compiled by Katie Scanlan, NAEF Executive

DIARY DATES FOR SPRING 2009

2009 International Year of Astronomy-
(See Diary Follow-Up)

2009 Charles Darwin's 200th Birthday
(See Diary Follow-Up)

MARCH

Shout About 2009 – Friends of the Earth's activity week. For more info www.foe.co.uk
(See Resources)

5 **World Book Day**
www.worldbookday.com

BEN (Black Environment Network) Networking Conference at the Martin Luther King Centre, Manchester. Email: ukoffice@ben-network.org.uk or www.ben-network.org.uk

7-13 **National Science and Engineering Week**
(See Diary Follow-Up)

11 **No Smoking Day**
www.nosmokingday.org.uk

18-26 **The Education Show at Birmingham NEC**, is the UK's largest showcase of educational resources of all kinds. It enables educators to see what is new, try out resources and take part in free CPD. For info www.education-show.com

22 **World Water Day**
www.worldwaterday.org

23 **World Meteorological Day**
www.wmo.int

Growing Schools 'Get your Hands Dirty' Event at Kew Gardens. For info www.growingschools.org.uk

29 **Earth Hour**
Turn off all your lights at 8.30 pm

(See Diary Follow-up)

APRIL

National Pet Month
www.nationalpetmonth.org.uk

7 **World Health Day**
Marks the founding of the World Health Organisation. www.who.int

16-18 **Annual GA Conference 'Investigating Geography'** at Manchester University. www.geography.org.uk

19 Last day of Darwin Big Idea Exhibition at Natural History Museum. Started 14th Nov 2008. (See Diary Follow-Up)

22 **Earth Day**
www.earthday.org
The day to campaign against environmental abuse.

29 **International Noise Awareness Day**
www.lhh.org/noise/

MAY

3 **International Dawn Chorus Day**
www.idcd.info

5-11 **Compost Awareness Week**
www.compost.org.uk

6 **National Teacher Appreciation Day!**

10 **World Fair Trade Day**
The Theme of World Fair Trade Day 2009 is 'Fair Trade + Ecology'. The first global campaign for The Fair Trade movement connecting producers and customers around the world and is endorsed by IFAT. www.wftday.org

13-24 **Be Nice to Nettles Week**
Why not create your own nettle patch,

- make nettle soup, or do a butterfly survey of your school garden nettle patch. Risk Assessments are essential here for stings and possible allergies. www.nettles.org.uk
- 18-22 Walk to School Week:** theme for 2009 is ‘Walking Together’
www.walktoschool.org.uk
- 22 International Day for Biodiversity**
www.cbd.int/ibd

Friendship Funday. For your free resource pack to help make your school a friendly place.
www.savethechildren.org.uk
- 23 World Turtle Day**
www.hsus.org
- 24 European Day of Parks**
www.euoparc.org
- JUNE**
- 5 World Environment Day.**
This year’s theme is ‘Your Planet Needs You -Unite to Combat Climate Change’. Celebrations will be hosted in Mexico.
www.unep.org
- 8 World Oceans Day**
www.mcsuk.org

DIARY FOLLOW-UP INFORMATION

2009 INTERNATIONAL YEAR OF ASTRONOMY – The Universe, Yours to Discover.
IYA2009 will be a global celebration of astronomy and its contributions to society and culture, highlighted by the 400th anniversary of the first use of an astronomical telescope by Galileo Galilei. The Year aims to stimulate worldwide interest, especially among young people, under the central theme “The Universe, Yours to Discover”. www.astronomy2009.org

DARWIN IN 2009: CHARLES DARWIN'S 200TH BIRTHDAY. Throughout 2009 there is a huge variety of events to celebrate the man and his discoveries...
Darwin200 – A nationwide programme of events celebrating Charles Darwin’s scientific ideas and their impact around his two-hundredth birthday on 12th February 2009. www.darwin200.org/

DARWIN BIG IDEA EXHIBITION
14th Nov 2008 – 19th April 2009 at Natural History Museum. Visitors to the exhibition can take a close look at a range of treasures, exhibited for the first time. They include a memorabilia box that belonged

- 9-13 National School Grounds Week**
www.ltl.org.uk
- 13-21 Bike to School Week**
www.bikeweek.org.uk
- 29 Change Your World**
www.changeyourworld.org.uk
- 22-28 Child Safety Week.** Theme: ‘Make a Change, Make a Difference’ Free resources.
www.capt.org.uk

JULY

- 9 UK ITE Network for Education Sustainable Development/ Global Citizenship Annual Conference**
- 11 World Population Day**
www.unfpa.org/wpd
- 15 World Youth Day**
www.wyd2008.org

AUGUST

- 5 National Playday.** 2009 Theme: Make Time! From parents, carers and teachers, to policy makers and planners - everyone can make time to protect children’s right to play. www.playday.org.uk

to one of Darwin’s daughters and that contains hair from Charles Darwin’s legendary beard. Discover how the great scientist’s revolutionary ideas changed our understanding of the natural world.
www.nhm.ac.uk

THE DARWIN CENTRE
From September 2009 NHM visitors and scientists will share the excitement of exploring, studying and preserving the natural world in the new Darwin Centre. This 8-storey, £78 million landmark building completes the Darwin Centre’s development, which is the most significant expansion at the Museum since it moved to South Kensington in 1881.
www.nhm.ac.uk

THE GREAT PLANT HUNT ... following in Darwin's footsteps
Inspired by a year of celebrations to mark the 200th birthday of Charles Darwin, the Royal Botanic Gardens, Kew (RBG Kew), will be sending your school free resources in March 2009. The Great Plant Hunt invites school children aged 5-11 to explore the natural world around them in a series of activities, all clearly

linked to the primary science curriculum. Schools must sign up at:
www.data.kew.org/great-plant-hunt/brochure/website

DARWIN EDUCATION
The Charles Darwin Trust uses the intellectual and cultural heritage of Darwin, through his approach to science and his work at Down House and in the immediate countryside, to inspire a deeper understanding of the natural world. The Trust achieves this through research and development of Darwin-inspired education materials, and through developing programmes for teachers and schools. These programmes are delivered through collaboration with major organisations and at Down House.
www.darwinforum.co.uk

DARWIN RESOURCES
The life and times of Charles Darwin, including an illustrated Beagle Voyage, chronology, biographical information, and a full listing of documents.
www.aboutdarwin.com

NATIONAL SCIENCE AND ENGINEERING WEEK (March)
This year’s theme is ‘Change’, to fit in with Darwin200 and the International Year of Astronomy. Change can relate to all science subjects and topics, for example evolution, the life of stars, metamorphosis, mechanical movement, industrial revolution, colour change and more...NSEW is an opportunity for people of all ages, areas and organisations to take part in science, engineering and technology activities. www.the-ba.net

EARTH HOUR
What began as a campaign to get Sydneysiders to turn their lights off has grown to become one of the world’s biggest climate change initiatives. In 2009, at 8.30pm on March 28th, people around the world will turn off their lights for one hour – Earth Hour. The aim is to reach one billion people, more than 1000 cities, all joining together in a global effort to show that it’s possible to take action on global warming. www.earthhour.org

RESOURCES
(including Awards and Funding)

CLAIM YOUR FREE MAP
A reminder that secondary schools can claim a free Ordnance Survey Explorer map for every Year 7 pupil in schools which apply. Last year, 703,000 maps were issued to schools across the country raising awareness of local geography and map-reading skills.
Birmingham Mail, 13.11.08

MORE ABOUT MAPS
Henricus Peters, NAEF’s Primary Representative, has consulted on major revisions to two Geographical Association/Harper Collins Key Start Atlases. Aimed at 7 to 11 year olds, the atlases integrate different strands of the geography and environmental curriculum for the World and UK. Publication date is Spring 2009; an article will appear about atlases in the summer 2009 journal.
www.harpercollins.co.uk/Contents/Title/Pages/default.aspx?objId=33663

CLIMATE CHANGE SPEAKERS
Global warming / climate change is arguably the most important issue of our times. Over 100 speakers around the UK are available to give talks on this highly topical subject to any local audiences, including schools (secondary and primary). All speakers can explain the main climate change issues; some also offer the option of specialist topics. Audiences are invited to ask questions, make their own points, and enter into discussion. Travel expenses are requested and any small fee towards costs is appreciated.
www.climate-speakers.org.uk/ *(Nb. This is not an NAEF event. All views expressed are those of the individual)*

DO ONE THING: PLANT A TREE
Planting a tree is one of the simplest ways to give your local wildlife a little encouragement and it will last for many generations to come. It’s really easy to do and it’s a gift to future generations of people and wildlife. The BBC Breathing Places website is encouraging people to get involved and ‘Do One Thing’. The website contains advice on which trees to plant to attract certain wildlife and how to do it.
www.bbc.co.uk/breathing_places/ *(Get your trees in quick though - March is really the latest you should be planting)*

AND TO HELP YOU DO IT PROPERLY...
Learning through Landscapes and The Tree Council have together launched a new CD Rom resource ‘Tree Ties: Working together to plant Trees’, a step-by-step guide to help primary school children to choose, plant, nurture and celebrate trees in their school grounds. The CD Rom is full of information including where to plant, where to avoid, why trees are important and what tree is best for your grounds. The teacher’s guide also provides printable information and activity sheets as well as curriculum ideas and guidance. The CD is available now to buy from the LTL website: www.ltl.org.uk for £14.95.

WILDLIFE PHOTOGRAPHER OF THE YEAR
The annual Wildlife Photographer of the Year Competition finds the very best wildlife images taken by the world’s top professional and amateur photographers. A range of categories includes Young Photographers. The 2008 exhibition is open at the

Natural History Museum from 31st October to 26th April 2009. For details of the exhibition and images of the winner visit: www.nhm.ac.uk

QUEST TO FIND RAINFOREST GUARDIANS

School children in the UK now have the opportunity to become some of the world's first rainforest guardians through an innovative course of lessons launched this week by The Prince's Rainforests Project. Download for free at: www.princesrainforestsproject.org/schools.

LET'S GROW

A new scheme from Morrisons to help children learn how to grow fruit and vegetables at school. Schools can register free and encourage parents to collect vouchers with their weekly shop. Vouchers can then be redeemed for brand new gardening equipment including seeds, spades and green-houses. Visit www.morrisons.co.uk/letsgrow and get your school growing! The website also has factsheets, lesson plans and other teaching resources.

EARLY YEARS RESOURCE

The DCSF has published an 'Early Years Foundation Stage – Everything you need to know' resource containing detailed information and case studies. The Early Years Foundation Stage is a play-based framework which provides support to those working with young children, schools, nurseries and childminders.

www.dcsf.gov.uk/publications/eyfs/

TOOLKIT TO TACKLE LITTER

The CRPE (Campaign to Protect Rural England) has recently launched an exciting and colourful new schools campaign pack with the Wiltshire Wildlife Trust. The resource pack, How to Run a Whole School Litter Campaign, includes shocking facts about litter and powerful photographs that show wildlife injured by carelessly dropped rubbish. Practical activities and lessons encourage children to understand the problem of litter and the harm it can do to wildlife and the wider environment. Teachers will find the suggested activities and lesson ideas can be related across all subject areas of the curriculum.

www.cpre.org.uk/campaigns

FARM AND GARDEN VISITS

The Federation of City Farms and Gardens (FCFG) has details of farms and gardens to visit in London. Publications include maps of Birmingham, Bristol, London, North East, North West, Scotland and Northern Ireland (free downloads) plus packs (charged).

www.farmgarden.org.uk/

BES GRANTS

The British Ecological Society is offering fund-

ing specifically to enable schools to buy ecology field work equipment. The aim is to equip science departments with resources that will then enable students to access high quality educational experiences outside the classroom. Grants of up to £500 are available to primary, secondary and tertiary schools. Application deadlines are Jan 31st, April 30th, Sept 30th. Applications will be accepted from December 2008 for 2009 grants.

www.britishecologicalsociety.org

QUANTUM SHEEP AND THE WONDERFUL WOLDS

Quantum, the 3D cartoon stylised sheep, is the hero of a new interactive computer game, with the focus being on introducing 7-11 year olds to the Cotswold Landscape. The aim of the game is to help Quantum rescue a lost lamb from four periods in history - the Celtic, Roman, Medieval or Victorian eras - where he encounters all sorts of flora and fauna which makes the Cotswolds what they were and what they are today. Our heroic sheep also finds out about the impact of man upon the landscape. Download the resource at www.cotswoldsaonb.com/

FREE TREES AND SEEDS

Packs of 30 starter saplings and seeds are available for free, from the Nature Detectives. Order now for delivery in March 2009. www.naturedetectives.org.uk/schools/freetrees

LOVE YOUR SCHOOL GROUNDS

An initiative developed on behalf of the Learning Outside the Classroom Manifesto school grounds sector partnership. Its development has been supported by the Department for Children, Schools and Families. The website explains why children should love their school grounds. Reasons cited include learning and discovery, physical health and social confidence. www.loveschoolgrounds.org.uk

GREEN DAY: A free climate change activity kit for schools

Green day is a one-day event for schools about climate change, sustainability and the built environment. It is a fun and flexible way to integrate these themes into lessons and school activities. A free activity kit, promoted by CABE, provides ideas, activities and resources for holding a green day in your school, making it a more sustainable place in which to work, play and learn. Download at www.cabe.org.uk/AssetLibrary/11438.pdf



BUILDINGS, INDUSTRIALISATION & WASTE

TIPTON LITTER WATCH AWARDS

Community-led environmental charity Tipton Litter Watch has been short-listed for two national awards for its Think Before You Throw programme. It has

been short-listed as part of the Local Government Chronicle and Health Service Journal Sustainable Communities Awards 2009, in two categories - Improving Local Environment and Best Community Youth Initiative.

The Think Before You Throw programme works in partnership with local schools and educational centres across Sandwell to teach the importance of sustainability and caring for their communities.

For more info call 0121 557 6001, email:

tiptonlitter@aol.com, or visit

www.tiptonlitterwatch.org.uk

2012 STADIUM SCHOOL

Tessa Jowell, Olympics Minister, and Schools Minister Jim Knight, are exploring the possibility of establishing a school at the Olympic Stadium site after the 2012 Games. The proposal is designed to complement not replace the use of the stadium as a sporting venue. Jowell said: "The stadium has the potential to inspire future generations...a school designed to nurture sporting and related achievement could be an excellent legacy..." **Sustain, Vol. 09. Issue 02**



ENERGY

SCHOOL'S SOLAR POWER INNOVATION

A brand new solar-powered computer room has been unveiled at the forward thinking Cardinal Wiseman Catholic Technology College, in Birmingham. The College has installed solar panels to power batteries which will in turn run approximately 20 computers for up to 5 days. The environmentally-friendly college already uses wind-turbines to power the main school system.

Sutton Coldfield News, 18.07.08

END USE OF FOSSIL FUELS IN 20 YEARS

warns the government's climate change watchdog. The Climate Change Committee advises that the UK should set a 2050 target of cutting all greenhouse gas emissions by 80%, including aviation and transport (previously excluded from such targets, see below). The committee chairman, Lord Turner of Ecchinswell, says "we have to almost totally decarbonise the power sector by 2030..." if targets are to be met. Ed Miliband, energy and climate secretary, welcomes the report saying "we need to act now to avoid dangerous climate change and the action we take must be guided by experts".

The Guardian, 7.10.08

GREEN LIGHT FOR WIND FARM

One of the UK's largest offshore wind farms has been given the go-ahead. The 500 mega-watt farm, off the coast of Barrow-in-Furness, will include 139 turbines and produce enough electricity to power 372,000 homes. Several other wind farms are also

proposed in UK waters. Energy Secretary John Hutton said "These wind farms demonstrate our commitment to dramatically increase the amount of energy we generate from renewable resources, helping to cut the UK's carbon emissions and secure our energy supplies". **Your Environment, Issue 21, Nov 2008.**

BIOFUEL THAT GROWS ON TREES

A tree fungus that grows only in the Patagonian rainforest has been found to naturally produce a mixture of chemicals that is virtually indistinguishable from diesel.

According to the American scientists at Montana State University who made the discovery, 'mycodiesel' is a fungus-derived biofuel that can be pumped directly into an existing diesel car without the need for modification. A spokesperson for the Environmental Transport Association (ETA) said: "It will be a little time before we are filling our cars at the garden centre rather than the petrol station, but the potential of this unexpected discovery is huge. For more information www.eta.co.uk

MINISTER BOWS TO PRESSURE ON CLIMATE CHANGE BILL

The UK's Climate Change Bill, (incorporating the targets discussed above) is due to become law as 'Environmental Education' goes to print, and after bowing to huge public pressure will include aviation and shipping in its emission targets. Delighted with the decision, Thom Yorke, Radiohead singer and environmental campaigner, said "It is a massive step forward for us all...and it came about simply because hundreds of thousands of people on the ground hassled their MP, who in turn hassled the government. Amazing." Another person firmly in support of the decision was Friends of the Earth's executive director, who said "The final piece of the jigsaw is in place. The world's first climate change law will also be a world-class climate change law."

The Guardian, 27.10.08

What better demonstration of 'people power' in action...an inspiration to us all.



PEOPLE AND COMMUNITIES

TEACHING ABOUT THE ENVIRONMENT IN NEW PRIMARY CURRICULUM?

Jim Rose's interim report into the primary curriculum recommends rearranging the curriculum around six areas of learning, rather than using the current 11 statutory and three non-statutory subjects. The six areas will cover understanding of English, communication and languages; mathematics; science and technology; *Human, Social and Environmental*; physical health and wellbeing; and arts and design. The proposal alarmed both press and politicians, who feared it would spell the end

of subjects such as history or geography. But it received a warmer welcome from primary teachers. Many said it would make it easier to teach cross-curricular lessons and provide a smoother transition both from early years and into key stage 3.

TES, 12.12.08

CHILDREN FAIL TEST ON NATURAL WORLD

Half of youngsters aged 9 to 11 were unable to identify a daddy-long-legs, oak tree, blue tit or bluebell, in a poll by BBC Wildlife Magazine. The study also found that playing in the countryside was children's least popular way of spending their spare time, and that they would rather see friends or play on their computer than go for a walk or play outdoors.

Sir David Attenborough warned that children who lack any understanding of the natural world would not grow into adults who cared about the environment. "The wild world is becoming so remote to children that they miss out," he said, "and an interest in the natural world doesn't grow as it should. Nobody is going to protect the natural world unless they understand it." Fergus Collins, of BBC Wildlife Magazine, said the results "reinforce the idea that many children don't spend enough time playing in the green outdoors and enjoying wildlife – something older generations might have taken for granted".

The Independent, 1.8.08

BRITAIN'S FIRST EVER PLAY STRATEGY

was announced in Dec 2008, following the government's 'Fair Play' consultation in partnership with Play England. Ed Balls the Children's Secretary has re-stated that, in spite of the current economic situation, children's play and a more child-friendly public realm are a central part of the government's long-term ambition to make this the best place in the world to grow up. Adrian Voce, Director of Play England, said (in The Guardian) that "Neighbourhoods where children can play safely, with more and better parks and green spaces, better traffic calming and more pedestrian zones are better places to live for the whole community, making an important contribution to economic activity" and that "far from being a luxury that we can no longer afford, the play strategy is good government – investing in a long-term vision that we cannot afford to abandon." For more info:

www.dcsf.gov.uk/play

CHILDREN'S ORCHARD PROJECT RIPE FOR THE PICKING

More than 1,000 fruit trees have been planted by Glasgow's schoolchildren, and in November 120 different varieties of local apples were harvested and on display at the City's chambers.

The Children's Orchard project was launched 4 years ago, and according to John Hancox (an apt name) founder of the charity, the project is explod-

ing, thanks to a desire to beat the credit crunch(!), reduce food miles and to get children involved in relatively easy food production. Hancox says "For the children, there is something magical about seeing fruit grow on trees, right through from the blossom to the fruit developing and the harvest. They get to get their hands dirty and to do something practical". The project is also helping to secure the future of some of Scotland's rare apple varieties such as the Golden Pippin.

Education Guardian, 11.11.08

YEAR OF READING GARDEN

Bordon Junior School, Hampshire, won a garden to promote reading. The National Year of Reading Garden was on display at the Hampton Court Palace Flower Show in the summer and was then moved to Bordon Junior School. The courtyard garden, which has a reading room, a bookworm track and a secret reading corner, was inspired by books such as the Very Hungry Caterpillar by Eric Carle and the Tale of Peter Rabbit by Beatrix Potter.

TES, 14.11.08

'SECRET GARDEN' OUTDOOR NURSERY

A mother who believes that nursery pupils spend too much time cooped up indoors has opened Britain's first outdoor pre-school to counter what she claims is a form of child abuse. "When I was in the nursery school, I used to leave the door open, and 90 per cent of the time 90 per cent of the children would choose to play outside." Said Cathy Bache. The Secret Garden, based on similar schools in Norway and Canada, was approved as a nursery by the Scottish Commission for the Regulation of Care. The new curriculum for under-fives north of the border emphasises that children be confident individuals, responsible citizens and effective contributors to the world around them. It is a far cry from the foundation stage in English nursery schools, which campaigners say places too much emphasis on a formal curriculum at too early an age.

The Independent, 29.11.08

THREE CHEERS FOR TREE MUSKETEERS

'And three cheers more for the Tree Musketeers - and not just for their great name.' The London-based conservation group's sterling efforts to plant, protect and care for trees in the borough of Hackney have been recognised with an award from the Mayor's office. The group's 10-year mission, including the replanting of Stoke Newington Common, has been carried out with no core funds or paid workers.

The Guardian, 3.12.08

SCHOOL FOOD MATTERS

A campaign to encourage all schools to have kitchens capable of preparing fresh and healthy food, cooking and growing programmes, a link with a

local farm as an educational resource and for the supply of local produce – and much more. Visit: **www.schoolfoodmatters.com**

GREEN JOBS COULD BOOST ECONOMY

A report from the United Nations Environment programme says that tens of millions of green jobs could be created by a move to low-carbon and low-waste economies around the world. Currently 10 million people are working in recycling and waste management in China, 600,000 working in solar power in China and 25,000 previously unemployed South Africans are now working on Government conservation projects.

'Your Environment' Issue 21, Nov 2008



PLANTS AND ANIMALS (BIODIVERSITY)

BAN PESTICIDES TO SAVE BEES

The Soil Association has urged the government to ban pesticides linked to honeybee deaths. Four other European countries have already taken these precautionary measures, but the chemicals in question are still widely used in the UK. Policy director at the Soil Association, Peter Melchett, said "It is typical of the lax approach to pesticide regulation in the UK that we look like being one of the last of the major farming countries in the EU to wake up to the threat to our honeybees". Beekeepers worldwide have reported 30-90% losses of honeybee colonies during the last two years.

The Guardian, 29.9.08

REASONS TO SAVE OUR BEES

Peter Jarvis of the Birmingham & Black Country Wildlife Trust states "Perhaps a third of the human diet comes from insect pollinated plants and honeybees alone are responsible for about 80% of that pollination.' He continues to say that the major problem for bees is a loss of habitat due to the fact that farmland has continued to lose flower rich feeding areas and nesting sites, and recommends that gardeners (inc. school gardens?) could hold the key to reversing the decline in the bee population. Peter recommends planting 'nectar rich flowers like hollyhocks, lupins and lavenders, which are better than annual bedding plants'.

Birmingham Mail, 18.11.08

See 'EE' article about flower rich meadows in the upland fells of Cumbria on page 25 for more inspiration.

LEYLANDII TO BLAME FOR HOUSE SPARROW DECLINE?

Following a study, scientists have suggested the dramatic 20-year decline of house sparrows in towns and cities, is because of the popularity of ornamental plants such as leylandii, the removal of trees, and the conversion of front gardens for

parking. The loss of woody shrubs and trees leaves too few insects in summer for the birds to feed their chicks. Dr Will Peach of the RSPB, who led the study, said: "Sparrows need insects in the summer, and lots of them. The trend towards paving of front gardens and laying decking in the back, and the popularity of ornamental plants from other parts of the world, has made many gardens no-go areas for once common British birds. Many of the things we can do to help just mean being lazy, doing nothing and allowing the garden to be a bit scruffy." Peach also suggest that gardeners (or schools?) could plant honeysuckle, wild roses, hawthorn or fruit trees to help house sparrows.

The Guardian, 20.11.08

NATURAL HEALING AT KEW

A new conservation scheme sees Kew in partnership with traditional healers in South African urban townships. The 'Africulture' project encourages healers to cultivate the 30 most important plants they use, rather than harvesting them in the wild where an intolerable strain is being put on a once thriving supply of plants. This scheme embodies the priorities of the new 10-year 'Breathing Planet' programme, recently published by Kew. The twin themes of people and environmental threats are central to the programme. "People everywhere strive to improve their quality of life. But we are all living on borrowed time, putting far too much pressure on the natural resources on which we depend" says Stephen Hopper, Kew's Director. The programme aims to form "partnerships with people throughout the world" and work "collaboratively with them on the science of plants" rather than Kew's previous more economic focus.

The Guardian, 8.10.08

£2M BOOST FOR NATURE CONSERVATION

Plans to boost the number of people who volunteer to help protect England's nature and wildlife were unveiled on Tuesday 18 November by Environment Secretary Hilary Benn.

Defra is launching a £750,000 campaign to increase conservation volunteering, to help people who want to do their bit for the natural environment and wildlife get involved in local projects.

www.defra.gov.uk/news/latest/2008/biodiversity

CORONATION STREET GOES BATTY

Natural England will be paying a visit to one of England's most famous addresses (Monday 14 April) after resident 'Roy Cropper' suspected some 'batty' behaviour on a local building site. The Coronation Street story line has highlighted the plight of our nocturnal furry friends. There are 17 different species of bats in England, some very rare, others still quite widespread. These fascinating mammals are heavily dependent on buildings as they often use them as roosts at different times of the year.

Because populations of most species have declined in past decades, all British bats have been protected by law since 1982. For more info:
www.naturalengland.co.uk/bats

VITAL NEED FOR HARMONY, SAYS PRINCE OF WALES

In a speech to the Foreign Press Association, HRH said "My views on architecture, the environment and society are underpinned by one unifying idea – the vital need for harmony." He went on to discuss the reliance we, as a society, have on technology and how this maybe be affecting our 'connection' with nature. "If we hope to restore the balance, we must reintegrate the best parts of this ancient understanding of Harmony with the best modern technology and science, not least by developing innovative and more benign forms of technology that work with the grain of Nature rather than against it."

The Times, 27.11.08



SOIL, ROCKS & MINERALS (LAND)

GEOLOGY MUSEUM REALLY ROCKS

The University of Birmingham's Lapworth Museum of Geology is recognised as a collection of outstanding national and international significance. It is one of the oldest specialist geological museums in Europe, and is home to more than 250,000 specimens, from amber to giant reptiles as well as early scientific instruments, geological maps and photographs and archaeological artefacts. Professor Paul Smith, Professor of Palaeobiology and Director of the Lapworth Museum, says: 'We would like the museum to be used not only as a resource for those with an interest in geology and palaeontology, but also as a centre for understanding environmental change through time.'

www.lapworth.bham.ac.uk

MAGIC OF STONEHENGE

A new archaeological dig at Stonehenge has found clues that point to a belief that the 'bluestones' (spotted dolomite, brought 150 miles from Wales) had healing properties. This is the first excavation at Stonehenge in 40 years, and Professor Tim Darvill believes they may have proved that Stonehenge in prehistoric Europe was the equivalent of Lourdes or "the accident and emergency unit of southern

England"! The bluestone comes from only one place, in Pembrokeshire, where there are springs still believed to be healing holy wells, and ancient decorated stones prove they were also important in prehistoric times. The archaeologists concede Stonehenge was probably "multifunctional" also serving as a calendar for the solstice and a site of worship.

The Guardian, 23.09.08



WATER

STEEP FALL IN NUMBER OF COMMON SEALS AROUND UK

There has been a 12% drop in common seals at 13 monitored sites around the UK. This amounts to a totally of 3,120 fewer seals in UK waters. The cause is baffling scientists, who say it is as if the entire population has stopped breeding; "This is very abnormal" says Ian Boyd, professor with the sea mammals research unit at St Andrews University. "... The rates of decline are equivalent to these populations producing no offspring for five or six years".

The Guardian, 20.10.08

ANTARCTIC INVENTORY

The first comprehensive inventory of sea and land animals around a group of Antarctic islands reveals a region that is rich in biodiversity and has more species than the Galapagos. Stefanie Kaiser from University of Hamburg says:

"We never knew there were so many different species on and around these islands. This abundance of life was completely unexpected for a location in the polar regions, previously perceived to be poor in biodiversity."

British Antarctic Survey Press Office, 1.12.08

"In the end we will conserve only what we love. We will love only what we understand. We will understand only what we are taught"

Baba Dioum, Senegalese poet and environmentalist, 1937

WE WANT TO KNOW!

Contributions to **News and Views** are very welcome

Please email to: info@naee.org.uk, with 'News and Views' in the subject heading
Or send to the address on page 3

FLORA of the FELLS

A cross-curricular project for Cumbrian Village Schools

A haymeadow in Ravonstonedale that's never been ploughed

Annie Masson, *Flora of the Fells Education Officer, Friends of the Lake District, Kendal*

Background to the Project

The Flora of the Fells project, funded by the Friends of the Lake District and Natural England, is about connecting people of all ages and backgrounds with Cumbria's upland landscapes and environments through the interlinked aspects of biodiversity, culture, social, economic and natural resources. Our education work focuses on helping schools and young people across Cumbria to gain direct experience of their own lakeland environment, providing hands-on activities and helping schools to develop longer-term sustainable links with their local sites. Although most of our work is with Primary schools, we do include programmes for Secondary schools as well as for Youth or Family events. Activities and projects link to the curriculum and are generally cross-curricular including geography, science, art, literacy, numeracy, PHSE and citizenship. Several schools have also taken part in the John Muir Environmental award scheme.

Getting to know the Landscape

Once out on the Fells, young people have a chance to explore these "wilder" places and discover what makes them so special, from tiny arctic alpine flowers or mosses (which have survived since the last ice age) and the animals dependant on that environment, to the geological, natural and human impacts that have shaped the landscape. It also allows them to experience space, calm or excitement through being in touch with nature. The uplands have much to offer with a variety of landscapes and geology, and great places to increase understanding of hill farming, tourist access issues, natural cycles, food chains, map work or the impacts of global warming. Children can help to conserve and protect this landscape through hands-on work, monitoring the environment through the seasons, and making interpretation materials available to share with other students, parents and the community.

The Hay Meadows Project

This project was conceived in 2007 by Flora and Natural England to look at the importance of hay meadows. Since the Second World War, over 90% of hay meadows have been lost, yet they support a rich diversity of insects and animals as well as being culturally and historically important. We invited junior pupils from three primary schools based in North West Cumbria to take part: Eaglesfield Paddle CE Primary and Lorton Primary in Cockermouth, and Lamplugh CE Primary in Frizington. The schools are close to a small collection of hay meadows called High Lees, a National Nature Reserve. At the Reserve, the children engaged in a variety of activities including basic identification (including comparison with an intensively managed modern site), listening activities, and a hay meadows food chain game.

Mini hay meadows at school

Back at school, children researched the background to hay meadows and produced posters and leaflets based on their learning. Interested schools will sow seeds gathered locally on prepared sites in their school grounds to help grow a mini meadow with support from parents, governors and experts; unfortunately this was delayed last year due to summer weather badly affecting the harvesting.

Orton Primary's two-year project at Little Asby Common

We have been working with Orton Primary School for the last 2 years on a nearby site at Little Asby Common, part of the Orton Fells on carboniferous



© Flora of the Fells

Developing sensory skills

limestone laid down 350 million years ago and later shaped by the ice age. It includes areas of limestone pavement providing great microclimates in the grikes such as limestone fern or hart's tongue fern enabling them to survive the extremes of weather and grazing. Nearby tormentil, quaking grass, rock rose and bird's-eye primrose can be found as well as skylarks, curlew and oystercatchers.

Learning about 'bields' and the 'Dowly Tree'

In the first year we took the children on site to explore and find out more about this fascinating area and their findings covered several areas of the curriculum. We focused on a combination of wildlife, including plant identification, with a comparison of contrasting areas. Historical investigations looked at the impact of animals grazing the Common and the children discovered how 'bields' were used as sheep shelters. More language enrichment came from listening to local stories and from curious names such as the 'Dowly' Tree ('dowly' is a northern word for miserable or lonely). We followed up the session in school with a summary and a carousel-style of workshops based on habitats, sheep and other grazers, microscope skills, art, and writing based on their experiences – a real cross-curricular experience.

Little Asby Common through the seasons

Last year, in 2008, the junior children, teachers and parents visited the site twice in March and again in June to compare Little Asby Common in different



© Flora of the Fells

The limestone formations are so unusual that they readily lend themselves to mosaic-making

seasons. We introduced a mini-landscape assessment of both the Common and the view from school grounds, and developed their plant identification, sensory skills and general knowledge of the site. Site visits were followed by an afternoon session to develop the learning from these visits, culminating in groups producing displays and presentations.

The children's limestone pavement

The infants (key stage 1 pupils) and their teachers visited the site in June with the year 3s (now quite experienced and helping their younger counterparts) along with Flora staff and a local artist and potter. The main focus was to explore parts of the site and to find out who and what lived there. They were introduced to habitats, explored the geology through rocks and fossils and the mini world of clints and grikes, took part in sensory games, collected materials and made drawings and clay imprints from the limestone pavement. Back in school everyone got a chance to work with the artist to produce a piece of ceramic limestone pavement (complete with plants, snails etc) as well as producing a mini plan, a short piece of writing or poem, and a variety of art work.

More information —
Contact Annie Masson, Flora of the Fells Education and Interpretation Officer:
annie-masson@fld.org.uk, 01539 720788,
or via the website:
www.floraofthefells.com
(Website due to be updated early in 2009.)



Flora of the Fells Project

Future developments with schools include:

- Inset sessions for teachers taking children on visits to farms and strategies for using of farms as an outdoor classroom;
- Local school-based inset training on activities for use on site visits and in the school grounds
- Developing a talk and workshop for use in schools / outside based on a recent FLD publication, "Mission Possible – Can we save Cumbria from Climate Change"
- Case studies and networking with participating schools

© Flora of the Fells



'In touch with nature': pupil from Orton Primary School

Climate Change in Cumbria

A new publication from the Flora of the Fells Project

© Stuart Holmes
www.sharpedgeimages.co.uk



The Floods at Keswick in 2005

The new publication from the Flora of the Fells Project explores what climate change will mean closer to home in Cumbria, and in particular in the mountain areas of the Lake District and North Pennines. These areas are a playground for millions and underpin tourism businesses and rural livelihoods in the county. The repercussions are hard to predict. Cumbria may not suffer as much as some parts of the world from the headline-grabbing horrors of the impending climate storm: temperature rises are predicted to be moderate and the threats from the implications of sea-level rise and changes in rainfall patterns less marked than elsewhere.

Does that mean that we don't need to worry about changing our lives to reduce its impacts? Not at all. Our mountains are important natural systems, offering clean water, protecting soil and storing vital carbon in their trees and peat, as well as being

strongholds for wildlife and places for us to enjoy. They are also sensitive environments, where even small changes can have a big impact. Being more susceptible to change, they offer an early warning system of global warming. The fells of the Lake District and North Pennines already show evidence of the coming of a warmer and wetter world, changes putting these crucial resources at risk.

Furthermore, Cumbria and the Lake District are not immune from what is happening elsewhere. The hot dry summers in the south of England could bring additional demands for water from the reservoir-rich north. Or maybe the searing heat of the Mediterranean summer, and rising costs of travelling, will draw more tourists to the temperate climes of the Lake District. Some visitors may like it so much that they choose to stay permanently, putting further pressure on housing and local services. And perhaps the inhospitable nature of the Africa, Asia or Australia of the future may create a new wave of environmental migrants to our shores seeking asylum in our green and pleasant land.

Moreover we have responsibility to those countries at greater risk from climate change. The average Briton is responsible for 30 times more greenhouse gas emissions than his counterpart in Bangladesh, yet it is Bangladesh which is slowly sinking as sea levels rise.

So there is no room for complacency and inaction. Our mission, should we choose to accept it, is to do what we can where we can to lessen the impact of global warming and give nature a fighting chance of adapting to the changing world which we have made. It is not only the landscapes of the Lake District or the North Pennines which are at stake, for the vibrations of a carbon footprint placed in Cumbria reverberate around the world.

This article is taken from 'Mission Possible - Can We Save Cumbria from the Impact of Climate Change?' by Martin Varley. It can be downloaded from:

www.floraofthefells.com

The Future for trees in Cumbria

In the future we may need to get used to the types of trees which make up our traditional woodlands changing. Certain species which we have long treated as being 'native' may not be able to adapt to the new conditions and associated plants and wildlife will be affected. We will need to look again at how we see woodlands.

Silver Birch — Climate change will affect upland woodlands most. These woods, typically found in the Lake District, may be less common in the future

Beech — Not normally thought of as a Cumbrian native, beech trees may become a more common sight

Ash — A later budding tree, the ash may lose out in competition with earlier budding trees like the oak

Horse chestnut — Common in Europe, the horse chestnut may spread more widely as the UK's climate becomes more continental

THE FOOTPRINT - A NEW CLASSROOM EXPERIENCE

Class visit to the National Trust's new Eco-Building, Windermere

Bernie Fidler, KS2 teacher, St. Mary's Primary School, Ulverston, Cumbria

"The Footprint" is the name of the new eco-building recently constructed by the National Trust, demonstrating that they don't just preserve old buildings but are at the forefront of building technologies to conserve our future. Hidden away in St Catherine's Wood on the edge of Windermere Town, it is accessible by public transport -both bus and train. Those of you who read the article about Bromley Environmental Education Centre in our previous journal (vol. 89 Autumn 2008) will already have a clear idea of the design and educational potential of "The Footprint". It is built entirely of reclaimed and recycled materials using straw bales, old car tyres, sheep's wool and locally sourced timber and is designed to make the most use of light and space. – Ed.



© Scott Mackie

Class visit to the National Trust's new eco-building

My class was fortunate to be one of the first to visit after its formal opening and spent a busy and memorable few hours there. The first impression is one of great space and elegance. It is referred to as a classroom and is used as one but the learning comes from examining its structure both inside and out and for that the class was split into two groups with clue cards and a tutor to aid their observations. There followed a walk through the woodland into what had been the old sheltered kitchen gardens, for St Catherine's had been a large Victorian house, burnt down in mysterious circumstances! Collecting and observation tasks followed as well, seeking for answers as to why the house was burnt down.

Our woodland classroom

After a short lunch break and a discussion on our human needs for shelter, the children had one of those luxurious woodland opportunities of endeavouring to construct their own shelters from natural

materials that nature had already discarded. Sometimes I think you can discover more of children's abilities and group dynamics in such sessions than in many hours of classroom observation. Time passed all too quickly just allowing for a reflection on some of the many discoveries we had made in and around this really special classroom of the future. If only.....!

Inspiration for 'green living' back at school

For our school the visit gave added impetus to our own garden and allotment club activities culminating in a very successful first season of growing our own fruit and vegetables. The National Trust rightly feel that the project gets to the heart of sustainability and the environment in a very effective hands on way, inspiring green living, whilst having fun in the outdoors and in the *Footprint* itself.

More information —
kellysproston@nationaltrust.org.uk

VISITING THE GUILDHALL MUSEUM, CARLISLE

JULIE WOODING, Learning & Access Manager, Tullie House Museum and Art Gallery, and
JULIE WILSON, Year 6 teacher, Stanwix Primary School, Carlisle, Cumbria

A resource for local studies

Surrounded by retail outlets and coffee bars, a wonderful mediaeval timber-framed building is hidden in the middle of the city of Carlisle. Built in the late 14th Century, the Guildhall is currently owned by the City Council but managed by Tullie House Museum and Art Gallery. Used extensively by schools, the Guildhall is an excellent stimulus for imaginative thinking and supports the primary curriculum, as well as the DCSF's 'Learning Outside the Classroom.'

Setting the local scene

A visit to the Guildhall always begins outside the building. Museum staff are keen for children to look more closely at the exterior. Direct comparisons are discussed with the nearby Castle and Cathedral before the students are shown the neighbouring street and asked to visualise the scene – the hustle and bustle, the smell, the dark street with the overhanging buildings. Unfortunately only the Guildhall remains from this period, but using the building in this way encourages children to understand what life was like. They tend to be very "impressed" to learn about the disposal of human waste by throwing it out of the window!

Exploring the building's structure

Once the local scene has been set, the class are taken into the Guildhall to explore the building. Children are always fascinated with the uneven sloping floor. The guides encourage them to study the structure, the wooden beams and pegs that hold it together and the wattle and daub walls. An interior display allows the class to get a closer look at the fabric of the building – the beams interwoven with sticks then filled with mud, straw, horse hair and, of course, cow dung!

Understanding a past environment: Carlisle in Tudor times

Part of every good museum visit is an object handling session and a visit to the Guildhall is no exception. These sessions allow the children a greater understanding of the past and how people lived. Discussion on how the objects were used, constructed and what it tells us about the past form a core part of the visit, encouraging both speaking and listening skills. Our pupils at Stanwix always



enjoy the opportunity, especially the "dressing-up" session. The theme of our study of life in Tudor times is the difference between rich and poor and we can also make some thought-provoking comparisons with modern-day clothing and the children's own experiences.

Within walking distance of the school

We are fortunate that the Guildhall is just a twenty-minute walk from school, the service is very good value and the risk assessment side is dealt with thoroughly. Similarly we make good use of Tullie House's collections and displays. Like many schools, costs, safety issues and the pressures on time are constant concerns to the extent that it has needed the Learning Outside the Classroom Manifesto to restate the benefits of "first hand experiences" out in the environment: As it clearly states:

"Every young person should experience the world beyond the classroom as an essential part of learning and personal development, whatever their age, ability or circumstances. These, often the most memorable learning experiences, help us to make sense of the world around us by making links between feelings and learning...."

They stay with us into adulthood and affect our behaviour, lifestyle and work...and influence the values and decisions we make."

Many school children return to visit the Guildhall with their families. This timber-framed building is definitely a great asset to the schools of Cumbria and beyond.

Further information —
From the Museum:
e: enquiries@tulliehouse.co.uk
t: 01228 618718



Recycling is NOT the Answer!

Reducing the waste produced by a school's everyday activities helps to conserve the earth's resources. Yet it is often difficult for schools to access appropriate recycling services.

Martin Allman, Waste Prevention Manager at Cumbria County Council, investigates and suggests a possible way forward.

Since 2006, the Waste Management Team at Cumbria County Council has worked with schools to help them to become more environmentally friendly in terms of the waste they produce and how this is managed. In addition to giving direct tuition of children, INSET sessions for teachers, and a number of recycling-related promotions and competitions for schools, the Cumbria Strategic Waste Partnership (CSWP) has been successful in providing some level of recycling to over half the schools in the county, even if only for paper. Whilst many schools are able to recycle more through a combination of local authority, private companies and Third sector organisations to be truly effective in the management of waste we all need to be "working smarter".

Regulations

Much of the problem associated with the recycling of schools' waste is how the stuff itself is classified under the government's waste management regulations; "household waste for which a charge for collection may be made", or so-called Schedule 2 waste. This often means that the provision of recycling services to schools comes at a cost. Although the costs for recycling services can be offset by the savings made for the disposal of the non-recyclable waste (the value of offsetting is likely to increase as waste disposal charges rise) no amount of recycling will make a school the beacon of sustainability it can be.

Tools to help

The smartest tool in the waste management toolbox is the Waste Management Hierarchy – the "Swiss Army Knife of Sustainability" – is an order of priority actions which produce triple bottom line benefits: i) for the bank balance (ii) for the Community, and (iii) for the Environment. The 'hierarchy' is described below:



'SUSTAINABLE SCHOOLS': PURCHASING AND WASTE

'Purchasing and Waste' is one of the 8 'Doorways' of the government's Sustainable Schools Strategy, launched in November 2006. By the year 2020, the government would like all schools to be 'models of sustainable procurement, using goods and services of high environmental and ethical standards from local sources where practicable and increasing value for money by reusing, repairing and recycling as many goods as possible.'

New NAAE Publication

NAAE is updating its 1994 publication 'Positive Action' which helps schools to learn about environmental issues and take steps to become more environmentally friendly. The updated version, to be published later this year, will link the original headings, such as Energy, Water, School Grounds, Food and Drink, Waste, etc. to the relevant 'doorways', and include case studies from schools, and from local authorities which support schools, such as the Waste Management Team of Cumbria CC, mentioned above.

Reduce

The first priority in the hierarchy is to Reduce Waste, so there is less to deal with in the first place. Schools can take very simple measures to achieve significant waste reductions:

- control portion sizes of school meals,
- cut and share break-time fruit,
- ensure waste from packed lunches is sent home with the children,
- use both sides of the paper
- set printers and copiers for double-sided as a default.

Managing the school's supply chain is also important here – you buy the product, not the packaging, so have your suppliers take the packaging back! Also, watch what you vend. Whilst vending machines can generate income, much of this is lost to increased waste charges – especially when it comes to plastic bottles. Issue the children with reusable sports bottles and ban single use bottles.

Reuse

The next priority is to Reuse Waste. Having scrap boxes for partially used paper and card in each classroom is a start – this can then be used for rough work, wet break play, art, or even just for making paper planes! IT equipment and furniture can be donated to charities or other users and advertised free of charge on the recycleforcumbria.org website. Catering jars and tins can be used for storage.

Recycle

Next, waste should be recycled, but this presents its own challenges. For every item a Local Authority collects for recycling, it has to find a reprocessor, and that reprocessor has to find a market for each material. Capacity in Cumbria for both reprocessing and the onward markets is less developed than say in Manchester or London.

School purchasing policy

So ask yourself, “what recycled products does the school buy?” Schools budgets are an important tool in developing the UK's capacity to reprocess its waste by stimulating the market. The Cumbria Buyers Guide contains hundreds of products that are recycled and are specially highlighted with a green loop. Making the shift from virgin to recycled paper would be one simple measure a school can take.

Free compost bins for schools

Schools too can help themselves and in Cumbria every school is entitled to free compost bins which could recycle as much as 30% of the school's waste including fruit and vegetables, paper and card. Composting at start has great links to the curriculum – ever been on a bug hunt? If your school has not received its free composters contact Cumbria County Council.

The last resort

Waste that cannot be reduced, reused or recycled will either be incinerated (but not in Cumbria – we have a much more innovative solution proposed – mechanical/biological treatment – see the recycleforcumbria.org website) or sent to landfill – which simply cannot continue even if only for economic reasons. Under the Landfill Allowance Trading Scheme and to prevent carbon emissions the County Council is limited on how much waste it can bury. A breach of the limit means a substantial penalty of £150 per tonne. The CSWP, by reducing the amount it sends to landfill via “The 3Rs” has avoided fines so far but the “allowance” reduces each year meaning it has to apply the 3Rs ever more rigorously. If fines (and these could be in the millions) are ever applied there would be less money available for other services – including schools.

Junk in – junk out!

So, recycling is not a panacea, magic bullet, nor a cure-all. In much the same way a catalytic converter traps some vehicle exhaust emissions, recycling traps some of our waste. Ideally our cars would run on cleaner fuels – so then our schools need to run on cleaner products. If “we are what we eat” then our schools “are what we buy”.

A wrap around solution

Clearly then, there is a certain amount local authorities can do – expert talks from officers, supplying free compost units and working with the children to set up 3Rs schemes across the school. In Cumbria this year we have an expanded team of officers to work with schools. We will also help negotiate with your suppliers and the CSWP is looking how best to approach Schedule 2 waste (which also includes waste from residential homes, student accommodation and certain hospital waste).

Self help

But self help is a huge part of the solution. In the same way as we get children to take ownership of their health and learning then the education sector, whether primary, secondary or tertiary, needs to take ownership of their waste and move higher up the Waste Management hierarchy.

Further information —

Martin Allman has been involved in environmental education for over 10 years and now leads Cumbria County Council's Waste Prevention Team. Cumbrian schools can arrange a visit from the team by contacting Martin on 01228 227647.

Karly Dodd at Heron Hill School has run workshops with Martin and can also offer advice from the school's perspective.

Contact: admin@heronhill.cumbria.sch.uk, or tel: 01539 773639

ENVIRONMENTAL AWARENESS THROUGH ADVENTURE



GEOFF COOPER, *Low Bank Ground O.E. Centre (Wigan LEA), Coniston*

A unique forum

How many adventurers are aware of the delicate ecological balance and beauty of the environment through which they journey? Does the climber know or care about the mountain plants clinging to the steep rock faces? Do canoeists relate to the world of water birds and otters as they travel down rivers? Do the field study groups sampling vegetation and measuring river channels develop any feelings for the natural world? How many of us accept responsibility for the environment and are prepared to take steps towards its conservation?

The Adventure and Environmental Awareness Group

was established in 1984 following a landmark conference at Brockhole, the Lake District National Park Centre. It is made up of a wide range of outdoor enthusiasts and representatives of national and regional environmental and recreation interests (including NAEF). The Group's aim is: “to encourage awareness, understanding and concern for the natural environment amongst those involved with

adventure, education and recreation.” There is a belief that direct experience in the outdoors encourages an interest in conservation; at the same time, greater awareness of the richness and interrelatedness of the environment enhances the outdoor experience.

Achievements

The AEA Group has acted as a catalyst in bringing diverse interests together and raising awareness. It has organised a series of successful conferences and workshops on climbing, canoeing, wild camping and large scale events in the environment. A conference on mountain biking brought together bikers and those involved in land management and conservation. It produced the first report in Britain on “Mountain Biking and the Environment” proposing guidelines for users and encouraging management agreements.

Environmental Charter for Outdoor Users

Other reports have led to codes of good practice. An example is the “Environmental Charter for Outdoor Users in the Lake District” endorsed by the Lake District National Park Authority, the National Trust and the Field Studies Council. It suggests that (how) leaders can take an active role in caring for the environment. ➤➤

© Geoff Cooper



Children looking out over Coniston Water

Current issues for the Group

Over the last few years the Group has campaigned for the importance of adventure to be recognised in our risk-averse culture. It has tried to broaden horizons amongst outdoor leaders by promoting global awareness and more sustainable practices both for individuals and organisations. The most recent

conference explored the values we impart through outdoor education and questioned whether these challenge or reinforce the dominant commercial values of society.

More information —
See the group's website: www.aea-uk.org

Environmental Charter for Outdoor Users

- Promoting an awareness and respect for the natural environment and a responsible attitude to all outdoor activities in the Lake District.
- Introducing groups to the concept of National Parks and issues facing them.
- Giving groups an understanding of how the landscape, plants, animals and humans are interrelated.
- Recognising the importance and fragility of habitats.
- Treading lightly to cause as little disturbance as possible.
- Recognising that all land is special and respecting rights of way, local byelaws and access agreements.
- Placing any temporary equipment so as to minimise disturbance.
- Working with small groups, encouraging them to travel quietly and respect the interests of people who live and work in the countryside.
- Minimising the use of transport to sites.
- Co-operating with the National Park Authority and other conservation bodies and consulting with them on the use and management of sites.
- Promoting good environmental practice in their organisation and encouraging groups to take an active role in caring for the environment and adopting more sustainable practices.

CHILDREN AND NATURE IN THE CITY

Henricus Peters, London teacher and NAEF Executive Primary School Representative

Changing schools, changing scene

How do children relate and interact with their natural and built environments? What opportunities are we, schools, and other groups, providing children with to help their encounters to be a positive and healthy – even enjoyable – experience? My recent move from my very first school of St John's, Stanmore, in Harrow, to Woolmore School, Tower Hamlets, has re-kindled these fundamental questions and how we might approach these issues.

My first school is favoured by a grassy football pitch edged by native trees and a wild corner, within walking distance of The Corporation of London's Bentley Priory National Nature Reserve, including a deer park, ponds and woodland, and is a very short bus ride away from the Thames Valley Education Centre at Clay Lane. Though part of north London, it is very green suburban. The Tower Hamlets school, by contrast, is set in the very urban Poplar district, the school sited across the road from several high-rise estates. 'The city', with Canary Wharf's gleaming towers, marks out the skyline.

Natural Spaces

To say there are no trees in Poplar would be grossly unfair – and incorrect. All Saints Church and the neighbouring estates en route to the school have trees and green spaces; the school itself has a green corner which is being developed. The area however has an 'urban' feel. How then do the children come to connect with nature? Opportunities are constantly being investigated and developed, both within and outside the school. Science, geography and maths lessons are held using all parts of the school grounds and neighbouring streets. Depending on the year group, classes undertake outings to the local Isle of Dogs Recycling Centre (KS2), Science Museum (KS2), Natural History Museum (KS1), London Zoo (KS1), and various parks/recreation grounds. Before school, there's a Breakfast Club with a real community atmosphere and a keep fit club which goes outside if the weather permits; after school, there's a free gardening and healthy eating club, giving hands-on experience of plants, animals, food, the local and wider worlds of both children and adults. To argue, as one might, that Tower Hamlets children have less than Harrow, because it is not 'visible' or close at hand, would again be flawed. Within easy travel distance of 'the city' are the Thames River, its Barrier, and Maritime Museum showcasing the story of humans and the environment, and the hands-on experiences of real nature from a disused space at Rainham Marshes.

Woolmore School, in Tower Hamlets, showing high rise flats and green corner, used by children for lessons and at playtimes, to the far right of the picture



© Henricus Peters

Children Losing Touch with Nature?

I know a Londoner who has never set foot inside the British Museum; she has not had the desire or need. Creating this desire or need – appetite even – to connect with the natural world is something crucial to develop with, and for, children at an early age. A survey by the BBC's *Wildlife* magazine² and *The Independent*³ asked 700 children to identify pictured flora and fauna, and found their responses much lower than expected or hoped for. Children also preferred to see friends or play on their computer than go for a walk or play outdoors or go to the countryside. In the United States, they call it 'nature deficit disorder'; I call it children missing out. Through the Learning Outside the Classroom⁴ agenda and NAEF's own campaign to 'put the environment at the heart of the curriculum' we can continue to promote awareness, and not just to those with access to it.

References:

- <http://www.everychildmatters.gov.uk/>
- Are Children Losing Touch With The Wild? BBC Wildlife Magazine, August 2008. <http://www.bbcwildlifemagazine.com/>
- Attenborough alarmed as children are left flummoxed by test on the natural world, Sarah Cassidy, Education Correspondent, The Independent, Friday, 1 August 2008 www.independent.co.uk/.../attenborough-alarmed-as-children-are-left-flummoxed-by-test-on-the-natural-world-882624
- Learning Outside the Classroom Manifesto: <http://www.teachernet.gov.uk/teachingandlearning/resource-materials/outsideclassroom/>

What do you think? Contact me at: Henricus.peters@virgon.net.

THE BRIGHTON & HOVE CLIMATE CHANGE WORKSHOP

3rd October 2008; Brighton & Hove High School, Junior Department

The theme of this Climate change workshop was about schools becoming more environmentally friendly. Teachers and pupils from our school attended as well as from lots of other schools in the area. We heard how Brighton & Hove High School senior pupils had planted trees to minimise pollution and had set up recycling bins. They wore clothes made from recycled plastic bags and bin liners. Pupils from Middle Street School shared all their ideas about saving energy like turning off lights in school. We loved their eco-friendly café!

A man called Daniel Viliesid gave us an inspiring talk about One Planet Living, and we heard about an exciting new Eco building project in Brighton, and how to improve the ways we recycle our waste. It made me understand how if each one of us became more eco friendly on a local basis it would have a huge impact globally.

Later we were able to put questions to representatives from our local council about how the city is being run, and they explained different ways of making it sustainable for the future. It made us feel that we could be part decision making, and we also learnt



Students show off their goodie bags while playing the 'cut the carbon' board game

more facts and information about what is going on near us. We all enjoyed the 'cut the carbon' board game too, because it showed us how to be eco friendly in our daily lives.

We all got a goody bag full of things like eco friendly and recycled stuff we can use in school. The bag smelt like parsley but I think it was recycled from plastic bottles. We all had some delicious food, and everyone went back to their own school to report back about what we had learnt. I really loved meeting children from other schools and it was lovely to hear their ideas.

This year our school is aiming for the Green Eco Schools flag, having already been awarded the bronze and silver awards. This workshop has helped us on our way!

By Emily Jacobs, Year Six, Brighton and Hove High School

LAUNCH OF THE "SUSTAINABILITY & ENVIRONMENTAL EDUCATION" ORGANISATION

20th November 2008; House of Commons, London

The launch, hosted by Barry Sheerman MP, was essentially a series of short congratulatory speeches marking the end of a difficult period for the Council for Environmental Education (CEE) and its rebirth and the opportunities for renewed growth. At a time when Education for Sustainability is rising up the political agenda and cross curricular teaching, including Learning Outside the Classroom is coming back in favour, a reborn organisation that promises to further these aims in schools is welcome. NAEF is one of the few member organisations supporting teachers and students – i.e. the

"users" of environmental provision supplied by the various NGOs – and we look forward to supporting and working with SEEd in that capacity.

As an umbrella organisation, CEE grew to be a far bigger organisation than NAEF had ever been so its fall when funding was withdrawn was far greater. Our organisation lost Defra funding back in 1999 and has survived almost ten years through the sheer dedication of its members. That CEE has now re-emerged as SEEd celebrates a similar dedication by a core of its members that it should be there to meet an essential need.

Just one concern: although the new title reflects the role of Sustainability in Education, the word "environment" was overlooked in all the speeches. An oversight, we hope, for it was implicit in the examples given. Without developing an understanding of and a love for the environment it is harder to encourage a desire to make it sustainable. Sustainability Education needs Environmental Education.

Norman Farmer, David Fellows & Alona Sheridan, NAEF Executive

A WORLD WITHOUT BEES

Alison Benjamin & Brian McCallum

ISBN 978-0852650929

Guardian Books

www.guardianbooks.co.uk

304 pp, Price £9.99

The mystery of the vanishing western honeybee has led to fears that we are dangerously out of touch with nature. This important and compelling book by journalist Alison Benjamin and her partner Brian McCallum, both fledgling beekeepers, dramatically examines the environmental, political and economic forces shaping the honeybee's fragile existence – and why the world can't survive without it.

The book deals with the bewildering mass deaths of honeybees all around the world. So far, no good explanations have been offered that everyone agrees with. The two authors have interviewed researchers who blame pesticides, fungicides, the Varroa mite, climate change, new viruses, and lack of genetic diversity or even mobile phones.

The book then describes the cataclysmic effects of a world without honeybees. If you think only the honey would disappear, think again! Many important crops are dependent on honeybees for pollination. A world without bees would be a world without fruit, vegetables, juice or clothes (from cotton). Many crops pollinated by bees are used as cattle feed, so a world without bees could also be a world without meat!

Meanwhile, habitat change has driven bumblebees and other pollinating insects to near-extinction in some areas.

"A World Without Bees" poses more questions than it can answer meaningfully. These questions must be answered soon if catastrophe is to be avoided, or will the bees evolve and solve the problem for us? However, the book is well-researched and carefully written; "A World without Bees" is part tribute to the honeybee, and part detective story exploring why the global bee population is diminishing and part call-to-arms to ensure their survival.

Andy Cadman, recently retired biology teacher

THE GREEN SCHOOL:

How your school can achieve and promote sustainability

Stan Terry

ISBN 978-0948543470

Adamson Publishing Ltd

www.adamsonbooks.com

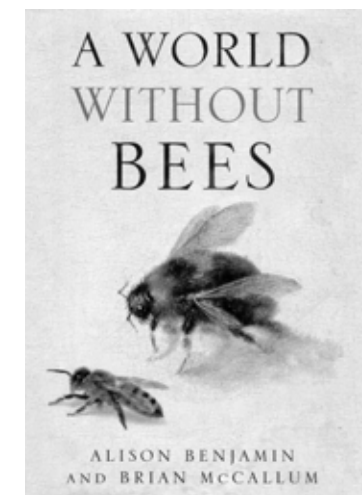
152 pp, Price £9.95

An attractive cover with a simple message. Inside this is a serious book. No photographs or even line drawings, although there are a few diagrams, just straightforward instructions on how to achieve what it says on the cover.

Chapter one answers the questions, why sustainability and why schools. Chapter two is Formative Evaluation, sensibly checking the reader's knowledge and understanding of sustainability in a set of 20 multiple choice questions (answers provided afterwards!), before embarking on the "lesson". In the third chapter we move on to straightforward measures to cut power and water consumption and waste management. Full of good advice and probably the odd idea that even experienced waste watchers may not have thought of, these 22 pages are possibly the most useful in the book. Chapter four is of interest to anyone whose school might be rebuilt or substantially re-modelled and chapter five moves on to suggest how sustainability might be embedded in school life. The following chapter gives detailed case studies of 10 schools. The final two chapters set out clearly the curricular opportunities for teaching sustainability across all four key stages and a number of support agencies offering guidance.

A sensible, well written "toolkit" for all in schools, especially headteachers, governors and curriculum leaders.

David Fellows, NAEF Executive



Earthly Treasure –

A popup book about minerals

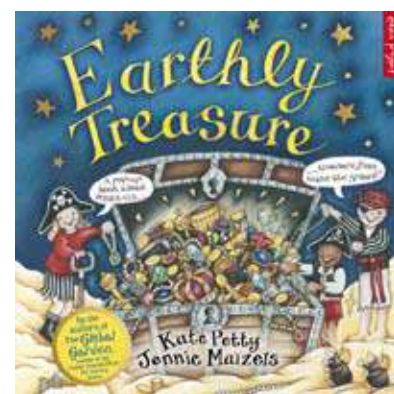
Written by **Kate Petty** and illustrated by **Jennie Maizels**

ISBN 978-1905811021

Published by Random House www.rbooks.co.uk with

Eden Project-Rio Tinto Partnership www.edenproject.com

12 pp (full colour pop-up pages), Price £12.99



Following on from the success of *The Global Garden*, also in conjunction with Eden Project, the two authors have combined talents to look ‘under the ground’. And, for the most part, the reader will not be disappointed with their discoveries.

The first pop-up house – ‘pull the tab to make the minerals disappear’ – is fascinating. When the tab is pulled it all but disintegrates before your eyes! Despite my background in earth sciences – mainly water and soils – I agree with the book’s synopsis that ‘Both children and adults are amazed to discover how many of the things we use have been taken from the ground beneath our feet. The authors cleverly define minerals – a tricky feat – by showing what contains them – most things we have in and around buildings!

But there are parts of the books where style – or the mechanics of the pop-ups – seem to have taken over from accuracy of content. A wheel of objects for sorting animal, vegetable and mineral has no checklist. A river alongside, labelled as illustrating ‘wind and water erosion’, looks more like a glacier! An adjacent pop-up showing where fossils, oil and coal come from – bones, the sea and trees – is far clearer.

As a curriculum resource, this book supports KS1 Science (Year 2), KS2 Science and Geography (Years 3 and 4) – but select the relevant page first – it would perform well as a superb read-aloud, but perhaps small groups would be needed to access the pop-ups.

Henricus Peters, *Primary School Teacher and NAEF Executive*

ADVENTURES IN NATURE:

(Projects for 3-6 year olds)

Translated from the Italian ‘Avventure in natura’

Ivana Micheli & edited by **Nicola Pay**

ISBN 978-1901589788

Published by Children in Scotland, 2008

email: publications@childreninscotland.org.uk

120 pp (40 full page colour photos), Price £16.99



In the book’s Foreword, Professor Colwyn Trevarthen (University of Edinburgh) states that ‘*direct contact with the natural environment is hugely important for children’s development, and how they experience it.*’ What follows is how nursery school teachers in northern Italy have focused on using the local natural environment to develop their children’s confidence and skills of communication and cooperation. Nursery teachers in Verona undertake training to take children on regular outings to experience simple discoveries outdoors, starting during the child’s first year at the nursery. For example, 3 year olds explore woodlands, building dens and setting up a picnic area; older children (5-7 year olds) use maps and go orienteering in the woods, or a group of expert mountain climbers may take them out climbing with ropes in the hills nearby. ‘Learning paths’ are followed from the earliest months at the nursery which prepare the youngsters for further explorations throughout the year, whether in the school garden, the local woodland, or even (for 5 year olds) rafting on the river. The children are included in all stages of planning and recording their outdoor adventures, and there is a detailed description of how some of them overcame their fear of the dark before embarking on an expedition along underground passages and caves. In the concluding chapter, Luigina Mortari argues that over the years, ‘*the theory of education has seen the devaluing of sensory experiences*’ but that ‘*environmental education draws attention to the benefits that can be gained from the valorisation and direct experience with nature.*’ She quotes from Henry D. Thoreau, the 19th century American scientist/naturalist/philosopher who said “*a scientist is he who smells, touches, observes, listens and hears better than any other man.*” Teachers and practitioners in early years settings will find this book an inspirational guide to set out with their children and follow their own paths of adventure in the great outdoors.

Sue Fenoughty, *NAEF, ex-advisory teacher for environmental education, Birmingham CC*



WEB WATCH 10



AREAS OF OUTSTANDING NATURAL BEAUTY (2)

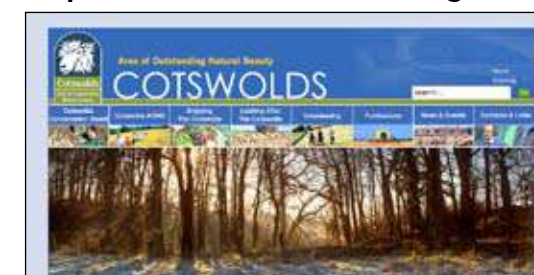
Compiled by **Henricus Peters**, *NAEF Executive*

Continuing the theme of Learning Outside the Classroom from the last edition, I here investigate the web-based resources from more of the country’s Areas of Outstanding Natural Beauty.

The Areas

Cotswolds AONB

<http://www.cotswoldsaonb.org.uk>



Billed as ‘one of the most beautiful areas of England’ (easy driving distance of Cheltenham, Gloucester, Oxford and Cirencester). The site has a striking interactive map but many hidden features. Under ‘Enjoying’ there are 14 walks factsheets to download. The ‘Activities’ include cycling, horse riding and walking, all of which have good links. ‘Transport’ has a downloadable guide for ‘Explore the Cotswolds by Public Transport’. ‘Attractions’ lists gardens, historic houses, prehistoric sites, museums, nature reserves and country parks, railways and boat trips and more. ‘Accommodation’ has good links to the region’s towns and cities. ‘Local Produce’ includes a link to a foodie website: <http://www.tasteofthewest.co.uk/>.

‘Quantum’, the 3D cartoon stylised sheep found at interactive kiosks in Gloucestershire, is wonderful. Focused on 7-11 year olds (KS2), the programme aims to help Quantum rescue a lost lamb from four periods in history - the Celtic, Roman, Medieval or Victorian eras, encountering flora and fauna of the past and present as he goes, so the heroic sheep finds out about human impact. Though not interactive, the resource pack is downloadable.

Dorset AONB

<http://www.dorsetaonb.org.uk/>

Dorset is known as one of Britain’s ‘finest coastlines’ – the AONB covers some 44 per cent of it – and it is also home to the relatively new Jurassic Coast World Heritage Site at <http://www.jurassiccoast.com/> (note: please enquire before visiting the actual heritage site). Children’s Discovery Zone has a useful (if un-colourful) ‘Timeline’ recording Dorset’s changing countryside from dinosaur-

infested swamps to a land of stone circles and castles; a ‘Treasure Hunt’ — an online or printable quiz (answers in Discovery Zone) — and ‘Map game’ which takes time to download but is worth it (all aimed at KS2); a ‘Children’s Charter’ and Feedback Section states the website will ‘make a ‘cool countryside kids for action’ poster on the Discovery Zone website!

Publications include downloadable resources including background fact files on wildlife, trees, history on your doorstep. Other good links include English Heritage <http://www.english-heritage.org.uk/>, National Trust <http://www.nationaltrust.org.uk/> and Wessex Archaeology <http://www.wessexarch.co.uk/>.

Darwin in 2009

<http://www.darwin200.org/>



A nationwide programme of events celebrating Charles Darwin’s scientific ideas, and their impact, around his hundredth birthday on 12th February 2009. Links to: <http://www.darwinforum.org.uk/> the Charles Darwin Trust; <http://www.nhm.ac.uk/about-us/darwin-centre/>, the Natural History Museum (London)’s state-of-the-art research and collections; <http://www.amnh.org/education/resources/rfl/web/darwinguide/> organized by the American Museum of Natural History, New York.

Details of Learning Outside the Classroom Manifesto: <http://www.teachernet.gov.uk/teachingandlearning/resourcematerials/outsideclassroom/>

For ‘live’ links, see the website at:

www.naef.org.uk

To send your favourites, e-mail:

henricus.peters@virgin.net

National Association for Environmental Education (UK)

University of Wolverhampton, Walsall Campus, Gorway Road, Walsall, WS1 3BD
Tel/Fax: 01922 631200 • e-mail: info@naee.org.uk • Website: www.naee.org.uk

EDUCATION 21

Funding for the distribution of this journal to all Cumbrian schools and libraries has come through the Education 21 group which was set up with County Council support. Education 21 took its title from one of the major international agreements that arose out of the 1992 "Earth Summit" in Rio de Janeiro (the United Nations Conference on Environment and Development). After the summit, Agenda 21 ("a comprehensive programme for global action in all areas of sustainable development") filtered down through national and local government and the Education 21 group in Cumbria was one result. Education 21 members represent a range of Cumbrian organisations. The members share information and expertise and a commitment to supporting sustainable development for people and environments in both formal and informal learning.

Formal meetings are held each half term at venues across the county.



© Simon Bramwell

EDUCATION 21 MEMBERS

CUMBRIA WASTE MANAGEMENT; THE NATIONAL TRUST; LAKE DISTRICT NATIONAL PARK; FOREST SCHOOLS; YOTTENFEWS; CUMBRIA EDEN RIVER TRUST; FORESTRY COMMISSION; EDEN LOCAL AGENDA 21; CUMBRIA DEVELOPMENT EDUCATION CENTRE; NATURAL ENGLAND; ENVIRONMENT CUMBRIA EDUCATION ASSOCIATION; CUMBRIA CC SUSTAINABILITY UNIT; STEM CENTRE; BASSENTHWAITE REFLECTIONS; CUMBRIA WILDLIFE TRUST; CUMBRIA OUTDOORS; UNIVERSITY OF CUMBRIA; WRAP; FRIENDS OF THE LAKE DISTRICT; WEALTH OF WILDLIFE; RHEGED; YPTENC; FIELD STUDIES COUNCIL; CUMBRIA CHILDREN'S SERVICES; HIGH WRAY BASE-CAMP; CUMBRIA CLIMATE CHANGE UNIT; CLEO; SOUTH CUMBRIA RIVERS TRUST

*NAEE is an educational charity, managed by teachers, for teachers of
environmental education everywhere...*

This journal is free to all NAEE members