

# Environmental Education



## Urban Environmental & Sustainability Education





# National Association for Environmental Education (UK)

*NAEE supports a wide range of professional educators to help them improve the quality of their teaching and their students' learning, in relation to environmental and sustainability issues.*

## ALL MEMBERS RECEIVE THESE BENEFITS:

- *Environmental Education* journal 3 times a year
- Resources and information for teachers and educators
- Network with outdoor and environmental education specialists
- Share your ideas via NAEE online, twitter, facebook, LinkedIn, pinterest

For details and rates, visit [naee.org.uk](http://naee.org.uk) or contact [info@naee.org.uk](mailto:info@naee.org.uk)

University students FREE | Join NAEE today!

## NAEE online:

[naee.org.uk](http://naee.org.uk), [twitter.com/naee\\_uk](https://twitter.com/naee_uk), [facebook.com/UKNAEE](https://facebook.com/UKNAEE) for information, news, blogs, curriculum documents, details of school bursaries, feature articles and more.

NAEE is a Charitable Incorporated Organisation [Charity No. 1166502] that is run by its members and volunteers who care passionately about environmental education and education for sustainable development. Our charitable object is to provide a public benefit by advancing environmental education within early years settings, primary and secondary schools, and institutions responsible for teacher education within the UK and elsewhere. Teachers are encouraged into the Executive; for more details contact [info@naee.org.uk](mailto:info@naee.org.uk).

**GROUP COLLABORATIONS:** NAEE greatly values being able to collaborate with organisations that have the same or very similar missions/goals. Some of these groups include:

*United Kingdom:* Archeology Scotland; Association for Science Education; Birmingham Botanical Gardens; British Council for Archaeology; Black Environment Network; Council for Learning Outside the Classroom; Geographical Association; London Environmental Educators' Forum; Martineau Gardens; Mount Pleasant School Farm; National Savers; Rotary International (Britain & Ireland); TIDE~global learning; Women's Environmental Network; Youth Hostel Association.

*Overseas:* Australian Association for Environmental Education; Children and Nature Network USA; Forest and Bird New Zealand; Green Teacher; New Zealand Association for Environmental Education; Nature Club of Pakistan; North American Association for Environmental Education; Roots & Shoots Shanghai.

**WRITE FOR THIS JOURNAL:** If you are a teacher with experience in environmental or outdoor education, especially in pre-school or secondary school, and would be interested in writing an article for our termly *Environmental Education* journal, contact [info@naee.org.uk](mailto:info@naee.org.uk).

## National Association for Environmental Education (NAEE UK)



**President** Professor Justin Dillon

**Vice Presidents** Anne Kenrick MBE, Professor Joy Palmer, Professor Mick Waters

**Life Members** Professor David Bellamy, Norman Farmer

**Trustees** Gabrielle Back, Prof. Justin Dillon, Nina Hatch, Dr Elsa Lee, Dr Morgan Phillips, Prof. William Scott, Tim Baker

**Officers** David Fellows, Sue Fenoughty, Juliette Green, Henricus Peters, Sue Shanks, Alona Sheridan

**Fellows** Ben Ballin, Judy Braus, Margaret Fleming, Dr Melissa Glackin, Henry Greenwood, Sheila Gundry, Lee Jowett [naee.org.uk/about-naee/naee-fellows](http://naee.org.uk/about-naee/naee-fellows)

**Environmental Education | Volume 122, Autumn 2019**

**Editors** Rachel Cook, Julia Minnear, Anna Porch, Emily Harris, Katy Barton (LEEF); Juliette Green (NAEE)

**Proofreader** Alona Sheridan

**Publications Coordinator** Dr Elsa Lee

ISSN 03098451 © NAEE 2019

**NAEE Office** Department of Education, University of Bath, Bath, BA2 7AY. **Office Administrator** Carolina Salter

**Email** [info@naee.org.uk](mailto:info@naee.org.uk) **Web** [naee.org.uk](http://naee.org.uk)

# Contents



## *Environmental Education* Volume 122

<b>4</b>	Editorial	<b>Rachel Cook, Julia Minnear, Anna Porch, Emily Harris &amp; Katy Barton</b>
<b>5</b>	President's Column	<b>Professor Justin Dillon</b>
<b>5</b>	From the Chair	<b>Nina Hatch</b>
<b>6</b>	Learning afloat in London: urban ES education on the Thames	<b>Zaria Greenhill</b>
<b>7</b>	Supporting community-led action through urban ES education	<b>Nicola Simpson</b>
<b>8</b>	Urban ES education as a space for social connections for the residents of Grenfell	<b>Emily Munn</b>
<b>9</b>	Wild in the City: building a bridge back into nature	<b>Beth Collier</b>
<b>10</b>	Developing an ecologically informed sense of place to safeguard tomorrow's urban environment	<b>Edward Jones</b>
<b>11</b>	Mud and MEEN: urban ES education in the post-industrial landscape of Manchester	<b>Raichael Lock</b>
<b>12</b>	Supporting outcomes for young people through the Green Talent Programme	<b>Kate Bygrave</b>
<b>14</b>	Hugh Kenrick Days update: environmental education visits for urban schools	<b>Juliette Green, Marie Dean, Wajeelha Ahmed &amp; Bethany Kirby</b>
<b>16</b>	Young writer: discovering nature in London	<b>Kabir Kaul</b>
<b>17</b>	Green literacy: an environmental superhero	<b>Henricus Peters</b>
<b>18</b>	Launch of London National Park City	<b>Russell Galt</b>
<b>19</b>	Book reviews	<b>Professor William Scott &amp; Kaleigh Atkinson</b>
<b>21</b>	Webwatch	<b>Henricus Peters</b>
<b>22</b>	References	

**Cover images:** ES education on the Thames; image Poppy Flint, Thames 21. Practising woodland living skills; image: Beth Collier, Wild in the City. Podsmead Clearance Team in action; image Suzannah Bird, Gloucestershire Wildlife Trust.

All photos within articles by the author, unless otherwise stated.

***Environmental Education* is the termly journal of the NAEE. Views expressed in the articles of this journal are those of the authors and do not necessarily represent those of NAEE.**

Paper: cover 150gsm Regency Silk paper (FSC mix); pages: 90gsm uncoated recycled paper (FSC recycled)

Printed by Mail & Print, Salisbury



## NAEE Urban ES Education Special Edition

**Editorial Board: Rachel Cook, Julia Minnear,  
Anna Porch, Emily Harris & Katy Barton**



This special edition of *Environmental Education* celebrates the richness of urban Environmental and Sustainability Education (urban ES education), collated by London Environmental Educators' Forum (LEEF) in collaboration with NAEE to celebrate the 30 year anniversary of LEEF.

Formed in 1989, LEEF is a network of Environmental and Sustainability Education practitioners. We are a membership organisation for London's most passionate green educators, working with Londoners of all ages, backgrounds, identities and financial means. For 30 years we have helped connect London's ES educators with the broad aim of improving the quality and quantity of urban ES education delivered across the capital. Our collective aim is to make London a world-leading city for connecting urban people to nature and sustainability. Through training and networking events and our fellowship scheme, we share our passions, skills, ideas and knowledge and encourage others to do the same. Our members are working to develop more sustainable communities across London, enabling people not just to imagine, but to taste a more sustainable future. And we wish to thank all our members for the important work they do. If you are not already a member, we would encourage you to join us and share your passion and vision for a greener future with others who are doing the same all over London.

As an organisation, LEEF champions urban ES education because we understand that sustainable cities underpin stable, cohesive and productive societies. Urban ES education plays a critical role in supporting urban populations to discover, learn and care about their environment whilst developing more sustainable ways of living. The IPBES 2019 Global Assessment Report on Biodiversity and Ecosystem Services<sup>1</sup> tells us that new and innovative commitments to nature recovery are needed urgently. Cities like London thrive on new ideas. They are hubs of innovation. And we, as urban ES Educators, create spaces where people can form communities of action and commitment to common environmental goals. The UN's Sustainable Development Goal 11 'Sustainable Cities and Communities' sets important standards for sustainable urban development, urging us to rethink the way we build, manage and live in cities through a shared commitment to build cities for the future. But if we really are to develop effective responses to addressing climate change, food waste, air pollution and other environmental challenges, our cities must provide opportunities for us all to feel a sense of shared purpose and belonging, and create the desire to come together, not pull apart, at a time of crisis. Right now, we face what is potentially our last opportunity to galvanise a critical mass into taking positive action for the environment and to help create a more positive future for people living in urban communities.


This anniversary represents an important time for us to look back, to reflect and to celebrate what we have achieved together so far. In recent years, the physical, political and financial landscape around urban ES education has shifted rapidly. This year, a renewed political appetite for a more sustainable London has seen London declared a National Park City. All the

time, technological advances are creating exciting new digital opportunities – from social media campaigns to wildflower ID apps. And while some things move on apace, the fundamental characteristics of urban ES education are our constant – the joy of being outside; of experiencing the world in an active and multi-sensory way; of sharing outdoor experiences with other people; of taking time to explore and talk together.

When we look to the future for ES educators, the need for us to connect and work with each other has never been greater, and never has the demand for urban ES education been so strong. The recent school strikes for climate action show just how passionately young people feel about a greener future. And as more and more London councils declare a Climate Emergency, now is the time to utilise the strength of our networks to help translate these declarations into positive action.

This special edition is the result of our call to practitioners for articles back in spring 2019. We received an overwhelming response. In reading and selecting the articles, we were struck by the richness of approaches and the voices that characterise urban ES education *in* urban areas, *about* urban areas and *for* urban areas. Urban ES education has been defined and refined over the last thirty years. We have collated here articles that encourage you to explore your own understanding of what urban ES education is and why it is important. We invite you to consider this as you read. The articles explore how our work creates:

- Opportunities for people to experience different environments, e.g. taking children out of the classroom to a boat on the river
- Real work experiences for young people that lead to skills and employment
- Opportunities for young people who struggle in conventional classrooms to shine in our settings
- Chances for children to tackle real-world problems such as soil quality
- Spaces for families to heal and reconnect with nature and each other
- Activities that cover both curriculum work and create a sense of place
- Time and support for all people to create deep connections to nature

The contributions highlight the passion and creativity of urban ES practitioners and the importance of our networks and the way we connect. We would like to acknowledge though that there are many aspects of urban ES education practice that are not included here. Notably, the vast amount of work that we do with older people, mental health users and people with disabilities is missing. But we will continue to discuss, disseminate and celebrate the richness and diversity of urban educators' work across the sector on the LEEF website, and by inviting people to speak or run workshops at our upcoming conference and ongoing training events. 

## Urban environmental education

Professor Justin Dillon



My science teaching career started in London in 1980. The following year I attended a conference, *Nature in London*, held at Clissold School in Stoke Newington. The two-day event attracted 400 attendees, many of whom were teachers (as


evidenced by a show of hands at one point). Five months later the London Wildlife Trust (LWT) was constituted, bringing together a range of individuals, some of whom had been active at a local level as long ago as the 1960s, as well as newcomers like me.

At the time, many city-dwellers never recognised how much nature existed around them. Few realised that London is a green city with around 60% of its land area being greenspace (rivers, parks, woodlands, heaths, wetlands, gardens and farmland). Around the same time, other Trusts were set up in urban areas in Avon, Cleveland and the West Country.

LWT now has 50 staff and over 14,000 members. With the help of 500 volunteers it manages over 40 reserves

across the capital. Much of the work of the Trust involves educating schoolchildren; parents and carers; developers and politicians; local and national.

Seven years after LWT was born, I joined its Council as a trustee with a brief to encourage a greater focus on education. Five years later, in 2003, I joined the committee of London Environmental Educators' Forum and went on to be Chair from 2004-9. So it is with particular pleasure that I am contributing to this special issue of *Environmental Education*, put together by LEEF, focusing on urban environmental education.

As more of the world's population find themselves living in urban surroundings and as concerns about wellbeing continue to grow, the value of urban wildlife and open spaces to our lives has never been greater. We seem to be at a tipping point in terms of the public's concern for the environment and the message seems to be getting through to some, if not all, of our leaders. The work that environmental educators have been doing for many years is eventually paying off – so it is fitting to celebrate urban environmental education through the articles in this very special issue. 

## FROM THE CHAIR

### The urban child and the farm experience

Nina Hatch



*"Where does your food come from?"*


This is often the first question put to a class when they start a food and healthy eating topic. It is also the title of a unit in many primary schools covering science, geography, history and even sustainable living. Some schools include issues of food production and availability, covering SDGs 2 'Zero Waste', 14 'Life below water' and 15 'Life on land'.

As the majority of children live in urban or suburban environments their answer is of course *"from the supermarket"* or possibly *"the shop down the road"*. I have been teaching children from a classroom on a farm for over 30 years and optimistically can add *"from my allotment"* or *"the school garden"*, possibly even *"from the farm shop"*. It is widely accepted that the majority of our population are so far distanced from the environments where their food is really produced that we now need TV programmes to tell us about this. I know that it is far better if pupils have a 'hands on' experience of where and how their food lived, or grew. They are more likely to grow up appreciating and questioning what we eat, how we care for both animals and plants, and have an awareness of the environmental dilemmas increasingly facing our food production.

My classroom is on a dairy farm which was set up to enable pupils from the Birmingham conurbation to have such experiences. Children collect eggs, feed the sheep and chickens, and meet pigs and cows while spending a day around the farm and surrounding countryside.

I soon learnt to assume very little basic understanding from our visitors. More than once I have been asked how many zebras we own (our cows are black and white!) or why a particular cow was so hairy (it was a sheep). Astonishment is a common reaction when I explain that cow muck is part of the cycle of grass to glass (of milk). Colleagues at centres where children help with growing and harvesting tell me that digging up vegetables which they are going to wash, cook and eat can result in a similar reaction.



Thanks to the vision of a Cadbury family trust my centre is in an almost unique position to deliver an environmentally focussed farm experience to children from around Birmingham and the West Midlands. For other parts of the country Social Farms and Gardens<sup>2</sup> or LEAF Education (the leading organisation of the Countryside Classroom partnership<sup>3</sup>) can help teachers to find small city farms or schools which have a school farm unit, or farms that offer educational facilities. We can/must hope that at least some of the next generation will have a true understanding of the answer to the question... where does my food come from? 

**Nina Hatch** is Centre Director and Educational Lead at Mount Pleasant School Farm in Worcestershire: [mountpleasantschoolfarm.com](http://mountpleasantschoolfarm.com). She is an NAEE Trustee and Chair of the Executive Committee.



## Learning afloat in London: urban ES education on the Thames

Zaria Greenhill

London's success in the world is partly due to the Thames and we Londoners have been adapting the river to our needs for millennia. When we turn on a tap, a stream of 'Thames' comes out, albeit cleaned and safe; plentiful and bountiful for now. Educating about and on the river is a privilege and it also teaches one of sustainability's deep concepts: all things are connected.

The River Thames Boat Project is a river-based charity with a 30-year history, like LEEF. We have two community boats on the river and deliver Key Stage 2 environmental education (in two unique places in London: on board our 111-year-old converted Dutch Barge, *Thames Venturer*, at Teddington Lock in leafy South West London; and at Hermitage Community Moorings in Wapping, Tower Hamlets). Our clients are mostly state primary schools with some independent schools, community groups and home education groups. This breadth of contrasting access gives us a remarkable snapshot of the perspectives and realities of children from different ends of the Thames.



Primary school pupils studying river water on a community boat on the River Thames. Image: Zaria Greenhill

Children from both South West and East London consistently engage with high levels of curiosity, comprehension, literacy, focus and capability. It's not a surprise that London's schools are, at least on paper, the best in the country. The children who visit our boats have rich and different knowledge bases and prior experience, often due to diverse ethnic diaspora backgrounds and links to their 'home' countries. We relish drawing on the knowledge base pupils may hold relating to climate and water issues which links well to our global discussion about water use and the Thames. It's true to say, children often surprise us with what they know and how they think.

As a charity that serves mainly the needs of state schools, we need to align with their curriculum aims. While our content is designed to reflect curriculum objectives, we take the knowledge-based approach of

learning 'about' the local environment, the threat of climate change and the effects of plastic pollution (and cross-reference with skills development). This means adapting lessons to scaffold pupils' prior knowledge, a dynamic process which means being ready to try new things. For instance, on asking a Year 4 class of an East London school where electricity comes from, they chorused 'the sun', describing 'flat blue things that absorb the sun and make energy'. This obliged me to instantly re-frame, back-peddle and talk about 'what used to provide energy, once upon a time?' i.e. fossil fuels, and *then* discuss 'the future of energy', naming those flat blue things that they understood to be normal. The children had moved on ahead of me, and I constantly feel, as an educator, that I have to run to catch up.

Tragically, climate change is not yet in a central place in the curriculum. Children need a knowledge base from which to piece together coherent opinions about the future of the planet, as well as to be cognisant of the enormous threats that will face them in adult life. They need to learn to critically assess information and make well-informed judgements. They need to be able to see both sides of a question and be empathetic as to where others' perspectives come from, while also being able to present their own viewpoints cogently. In order to do all this, they need to be fully informed. Urban ES education delivered in a holistic way, using a place-based approach, can build on children's existing knowledge, encouraging them to see themselves as part of something bigger, and that ultimately all things are connected.

### 'Drastic Plastic'


In 'Drastic Plastic' we integrate plastic pollution with traditional river geography. Children are given a tag with a place on the Thames on it, along with the distance from the source and a percentage of the river's length. They order themselves along a rope representing the Thames, using their number skills as well as any geographical knowledge they may have. Once ordered, they look at a map of the Thames and appreciate 'their place':

*"Oh look, Lechlade, you're the first place where boats can actually float on the water"*

*"Southend Pier, you're the longest pier in the world".*

Then, they are told that some plastic bags have blown into the river near the source: the children near the source are given real bags to pass down the 'river'. More plastic is introduced and soon the children are passing armfuls of plastic waste along the rope river, all in the downstream direction, until they are spilled all over a world map, demonstrating how the flow of rivers also becomes the flow of waste: everything is connected. This fits with the geography requirement that children learn about river flow and the geography around it.

Above, I described how we teach 'about' the environment, but the children are physically active in this situation and using all their senses. They are right by the river and there is a real risk of the plastic they are using blowing into the river in a gust of wind: they see the results of careless plastic passing before them on the river's flow.

This experience may be the first time they have come close to the wonderful River Thames, which can be really impactful. They are asked for their ideas and encouraged to give opinions. They handle plastic and gasp at images of damaged sea life. This is education 'about' but also 'within' the environment. It is relevant, place-based and holistic education 'for' sustainability. 

**Zaria Greenhill** is the Education Manager at the River Thames Boat project in London.

**Contact:**  
[Zaria@thamesboatproject.org](mailto:Zaria@thamesboatproject.org)

**More information:**  
[thamesboatproject.org](http://thamesboatproject.org)



## Supporting community-led action through urban ES education

**Nicola Simpson**



Gloucestershire is often considered to be a rural county, full of countryside and nature. So many people might be confused to find out that Gloucestershire Wildlife Trust (GWT) has an urban programme of work. The county has two major settlements and only one city, Gloucester, which is estimated to have a population size of just 150,000 including its outlying districts. There are pockets of extreme deprivation in the city, with some areas being ranked in the 10% most deprived in the country (according to the Indices of Multiple Deprivation<sup>4</sup>). In some areas of Gloucester 40% of households don't have access to a car, compared with 26% across England. These factors often result in lack of access to the wonderful surrounding countryside.

Many areas of the city have large amounts of green space, which are owned by Gloucester City Council. As all councils have limited resources it is becoming increasingly necessary to explore new ways of maintaining local green spaces. GWT aims to realise communities' aspirations for these spaces, build the involvement of local residents and support them to have greater control and ownership over local spaces. Volunteering has traditionally been a way to engage with local communities in such areas, but with our increasingly busy lifestyles people have less time to volunteer and this can be even more evident in lower-income areas. As such, we've used environmental education as an invaluable tool to help develop skills and build pathways to future employment for local people.

This approach is exemplified in Podsmead, an area of Gloucester where GWT has been engaging with the local community since 2016 to manage an underused, but wild green space in the heart of this community. The area was regularly used for antisocial behaviour, including large amounts of fly tipping. As a result, it was seen as an unsafe place to go and local children did not play there. We started by working in partnership with Gloucester City Council and local residents to provide activities aiming to reach out to different parts of the local community. These included drop-in sessions about how to manage habitats, build benches and bird boxes; as well as providing opportunities to learn about the wildlife in Podsmead's schools.


Following on from this initial phase, a group of younger residents (working with a resident, Lisa) began to take a more active role. This led an enthusiastic group of young people to set up their own social enterprise: the Podsmead Clearance Team. GTW offered activities which helped the young people learn how to manage sites for wildlife. For instance, we offered training on when to cut wildflower meadows to avoid scrub cutting in summer due to nesting birds, as well as other training to enable the young people to develop skills for managing green spaces. They have now been awarded the maintenance contract from Gloucester City Council to maintain green spaces in Podsmead.



Podsmead Clearance Team in action.  
Image: Suzannah Bird

Now the Podsmead Clearance Team carry out the management from basic amenity grass cutting to creating better habitats for wildlife in the wilder areas with the skills and knowledge they have gained. The urban ES education skills and learning helped the team create an income and opportunities to build skills in one of the top 10% most income deprived areas of the country; not to mention better quality habitats for our urban wildlife.

On a summer's day the Podsmead green space is now full of wildflowers, butterflies and day flying moths, along with slow worms and a variety of birds. Local families now use the site to play, sit and enjoy a quiet moment, to connect with nature.

GWT is continuing to support the Podsmead Clearance Team; and we are working with other communities in Gloucester that are looking to adopt a similar model so they can have more control over the management of green spaces in their area. 

**Nicola Simpson** is Gloucestershire Wildlife Trust's Urban Wildlife Manager.

**Contact:**  
[nicola.simpson@gloucestershirewildlifetrust.co.uk](mailto:nicola.simpson@gloucestershirewildlifetrust.co.uk)

Twitter [@gloswildlife](https://twitter.com/gloswildlife)





## Urban ES education as a space for social connections for the residents of Grenfell

Emily Munn



Urbanwise aims to promote active outdoor learning in the local area, help young people communicate their views and ideas on environmental issues which concern them and bring people together to examine issues around environmental change.

Urban ES education is often associated with building social connections, trust and community, also known as social capital. In this article we suggest that urban ES education can offer meaningful and valuable experiences whilst fostering social capital between participants, communities and practitioners in urban areas. We illustrate this by discussing our work with the Grenfell community in London.

In June 2017, the Grenfell Tower tragedy created an immeasurable loss for communities and families. In the aftermath, Urbanwise.London has been supporting families by facilitating their discovery of nature, play, relaxation, as well as connection to other Grenfell families in outdoor greenspaces in London.

With the support of John Lyon's Charity and The Big Lottery, we organised visits to greenspaces within easy reach of North Kensington as well as further afield via public transport or hired buses. Being embedded in the West London community for over thirty-five years and with employees living in North Kensington, we were able to reach participants through existing contacts and connections to local organisations. This proved invaluable when advertising the project to those personally affected by events at Grenfell.

Families self-enrolled on as many visits as they wished. We worked with over 20 families, including 23 adults and 32 children (age 0-16 years). Families self-identified as mostly first and second-generation Ecuadorian, Colombian, Venezuelan, Somali, Kosovan, French, Caribbean and Arabic heritage.

As participants often joined us on repeat visits, we noticed they started to bond during the activities as they organised communal food to share, developing friendships as parents bonded and children's confidence developed. The parents, who were from different Grenfell

communities, shared tips and signposted each other to local resources and activities, including health and well-being workshops.

We were reminded that in urban ES education, it is often these 'in-between' moments of social connection and the building of social capital that provide the highest value. In facilitating the visits we provided a space and activities for connection and dialogue where a supportive ear could be offered to those who chose to share their experiences and concerns following the fire. For example, one of our supporting visit leaders had family displaced following the fire and shared their direct experience.


Participants told us how they experienced these spaces as places of respite and recovery to support their families' emotional wellbeing. Many reported that places visited were previously unknown and they would not normally access the sites, both local and further afield. Yet several participants told us they returned to sites because they found their own peaceful haven in London.

Connections and social bonding that occurred during the project took place on three levels. First, for the participants, by providing individual and family members with a space to be together and support each other:

*"I have seen her grow in confidence so much these last few months. As you know, my niece lost several family members in the Grenfell fire and it has been a struggle getting her out and about. I know she very much enjoyed the wetland trip and it was good seeing her smile. Thank you again for offering me and my family an amazing opportunity to participate in your activities."*

Second, for intra-community connections, through sharing, signposting of individuals to new local organisations and wellbeing support and trips to new places previously unvisited:

*"My grandson benefited from the company of other children, while I enjoyed talking to other parents. Having a picnic together added to the communal atmosphere; we were able to exchange ideas and advice on how to make the most of the opportunities that the area we live in has got to offer. For me and my grandson it is all about nature and friendship."*

Finally, connections occurred within our urban ES practitioner community. Through LEEF, we worked in multi-agency partnership drawing on our personal connections to make the project happen. For example, Holland Park Ecology Centre gave their private space and staff time to allow a group to learn about aquatic life in a pond dipping session; and the team at Hampstead Heath opened their secret garden for a day of den building, tree climbing and making hot chocolate together. 



Families from the Grenfell community visiting a greenspace.  
Image: Urbanwise.London / Nature Discovery Program

Emily Munn is based at Urbanwise.London, a charity dedicated to connecting children, young people and communities to all aspects of their local, urban environment.

More information: [urbanwise.london](http://urbanwise.london)

**Urbanwise.London**  
(The Urban Studies Centre)



## Wild in the City: building a bridge back into nature

Beth Collier



Wild in the City supports the wellbeing of urban residents through relationships with nature in London and beyond. We offer programmes in woodland living skills, natural history, walks and ecotherapy; using the skills of our ancestors to develop a deeper relationship with the natural world and a sense of belonging to communities past and present. We are a black-led organisation with a focus on health and supporting Black and Minority Ethnic (BAME) communities in accessing nature and the countryside, addressing the widely acknowledged lack of representation and lower levels of involvement of people of colour in nature-based activity.

### Our focus

People of colour currently spend less time in nature in the UK than white people. Whilst we are often very connected to nature in countries of heritage, several factors contribute to a disconnection in the west. For example, the pressure to build new lives, experience of racism and hostility from white communities, feeling more exposed and vulnerable in areas where there aren't other people of colour, not having generational knowledge from parents or grandparents who can teach us about the nature here and the experience of being 'othered' and patronised or disregarded by environmental organisations whose membership is often predominantly white middle class.

Many people of colour are left feeling that they don't belong in natural settings, that they are unwelcome or that nature has no use to them.

### Nature Connectors and Nature Guides

Our work rebuilds a relational bridge to learning about nature that many people of colour have lost in not having grandparents and parents who could tell us about wildlife in the UK, and in doing so reinstating an oral tradition for learning about nature.



Practising woodland living skills. Image: Beth Collier

Our six week Nature Connectors programme supports reconnection with nature by exploring wilder local green spaces through walks, woodland living skills and wildlife identification. We spend time around the fire reflecting on our relationship with nature as people of colour, considering the emotional and social benefits and any barriers that there have been. We learn relationally, through spending time together in conversation, rather than formal teaching – we call this the 'grandparent model'. For some attendees it will be their first steps into wilder areas, others are experienced hikers, but what we all tend to have in common is the experience of being 'the only one' in nature groups and there is healing in being part of a group of BAME people.

A select number of Nature Connectors go on to train as Nature Guides: an in-depth programme supporting black, Asian and minority ethnic volunteers to lead others in nature, creating greater representation and skills within BAME communities.




Exploring a local wilder green space. Image: Beth Collier

### Oral tradition

Our style of 'teaching' is conversational and relational. People learn through the repetition of sharing, rather than through a cerebral, handout style. Our grandparent model is not about age but the manner of sharing knowledge about nature, which is person centred, allowing self-paced learning and attuned directive sharing where a person may not be aware of what there is to know. As a child on a walk with an 'ideal' grandparent, you explore, feeling safe and enjoying the company. If you find something interesting you may come and show your grandparent and they will tell you what it is and something about it. If your grandparent sees something of interest they may point it out and tell you about it. At the end of the walk you're aware that you know more than you did starting out, but at no point did you feel you had a 'lesson'. We aim to create a therapeutic space which replicates an ideal grandparent's attentiveness; enjoying a relationship with someone interested in sharing their knowledge and who engenders a sense of emotional and physical safety; facilitating with perspective that the experience is about the attendees' own exploration and not the passive, guide-directed information sharing that can be very off-putting to many people.

### Bridge back into nature

We embrace the organic ebb and flow of relationships with nature and people; it means being able to sit with intimacy, a phenomenon that is becoming rarer in the social media age.

We've built a bridge into knowledge about nature in the UK, reinstating an oral tradition as participants share what they've learnt with their family and friends, bringing them out into nature too. Nature Connectors has helped to nurture a sense of belonging within people who had felt disenfranchised; this has positively impacted wellbeing and created friendships and intimacy with others and nature. Nature Guides now lead our Natural Health Service sessions supporting others to explore and enjoy time in our parks and woods. 

Beth Collier is Director of Wild in the City. She is a nature-based psychotherapist and anthropologist who teaches natural history and woodland living skills.

Contact: [beth@wildinthecity.org.uk](mailto:beth@wildinthecity.org.uk)



## Developing an ecologically informed sense of place to safeguard tomorrow's urban environment



Edward Jones

FSC London's education offer is tailored to reflect the local area, so students learn about the historical, geographical and biological significance of what, for many, is ultimately on their doorstep. This is important, because it helps them develop an ecologically informed sense of place for where they live. Children with a strong ecological sense of place, be it their local area, nation or planet, will be better prepared to become the responsible and active citizens needed to face the environmental challenges of the 21<sup>st</sup> Century.

Sense of place is developed from an early age from experiences of places refracted through social and cultural relations. Research suggests an ecologically informed sense of place contributes to environmental stewardship<sup>5-7</sup>. This relationship between stewardship and sense of place is partially understood. Yet increasingly, at both GCSE and A Level, subjects such as geography look at 'Place', how places are created and what can be done to safeguard them for future generations.

### Primary education

Even before an urban ES education session, pupils' sense of the place has been established. For example, during a visit to Bushy Park to investigate 'Living Things and their Habitats', I began by asking a class of Key Stage 2 children whether they had previously visited Bushy Park. All of the pupils answered positively, with examples including walking their dog or going for an ice cream. Working with pupils' *ecological* sense of place gained from their lives outside of school is important in making connections and enriching the pupils' learning.

During the session, students had an opportunity to explore freshwater, grassland and woodland habitats, identifying invertebrates and their roles within the ecosystems and we explored how invertebrates live in the outdoor spaces they visited.

Back in the classroom, whilst looking at a juvenile Ramshorn Snail's beating heart under a trinocular, I asked the children why it was important to look after the habitats within the park. One pupil's answer was:

*"We need to look after pond as it is the snail's home and the snail has a heart like us."*

Trying to build from this response, I asked the students how they could look after the park for invertebrates, suggestions included planting trees and flowers:


*"If we plant more trees and flowers then the insects will have more habitats and food."*

### Secondary education

In Year 10, we utilise numerous fieldwork techniques when delivering Human Geography fieldwork courses, including re-photography methods. Here students compare a historical view with what they can see today. We look at images from 2005 when there were shopping trollies in the river and then direct their attention to the river at present. We explore what they know about the area and if they have ever been there, and how the images relate to their experiences.

As part of the creation of wetland habitat within the Olympic Park, the River Lea was dredged for rubbish, with 400,000 wetland plants being planted.

During the lesson pupils talk about how they know the River Lea. During several lessons, they start an impromptu litter pick, cleaning up crisp packets and bottles they find. Discussions lead some pupils to realise that they value the area and to connect with their own sense of place, leading them to want to demonstrate environmental stewardship.

Beyond the curriculum requirements of understanding how the natural and urban environment are linked up within a place, such fieldwork offers the opportunity to teach how to act responsibly and ethically in and toward the environment. The pupils develop their existing ecological sense of place through fieldwork through first-hand experiences of natural environments and the problems and solutions that characterise these places. Be it in a Royal Park or on the streets of Stratford, as urban ES educators, we can teach not only *about* the environment, but *in* it and encourage participants to look beyond the core fieldwork for students to develop empathy for the environment. 



The River Lea in 2005 and 2019. Image: FSC London

**Edward Jones** is a Tutor with FSC London and FSC Epping Forest. He develops and delivers environmental education opportunities for learners from Key Stage 1 to Key Stage 5.

**Contact:** [e.jones@field-studies-council.org](mailto:e.jones@field-studies-council.org)

**More information:** [field-studies-council.org/centres/londonregion/london.aspx](http://field-studies-council.org/centres/londonregion/london.aspx)





## Mud and MEEN: urban ES education in the post-industrial landscape of Manchester

Raichael Lock



As Maria Puig de le Bellacasa<sup>8</sup> argued recently in her plenary at the Royal Geographic Society Conference in London, 'soil' is a perfect metaphor for our troubled relationship with the 'Earth'. So, that means, for urban ES educators, teaching about mud is more important than ever.

In Manchester, the legacy of our post-industrial past is evident in the everyday connections with soil. Digging a hole in some school grounds can be hard: rubble from old schools or housing stock prevents the spade from going deeper than a few inches, sometimes there is a layer of soil capping the hardcore below and on occasions there are indications of contamination.

Over the years, the Manchester Environmental Education Network (MEEN) has had plenty of experience working with Manchester's soils – whether tree planting, forest gardening, vegetable growing or wildflower seeding – so we know the problems facing urban soils. However, we became acutely aware of the lack of local knowledge around soil quality when a school was being supported by local agencies to develop an allotment on contaminated land. This raised the question: how to help Manchester's soils?

### 'Save our Soils'

MEEN wanted to change the perception of contaminated/impoverished soils from being a threatening and insurmountable problem into an exciting learning project, involving practical actions to help soils and opportunities to share the learning with other communities. In 2016, the 'Save our Soils' partnership project was devised. The partnership reflects the importance of multi-agency approaches in environmental education in order to widen children's aspirations and understanding of the world.



Digging deeper into school soils. Image: Raichael Lock

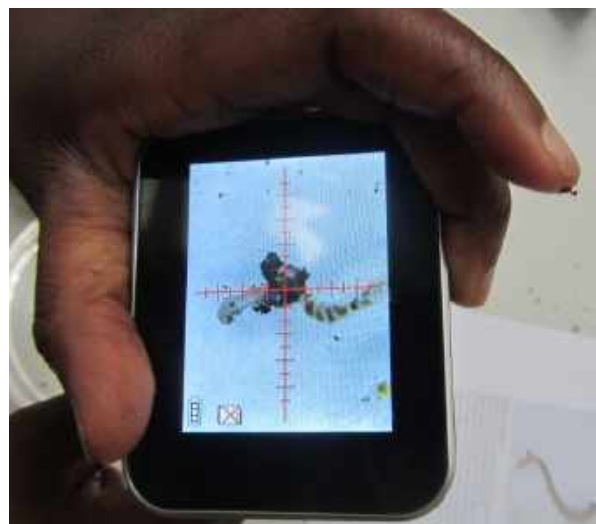
Designed to be responsive to the context of each school setting, MEEN works with schools to examine historical maps of the locale and then, if necessary, have the soil tested. So far six primary schools have engaged with the project with each school choosing its own trajectory depending on the soil and interests of the young people involved. Learning sessions have included thinking about the importance of soil, soil types, soil contamination and/or pH testing.

One school voted to learn about organic growing; another played the 'soil web' game; others chose to play

MEEN's 'It's a worm's life'. There were activities such as doing an archaeological dig linking to historical maps, and planting trees and hedges to improve soil quality.

However, there were also plenty of valuable partnership activities, such as composting sessions at Debdale Eco Centre and bringing in their expertise to build raised beds; there were visits to the University of Salford soil laboratory for soil testing and, most recently, an artist was brought in to work with clay.

We know from research, such as that carried out by the University of Manchester<sup>9</sup>, that heat waves and climate change have a much greater impact on soil microbes than previously realised. One activity every school chose was to examine soil critters with hand-held microscopes. This has proved key in helping young (and old) realise the incredible richness of the soil as a living system. In one instance an excited child ran over to me to let me know she had seen: "*a nematode poo*", having already been amazed that such creatures existed, whilst another pupil declared: "*soil is awesome! It's so full of life!*"



Examining a millipede using a hand-held microscope. Image: Raichael Lock


It's also clear that this previously unknown underworld has inspired a desire to care for soils. Children have requested that the living soil samples be returned safely to their 'home' and great care has been taken by the pupils not to harm the wildlife.

As suspected, though, finding a 'living' urban soil proved interesting. Pre-empting the lack of soil biota in school soils, MEEN collected samples from a local forest garden where years of permaculture practice has allowed the soil to flourish. Sadly, school soil samples barely produce more than worms. It has also proved difficult to make much improvement in the school soils for a variety of reasons. Firstly, soil reclamation is too big a task for such a small project. However, one school with contamination planted *Salix* hyper-accumulators with the aspiration that the university will test the leaves to see if heavy metals can be removed. Where soil is impoverished, silver birch trees have been planted to break up rubble, but with the systemic grounds management system of 'mowers and blowers' removing organic matter from schools, MEEN is exploring longer-term solutions.

The sharing of knowledge has proved fruitful, with eco-teams creating displays and running assemblies. One team held a meeting with the Head to share their learning, whilst four schools have delivered presentations at two of MEEN's intergenerational conferences.

With the help of the University of Manchester, MEEN has also produced a film<sup>10</sup> capturing the first wave of the project. The film highlights how the pupils' experience, knowledge and understanding have inspired members of the community.

Responding to an environmental problem, such as soil impoverishment, adds yet another issue to the list of things to worry about. However, when pupils were

asked for their response to George Monbiot's declaration that there are only 60 years of good harvests left, the pupils insisted they need to learn about the problems because: *"We're the ones that are going to have to deal with it, not you"*. 

**Raichael Lock** is the co-ordinator of the Manchester Environmental Education Network, which supports teachers, organisations and individuals working to promote EE and EfS. Raichel is also an ESRC funded PhD student at the University of Manchester researching the Save Our Soils project.

More information: [meen.org.uk](http://meen.org.uk)



## Supporting outcomes for young people through the Green Talent Programme

**Kate Bygrave**



The Green Talent programme was developed by the Learning Team at the City of London's Open Spaces Department to connect at-risk young people to the natural world. By 'at-risk' we mean young people assessed as not in education, employment or training (NEET) or who are at risk of, or already fall into, the following categories: poor health, teenage pregnancy, drugs, alcohol or substance abuse and offending. The programme works with young people from a variety of backgrounds, including youth clubs, Pupil Referral Units (PRUs) and other specialist youth services. It uses environmental-based activities to inspire and engage young people with nature as well as have a positive impact on their personal and social development and wellbeing. To date 368 young people have participated in the Green Talent Programme.

Although not a perfect fit, the National Occupational Standards (2008)<sup>11</sup> definition of youth work is helpful to understand the activities we use in the Green Talent Programme with the aim of enabling:

*"young people to develop holistically, working with them to facilitate their personal, social and educational development, to enable them to develop their voice, influence and place in society and to reach their full potential."*



Learning bushcraft skills as part of the Green Talent Programme. Image: City of London.

Our approach builds on this definition, centring around five personal impact areas: building understanding, confidence, involvement, wellbeing and connection.

We aim to have a positive impact on young peoples' development by using an amalgamation of approaches, based on youth work principles and various urban ES education techniques. The activities we use to engage youth include basic bushcraft and survival skills, which are used initially to increase engagement of participants. These sessions allow for the development of good working relationships, as well as assessing participants' competence, confidence and behaviour. For example, a wood carving session is delivered early in the programme, which also allows for an open dialogue surrounding the issues of knife crime, gangs and violence.

We use practical conservation and youth-led social action to boost self-esteem and self-confidence by allowing participants to instantly see what they have achieved during a session.



Young people engaging with nature. Image: City of London

The project has had a great impact on young people, achieving outcomes relating to enhanced self-esteem and self-confidence; helping young people to manage relationships; creating opportunities to learn and have positive experiences; assisting young people to consider risk, make decisions, broaden their horizons and develop a positive world view. Many of these young people struggle in classrooms, where they feel they may not belong. Outside they feel less pressure and relax a little. Some of the things our participants say are:

*"I didn't know what to expect at first, but the experience was amazing. I never knew there was so much that I could do."*



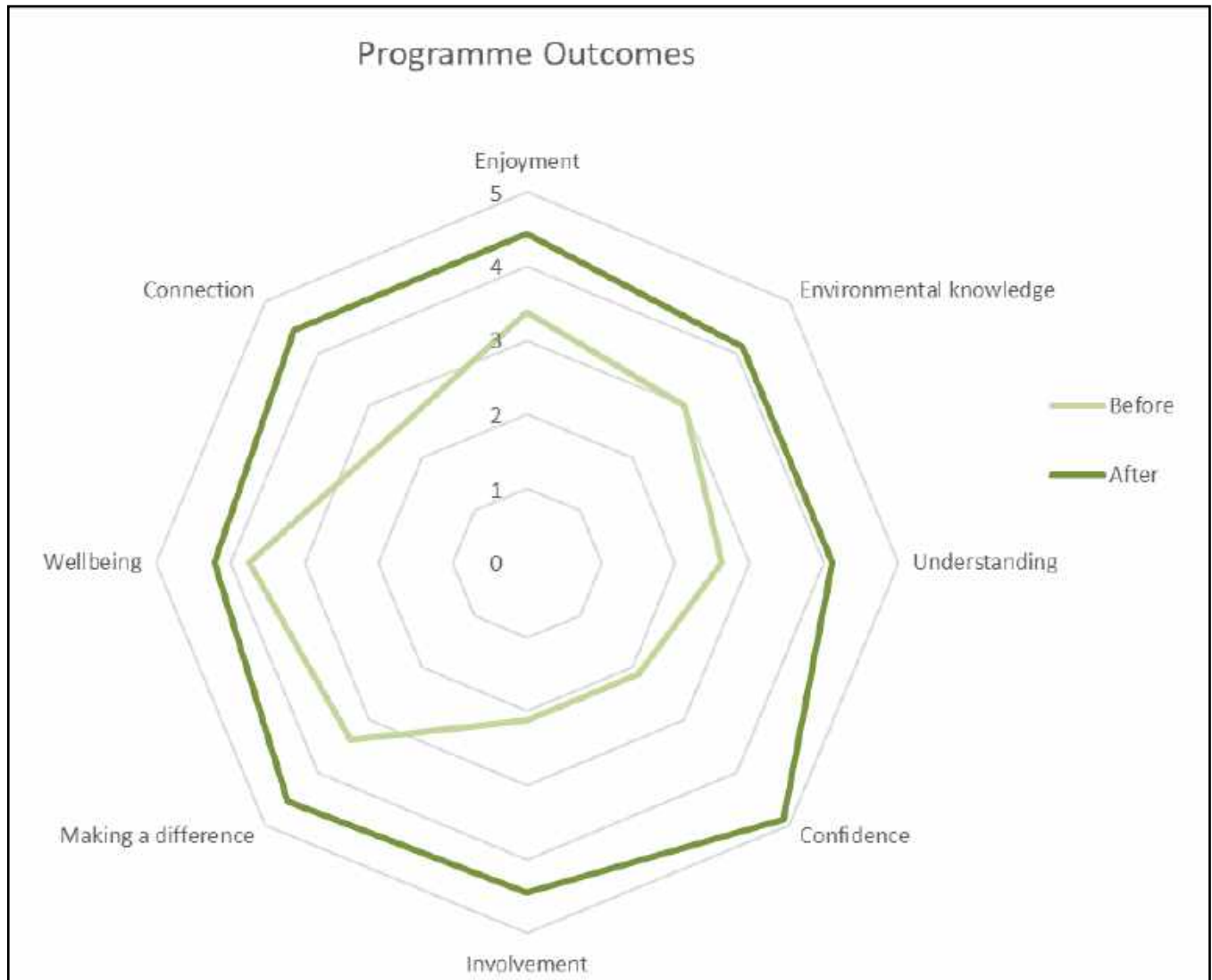
In addition, the project has also improved the perception of young people with the staff and volunteers who work in the Open Spaces Department.

In partnership with London Ambitions, Green Talent delivered five 26-week programmes to PRUs for young people in highly urbanised areas across London who are not able to attend mainstream education due to behaviour and/or health issues. Each week, participants were given the opportunity to visit local green spaces to carry out tasks, learn survival skills, be creative, undertake team-building challenges; as well as work on

projects to grow food and develop a small area of the school grounds using the skills learnt. At the beginning and end of the programme students were asked to rate their own feelings about: environmental knowledge, enjoyment, connection to nature, involvement in green space activities, wellbeing and understanding of the importance of green spaces (see outcomes below).

**Kate Bygrave** is the Learning Project Officer at the City of London and a Youth Worker.

**Contact:** [Kate.Bygrave@cityoflondon.gov.uk](mailto:Kate.Bygrave@cityoflondon.gov.uk)



Outcomes star showing the average self-reported outcomes of participants before and after taking part in the Green Talent programme

London Environmental Educators' Forum (LEEF) is a membership organisation for London's most passionate green educators. We meet to share skills and knowledge to improve the quality and quantity of environmental education delivered across the capital. Formed in 1989 we are now the city's largest network of environmental education practitioners working in schools, parks, museums, community gardens, city farms, botanic gardens, and many other spaces. Our aim is to make London a world-leading city for connecting people to nature and sustainability.

**More information:** [leef.org.uk](http://leef.org.uk)

 [twitter.com/londonleef](https://twitter.com/londonleef)

 [facebook.com/londonleef](https://facebook.com/londonleef)



## Environmental education visits for urban schools

Juliette Green, Marie Dean, Wajeeha Ahmed & Bethany Kirby

NAEE's Kenrick Days project offers bursaries for West Midlands schools to visit environmental education centres for curriculum-focused activities. One of the main considerations when choosing schools to receive the bursaries is the catchment area of the school, with priority given to schools that are situated in deprived areas and those with little or no green space in and around the school site. When applying, teachers are asked to give details in answer to the following two questions:

- How will the visit link to environmental activities carried out in your school?
- How will the visit develop pupils' knowledge and understanding of the environment and help to foster caring attitudes?

Some of the information included in applications for the academic year 2018-19 included:

*"The visit [to Mount Pleasant School Farm]... will give the children the opportunity to see the countryside and to experience a more natural environment, away from the city streets and buildings. It will also help them develop environmental awareness. This will in turn bring the wider world closer to them".*

Somerville Primary School, Small Heath

*"The school is situated in the middle of... a large council estate. We are in an area of high social need and have a high percentage of children that are pupil premium (81%). The school site is mainly concrete or Astro turf. We believe that outdoor learning is key to raising our pupils' wellbeing and life experiences. Many of the children are not receiving wider experiences and so are unable to talk about the wildlife and environments because they are not taken out of the area by their parents or carers."*

The Oaks Primary School, Druids Heath

*"The visit [to Martineau Gardens] will not only develop children's knowledge and scientific understanding but it will raise children's environmental awareness. This will enable them to educate our school and the wider community. The children attending the centre will be from our Eco-schools team and science ambassadors. Their role provides a unique opportunity that empowers pupils to lead change within our school and have a positive impact in their wider community".*

St Brigid's Catholic Primary School, Northfield

There follow extracts from three reports from schools in urban areas of Birmingham – Kings Heath, Handsworth and Sparkhill – that visited the three Kenrick venues. These reports show the benefits that were gained by the pupils, not only in terms of curriculum coverage, but the new experiences that they had, how they were inspired to love the outdoors, and the environmental attitudes they were able to take away.

### St Dunstan's Primary School, Year 2 Kenrick Day visits to Martineau Gardens

Year 2 had been looking forward to their visits to Martineau Gardens from the moment they heard the words 'Pirate Adventure'!

Learning about our oceans and seas during a spring term topic had introduced the children to the names of the oceans and had given them insight into the lives of some of the creatures which inhabit our marine environments. They had learnt how human activity is damaging our oceans, particularly pollution such as plastics. Lunchtime at Martineau Gardens helped our children to think about which parts of their lunch could be composted and which could be returned to school for recycling.

Previous work on maps had enabled the children to know simple compass points, directional language and basic symbols in a key. These geography concepts were consolidated through the pirate-themed day as the children used real compasses and a simple map to find the buried treasure.

The environment of Martineau Gardens provided ample opportunities for the children to investigate our summer science topic 'Living Things in their Habitats'. Many children enjoyed smelling and tasting the herbs in the herb garden and understanding that some plants can be eaten, while others cannot. Using their senses to listen to sounds from within and beyond the gardens and to smell, touch and taste edible plants created a wonderful sensory experience. One child so enjoyed the chives she kept running back to pick some more, exclaiming that they were "lovely!"

Eagle-eyed children spotted something yellow growing at the base of a tree and soon learnt that this was a fungus and should not be touched. The children were captivated by a rather large caterpillar which was eating its way through a plant, while others were fascinated by a group of spiderlings, which scattered when gently blown. Photos of these were used back in school to support teaching about micro-habitats.



The children were fascinated by the mullein moth caterpillars and spiderlings that they observed. Image: Marie Dean.

During the course of the day, the children were encouraged to use sensory adjectives when talking about the plants and to use spoken sentences to justify answers and opinions.

In school, the children talked about their visit with enthusiasm and wrote a recount of their day in their English lessons. For many, playing together in the pirate themed play area was the highlight of the visit as was, of course, eating their packed lunch!



## Rookery School, Year 1 Kenrick Day Visit to Mount Pleasant School Farm

In Geography lessons, Year 1 pupils at Rookery School had been learning about the physical and human features of different localities. It was deemed necessary for children to experience these different environments in order for them to get a better understanding of their physical and human features. Prior to visiting Mount Pleasant School Farm, children explored their local environment: an inner-city urban area. Following this, they visited Woodgate Valley Country Park, where they had the opportunity to experience the countryside. Mount Pleasant School Farm was the final location that was visited. The aim of this visit was for children to consolidate their understanding of, and make observations about, the physical and human features of different localities. In addition, teachers saw the visit as an opportunity for children to see a range of animals, which was to be our next topic.

The children had a wonderful time exploring the farm environment, feeding the animals and learning about milking cows and collecting eggs. It was heart-warming to see the excitement on the children's faces, most of whom had never visited a farm before. One child exclaimed: *"This is the best trip I have ever had!"* Others wanted to express their gratitude to Nicky, the farm guide and wrote 'Thank you' cards for her when they got back to school. This outcome was not planned but something that the children themselves wanted to do, which demonstrated how much they had enjoyed their farm experience.

The planned outcomes for the children, following their visit, included writing a recount of their trip in literacy; talking about the physical and human features of a farm in geography; and checking the weight of different eggs in maths.

Following the visit, it has been noted that there has been a change in some children's attitude towards their environment. During the visit Nicky showed children different 'bins' and explained that all rubbish should be sorted and put in the right bins. One child remembered this and upon returning to school wanted to throw her apple core in the right bin so that it could be given to the pigs at the farm. As a result, a food bin has been provided for the children to throw away their left-over fruit – something that is enthusiastically used not only in the Year 1 classes that visited the farm but across the whole school.

The visit to Mount Pleasant School Farm was greatly appreciated by both children and adults. It has been a useful tool in enhancing children's understanding of the world they live in and has provided a fantastic base for children's learning outcomes.

## St John's Church of England Primary School, Year 3 Kenrick Day visit to Birmingham Botanical Gardens

During Year 3's recent topic 'Brilliant Botanists', we focused our learning around caring for the environment; the anatomy of plants; how plants grow and what they need for survival; and naming a variety of plants and the environments that they need in order to grow.

The children's knowledge of plants and the environment is limited due to the lack of opportunities to experience nature and wildlife in the community. Although there are plenty of opportunities to visit gardens and parks in Birmingham, many of the children at St. John's don't venture out of Sparkhill.

St John's is based in an inner-city area of Birmingham with high deprivation. The school is two form entry with 79% of children with English as an additional language (EAL). Nearly a sixth of pupils receive support for their special educational needs and/or disability (SEND). We try to fit in as many enrichment opportunities with each topic to give children hands-on, real-life experiences. Birmingham Botanical Gardens fitted perfectly with our topic and gave the children a chance to explore tropical greenhouse environments as well as some amazing gardens. We chose to attend the session titled 'Growth' to build upon what we had been learning at school.

Each year 3 class got to explore the glasshouses, looking at the koi carp, cacti and tropical plants. The children could not believe the size of the fish and loved looking at all the different patterns on them.

After looking in the greenhouses, we ventured into the beautiful gardens. The children sketched some of the plants and flowers that they could see. They particularly loved picking up petals from rhododendron walk and pinecones that had fallen from the trees. Then we walked to the birdhouses. The children were amazed by the 'blue pigeon' that was wondering around near the bird house, which was in fact a peacock!


Due to it being a sunny day, the children were able to run freely around the grounds of the Botanical Gardens. Some children were rolling down the steep hills. This became a highlight for many of the children.

*"My favourite part was seeing the peacocks and rolling down the hills, I love nature".*

Then we had our classroom session. It was brilliant and covered all of the science curriculum objectives for our Brilliant Botanists topic. The session was at the right level for the children and was really interactive. They learnt about the different parts of a flower, what it needs to grow, and pollination. The children listened really well and were able to apply some of their prior knowledge.

*"We need plants to give us oxygen but lots of people are chopping down all the trees so we won't have any oxygen".*

The children could label the stamen, carpel, sepal and petals which we had learnt at school too. After that, they found out about seed dispersal and pollination. The children dressed up to role play how pollination occurs. It really helped their understanding of the process.

Once back at school, we planted a range of seeds and some of the children planted some of their own sunflower seeds at home and brought them back to school, having been inspired by the trip. We also based our English lessons all around writing about a magical garden. This was inspired by the children's amazement at the beautiful grounds of the Botanical Gardens. 

.....

**Juliette Green** is an Executive Member of NAEE and part of the Hugh Kenrick Days Team. **Marie Dean** is a teacher at St Dunstan's Catholic Primary School, Kings Heath, Birmingham. **Wajeelha Ahmedi** is a teacher at Rookery School, Handsworth, Birmingham. **Bethany Kirby** is a class teacher and Assistant Headteacher at St John's C of E Primary School, Sparkhill, Birmingham.

.....

**Contact:** [kenrick@naee.org.uk](mailto:kenrick@naee.org.uk)

**More information:** [naee.org.uk/apply-for-a-school-bursary](https://naee.org.uk/apply-for-a-school-bursary)



## Discovering nature is child's play

**Kabir Kaul**



I'm Kabir, a young wildlife enthusiast from North London. I have always been interested in nature, but only started exploring British wildlife about five years ago. I decided to look out of the window, and every time I looked harder, the more robins, sparrows, foxes, white-tailed bumblebees and

brimstone butterflies I would see. I thought of my neighbourhood as an urban paradise, a place where people had the potential to connect and harmoniously coexist with the wildlife on their doorstep.

I decided to try and make a difference over the following years by making a pond, putting out bird feeders and a bird bath, and planting more flowers and bushes for insects: this is one of the main reasons how I got into birding and wildlife watching. I thought I was the only person doing this, and felt alone: all I saw was people my age obsessed with the latest game on their smartphones and tablets. After joining organisations such as the BTO and the RSPB, I met many people with similar interests, who also do their bit to 'give nature a home'. Learning from others' experiences, I sought to make a difference in young people's lives, and to help them get involved and connected with nature.

School was the perfect place to start. With another wildlife enthusiast, and lots of support from my headmaster (who is a birder!), the school's Wildlife Society was finally created in November last year. Meetings run every two weeks, and are based on a wide range of ways on how young people can get involved with nature, from work experiences on a farm to getting out and about to embrace the capital's wild side. At the first meeting, there were only four people, and now there are seven!


Overall, this is a very effective and easy way of educating young people about the natural world, and this is one of the main ways you can get involved. However, while most children will be subconsciously thinking of nature after a presentation, there will be a few who have completely no interest: when this happens, persevere

by engaging the audience: make the club more interactive with quizzes and activities. This has really helped me in the past.

Furthermore, you can also lead an excursion to a nature reserve or open space, so young people can have a first-hand experience of being connected to the natural world. To enhance their experience, give them binoculars or insect-viewers, and let them explore their surroundings from a different angle. Start simple: get them to find different wild flowers, or different species of insects. Once they are interested, they will start discovering the natural world for themselves.



Kabir with his entry for the National Park City Wildlife Photography Competition, for which he was a finalist. Image: Kabir Kaul.

I believe, from our encounters, we can teach the younger generations to love and savour the natural environment, and eventually, maybe they will turn an ear to birdsong, or look at the intricate patterns of a butterfly's wings, instead of their smartphones. 

**Kabir Kaul** is a 13-year-old British Kashmiri birder, wildlife enthusiast, WeBS counter, conservationist and French hornist. He is obsessed with London and its wild spaces.

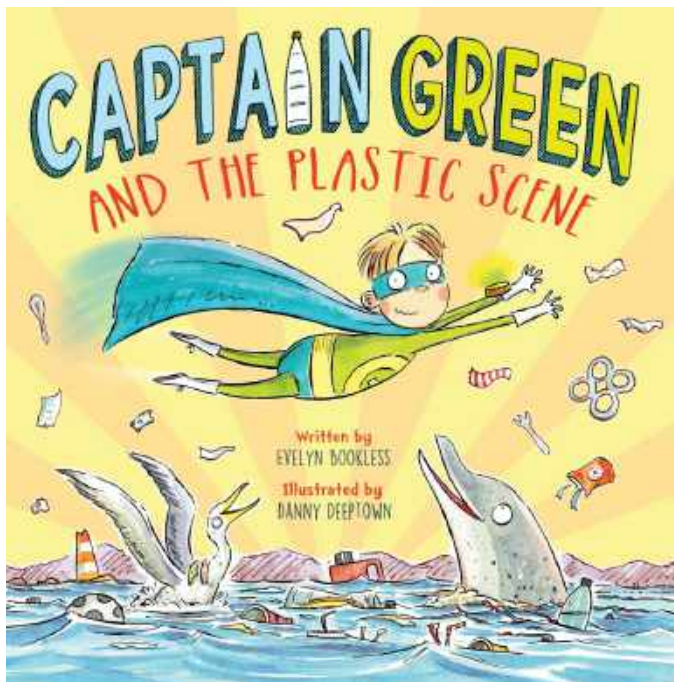
**More information:** [@Kaulofthewilduk](https://twitter.com/Kaulofthewilduk)



Kabir recently created a map showing the location of every nature reserve and publicly accessible wildlife site in Greater London. This can be found on his blog: [kaulofthewild.com](http://kaulofthewild.com). Image: Kabir Kaul.



NAEE's e-journal Editor Henricus Peters interviewed Evelyn Bookless, author of children's picture book, *Captain Green and the Plastic Scene*, aimed at 'super humans' from 4 – 8 years old.



### What inspired you to write *Captain Green and the Plastic Scene*?

I was inspired to write *Captain Green and the Plastic Scene* while on a beach in Indonesia. I was stunned to see so much plastic washed up on the sand, just past our hotel. I thought *this is a job for a superhero* and Captain Green was born.

### What is the story about?

Fresh out of Superhero School, Captain Green finds himself on a major mission: saving sea creatures from plastic. Using his incredible powers, Captain Green promises to save the day, but discovers that he can't do it all alone.

Readers find out how they can be a hero too. Superpowers are not required, anyone can do it!

### Is there a message you wish to convey with this book?

Absolutely. That if we all work together and make some easy changes in our daily lives, we can drastically improve plastic pollution.

When I visit schools, I find that children connect emotionally to this problem. There is one illustration in particular, where Captain Green is comforting Dolphin, that children respond to particularly strongly. It has been a joy to listen to them discuss their bright ideas to save our seas.

I enjoy hearing from parents and teachers about the changes that children have made at home and in school to refuse, reduce, reuse and recycle plastic. I think that the message of looking after the environment has never been more needed and children want to and can make a real difference.

### Is the book connected with any particular environmental charity?

The book has been endorsed by the Marine Conservation Society and can be purchased on their website, where profits go to support the valuable work that they do. The book is being used in schools and homes to introduce children to the topic of ocean conservation and to, hopefully, inspire a new generation of eco-warriors.

### Have you written any other environmental books?

I am working on another Captain Green story at the moment. My publishers wish to make this a series of picture books about various environmental issues. The next story is about climate change and it should be available in 2020.

### Tell me about your writing process.

I get inspiration in all sorts of ways; from things I see and hear when out and about (especially when there are animals around), from things my little boy says and does and even from things I hear in the news.

Writing *Captain Green and the Plastic Scene* required a lot of research. Although the story is fictional, the environmental issue is not. Once I had a rough idea of what I wanted to write about, I needed to decide how best to shine a light on the problem while, most importantly, telling a story that children would enjoy and connect with. I watched documentaries, read widely and talked to a marine biologist to get a good grasp on plastic pollution. I chose three animals to include and studied their habits and habitats.

The hardest part of writing this story was deciding how best to show the problem without overwhelming children and how to show solutions without being preachy.

Most of the other stories I write are more light-hearted. I often begin with a rough concept for a story and ideas and plot lines get ironed out as I write. I just go along for the ride and love it when the writing flows. The story is often found in the revision and I am so lucky to have fantastic critique partners who cast their fresh eyes and sharp minds over the bumpy bits.



## How do you present your book in schools?

I love to visit schools. As an experienced primary school teacher myself, I feel very comfortable pitching talks to suit children of all ages.


I usually chat about my inspiration for Captain Green, read the story and ask and answer questions. The children like to chat about the topic afterwards and share what they know about plastic pollution. I like to share a few facts with them and then we talk about some easy solutions to cut down on single-use plastic. In some sessions, children get to create their own superhero watches from recycled materials or design their own eco superhero. Instructions for these activities, and more, are available to download from my website.

Sometimes my focus is more on books and writing, and that's fun too. I am currently taking bookings and can be contacted via my website.

## What were your favourite books to read as a child?

As a younger child I adored *The Folk of the Faraway Tree* by Enid Blyton and would read it over and over, imagining what the characters and their amazing tree looked like. I also loved imagining the world of *The Wind*

*in the Willows* by Kenneth Grahame and read it now to my own son. *The Secret Garden* by Frances Hodgson Burnett and *Little Women* by Louisa May Alcott also have a special place in my heart.

I remember being given a non-fiction book about the environment that I also used to pour over from a young age. It instilled in me a deep desire to help protect our planet and its animals. Books are powerful tools and I believe that the more exposure children have to them, the better citizens they grow up to be. 

**Evelyn Bookless** grew up on a farm in the west of Ireland. She is a nature lover, mum, teacher and writer. Her first time diving was at The Great Barrier Reef. It blew her mind (but thankfully she made a full recovery!) Evelyn has lived in Hong Kong and Singapore for the past 10 years but has recently moved to the Netherlands. She dreams about clean oceans and contented sea creatures.



**More information:** [evelynbookless.com](http://evelynbookless.com)

## LAUNCH EVENT

### London becomes the world's first National Park City

**Russell Galt**



*"Those extensive tracts of country in England" selected for "their natural beauty" and "the opportunities they afford for open-air recreation..."* It seems unlikely that those who penned the National Parks and Access to the Countryside Act 1949<sup>12</sup> would have predicted a future Mayor of London declaring The Old Smoke a 'National Park City'. Yet on 22 July 2019 in a packed auditorium in City Hall, that's exactly what happened.

Hold on. According to the International Union for Conservation of Nature (IUCN), the primary objective<sup>13</sup> of a national park is *"to protect natural biodiversity along with its underlying ecological structure and supporting environmental processes, and to promote education and recreation."* Is that a realistic objective for a city? How does it weigh up against other urban objectives such as commerce, transport and housing?

"Look carefully at the logo," hints Duncan Mackay, Senior Policy Specialist at Natural England. A giant green asterisk reveals itself. He explains that London hasn't been *formally* designated as a National Park. Rather it has been inspired by the aims and values of national parks. The use of the term is metaphorical.

**LONDON  
NATIONAL  
PARK CITY\***

According to Dan Raven-Ellison, a 'guerrilla geographer' and founder of the movement, it is fundamentally about making urban life better.


*"It's about lifting our ambitions; going further to make the city greener, healthier and wilder; improving our mental health; cleaning our air; making the city richer in wildlife; freeing children to play and meet friends outdoors again; tackling the climate crisis and bringing more joy to the city."*

By signing the London National Park City Charter<sup>14</sup>, individuals and organisations are helping to normalise ecological urbanism. The movement has spurred political commitments including a citywide target of 50% green coverage by 2050<sup>15</sup>. Yet it has all the hallmarks and momentum of a grassroots campaign with thousands of Londoners actively involved, including many who had not previously engaged in environmentalism. It's challenging people to think differently about their city and the role of nature within it.

Think via ferrata ascending inner city walls, imperial fountains transformed into wildlife ponds, hedgehog holes in every garden, and canals that are clean enough to swim in. "What if?" and "Why not?" have become slogans of the movement.

It doesn't stop at the M25. A Universal Charter<sup>16</sup> has been drafted for an international audience, already finding traction in Glasgow, Newcastle and even far-flung Adelaide. A campaign to secure 25 National Park Cities by 2025 is underway.

IUCN Urban Alliance Chair, Jonny Hughes, described the Summit as:

*"an important milestone on the road to creating more resilient, sustainable, just, healthy, nature-positive and fun cities... If cities are ours to shape through inspirational movements such as National Park Cities, let's ensure they bustle with nature and let's make them beautiful while we do so!"* 

**Russell Galt** is Director of the IUCN (International Union for Conservation of Nature) Global Alliance: an initiative which aims to create greener, more liveable cities that will improve the health, wellbeing and prosperity of people living in urban areas.

**More Information:** [tinyurl.com/y4tou7pe](http://tinyurl.com/y4tou7pe)



## **Urban Environmental Education Review** **Edited by Alex Russ & Marianne E. Krasny**



A publication with the title *Urban Environmental Education Review* sounds as if it's an academic journal, but it's actually a book, edited by Marianne Krasny and Alex Russ at Cornell's renowned Department of Natural Resources, and published by Cornell University Press. That said, it has the feel of a journal in that it's a series of papers written by teams of academics and clearly intended for an academic audience. Its 30 chapters are divided into five sections: [i] urban context, [ii], theoretical underpinnings, [iii] educational settings, [iv] participants, and [v] educational approaches. There is also a helpfully extensive Introduction by the editors, commendably brief Forewords and Afterwords, a helpful list of authors, and a good index. More unusually, there is also a website where lead authors of each of the chapters present video introductions to what they have written. A number of these are well done. You can also freely read and download 10 of the chapters via the book's website in a 'pre-release offer' that is still available. You will also find a few comments here on what authors have written.

This is a well-structured book, put together with care. Unsurprisingly, the largest section is the final Educational Approaches part with nine chapters. Anyone with the stamina to read the 320+ pages from cover to cover (unlikely, of course) will find themselves well-prepared when they get to these. These beginnings to the book cover a lot of ground and much of it is familiar. The theory section ranges from environmental justice and sense of place to environmental governance with climate change along the way. I'd have liked there to have been more by way of history, however, and was disappointed that Patrick Geddes didn't even get a mention. Around 1890 in Edinburgh, Geddes dedicated himself to urban regeneration through connecting the environment and education and is widely regarded as an early environmental educator. 80 years on in the 1970s he became an inspiration for the UK's urban studies movement. Geddes favoured a hands, heart and head approach to learning, and argued that children in contact with their environment would not only learn more effectively but also develop positive attitudes towards it. Sadly, a hundred years on, such arguments are still having to be made to policy-makers.

I have one other criticism of the book. Although it draws on 'contributions from round the globe', over half the authors are from North America, and Anglophone contributors are over-represented as they often are in such publications. Inevitably, given this, a lot of North American cases, contexts and examples are used to illustrate authors' points. It would have been nice to see a more globally-balanced approach to this. Most conspicuously, perhaps, although there are six contributors (to three chapters) from Africa, all are from South Africa and the rest of the continent is left as *terra incognita*, academically speaking. This is despite forecasts from the UN Population Division<sup>17</sup> that two of the top ten largest cities in 2030 will be in Africa, and that Sub-Saharan Africa will have a large majority of the world's fastest growing cities between now and 2030. Indeed, the first chapter in the book makes similar points as it describes the phenomenon of rapid urbanization. Perhaps an expanded further edition can put this right.

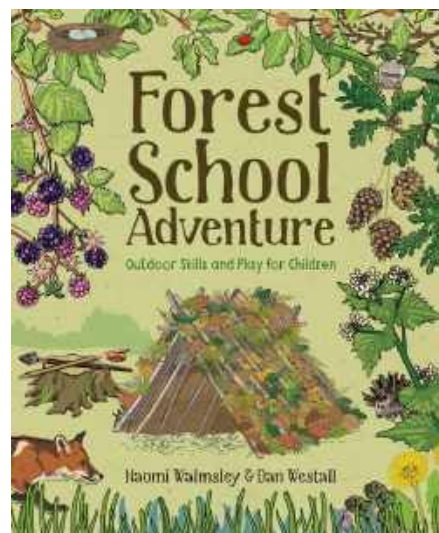
Book website: [tinyurl.com/y6odgp9s](http://tinyurl.com/y6odgp9s)

Video introductions: [tinyurl.com/yx9rs39d](http://tinyurl.com/yx9rs39d)

**Russ, A., and Krasny, M. (Eds.) (2017). *Urban Environmental Education Review*. Ithaca, New York: Cornell University Press. ISBN: 9781501707759**

**Reviewed by Professor William Scott**

## **Forest School Adventure: Outdoor Skills and Play for Children** **Naomi Walmsley & Dan Westall**



Beautifully written and illustrated with clear photographic instructions throughout, Naomi Walmsley and Dan Westall have brought together all of the key elements of forest school into an accessible and easy read. The book encompasses all that is needed to lead successful sessions across the primary age range and beyond, with its abundance of natural crafts, bushcraft skills and games, as well as wild cooking. Each chapter and activity is clearly laid out with a number of pictures for reference – particularly useful within the knots tutorials! The book is a valuable companion to any forest school leader, acting as both a reminder of activities, inspiration and also as a book to share with the children to allow them to choose the activities that they would like to explore further.

Naomi and Dan have qualifications in survival, bushcraft and Forest School and spent 5 months on a Stone Age immersion experience in America where they foraged for, caught and cooked their own food; made their own clothing from animal hides; and crafted their own tools from bones and wood. Throughout the book there are anecdotes from their experience which both adds interest and provides an opportunity to discuss how others lived years ago.

The book not only covers different skills used within forest school – such as knots, using tools and cooking – but also gives a number of different games and activities which can be used within sessions for different groups, such as making a bird feeder, making charcoal and leaf bashing.

Overall, I would highly recommend this book to anyone with an interest in forest school or who works with children outside. This book is just perfect for taking into the woods and sharing together.

**Walmsley, N., and Westall, D. (8). *Forest School Adventure: Outdoor Skills and Play for Children*. Lewes: Guild of Master Craftsmen (GMC) Publications. ISBN: 9781784944032**

**Reviewed by Kaleigh Atkinson**

***Resurrection Trust: Stories About Living Sustainably*  
Edited by Amanda Saint**



*Resurrection Trust* is a book of 'funny, dark, mad, bad, upbeat, downbeat and fantastical short stories about living sustainably'. They arose from the University of Southampton's Green Stories writing competition\*. The editor, Amanda Saint, says that the stories "showcase a myriad of different ideas about how humans can live more harmoniously with nature, and each other". The final two stories in the book were originally published in the 'cli-fi' anthology, *Nothing Is As It Was*, published on Earth Day 2018. "These were used in research for the *Resurrection Trust* book by Dr Denise Baden at the University of Southampton [into] what kinds of stories inspire more sustainable behaviour."


I read this book, fittingly enough, on a long train journey and it held my attention despite competition from fine landscapes. About half-way through the book I wondered if I was really the best person to review it as

I don't read many short stories (preferring novels), and I don't read much science fiction either – and that is the genre into which these stories fit most readily, despite the hint (noted above) that 'cli-fi' is the more appropriate term. However, I'm glad I did read it as the stories are, for most part both enjoyable and stimulating. Despite this, they left me with more questions than answers, but that's probably all to the good, given the ineffability of the transition we're trying to make.

The stories are extremely varied in focus and you wonder as you read them (I read them in order) what holds them together. In the end – for most of the stories – I think it is the necessity of exercising choice; coming to that fork in the road when you can choose, or not, to change how you live. It's important to note that we come to that fork every day; indeed, many times a day as we decide what to do. Not everyone in these stories chose the most obvious sustainable path, which added realism to the collection (because that's what we do most of the time); and for some of those who did, I found the ease of many of the transitions rather too glib to be believable.

I particularly liked Adrian Ellis' story *The Buildings are Singing*. It's about someone, Genie, who tries to rebel against the conformity of the AI building where she lives, by taking a stray cat home for company. The admirably anti-cat, pro-wildlife building is having none of it and withdraws some of her privileges until she makes amends. Tellingly it blocks all her TV channels except Eco-life. Genie's brother's girlfriend, meanwhile, has kicked him out preferring the sexy Cool-o-Matic 4000 fridge whose AI system she found particularly alluring (and, let's be honest, less trouble). Although this is a long way from Edward Abbey's magisterial *The Fool's Progress*, I was reminded of it anyway. I found this the wittiest story in the book and one of the most effective at raising the sort of issues – such as the necessary trades-off between the loss of personal freedoms and the gain of enhanced security – that we already face, and which are likely to become more acute.

In a review of the book, Jonathon Porritt said that it's hard to imagine "what living sustainably might really mean – and neither dry facts nor hypothetical scenarios seem to help very much." I think that's right. Convincing books are rare too. There are obviously Iain M Banks's culture novels where the problems of energy availability have been solved and want/need questions don't seem to apply as everything is in abundance – but that's a post-human world and out of reach. Then there's John Huckle's tour de force about life in Bedford in 2045 in which he describes a society where everyone is striving for the common sustainable good. That is, human nature has been tamed and there seem to be no deviants who want something better (or just different) for themselves and their families.

In the world we live in none of this applies which is why books like this are a help as we inch our way forwards, day by day; decision by decision. 

**Saint, A. (Ed.) (2019). *Resurrection Trust: Stories about living sustainably from the Green Stories competition* Environmental Education Review. Truro: Retreat West Books. ISBN: 9781916448384**

**Reviewed by Professor William Scott**

\* There are more Green Stories competitions coming up in 2020. See [www.greenstories.org.uk](http://www.greenstories.org.uk) for more details.



## WEBWATCH

### Websites focusing on towns and cities

Henricus Peters

As this edition moves slightly from the natural, towards a more specific focus on broader human centred environments, we realise the crucial importance of human geography, history and urban topics – where nature and human nature connect – in the curriculum.

#### London National Park City Schools Network

A network for London's schools/educators, to help all London's children become greener, healthier and wilder as part of London National Park City.

[nationalparkcity.london/get-more-involved/get-more-involved-1/schools-network](https://nationalparkcity.london/get-more-involved/get-more-involved-1/schools-network)

#### Royal Town Planning Institute

Royal Town Planning Institute has good teachers' resources and an ambassadors programme.

[rtpi.org.uk/education-and-careers/engagement-and-outreach](https://rtpi.org.uk/education-and-careers/engagement-and-outreach)

#### UNESCO World Heritage Cities Programme

UNESCO World Heritage Cities works with many partners to achieve goals - for example the Organisation of World Heritage Cities ([ovpm.org](https://ovpm.org)).

[whc.unesco.org/en/cities](https://whc.unesco.org/en/cities)

#### Green Cities Network

Green Cities network is all about a group of European cities and towns which are working to be more sustainable according to the Sustainable Development Goals.

[greencities.eu/about](https://greencities.eu/about)

#### Museums Association

Many museums have a major 'city' focus.

[museumsassociation.org](https://museumsassociation.org)

#### The Transition Network

The Transition Network is a grassroots idea to engage each local town and community to live better lives, in the local context.

[transitionnetwork.org](https://transitionnetwork.org)

#### Exploring Geopolitics

An information based site, for secondary students and adult reading. Many of the contributors are found in the likes of Geographical Magazine.

[exploringgeopolitics.org](https://exploringgeopolitics.org)

#### Geographical Association UK

Active membership group for geography teachers. Includes resources (some free), courses and a wealth of information about urban planning.

[geography.org.uk](https://geography.org.uk)

#### Royal Geographical Society

Learned society for all things related to geography. Includes resources and courses.

[rgs.org](https://rgs.org)

#### British Geological Survey

Understanding the geology beneath urban areas, for better planning.

[bgs.ac.uk](https://bgs.ac.uk)

#### Maps

Maps and resources for teaching about geography.

[ordnancesurvey.co.uk/education](https://ordnancesurvey.co.uk/education)

'*Making Sense Of The World, One Map At A Time*' – a US-based website with maps to view online or buy.

[brilliantmaps.com](https://brilliantmaps.com)

#### UN Sustainable Development Goals

One of the series of 17 goals states: "*cities have been very active in climate change action*".

[un.org/sustainabledevelopment/cities](https://un.org/sustainabledevelopment/cities)

#### Urban planning websites

A place to sign up to discussion weblogs.

[blog.feedspot.com/urban\\_planning\\_blogs](https://blog.feedspot.com/urban_planning_blogs)

#### National Geographic Cities Issue

Great edition all about the positive and negative aspects of cities.

[nationalgeographic.com/magazine/2019/04](https://nationalgeographic.com/magazine/2019/04)

#### Historical Association

The Historical Association "*support the teaching and learning of history*" and provide a wide range of great resources, both for teachers who are members, high school students and anyone with a particular interest in all aspects of historical information. Aside from their regular magazines for members, they have free downloadable resources such as A-level topic guides and free pamphlets on British and world topics including the Great Fire of London, Roman Britain and engineering achievements.

[history.org.uk](https://history.org.uk)

[history.org.uk/publications/categories/pamphlets](https://history.org.uk/publications/categories/pamphlets)

#### British Museum

The British centre dedicated to world history, culture and architecture. The BM has vast collections for all things urban – it's just the small matter of finding things – for example, there's a collection, also a trail, called World City in 20 objects.

[britishmuseum.org](https://britishmuseum.org)

#### Museum of London

"*Discover the history of London from prehistoric through to today.*" Here you'll find a great exhibition and resources about Romans up to and including the world city we know today. Remember there's also its unique Docklands sister museum.

[museumoflondon.org.uk/museum-london](https://museumoflondon.org.uk/museum-london)

#### London Transport Museum

"*The world's leading museum of urban transport*" features all the vehicles that you would expect with a focus on the uniquely London things like the Underground railway, double decker buses, posters and other paraphernalia.

[ltmuseum.co.uk](https://ltmuseum.co.uk)

## Science Museum

Seven floors of exhibitions and entertainment based on science, with a big focus on industry and the city.

[sciencemuseum.org.uk](http://sciencemuseum.org.uk)

[sciencemuseum.org.uk/objects-and-stories/science-city-london-1550-1800](http://sciencemuseum.org.uk/objects-and-stories/science-city-london-1550-1800)

## Mailing lists

BIG chat mailing list. “*BIG is the skills sharing network for individuals involved in the communication of science, technology, engineering and maths (STEM) subjects.*”

[big.uk.com](http://big.uk.com) > bigchat

Psci Comm mailing list. “*A list to provide a forum for discussion of any matter relating to public communication of science and public engagement with science.*”

[jiscmail.ac.uk](http://jiscmail.ac.uk) > psci-com

GEM mailing list. “*This list is for discussion of issues in museum education in the UK, in particular the use of IT, learning in and from museums, and related research.*”

[gem.org.uk/our-work/publications/gem-jiscmail](http://gem.org.uk/our-work/publications/gem-jiscmail)

Natural Environment and People Evidence Round Up. A round up of recent research, policy and practice snippets. To be added to the mailing list, email:

[martin.gilchrist@naturalengland.org.uk](mailto:martin.gilchrist@naturalengland.org.uk)

.....

**Henricus Peters** is a Editor of NAEF's ejournal.

Readers are invited to send favourite and most useful websites and apps to [Henricus.peters@gmail.com](mailto:Henricus.peters@gmail.com)



---

## REFERENCES

1. [ipbes.net/global-assessment-report-biodiversity-ecosystem-services](http://ipbes.net/global-assessment-report-biodiversity-ecosystem-services)
2. [farmgarden.org.uk](http://farmgarden.org.uk)
3. [countrysideclassroom.org.uk](http://countrysideclassroom.org.uk)
4. [gov.uk/government/collections/english-indices-of-deprivation](http://gov.uk/government/collections/english-indices-of-deprivation)
5. Kudryavtsev, A.; Stedman, R.C. & Krasny, M.E. (2012) Sense of place in environmental education. *Environmental education research*. 18(2). pp.229-250.
6. Carmona, M. (2019) *Place Value & the Ladder of Place Quality*. Place Alliance & Design Network.
7. Chapter 15, van Eijck, M. (2010) 'Place-Based (Science) Education: Something Is Happening Here', in: Toppins, D., Mueller, M., van Eijck, M. and Adams, J. (eds.) *Cultural Studies and Environmentalism*. London: Springer. pp. 187-191.
8. Maria Puig de le Bellacasa (2017). *Matters of Care: Speculative Ethics in More than Human Words (Posthumanities)*. University of Minnesota Press; 3<sup>rd</sup> ed. edition
9. [manchester.ac.uk/discover/news/heatwave-and-climate-change-having-negative-impact-on-our-soil-say-experts](http://manchester.ac.uk/discover/news/heatwave-and-climate-change-having-negative-impact-on-our-soil-say-experts)
10. [meen.org.uk/saveoursoil](http://meen.org.uk/saveoursoil)
11. DERA (2008). *Professional and National Occupational Standards for Youth Work*
12. [legislation.gov.uk/ukpga/Geo6/12-13-14/97/section/5](http://legislation.gov.uk/ukpga/Geo6/12-13-14/97/section/5)
13. [iucn.org/theme/protected-areas/about/protected-areas-categories/category-ii-national-park](http://iucn.org/theme/protected-areas/about/protected-areas-categories/category-ii-national-park)
14. [nationalparkcity.london/get-more-involved/get-more-involved-2/charter](http://nationalparkcity.london/get-more-involved/get-more-involved-2/charter)
15. [london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/parks-and-green-spaces](http://london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/parks-and-green-spaces)
16. [npc-universal-charter.netlify.com](http://npc-universal-charter.netlify.com)
17. [population.un.org/wup/Maps](http://population.un.org/wup/Maps)

For all news on the Association, blogs, journal back issues, a dedicated members' page and environmental education ideas and activities, visit [naee.org.uk](http://naee.org.uk).

Follow us on social media:



[twitter.com/naee\\_uk](https://twitter.com/naee_uk)



[facebook.com/NAEEUK](https://facebook.com/NAEEUK)



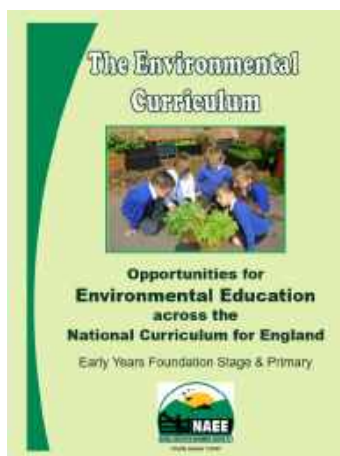
Write for *Environmental Education* – contact [info@naee.org.uk](mailto:info@naee.org.uk)



# NAEE's curriculum guides for schools

NAEE has published three guides for schools that illustrate how the school curricula provide numerous opportunities for teachers and students to explore the world's most pressing issues.

These curriculum guides are freely available as PDFs on the NAEE website: [naee.org.uk/latest-report-from-naee](http://naee.org.uk/latest-report-from-naee)

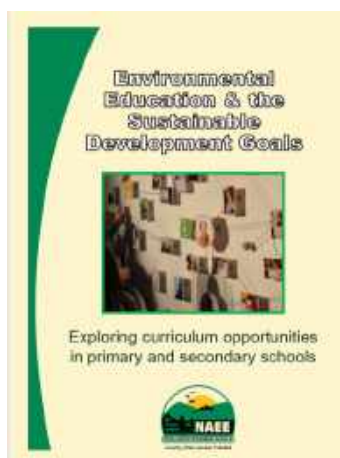
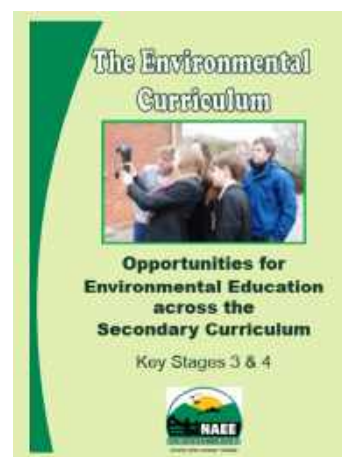


## **The Environmental Curriculum across early years foundation stage (EYFS) and primary (KS1 & 2)**

This report illustrates how early experience of schools provides opportunities for children to explore the world around them (both natural and built) and develop positive attitudes towards it.

## **The Environmental Curriculum across key stages 3 and 4**

This report illustrates how the secondary curriculum provides opportunities for schools, teachers and children to explore the natural world and develop understandings of key environmental issues.



## **Environmental Education and the Sustainable Development Goals (SDGs)**

This report explores curriculum opportunities in primary and secondary schools for a consideration of the goals. It uses curriculum analysis and school and NGO case studies, and its aim is to stimulate further work in schools to engage young people in learning about local and global environmental issues.

If you would be interested in providing case studies for future NAEE curriculum guides, please contact [info@naee.org.uk](mailto:info@naee.org.uk)

# LEEF National Urban Environmental Education Conference

**Monday 10<sup>th</sup> February 2020**

**Natural History Museum**

**Cromwell Road, London, SW7 5BD**



LEEF want to start a national conversation about urban Environmental and Sustainability Education.

LEEF's first national conference will be a celebration of innovative approaches for bringing ES learning to diverse audiences in urban contexts, and will celebrate the 30<sup>th</sup> birthday of LEEF.

Most importantly, it is an opportunity for practitioners to come together on a large scale to have a broad and deep conversation about emerging and best practice in our sector, and how we should and will move forward together over the next 30 years.

[eventbrite.com/e/leef-national-urban-environmental-education-conference-2019-tickets-54585974118](https://eventbrite.com/e/leef-national-urban-environmental-education-conference-2019-tickets-54585974118)

*"Our struggle for global sustainability will be won or lost in cities"*  
Ban Ki-moon, former UN Secretary-General