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Consider your trace: the shift from education ‘in’ to education ‘for’ the environment

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Introduction

‘Leave only footprints, take only photos, kill only time’ is a slogan of the Leave No Trace movement that emerged in the USA in the 1960s (Leave No Trace, nd). The movement and the slogan are currently experiencing a surge of interest in the UK and elsewhere in Europe amongst outdoor education organisations. In the age of the Anthropoceneⁱ the notion that humans ‘leave no trace’ anywhere on the planet is, of course, absurd. At the same time, it is becoming equally clear that humans should ‘leave a considerably smaller trace’ if we are to enjoy a sustainable future on Earth along with the other non-human inhabitants (Alagona & Simon, 2012).

This chapter begins with the twin discourses of adventure and environmental education, collectively known as outdoor education, and how they reflect the wider social trends of the twentieth century. Trends in UK environmental education over the last twenty years are then considered to see whether they reflect the recent awareness of human environmental impact and growing demands for a sustainable future, perhaps a move towards ‘consider our trace’.

In the latter part of the nineteenth century, whilst the *Wandervogel* youth movement in Germany was setting out to explore other cultures and the *friluftsliv* movement in Norway was discovering its own landscape as an important and emerging aspect of culture, British outdoor education was developing both an inward and an outward gaze. The focus of some activities, programmes and movements are clearly directed inward at the personal development or character building of the participant. Others with an outward gaze emphasise learning about landscapes and communities. In the UK these two strands of outdoor practice began at roughly the same time. For example the Boy Scouts movement (1908) and the Girl Guide movement (1910) focussed on personal development. Meanwhile the Woodcraft Folk (1925), inspired by romanticised ideas of native Americans, focussed on community and environmental relations. Both movements emphasised the desire to internalise a sense of duty amongst the emerging middle class at a time of considerable social change (Loynes, 2007).

The two discourses of adventure and environment

The two strands of adventure and environment have emerged and diversified in the many currents of the river that is outdoor learning in Britain. Some key events highlighting developments in both strands start in the first half of the twentieth century (Ogilvie, 2012):

- The British Schools Exploring Society integrated leadership development with science, service and adventure with its first expedition in 1932.
- The first scientific field trip from the Geography Department of Aberdeen University explored the Cairngorm mountains in the 1930s and began a trend for field excursions amongst universities and schools.

- Residential and expeditions emerged as a means of character building in both state and private schools led by an emerging cadre of liberal head teachers.

After the second world war increasing social stability and affluence saw significant enhancements in state education that supported the development of both adventure and environmental education (Ogilvie, 2012):

- The first Outward Bound centre opened offering month long courses to school boys in 1947 and school girls in 1951. The Duke of Edinburgh's Award Scheme, which contains a significant expedition requirement, began in 1956.
- The 1944 Education Act encouraged the emergence of outdoor centres during the 1940s and 1950s with a hay day in the 60s and 70s. Post war developments reflect a shift in focus from the instilling of a sense of duty to the assertion of individual rights for participation in society and its increasing benefits of recreation and travel. These centres ensured a considerably more egalitarian approach to access to outdoor education.
- Field trips mandated by the national school curriculum in the 1960s led to a growth in field study centres to meet the need. The first Field Study Council centre opened in 1947.
- The shift to more output led personal and social development courses occurred during a period of high unemployment and a raised interest in 'soft' vocational skills in the 1980s onwards.
- The combination of a serious accident known as the Lyme Bay Tragedy and demanding changes in the curriculum led many secondary schools to reduce their involvement in outdoor education and their use of outdoor centres. This created an opportunity quickly taken up by primary schools with a growing confidence in the value of outdoor learning.

At the turn of the century an emerging awareness of environmental concerns coupled with a rising awareness of how little time children were spending in constructive play in or out of doors led to national campaigns such as 'Adventure for All'. These created a context in which new outdoor education movements emerged and flourished:

- The emergence of Forest Schools in the UK amongst early years learning and play in 1994. The movement, which has grown rapidly, was inspired by Danish pedagogy (Knight, 2012).
- A rise in interest in 'bushcraft' amongst teenage youth groups and adults.
- The launch and rapid expansion of the John Muir Award, an environmental education programme adopted by school and community groups, in Scotland and then England and Wales (John Muir Trust, nd).
- The 'Learning Outside the Classroom' manifesto (2006) launched a government and, later, an independent initiative championing a rise of teacher led learning outside the classroom (Waite, 2011).
- 'Natural Connections', a Natural England funded project to advocate for Learning in the Natural Environment with explicit curriculum outcomes, engaged 190 schools by the conclusion of the project in 2016 (Waite, Passy, Gilchrist, Hunt, & Blackwell, 2016).

This chapter follows these developments in environmental education in the UK over the last twenty years. I explore whether there are trends that parallel wider concerns in society about a sustainable future or whether other social trends remain dominant. Elsewhere in Europe the story has been diverse with, for example, a strong environmental education orientation in Slovenia working with schools and, elsewhere, an equally strong non-formal educational approach to personal development in Finland. Festeu and Humberstone (2006) give further examples of the diversity of practice across Europe. Whether the trends I highlight in the UK can be identified more widely in Europe has yet to be explored.

Recent developments in environmental education in the UK

In the introduction I highlighted two strong strands of practice of outdoor education, adventure and environment. From this have arisen two strong pedagogical discourses. 'Adventure' emphasises the inward gaze and instrumentalizes nature as an arena for adventure and personal development (Mortlock, 1984; Lines & Gallasch 2009). 'Environment' emphasises the outward gaze constructing nature as an object of curiosity for educational purposes, a laboratory, zoo or park perhaps. In both cases the consequence has been pedagogies that tend to construct nature as 'other'. Whether as an arena or a laboratory, nature is instrumentalised for human benefit and curiosity (Bonnett, 2004).

Adventures require a 'hostile' space in which adolescents can develop skills, discover their power and explore their emerging identities in the arenas of mountains, rivers, seas and caves. The adventurers become authors of their own narratives, the heroes of their own epics. The presence of another story in the landscape authored by local people, or even other adventurers, is typically ignored. Nature is an arena to be visited to face challenges that aid character development (Loynes, 2008).

The interest in adventure narratives, of both a fictional and non-fictional kind, is a significant trend in UK culture of the twentieth century. It is thought to be an expression of the growing sense of agency and aspiration amongst a wider sector of society as standards of living develop. Adventure gets a boost from the increasing affluence and mobility as more and more people seek out adventure activities in their recreational time. The culture of celebrity and the rise of individualism further promote adventurous lives as activities become commodified and globalised (Pike & Beames, 2013). Education responded by understanding personal development as a valid educational purpose and adventure as a worthwhile pedagogical approach for adolescents, a 'rite of passage' supporting the process of transformation from youth to adult (Hopkins & Putnam, 1993).

On the other hand emerging young scientists and their teachers found dramatic, novel and unfamiliar landscapes motivating contexts for enquiry using scientific and social scientific methods to develop the skills and knowledge of a range of disciplines (Hunt, 1989). Abstract knowledge is won from studying the locations visited and taken back for examination in school. Nature is understood as a zoo in which to encounter the novel or a laboratory in which to hone the skills of scientific enquiry (Bonnett, 2004).

Understanding nature as an object of study that has diversified into the various sciences and underpinned the industrialisation and progress of societies worldwide had an early start in the UK. The British Empire provided a context in which exploring the exotic, the 'other', became a much-celebrated tradition linking science and adventure in the idea of the expedition. It is perhaps this tradition that led UK outdoor practice to value visits to unfamiliar and dramatic places as a worthwhile educational endeavour epitomised by the British Schools Exploring Society and many other educational exploration groups and movements (Beames, 2010). Indeed, it can be said that the winning of scientific knowledge provided an early justification for far-flung adventures. The 'adventure' became a much valued but implicit aspect of educational journeys until later developments brought it into the limelight (Beames, 2010).

Nature as 'other'.

'Nature as other' is emphasised by the act of 'visits' to nature for a day, residential visits to specialist centres and expeditions. Again, nature is something elsewhere that is different from the everyday situation and that is visited on special occasions. One example that emerged in the sixties in the USA and is now becoming popular as a movement in the UK and elsewhere in Europe is 'Leave No Trace' (see inset 1).

Case study 1: Leave No Trace

Leave No Trace (LNT) is both an educational programme and a movement. It has been offered to visitors to wilderness areas in the USA for over 50 years and has been adopted by individuals and organisations as a set of values for wilderness visitors to follow. This includes European educational organisations such as National Outdoor Leadership School (NOLS) Europe and the John Muir Award. The term has also entered everyday usage amongst outdoor professionals and recreationalists to describe or promote a low impact approach. Recently, an Erasmus plus project called 'Imprint' has set out to introduce the 'Leave no Trace' approach into schools in six European countries with the aim of scale up to many more.

LNT has been challenged on several occasions largely for the way in which it argues for minimum impact behaviours once people enter a wilderness area – no littering, no fires, stay on the trails, keep quiet, etc – but ignores the, some would argue, much bigger impacts that the carbon footprint of the equipment and travel involved in the trip as well as the even bigger impact of the everyday lifestyles of our societies on a global scale including impacts on wilderness areas where no trace has supposedly been left.

There is also the substantial impacts humans have had and continue to have within wilderness areas to consider, ethnic cleansing and the reintroduction of species for example, including 'keystone' species such as wolves. Keystone species are those that have a significant trophic role in the ecosystem. For example the mere presence of wolves disturbs browsing herbivores such as moose. As a result vegetation patterns are changing including the regrowth of overgrazed woodlands on which many other species depend.

To this I would add a more conceptual but significant dilemma. The LNT approach treats nature as other, something that is entered at the boundary of a wilderness and left when people leave and something people should interact with as little as possible; 'leave only footprints, take only photos'. Care for nature is therefore exercised within the boundary but is assumed not to apply outside of the area.

With respect to the appearance of LNT in Europe, which arguably has no wilderness areas, it can be said that humans are the most impactful keystone species and have been for centuries. This has resulted in habitats that have become widely valued for their biodiversity such as hay meadows and coppiced woodland. These have fallen out of everyday use as new sources of materials and new methods of farming and forestry have been introduced. These habitats are now considered endangered yet they are so highly valued for their biodiversity that they are protected as nature reserves or encouraged with agri-environment funding to maintain the old management practices. From this point of view leaving a trace can be seen as a good thing maintaining threatened species and ecosystems often with voluntary effort.

These kinds of approaches engage people with nature in ways that extract resources in a sustainable fashion at the same time as enhancing a valued aspect of European biodiversity. Humans are understood as involved in and a part of nature rather than as viewers of nature. The recent interest in rewilding takes this approach a step further as it both values areas where 'natural' processes dominate and are left as far as possible to themselves and it understands humans as one of these 'natural' processes that walks through, camps, consumes wild food and fuel and disturbs animals.

This sets LNT an inbuilt conundrum. Imprint, the European project mentioned above, illustrates this well. Whilst setting out to achieve a 'minimal or zero footprint' the organisation also seeks to '(t)arget a positive footprint (I'm a print+), rather than just reducing the negative one (I'm a print-)' creating active environmental citizens in the process.

My argument is that LNT can create people who love nature but understand it as something of which they are not a part or involved in whilst a 'Leave More Trace' approach – or as a colleague recently suggested a 'consider your trace' approach, also implied by Imprint as their actual goal, creates environmental citizens engaged in what is the right trace to leave for the benefit of humans and biodiversity.

In this case study I suggest that, even in attempting to care for nature, nature is treated as something other and that humans impact on it only when we are present in it, that is in the special places humans have designated as natural. As many have argued this approach is congruent with the urbanised, industrialised consumer society that now dominates western societies and is rapidly globalising (Alagona & Simon, 2012). Modern life distances the majority of people from experiences of nature whether that be for utility or aesthetic appreciation. In the rush to protect what is left of nature humans have set it aside behind boundaries and, in some cases, barriers conceptually excluding us from it and it from us (Bonnett, 2004). I overemphasise of course for the sake of clarity. There will be situations where nature is understood differently perhaps in rural communities or from organisations with a strong counter culture ethos. However, I suggest that my thesis is helpful from the point of view of locating outdoor learning in wider socio-political and economic contexts.

'Connecting' with nature

This may seem at odds with the earlier list of events that included, for example, Forest Schools and the John Muir Award; both programmes that appear to have a different orientation to nature. The second part of my thesis is that I think the trends in outdoor learning are changing. During the last thirty years a current in the river of approaches to outdoor learning, that has been persistent but faint (see Woodcraft Folk (2008) for example), has strengthened (Henderson & Vikander, 2007; Roberts, 2012). The

driving force has been a professional concern for education for sustainability developing globally throughout education (Orr, 1991; Sterling, 2001; Bonnett, 2004; Hayward, 2012) to which outdoor educators from the UK and elsewhere believe they can make a valuable contribution (Cooper, 1998; Mannion, Fenwick & Lynch, 2012; Ross, Christie, Nicol & Higgins, 2014). It has been further informed by a growing feminist critique of masculine outdoor narratives of separation from and dominance over nature (Warren, 1996).

These trends are made up of a disparate set of growing and increasingly popular approaches within the outdoor sector that claim to place humans in nature rather than setting them apart. They increasingly ally with the emerging global movement of place-based or place-responsive education (Wattchow & Brown, 2011; Mannion & Lynch, 2016; Beames, 2016). Similar potential and trends have been noted in Sweden (Sandell & Othman, 2010).

One of these new approaches, The John Muir Award, was launched in Scotland in 1997 as an initiative to 'encourage people to connect with, enjoy, and care for wild places'. The 250,000th award was given in 2015 and the scheme now operates in Scotland, England and Wales (see inset 2).

Case Study 2: Leave More Trace: The John Muir Award

The John Muir Award (JMA) is the educational arm of the John Muir Trust, a wilderness charity that promotes and defends the interests of 'wild' land primarily in Scotland.

Despite its adoption of the LNT approach, the JMA leaves a considerable trace both in wild places and in nature more widely through its award scheme. The JMA encourages groups of people to find, learn about and doing something for a place and then tell others about the place and the work. In a recent study (JMA, 2011) the JMA claimed (based on a survey of 81% of participants) to have, in one year achieved:

- 32,373 metres of footpaths maintained and created – equivalent to more than four tourist paths up Ben Nevis.
- An area the size of 100 football pitches cleared of invasive species, including rhododendron, Himalayan balsam, snowberry and sea buckthorn.
- 82,451 bin bags of litter cleared – more than the capacity of the Olympic Stadium.
- 1,382 metres of hedgerows created.
- 335,574 square metres of woodland managed including 18,967 trees planted.
- 2,093 metres of drainage ditches dug.
- 4,160 metres of fences built or maintained.
- 74,712 square metres of meadow created.

This is hardly 'no trace' and is indeed considerably more trace than a group passing through on a hike might have caused. Indeed, the report claims that, using Heritage Lottery Fund figures the work done was worth £977,280. By 2015 this figure had risen to £1,291,710. The difference is, of course, that the trace has been considered by the group, and in some cases by the organisation their work supports, and has been considered as the right trace to leave enhancing biodiversity or enhancing the opportunities for people to encounter flourishing habitats.

Of course, the LNT approach is a helpful way to put across the idea that humans should and can minimise their harmful impacts in areas of high natural value. Perhaps one of its strengths

is that the scheme makes no judgement about whether that highly valued place is just down the road in a wild patch surrounded by urban landscapes or a continent away in a place with little human settlement. From this perspective the JMA, despite adopting LNT, is a good candidate for LMT and CYT. The same report would seem to endorse this view (JMA, 2011) with a quote from John Muir:

“It is not enough for people to be in sympathy with the plight of the natural world, but that they must become ‘active conservationists’, as campaigners, as practical project workers, as scientists, as artists, as writers.”

Whilst emphasizing ‘wild places’, settings that continue to resonate with the concept of ‘nature as other’- or at least ‘good’ nature as other, the scheme in fact encourages people to connect with local as well as far away places that have a ‘wild’ feel to them. This can be a village pond, woodland copse or overgrown hedgerow as well as a national park or wilderness area. In addition participants are invited to do more than ‘connect’ with a place but also to ‘care’ for it. In this chapter I use the term ‘engage’ to make a distinction between the appreciation ‘of’ a place and an active participation ‘in’ a place. This engagement is characteristic of a change in environmental education, one that is shifting focus away from environmental understanding and appreciation and towards environmental citizenship.

Engaging with nature: environmental citizenship - a new trend?

I have used the John Muir Award to characterise what I think is a growing trend that may be reflecting growing environmental concerns in society, from the loss of wildlife and countryside to anthropogenic climate change and other forms of pollution.

Perhaps these developments have taken their strongest hold in early years education, in nursery and primary schools. In primary schools there is a growing interest in ‘learning outside the classroom’ using the school grounds, farms, nature reserves, museums and historic sites and local open spaces such as woods and parks. The purposes are varied from using the space to teach curriculum topics to developing social and study skills or enhancing relationships between pupils and teachers (Waite, 2011). These developments were advocated by a government initiative called ‘learning outside the classroom’. The initiative is now an independent ‘council’ providing online resources, training and advocacy for teachers (Council for Learning Outside the Classroom, nd).

In nursery schools the emphasis is more on constructive outdoor play. Of these approaches the Forest School movement has had a particularly significant influence in the UK. Imported from recent Danish practice, the pedagogy has been widely adopted and adapted supported by a national organisation and training programme. The key principles of student led enquiry and play emphasise a sensual, emotional, creative and cognitive connection with places. Pupils develop a familiarity with a place in different weather and seasons. Supported by adults children explore, make fires, build dens and make trails among many other play activities (Knight, 2012).

Such activities are messy. Children take home 'nature' as wet and muddy clothes and vivid stories to tell. They leave behind trails, fire circles and dens. Importantly, the movement values not only the physical, emotional, social and cognitive benefits to the children but also the sense of an embodied familiarity and knowledge of a place, 'natural connections' as one large scale study using Forest School and other approaches has called it. The aspiration is that affection for such activities and places will stick and be passed on to future generations through family life as much as through schools. Natural England (NE), the government agency for nature in England, funded the Natural Connections project in order to explore how to encourage more primary schools into the outdoors. NE has since built on the term describing the approach as 'learning in the natural environment' (LINE) (Dillon & Dickie, 2012). NE argue for LINE as a key strategy in achieving government policies concerning health, wellbeing and education and so constructing these uses of the natural environment as a significant ecosystem resource worthy of government investment. A strong evidence base is growing to support their claims (Waite et al., 2016).

Outdoor education has also begun to explore ways in which it can not only do positive things for nature through conservation but how it might also educate environmental citizens prepared to change their lifestyles in order to reduce their harmful footprints, bringing nature into the sphere of domains worthy of ethical concern. Of course OE is far from alone in this trend. Education for sustainability is a movement that has impacted on many subjects and in many countries since the United Nations Rio de Janeiro Earth Summit in 1992. Bonnett (2004) argues strongly for the importance of 'retrieving nature' in education for a post-humanist age. Rawles (2013) argues that outdoor education practitioners and scholars can address these concerns on two fronts, first by reducing their own footprint caused by travel and equipment use and, second, by working out how they can contribute to the teaching of the knowledge, values and behaviours necessary to encourage moves towards a more sustainable society.

An elusive coherent progression

So far a progression of LINE from nursery education to adulthood has proved elusive. Programmes such as the John Muir Award provide ways in which teachers and youth workers can pick up the natural connections of early years education and develop it, with the support of school subjects such as geography, into an engaged, environmental citizen. However, recent evidence indicates a significant drop in LINE, or any form of outdoor education, in upper primary and secondary education (Dillon & Dickie, 2012).

An integrated and progressive programme could lead to informed adults who value the places they live, work and play in and are prepared to act politically for them in embodied and discursive ways. Innovative projects have successfully engaged young people as advocates for sustainability in their schools and communities (Scott, 2013). Perhaps this will yet evolve into a comprehensive approach or perhaps the crowded and demanding academic agenda of secondary schools will continue to squeeze out the 'occupation' of environmental citizen. Quay and Seaman (2013) describe just such a case study from the USA in which an environmental education initiative failed to gain traction in the school curriculum. Their remedy is to suggest a move away from 'subjects' and towards what Dewey called 'occupations' as the central construct

for education. Compelling as their argument is, it is hard to see where such a move might come from in educational systems that seem inherently resistant to reform.

Perhaps this 'occupation' is not suited to the school situation and some new institution will pick up the agenda. There are possibilities. The National Citizenship Service, for example, is a summer programme of experiential activity forming a bridge between secondary school and further training or education (National Citizen Service, nd). Originally a pilot it is evolving into an inclusive service for all sixteen year olds. Many of the schemes on offer under this programme include community dimensions such as environmental projects.

Perhaps the original two strands of the outer landscapes of nature and the inner landscapes of identity formation will drift back together. The discourse around place-based education suggests this is possible as identity is represented as distributed in the places we inhabit whether we are at home or on visits. The representation of school grounds and local woods as nature of local significance as well as the visits further afield to contrasting and spectacular landscapes of cultural significance certainly provide a context in which more of us find our identities partly in nature, see nature as a valued place for which we have a set of duties and responsibilities and understand the impact of our lifestyle choices on nature – and therefore on us. This would be a trend that, if it does not leave more trace, it certainly will invite people to 'consider their traces', wherever they are.

Notes

¹ The Anthropocene is the term geologists recently applied to modern times. It refers to the epoch of geological history in which substantial, global evidence of humans will be present in the geological record. It has been applied to time since the explosion of the first atomic bomb after which radioactive fallout will appear globally in sedimentary deposits (Zalasiewicz, Williams, Haywood & Ellis, 2011).

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