One thousand good things in nature: Aspects of nearby nature associated with improved connection to nature.

Miles Richardson, Jenny Hallam and Ryan Lumber

University of Derby

Email: m.richardson@derby.ac.uk

This is a pre-copy-editing, author-produced PDF of an article accepted following peer review for publication in Environmental Values, 24 (5), 603-619.

The definitive publisher-authenticated version is available online, doi: 10.3197/096327115X14384223590131

http://www.erica.demon.co.uk/EV/EV2423.html

Abstract

As our interactions with nature occur increasingly within urban landscapes, there is a need to consider how ‘mundane nature’ can be valued as a route for people to connect to nature. The content of a three good things in nature intervention, written by 65 participants each day for five days is analysed. Content analysis produced themes related to sensations, temporal change, active wildlife, beauty, weather, colour, good feelings and specific aspects of nature. The themes describe the everyday good things in nature, providing direction for those seeking to frame engaging conservation messages, plan urban spaces and connect people with nearby nature.

Keywords: Nearby nature, nature connectedness, valuing nature, accessing nature.

KEYWORDS

Nearby nature, nature-connectedness, valuing nature, accessing nature.

INTRODUCTION

There is an acknowledged need to reconnect people with nature (e.g. DEFRA, 2011) owing to the associated benefits to human wellbeing (e.g. Hartig et al., 2011) and the natural world through increased pro-environmental behaviour (e.g. Nisbet, Zelenski and Murphy, 2011). However, as our interactions with nature will increasingly be within urban landscapes (Dunn et al., 2006), there is a need to consider how 'mundane nature' can be valued and provide a route for people to better understand their connection to nature (Newman and Dale, 2013). Interventions to tackle this issue head-on are emerging and empirical evidence of a sustained increase in nature-connectedness through noting three good things in nearby nature each day for five days has been found (Richardson and Sheffield, under review). The present paper provides an analysis of the good things identified in nearby or mundane nature that, as predicted by Newman and Dale (2013), can reconnect people to nature.

An analysis of the everyday things in nature people report to be good informs our understanding of the value of nearby or mundane nature, thus informing the principles by which natural spaces in urban areas are planned and utilised in the future. For example, it has been argued that increasing people's connection to nature is at least as important as increasing the availability of and access to green space in urban locations (Lin et al., 2014) as connection leads to use, exposure and associated benefits. Further, when trying to frame messages and engage people with nature and conservation, there is a need to know what the good things in nature are perceived to be (PIRC, 2013). There is also a wider need to consider the details of our subjective encounters with nature from differing methodological perspectives (Hinds, 2011) and better understand the feelings people have in, and toward, nature (Hartig et al., 2011). This paper goes some way to meeting these needs through presenting a content analysis of close to 1,000 observations of the good things in nature, thereby capturing feelings and celebrating the mundane.

The observations of the good things in nature were written by 65 people who took part in a research project to test an intervention designed to increase connection to nature. The participants were simply asked to note three good things in nature each day for five days. These observations took place within their typical everyday environment and routine. Prompts were sent each morning and sentences were typically collected in the evening. In order to evaluate the intervention those involved were asked to complete a number of questionnaires the weekend before, the weekend after and then a follow-up two-months later.

This allowed changes in the human–nature relationship to be analysed (Richardson and Sheffield, under review).

THE HUMAN–NATURE RELATIONSHIP

At its core, connecting people to nature is concerned with the concept of an individual's sense of self (Schultz, 2000), where humanity and nature are one and the same. Such concepts expand the self, for example the ecological-self (Bragg, 1996) and environmental identity (Naess, 1973), which relate to a person's understanding of their interconnectedness with nature or their sense of inclusion in nature (Nisbet, Zelenski and Murphy, 2008). From this perspective, a developed ecological-self leads to a greater respect for the natural world and pro-environmental attitudes and behaviours (Nisbet, Zelenski and Murphy, 2008). The self is a central construct within Western thinking and the notion of a disembodied or independent self is common in modern Western societies (Bragg, 1996). This need to develop the ecological-self arises from the idea that people increasingly see themselves as separate from nature (Vining, Merrick and Price, 2008). Driven by an imaginative human mind, technology shapes and defines us (Taylor, 2010). Technological advances first allowed people to settle, to farm the land, but further advances eventually saw people leave the fields and villages for a contrasting industrial life away in towns and cities; a lifestyle where work is no longer driven by the seasons and we are detached from the environment of our evolution in an Anthropocene age surrounded by a more mundane nature (Newman and Dale, 2013). In an analysis of this shift from agricultural to industrial economy Cronon (1995) highlighted the resulting alienation from nature. In parallel to these lifestyle changes, Western philosophical thinking also developed, seeing humans as separate from nature and dominant over it (Vining, Merrick and Price, 2008).

In an attempt to help realise the truth of the human–nature relationship and increase connectedness, the three good things in nature intervention answers calls to value the 'mundane nature' (Newman and Dale, 2013) or 'nearby nature' (Kaplan and Kaplan, 1989). The process adopted was informed by previous research that has analysed the impact on feelings of connection to nature of noting and writing about nature in the local landscape each day (Richardson and Hallam, 2013). There is a long tradition of writing about the natural world, which ultimately is a reflection on how the mind sees nature and itself (Cameron, 1989). A link perceived in the 1800s by Richard Jefferies, pioneer of a naturalism that

recognised the growing divide between humans and nature (Matthews and Welshman, 2010). However, some argue that writing about nature tests the boundaries of self against external nature and is a route to realisation of our place in the natural world (Slovic, 1992). This philosophical stance is in line with the dominant Cartesian tradition of modernity introduced above, where the subject is seen as separate from object and has led to assertions such as '*The world is made for man, not man for the world*' by Francis Bacon (Bacon cited in Worster, 1994 p.30). An alternative is the phenomenological perspective of Merleau-Ponty (e.g. Merleau-Ponty and Lefort, 1968), which suggests a shared place in the natural world – a perspective often observed by anthropologists in native peoples (Sabloff, 2001). This shared place and phenomenology was seen in the nature writing of Nan Shepherd before being espoused by Merleau-Ponty (Shepherd, 2011), and can be seen to develop through the act of nature writing itself (e.g. Jefferies, 2011; Richardson, 2014).

Although noting three good things in nature is a very short form of writing, the amount of time spent writing does not equate to the time spent processing the information written and associated thinking. Research has found writing about experiences for just two minutes for two days can bring benefits (Burton and King, 2007). Menary (2007) also suggests that writing is thinking in action, with writing being supported by both manipulations of the external environment and neural processes, such that writing is not just an output of thought, but shapes and enables our thinking. This cognitive integration perspective on writing returns us the philosophy of Merleau-Ponty and subsequent theories of embodied cognition (e.g. Clark, 1997; Gallagher, 2005; Lakoff and Johnson, 1999) and extended mind, which embed us in the environment (e.g. Borghi and Cimatti, 2010; Jacob, 2012) as biological beings evolved to make sense of our landscape (Noë, 2010). Thus, it is proposed that the simple act of noting and writing down three good things about nature promotes reflection and can shape our thinking about our relationship to nature. Recent research has confirmed the link between self-reflection and connection to nature (Richardson and Sheffield, in press).

THE GOOD THINGS IN NATURE

Previous work into human–nature relationships gives indications of what people might identify as good things in nature. A key concept is Biophilia (Wilson, 1984), which proposes that the human–nature relationship is built upon an innate human need for nature, a species wide genetic basis for affiliating with biological life (Gullone, 2000). Whilst there are

differences to the concept of nature-connectedness, aspects of Biophilia relate to the positive effect that can be attained through engaging with nature in specific ways. Therefore, Biophilia can provide a basis for predicting what the good things in nature might be. For example, the nine values of Biophilia (see Table 1) emerged from Kellert's research into attitudes towards wildlife (Kellert, 1993) with each value representing a different interaction with nature, motivated by an innate need to engage with the natural environment (Gullone, 2000). Although the nine values are not intended to identify the good things in nature, they can inform the present work. For example, the nine values are often unconsciously manifested through artistic means, emotional responses, cognitions and individual ethics (Kahn, 1997). The values are thought to be easily learnt as interacting via one of the nine values led to greater survival prospects in humanity's evolutionary past (Frumkin, 2001; Kellert and Wilson, 1993; Windhager et al., 2011).

Table 1 About Here

Choosing which aspects of nature to engage with is often based on the perception of the restorative benefits natural spaces provide (Hartig et al., 2011), which in turn is based on the visual appeal of nature (Kaplan, 1995). The earlier work of Kaplan on environmental preference examines human preference for certain variables identified within the natural environment (Kaplan, 1987). The detail of the work considers the cognitive, biological and evolutionary theories that might underpin these preferences. In the present work, the basis of some of the preferred variables themselves is informative – for example, the primary landscape qualities such as trees, water and foliage. These underpin more conceptual preferences such as complexity or mystery, a pathway disappearing around a bend promising more information. In a quantitative study of variable domains which predict environmental preference (Kaplan, Kaplan and Brown, 1989), mystery was found to be the only significant 'information' variable, with perception-based variables such as open space or smooth and easy terrain for locomotion being most powerful, although openness had negative associations. The primary landscape qualities are likely to be identified within the good things in nature, but the themes of the sentences in which they appear will be of interest, and it should be remembered that the context of the three good things in nature intervention is the

mundane nature in the local, often more urban, environment, rather than open natural landscapes with woodland, lakes and waterfalls.

Central to the work of Kaplan (1987) above is aesthetics, and this, together with our cultural history, highlights a fundamental good thing in nature; the beauty of nature. Nature's beauty has clear appeal to humans and is reflected in a long history of art and writing. Ulrich (1983) notes the human preference for natural forms and argues that aesthetic response to these natural forms is central to our understanding of human–nature relationships. Beauty is a perceptual experience of satisfaction studied within aesthetics and the beauty of nature is included in Kellert's nine values of Biophilia as the aesthetic dimension. Further, recent research has shown that increases in wellbeing through nature-connectedness are mediated by engaging with natural beauty, with the individual more likely to increase their wellbeing when they were attuned to the beauty of nature (Zhang, Howell and Iyer, 2014). It therefore seems likely that beauty will be a frequent theme within the good things in nature identified.

Colour can be part of the broader consideration of beauty, but is a variable of natural forms, the various colours of leaves for example. There is research to suggest that colour itself can also be expected to be seen as a good thing. Pleasant colours lead to positive affective responses such as delight and act as a contributing factor to the sense of tranquillity experienced when in nature (Kjellgren and Buhrkall, 2010). The visual appeal of nature is not restricted to vegetation alone, as the appeal for wildlife is also based on colour: bright pigments on penguins (such as on the beak and chest) lead to greater preferences for the animal over other attributes such as size or species (Stokes, 2006).

As they provide access to the world, the senses are a pathway to becoming immersed within the environment through an active engagement with the smells, sights, sounds and textures of nature. Pleasant smells from nature lead to heightened sensory experiences and can create a sense of tranquillity that is not possible with simulated natural environments (Kjellgren and Buhrkall, 2010). Auditory experiences are also important for those with an affinity for nature, with birdsong providing restorative experiences and the sensation of being (metaphorically) removed from an urban, indoor environment (Ratcliffe, Gatersleben and Sowden, 2013).

The research on the benefits of nature also provides insight into the good things in nature, with those aspects known to be beneficial inherently being good. For example, having access to local coastal waters has been found to provide mental and physical wellbeing benefits (White, Alcock, Wheeler and Depledge, 2013), while simply walking in an outdoor, natural

environment leads to better moods post-walk than walking in an indoor environment (Nisbet and Zelenski, 2011). Being able to view trees has long been associated with benefits to wellbeing and is often used in town planning as a central feature (Hartig et al., 2011). Finally, the strength of the relationship between humanity and nature may depend on the seasons, as it has been suggested that some seasons (such as spring and summer) may have a greater effect on emotional wellbeing scores (Howell et al., 2011), which suggests weather and temporal changes in nature could be important 'good things' in nature. This can be related to tending and growing plants (Freeman et al., 2012). Finally, being in nature can promote good feelings, such as happiness (Nisbet, Zelenski and Murphy, 2011)

A further possible source of predicting the good things in nature is from the key scales in the measurement of nature-connectedness. Two key measures are the Connectedness to Nature Scale (CNS, Mayer and Frantz, 2004) and the Nature Relatedness Scale (NR; Nisbet, Zelenski and Murphy, 2008), with the latter, as with a wide range of research in this area, having a basis in Biophillia. Whereas the values of Biophilia and wider research can be interpreted to give an indication of the good things in nature that are associated with a greater connection to nature, the items in CNS do not get beyond a recognition of that end state, an interconnectedness with nature. Whereas, with its basis in Biophilia, the NR scale does have a wider reference, with activity-related items that suggest an affinity for being outdoors, woods, wilderness, gardening and noticing wildlife.

In summary, the research presented above suggests that the good things will be found in the beauty of nature, its colours and the sensations it provides. The aspects of nature, such as the flora and fauna, weather and changes across the seasons might also be seen to be good. Inherent in all these possibilities are the good feelings themselves, the positive aspects of nature.

THIS STUDY

The content of the good things in nature noted by those tasked with writing down three good things in nature each day for five days is analysed. This will provide insight into what is perceived to be good in nature, in the context of a simple intervention integrated into the day-to-day lives of a range of people living in predominately more urban environments.

METHOD

Participants

Following an invite for a study 'exploring the benefits of short writing tasks', with a link to a participant information sheet, sent to campus and online students of the University of Derby and circulated by social media, 65 participants were recruited. The sample comprised 49 females and 16 males with an age range of 18 to 58 years, mean age of 33.8 years (SD = 10.3). Twenty-two participants were full or part-time students, 23 were working only, 19 were working and studying part-time and one was not working or studying. They were primarily UK (n = 54) and non-UK but EU (n=6) based, with the remainder from North America (n=5). Sixty-nine per cent were located in an urban/suburban environment and 31 per cent in semi-rural/rural locations.

Procedure

Participants were offered a choice of dates and asked for their preferred email address. A website was used to record participants' sentences each day, following daily email reminders to note three good things in nature. The participants were instructed to 'write three good things in nature that you noticed today' and the task guidance stated that the 'things you can list can be the beauty of small things at any one moment or wider aspects that arise from attending to the diversity and wonder of the natural world around you. For example, it could be as seemingly trivial as noticing the song of a robin or movement of a tree in the breeze.'

Ethical Considerations

The study was approved by the department's Psychology Research Ethics Committee and also met the conditions of the British Psychological Society's (BPS) Code of Conduct and ethical principles for carrying out research (BPS, 2004).

Coding the Data

The data set was analysed using content analysis, a systematic technique used to code large volumes of data (Krippendorf, 1980; Weber, 1990). An emergent coding approach was used to generate content themes. The first author's knowledge of previous findings is likely to have led to some bias in the process, and this is acknowledged, although this is balanced by the second author's independence. Following the procedure outlined by Haney et al. (1998)

the first and second authors independently read through one third of the data set and grouped statements into content themes. They then met to compare the content themes they had generated. In this meeting there was considerable agreement between the lists of content themes that had been generated. There were a few minor differences and these disagreements were discussed and resolved. Based on this discussion the titles of the content themes were decided and a sentence or two relating to each content theme was written up so that the first and second authors analysts were clear on the scope of each content theme and the kind of statements that should be coded within each content theme. In order to test the initial list of content themes the first and second authors independently coded 60 statements from the data set. During this stage the first and second authors met each time they had coded 20 items to discuss any disagreement and further refine the themes that had been initially generated. At the end of the process the titles of the themes were finalised, defined and example statements were listed after each theme. This created a coding manual that was then used by the first and second authors to independently code a sample of statements from the wider data set.

Inter-rater reliability was tested by the first and second authors coding 150 of the total number of cases. The two raters coded each sentence to one of the ten variables, with the eleventh, Other, not being used within the sample. Kappa coefficients of the 97.9 per cent agreement in the 3000 decisions ranged from 0.736 to 1.00 for each theme, with a mean score of 0.874. A generally accepted interpretation of Kappa coefficients is that a score between 0.6–0.8 represents substantial agreement, while a score above 0.8 is excellent agreement (Landis and Koch, 1977). Given the high level of agreement the second author used the coding manual to code the whole data set.

Results

The content analysis produced ten specific themes and an ‘other’ category, these are detailed below.

Sensations of nature. This theme encompassed statements that related to the sensory experience of nature. The sounds of nature were captured in statements such as ‘hearing the birds singing to one another’ and ‘the sound of the sea breaking on the shore’. Statements such as ‘the smell of cut grass’ and ‘the smell of the frangipani tree’ evoked the smell of nature. The visceral experience of nature was reflected in statements such as ‘sun on my skin’

and ‘the feeling of slightly damp, cool green grass’. Finally, one statement explored the taste of nature ‘drinking 100% coconut juice. What a sweet and refreshing water from the tree!’

Growth and temporal changes. This theme included statements that made reference to new buds, plants coming into bloom and changes associated with the seasons. Statements such as ‘the soft new leaves emerging on our beech hedge’, ‘purple flowers starting to bloom’ and ‘regeneration across the seasons’ capture this theme.

Wildlife being active in their habitat. Statements within this theme such as ‘watched a bird have a bit of a dance’ and ‘squirrel running into the tree’ discussed animals engaging in some kind of activity in their habitat.

Specific aspect of nature. Within this theme a specific plant – ‘A purple thistle’; animal – ‘a bumble bee’; or feature of nature – ‘bright rainbow’ – was given with no or very little context.

Beauty or wonder of nature. This theme related to statements which referred to beauty: ‘the sheer form of the mudflat by the river contains its own kind of undisturbed beauty’; or a specific landscape the person appreciates – ‘looking away from the town of Chesterfield I saw in the distance the green rolling hills of Derbyshire spread out as if they were a painting’. Expressions of the wonder of nature – ‘the intricacy of a spider web on the bin’ – or the resilience and diversity of nature – ‘small green plants breaking through cracked concrete, showing that nature is always ready to rise again and overcome artificial barriers’ – were also included in this theme.

Effect of weather. Statements within this theme such as ‘the breeze in the trees’ and ‘the long grass on the bank of the stream had been flattened beneath the weight of the rain drops hanging from it this morning’ examined the effect that the weather had on a range of plants. Other statements focused on the interaction between the weather and a manmade environment: ‘sunlight streaming in through my window’ and ‘there was a huge rainstorm, the rain was spattering off my patio.’

Colours of nature. This theme included statements which had a specific emphasis on colour such as ‘green on the leaves’ and ‘the slug that I removed from my sage plant had quite a fetching orange belly’.

Reflections on the weather. Statements which were a judgment of the weather – ‘How nice the weather was’; an observation of the weather – ‘dramatic hail storm this morning’; and statements which captured the dynamic nature of the weather – ‘there was a slight battle

between sunlight and the clouds today but the clouds won at about 8 a.m., so it was nice to watch that for a while' – were collected together in this theme.

Wildlife interacting. This theme included all the statements that made reference to animals engaging in an activity with at least one other animal. The activity could be as part of a family group – 'pigeons walking in a group together like a family'; hunting activity – 'a blackbird and a thrush were pulling worms out of the ground at work today'; playful activity – 'ducks playing in the pond'; or animals acting together harmoniously – 'a flock of birds in the sky flying at great speed and in complete unison'.

Good feelings from nature. Statements that made reference to nature creating positive feelings or state of mind were collected together in this theme. The feelings encompassed within this theme were diverse. It included statements that referred to feeling of peace and stillness – 'walking by the brook at university was very peaceful'; happiness – 'people smiling in the sun'; hope – 'the green colour of young leaves in spring time is so unique. That green represents hope to me'; and rejuvenation – 'the song of the birds at half five in a morning, something relaxing and uplifting about it'.

Other. These statements such as 'a nice house made of wood' did not fit into themes but did not form a theme of their own.

Table 2 About Here

Discussion

The content analysis revealed ten themes in the items people note as the good things in nature. These themes provide a better understanding of routes to connection with mundane nature (Newman and Dale, 2013). The themes also represent the functional aspect of an intervention that led to sustained increases in nature-connectedness, thus demonstrating the value of nearby nature. The frequency analysis in Table 2 shows that the key aspects are the sensations, temporal changes, flora and fauna being active, beauty and the interaction of the weather with mainly natural forms. These themes accounted for over 70 per cent of the sentences. Knowing the aspects of nature that people find to be good as they go about their day-to-day activities in a predominately urban landscape aids our understanding of how to

engage people with the natural world in an everyday context, and this engagement through writing is known to increase people's connection with nature.

Various specific studies in the literature and some guidance from the nine values of Biophilia (Kellert, 1993) led to a prediction that the good things noted in nature would be the beauty of nature, its colours and sensations, the flora and fauna, weather, changes across the seasons and the good feelings generated by nature. These broad themes are all represented in the content analysis, although aspects of existing typologies are not all present. The nine values of Biophilia were used to inform the above predictions and it is acknowledged that this is not their intended use. They do however inform the interpretation of the results through revealing the aspects of the human–nature relationship that are not frequently perceived as the good things in nearby nature. In other words, there were no clear themes related to the utilitarian, dominionistic, negativistic, ecologistic-scientific, symbolic, humanistic and moralistic aspects of our innate need for nature, thus leaving the naturalistic and aesthetic aspects that describe the value of contact, wonder, awe and beauty. It is no surprise that negativistic aspects weren't present and the nature of the intervention did not suggest scientific enquiry. Given the direction and limitation to three simple sentences it is also unsurprising that the deeper, moral, emotional and symbolic relationships with nature are not represented. Further, from a pro-environmental perspective, it is encouraging that utilitarian and dominionistic values associated with nature as a resource to be mastered were not apparent as 'good things' in the analyses. Finally, the themes show that the written content was overwhelmingly natural and nature focused, with less than five percent of content specifically related to good feelings about nature.

It is not surprising that the most frequent theme is sensations of nature, given that they are driven by the perceptual system that gives us access to the world (Noë, 2010). In a different context, Kaplan, Kaplan and Brown (1989) also noted the importance of perception-based variables in environmental preference. It can also be argued that sensations are the sensory moment of human–nature interaction and relationship; the moments of interconnectedness that arise from how we, as biological beings, make sense of the world around us; the point where human and nature is experienced as one. This integrative perspective fits neatly with the earlier discussion (e.g. Merleau-Ponty and Lefort, 1968) on the human–nature relationship and our embeddedness in the environment. With vision captured throughout the themes, the importance of tactile, olfactory and auditory sensations (e.g. Ratcliffe et al., 2013) in nature is also highlighted within sensations.

It is notable that the following themes in the rank order are clustered around a similar frequency. The changing of the seasons is known to impact on emotional wellbeing (Howell, Dopko, Passmore and Buro, 2011) and growth and temporal change is the second most common theme. These most frequent themes also suggest the importance of the dynamic qualities of nature: growth, change and activity. The movement that captures our attention is also seen within the effect of weather and wildlife interacting. Wildlife itself is known to attract human interest (Stokes, 2006) and was the basis for a fair proportion of good things.

The utility of the themes to engage people with mundane or nearby nature is an important consideration. It is possible to consider the good things people identify in nature in the context of activities known to provide routes to greater nature-connectedness. For example, growth and temporal change is a good thing that can be the focus of several activities, including scientific enquiry, gardening, conservation and growing food. Together, the ten good themes in nature inform routes to nature-connectedness and provide a wide framework for engaging people with activities that could lead to greater connection to nature and, therefore, the associated benefits to wellbeing and pro-environmental behaviour.

The findings also inform further development and refinement of the three good things in nature intervention (Richardson and Sheffield, under review). The themes support development of the task guidance. For example, the relationship between frequency and effectiveness is informative. Although content related to good feelings was infrequent, perhaps a focus on good feelings in nature would enhance the outcomes. Similarly the sensations of nature or temporal changes could be highlighted, or might not be key elements in the effectiveness of the intervention. Such aspects and refinements can now be tested through further research.

It is acknowledged that the analysis was limited by the task guidance given to participants. This was necessary to maximise the effectiveness of the three good things in nature intervention. The task guidance was theory based. Therefore, the examples in the instructions referenced beauty (from the Biophilia aesthetic value and appreciation of the aesthetic aspects of nature included in the Attention Restoration Theory, Kaplan and Kaplan, 1989), diversity and wonder (from the Biophilia naturalistic value) and open attention to bird song and the movement of trees (from the role of mindful practice in enhancing the experience of nature; Howell et al., 2011). This guidance will have directed participant responses to some extent, but the frequency analysis gives some confidence that the instructions did not dominate the specific direction of participants' responses. For example, the effect of the

weather and beauty and wonder of nature themes were mid-ranked and bird-song is only one aspect of the sensations of nature. Further, themes not referenced, such as growth and temporal change emerged independently, demonstrating participant independence from the examples given in the guidance. Finally, the timing of the study, from April to June, should be noted. This is a time of rapid growth and change, although it should be remembered the study lasted just five days within this period and temporal changes occur throughout the year.

In summary, ten themes that describe the everyday good things in nearby nature associated with an increase in nature-connectedness are presented. The themes provide guidance in order to frame messages and engage people with their local nature through better understanding people's experience (Hartig et al. 2011). The themes also represent the functional aspects of mundane nature that can be celebrated, valued and used to reconnect people with nature (Newman and Dale, 2013).

REFERENCES

Borghi, A.M. and F. Cimatti. 2010. 'Embodied cognition and beyond: Acting and sensing the body'. *Neuropsychologia* **48**: 763–773.

http://dx.doi.org/10.1016/j.neuropsychologia.2009.10.029

BPS. 2004. *A Code of Conduct for Psychologists*. Leicester: BPS.

Bragg, E.A. 1996. 'Towards ecological self: deep ecology meets constructionist self theory'. *Journal of Environmental Psychology*, **16**: 93–108.

http://dx.doi.org/10.1006/jevp.1996.0008

Burton, C.M. and L.A. King. 2007. 'Effects of (very) brief writing on health: The two-minute miracle'. *British Journal of Health Psychology* **13**: 9–14.

http://dx.doi.org/10.1348/135910707X250910

Cameron, S. 1989. *Writing nature: Henry Thoreau's journal*. Chicago, IL: University of Chicago Press.

Clark, A. 1997. *Being There*. Cambridge MA: MIT Press.

Cronon, W. 1995. 'The trouble with wilderness: or, getting back to the wrong nature', in *Uncommon Ground: Toward Reinventing Nature* (W. Cronon, ed.) pp. 69–90. New York: Norton.

Department for Environment and Rural Affairs. 2011. *The Natural Choice:Securing the Value of Nature (Vol. 8082)*. The Stationery Office.

Dunn, R., M. Gavin, M. Sanchez and J. Soloman. 2006. 'The pigeon paradox: Dependence of global conservation on urban nature'. *Conservation Biology* **20**: 1814–1416.

http://dx.doi.org/10.1111/j.1523-1739.2006.00533.x

Freeman, C., K.J.M. Dickinson, S. Porter and Y. van Heezik. 2012. '"My garden is an expression of me": Exploring householders' relationships with their gardens'. *Journal of Environmental Psychology* **32**: 135–143.

http://dx.doi.org/10.1016/j.jenvp.2012.01.005

Frumkin, H. 2001. 'Beyond toxicity. Human health and the natural environment'. *American Journal of Preventative Medicine* **20***:* 234–240.

http://dx.doi.org/10.1016/S0749-3797(00)00317-2

Gallagher, S., 2005. *How the Body Shapes the Mind*. Oxford: Oxford University Press.

http://dx.doi.org/10.1093/0199271941.001.0001

Gullone, E. 2000. 'The Biophilia hypothesis life in the 21st century: increasing mental health or increasing pathology?' *Journal of Happiness Studies* **1**: 293–321.

http://dx.doi.org/10.1023/A:1010043827986

Haney, W., M. Russell, C. Gulek and E. Fierros. 1998. 'Drawing on education: Using student drawings to promote middle school improvement'. *Schools in the Middle* **7**: 38- 43.

Hartig, T., A. van den Berg, C. Hägerhäll, M. Tomalak, N. Bauer, R. Hansmann, A. Ojala, E. Syngollitou, G. Carrus, A. van Herzele, S. Bell, M.T. Camilleri Podesta and G. Waaseth. 2011. 'Health benefits of nature experience: Psychological, social and cultural processes', in K. Nilsson, M. Sangster, C. Gallis, T. Hartig, S. De Vries, K. Seeland and J. Schipperijn (eds) *Forests, Trees, and Human Health*, pp. 127–168. Dordrecht: Springer.

http://dx.doi.org/10.1007/978-90-481-9806-1

Hinds, J. 2011. 'Exploring the Psychological Rewards of a Wilderness Experience: An Interpretive Phenomenological Analysis'. *The Humanistic Psychologist* **39**: 189–205. http://dx.doi.org/10.1080/08873267.2011.567132

Howell, A.J., R.L. Dopko, H.A., Passmore and K. Buro. 2011. 'Nature connectedness: Associations with well-being and mindfulness'. *Personality and Individual Differences* **51**: 166–171.

http://dx.doi.org/10.1016/j.paid.2011.03.037

Jacob, P. 2012. 'Embodying the mind by extending it'. *Review of Philosophy and Psychology* **3**: 33–51.

http://dx.doi.org/10.1007/s13164-012-0087-2

Jefferies, R. 2011. *The Hills and the Vale*. Cambridge: Cambridge University Press.

Kahn, P.H. 1997. 'Developmental Psychology and the Biophilia Hypothesis: Children's Affiliation with Nature'. *Developmental Review* **17**: 1–61.

http://dx.doi.org/10.1006/drev.1996.0430

Kaplan, S. 1987. 'Aesthetics, affect, and cognition environmental preference from an evolutionary perspective'. *Environment and Behavior* **19**: 3–32.

http://dx.doi.org/10.1177/0013916587191001

Kaplan, S. 1995. 'The restorative benefits of nature: Towards an integrative framework'. *Journal of Environmental Psychology* **15**: 169–182.

http://dx.doi.org/10.1016/0272-4944(95)90001-2

Kaplan, R. and S. Kaplan. 1989. *The Experience of Nature: A Psychological Perspective*. Cambridge: Cambridge University Press.

Kaplan, R., S. Kaplan and T. Brown. 1989. 'Environmental preference: a comparison of four domains of predictors'. *Environment and Behavior* **21**: 509–530.

http://dx.doi.org/10.1177/0013916589215001

Kellert, S.H. 1993. 'The biological basis for human values of nature', in S.H. Kellert and E.O. (eds) *The Biophilia Hypothesis.* Washington D.C: Island Press.

Kellert, S.H. and E.O. Wilson. 1993. *The Biophilia Hypothesis.* Washington D.C: Island Press.

Kjellgren, A. and H. Buhrkall. 2010. 'A comparison of the restorative effect of a natural environment with that of a simulated natural environment'. *Journal of Environmental Psychology* **30**: 464–472.

http://dx.doi.org/10.1016/j.jenvp.2010.01.011

Krippendorf, K. 1980. *Content Analysis: An Introduction to its Methodology.* Beverly Hills, CA: Sage.

Lakoff, G. and M. Johnson. 1999. *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought.* New York, NY: Basic Books.

Landis, J.R. and G.G. Koch. 1977. 'The measurement of observer agreement for categorical data'. *Biometrics* **33**: 159- 174.

http://dx.doi.org/10.2307/2529310

Lin, B. B., Fuller, R. A., Bush, R., Gaston, K. J. and Shanahan, D. F. 2014. 'Opportunity or Orientation? Who Uses Urban Parks and Why'. *PLoS ONE*, **9:** e87422.

Matthews, H. and R. Welshman. 2010. *Richard Jefferies: An Anthology*. Longcot: Petton Books.

Mayer, F. and C. Frantz. 2004. 'The connectedness to nature scale: A measure of individuals feeling in community with nature'. *Journal of Environmental Psychology* **24:** 503–515. http://dx.doi.org/10.1016/j.jenvp.2004.10.001

Menary, R. 2007. 'Writing as thinking'. *Language Sciences* **29**: 621–632.

http://dx.doi.org/10.1016/j.langsci.2007.01.005

Merleau-Ponty, M. and C. Lefort. 1968. *The Visible and the Invisible*. Evanston: Northwestern University Press. Retrieved from http://books.google.com/books?id=aPcET3X2zlECandpgis=1

Naess, A. 1973. 'The shallow and the deep ecology movements'. *Inquiry* **16:** 95–100.

http://dx.doi.org/10.1080/00201747308601682

Newman, L. and A. Dale. 2013. 'Celebrating the mundane: Nature and the built environment'. *Environmental Values* **22**: 401–413.

http://dx.doi.org/10.3197/096327113X13648087563827

Nisbet, E.K. and J.M. Zelenski. 2011. 'Underestimating nearby nature: affective forecasting errors obscure the happy path to sustainability'. *Psychological Science* **22**: 1101–6. http://dx.doi.org/10.1177/0956797611418527

Nisbet, E.K., J.M. Zelenski and S.A. Murphy. 2008. 'The nature relatedness scale: Linking individuals' connection with nature to environmental concern and behaviour'. *Environment and Behaviour* **41**: 715–740.

http://dx.doi.org/10.1177/0013916508318748

Nisbet, E.K., J.M. Zelenski and S.A. Murphy. 2011. 'Happiness is in our nature: Exploring nature relatedness as a contributor to subjective well-being'. *Journal of Happiness Studies* **12**: 303–322.

http://dx.doi.org/10.1007/s10902-010-9197-7

Noë, A. 2010. *Out of our Heads: Why you are not your Brain, and other Lessons from the Biology of Consciousness*. New York, NY: Hill and Wang.

PIRC. 2013. *Common Cause for Nature – Full Report*. Retrieved from: http://valuesandframes.org/download/reports/Common%20Cause%20for%20Nature%20-%20Full%20Report.pdf

Ratcliffe, E., B. Gatersleben and P.T. Sowden. 2013. 'Bird sounds and their contributions to perceived attention restoration and stress recovery'. *Journal of Environmental Psychology* **36:** 221–228.

http://dx.doi.org/10.1016/j.jenvp.2013.08.004

Richardson, M. 2014. *A Blackbird's Year: Mind in Nature*. London: FeedARead.com Publishing.

Richardson, M. and J. Hallam. 2013. 'Exploring the psychological rewards of a familiar semi-rural landscape: connecting to local nature through a mindful approach'. *The Humanistic Psychologist*, **41**: 35–53.

http://dx.doi.org/10.1080/08873267.2012.732156

Richardson, M. and D. Sheffield. Under review. 'Three good things in nature: a brief intervention to increase connection to nature'.

Richardson, M. and D. Sheffield. In Press. 'Reflective self-attention: A more stable predictor of connection to nature than mindful attention'. Ecopsychology.Sabloff, A. 2001. *Reordering the Natural World: Humans and Animals in the City*. Toronto, Canada: University of Toronto Press.

Schultz, P.W. 2000. ‘Empathising with nature: The effects of perspective taking on concern for environmental issues’. *Journal of Social Issues* **56**: 391–406.

http://dx.doi.org/10.1111/0022-4537.00174

Shepherd, N. 2011. *The Living Mountain*. Edinburgh: Canongate Canons.

Slovic, S. 1992. *Seeking Awareness in American Nature Writing*. Salt Lake City, UT: University of Utah Press.

Stokes, D.L. 2006. ‘Things we like: Human preferences among similar organisms and implications for conservation’. *Human Ecology* **35**: 361–369.

http://dx.doi.org/10.1007/s10745-006-9056-7

Taylor, T. 2010. *The Artificial Ape: How Technology Changed the Course of Human Evolution*. New York, NY: Macmillan.

Ulrich, R.S. 1983. ‘Aesthetic and affective response to natural environment’, in I. Altman and J.F. Wohlwill (eds) *Human Behaviour and Environment: Vol. 6. Behaviour and the Natural Environment*, pp. 85–125. New York, NY: Plenum.

Vining, J., M.S. Merrick and E.A. Price. 2008. ‘The distinction between humans and nature: Human perceptions of connectedness to nature and elements of the natural and unnatural’. *Human Ecology Review* **15:** 1–11.

Weber, R.P. 1990. *Basic Content Analysis* (2nd ed.). Newbury Park, CA: Sage.

White, M. P., Alcock, I., Wheeler, B. W., and Depledge, M. H. 2013. ‘Would you be happier living in a greener urban area? A fixed-effects analysis of panel data’. *Psychological Science* **24:** 920-928.

Wilson, E.O. 1984. *Biophilia*. Cambridge, MA: Harvard University Press.

Windhager, S., K. Atzwanger, F.L. Bookstein and K. Schaefer. 2011. ‘Fish in a mall aquarium – An ethological investigation of Biophilia’. *Landscape and Urban Planning* **99**: 23–30.

http://dx.doi.org/10.1016/j.landurbplan.2010.08.008

Worster, D. 1994. *Nature’s Economy: A History of Ecological Ideas*. Cambridge: Cambridge University Press.

Zhang, J.W., R.T. Howell and R. Iyer. 2014. 'Engagement with natural beauty moderates the positive relation between connectedness with nature and psychological well-being'. *Journal of Environmental Psychology*. **38:** 55-63..

http://dx.doi.org/10.1016/j.jenvp.2013.12.013

Value	Description
Utilitarian	Material benefits gained from the natural world.
Dominionistic	A desire to control and master nature for functional advantage, increasingly destructive.
Negativistic	Antipathy, fear and aversion from nature, particularly threatening aspects.
Ecologistic-Scientific	The urge to understand nature and its interconnections through systematic study.
Symbolic	The symbolic use of nature reflected in the development of language and thought.
Humanistic	Deep emotional attachment expressed as love and care of individual elements of nature.
Naturalistic	Satisfaction from contact with nature. Encompasses the complexity and diversity of nature and the resulting fascination, wonder and awe.
Aesthetic	The beauty of nature and the natural landscape. Includes the awe of physical appeal.
Moralistic	Affinity and reverence for nature leading to ethical responsibility. Includes harmony, connection and spiritual meaning in life.

Table 1. The nine values of Biophilia (Kellert, 1993).

Theme	Frequency	Percentage
Sensations of nature	159	16.8
Growth and temporal changes	124	13.0
Wildlife being active in their habitat	109	11.6
Specific aspect of nature	100	10.7
Beauty or wonder of nature	98	10.4
Effect of weather	93	10.0
Colours of nature	76	8.2
Reflections on the weather	72	7.6
Wildlife interacting	47	5.0
Good feelings from nature	40	4.3
Other	22	2.4

Table 2: Table outlining the frequency and percentage of each of the eleven themes identified in the data set.