

- How effective has the activity been in achieving the (often unclear) objectives of the activity; would any changes in pedagogy be appropriate; what are the reflections of the individual participants, peers, and organisation or community where they have been involved?
- What skills and capabilities were to be developed from the activity, and were they developed by the students/participants?

I acknowledge that this is asking a lot, and perhaps unfairly, from contributors reporting their experiences. However, if others reading these contributions are to engage with environmental communication for the betterment of our environment, then we need to have a good idea of what are effective approaches.

Reviewer Biography

Ian Thomas is an Honorary Associate Professor at RMIT University in Melbourne, Australia, and before his retirement taught into undergraduate and postgraduate environmental policy programs, as well as writing on environmental impact assessment, environmental policy, and environmental management systems. In his research, Ian has investigated the issues of embedding environmental education and sustainability education in the curricula of universities, examined the status of tertiary environmental programs, and investigated employment of graduates from these programs. His recent research has focused on capacity building of academics to support education for sustainability curriculum, and the graduate capabilities sought by employers in relation to sustainability.

Green Exercise: Linking Nature, Health and Wellbeing

Edited by Jo Barton, Rachel Bragg, Carly Wood, and Jules N. Pretty New York, Routledge, 2016
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Reviewed by Chris Harle, Lake Macquarie City Council, New South Wales, Australia

This book brings together internationally acclaimed research, with many of the chapters expanding on the themes of the seven heresies as described in the first chapter of the book. The key is in the name of the book — green exercise — which promotes the idea that health and wellbeing are improved by being physically active in the natural environment, whether that be walking in forests in Japan, immersing troubled youth in wilderness areas in the United Kingdom, undertaking activities in aquatic areas (blue exercise), exposing children to play in the natural environment, environmental volunteering in Australia, or even incorporating physical activity in nature into the workplace environment. Evidence is provided as to how green exercise can be introduced at all stages of the lifespan from childhood to dotage, with resulting benefits in physical health and mental wellbeing.

As I read the first chapter, 'The seven heresies of Asclepius', by Pretty and Pencheon, I was sitting on a shaded deck seeking some respite from a hot summer day — this has been another hot, dry summer in a heating world under the influence of climate change. Glancing up to a tree overhanging the side of the deck I caught the eye of a satin bowerbird watching me. I saw wisdom in the bird's eye and its ability to just be in the moment. At that same moment I realised how much the words in this chapter resonated with me. I am clearly a heretic. In Chapter 1 we are taken back to the time of the Ancient Greek healing temple, dedicated to the Greek god of healing and medicine, Asclepius. These temples were situated in beautiful natural settings, as it was assumed at the time that health and wellbeing were enhanced by nature.

Fast forwarding to the modern day, Pretty and Pencheon present some tables and graphs detailing the continuing increases in GDP in affluent countries. This is contrasted with a corresponding downward trend in feelings of wellbeing, mental ill-health and chronic conditions. The seven heresies are based on increasing empirical evidence that demonstrates there is more to wellness than today's healthcare and social settings can deliver. It appears that affluence has a dark side. It suckles the twin children named obesity and chronic disease, and it makes us no happier. The seven heresies alluded to are physical activity in natural settings, improving diet and nutrition through increasing intake of plant based food, engaging with nature and natural settings, increasing social capital, caring for possessions, using stress reduction techniques such as the practice of mindfulness, and maintaining congruence between our actions and our values (p. 4). Chapter 15, 'The benefits of greener and healthier economies', by Pretty and Barton (p. 161), expands on the idea that material consumption is bad for us but consumption of nature is good for the economy.

Chapter 2, 'Nature in buildings and health design', by Kellert, introduces the concept of biophilia (p. 17). The biophilia hypothesis may well resonate with the reader as it suggests that humans possess an innate tendency to seek connections with nature (Wikipedia, 2017), including other species, natural ecosystems and habitats, and environmental processes (p. 17). This chapter describes how the relatively modern shift away from the natural world (i.e., over the last three or four hundred years of our human existence) has seen a growth in humanity's capacity to take the raw materials of nature and convert them to products for human use, thus separating us from the source. As a result, there is a movement towards biophilic design that can reintroduce the natural world into our built environment. Examples of this include green walls and placing gardens in health care centres. This is a chapter that would certainly interest architects, builders, designers, and local government planners.

If you are an environmental educator, a social worker, a healthcare worker, or work in the physical activity industry, you will find at least one of the chapters in this book will be of interest and provide you with evidence-based research to underpin your programs. For example, Chapter 3, 'Green exercise for health', by Barton, Wood, Pretty, and Rogerson, discusses the evidence that physical exercise and exposure to nature has on health and wellbeing. Chapter 7, 'The health benefits of blue exercise in the UK', by White et al. (p. 69), promotes the concept of exercising in or near aquatic environments and the opportunities available to enhance physical activity. Chapter 14, 'Green exercise and dementia', by Mapes (p. 150), shares some of the evidence base outlining the beneficial role of green exercise for people living with dementia.

For those also interested in mindfulness, which is the psychological process of bringing one's attention to experiences occurring in the present moment (Wikipedia, 2018), Chapter 4 advises us 'How to get more out of the green exercise experience'. This chapter introduces 'Attention Restoration Theory' (p. 38), which describes how nature can help combat attentional (or mental) fatigue. It also allows the reader to develop strategies

for enhancing the restorative process by tuning in to the natural environment around us. Chapter 8, 'Forest bathing in Japan', by Li (p. 79), is a particular favourite of mine as it informs us about *Shinrin-yoku*, the Japanese term for a short, leisurely visit to a forest field to relax and breathe in the phytoncides derived from trees, an experience similar to aromatherapy. There are also 10 tips provided to get the most out of your forest bathing (p. 80).

Environmental educators and those who participate in the education of children will gain insight from Chapter 5, 'The benefits of green exercise for children', by Wood, Bragg, and Petty. Chapter 6, 'Learning on the move', by O'Brien et al. (p. 53), provides examples from the United Kingdom about green education and connections with physical activity. Landcare organisers and other volunteer environmental organisations may well find Chapter 9, 'Healthy parks, healthy people', by Townsend and Henderson-Wilson (p. 89), of interest as it is an Australian article focusing on nature conservation and the benefits for volunteers. Those engaged in social work or youth work will find Chapter 10, 'Nature-based interventions for vulnerable people', by Sempik and Bragg (p. 100), Chapter 11, 'Care farming and probation in the UK', by Murray, Elsey, and Gold (p. 115), and Chapter 12, 'Wilderness and youth at risk', by Roberts, Barton, and Wood (p. 125), to be useful resources for possible program ideas. Human resource practitioners will find Chapter 13, 'Green exercise in the workplace', by Gladwell and Brown (p. 139), provides information on the health benefits that can combat increased workplace stress and sedentary time.

If you are concerned with the growing disconnection between humans who live in urban environments and nature, as evidenced by increasing pollution, climate change, the decline of species, and the devastation of forests and other ecosystems, you will most certainly find something of interest in this book. If you want to improve your own personal health and wellbeing or that of your family, you will find evidence in the book that can help you decide on the locations and activities that will bring you the most benefits. That is, if it is not too hot!

References

- Wikipedia. (2017). Biophilia hypothesis. Retrieved January 19, 2018, from https://en.wikipedia.org/w/index.php?title=Biophilia_hypothesis&oldid=810040002
- Wikipedia. (2018). Mindfulness. Retrieved January 19, 2018, from <https://en.wikipedia.org/w/index.php?title=Mindfulness&oldid=820751555>

Reviewer Biography

Chris Harle is the Sustainability Engagement Coordinator for Lake Macquarie City Council focusing on engaging individuals and communities in all aspects of sustainability, including in increasing knowledge and connection to the natural environment. She has a social work background, previously working in a diverse range of social work roles in community organisations and a local health district setting. After obtaining a Master of Public Health (Health Promotion), she became a Health Service Manager, managing a community health service in a local health district for four years prior to joining local government. Chris is a member of the Australian Association of Social Workers.