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People in Nature

Relational Discourse for Outdoor Educators

Thomas Beery

Abstract

Outdoor educators are concerned about a perceived human disconnection from nature. There is awareness of a lack of human affiliation, connection, or identity with nonhuman nature and its impact on attitudes and behaviors. This essay raises the possibility that despite our concern, we may contribute toward this disconnection via language that supports a separation of the *natural* and the *cultural*. Our ability to separate ourselves conceptually from the rest of nature may be partially to blame for environmental degradation, therefore challenging the nature-culture dichotomy is both useful and constructive. This essay will present examples of how outdoor educators can attempt to get past this problematic dichotomy and motivate more relational discourse within the practice of outdoor education.

Keywords: nature-culture, environmental connectedness, relational discourse, landscape, wilderness, Leave No Trace, biosphere reserve

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Toward a Relational Discourse

Can we rethink people into nature in such a way that we can better manage the earth? (Head, 2000, p. 3).

An important recent outdoor education text, *A Pedagogy of Place* (Wattchow & Brown, 2011), presents a vision for outdoor education that celebrates the meaning and significance of the places we live, work, study, and recreate. Wattchow and Brown's strong call for educators to recognize the value of empathetic relationships with place has been an important contribution to the field of outdoor education. Their work represents a long line of scholarship that has explored the meaning and importance of place, theory, and practice, in our lives. This essay, an effort to consider more relational discourse, or language, in outdoor education, is largely motivated by Wattchow and Brown's alternative vision of educational practice when they stated "... we want to make a case that outdoor education must adapt and evolve with the social and ecological imperatives of the times" (p. 28). In the spirit of this challenge, efforts to transcend dualist understanding of nature and culture are useful to push educators to consider their own use of language that may perpetuate a separation of nature and culture.

There is a long history of nature/culture dualism in Western thought, from Greek philosophy, to the ideas of Descartes, to more recent expressions, for example, consider the common distinction between natural sciences and social sciences used throughout educational systems. Despite widespread application, the nature/culture dualism is a separation that defies the empirical evidence of interconnectedness of earth systems, from evolutionary theory to current environmental challenges. Head (2012) articulated the central contradiction of dualist thinking by noting that despite empirical evidence that "demonstrates increasingly how inextricably humans have become embedded in earth surface and atmospheric processes, we maintain separationist ways of talking about things" (p. 65). In response to this nature/culture dualism, Head (2000, 2012) makes a strong case for the importance of a conceptualization of nature that integrates human with nonhuman nature. She notes that while this idea may seem highly intellectual, it has real-world consequences and results in "maps, fences, legislative and administrative instruments, gates, and boundaries" (2012, p. 66). Further, our ability to separate ourselves conceptually from the rest of nature is implicated in environmental degradation. Consider how rapid human consumption of nonrenewable resources ignores scientific understanding of systems and cycles as just one example of how such a separation may be able to manifest. Given such concerns, a better understanding of how these conceptualizations shape our educational approaches is worthy of consideration. This essay presents examples of this concern and implications for outdoor educators inspired by scholarship from cultural geography and appli-

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cation in protected areas management. Such examples are important to consider and may provide pathways toward a more relational discourse integrating nature and culture. A good place to start such reflection is within the idea of connectedness to nature, the very consideration of how people conceptualize their relationship with non-human nature.

Environmental Connectedness

As we pay attention, we'll find the tracks, the script of our wild neighbors, to tell us so; we'll begin to answer the essential question of how to live on a changing earth, where humans and nature are tangled so messily and so wondrously.

(Lyanda Lynn Haupt, 2013, n.p.)

An important current in outdoor and environmental education, environmental psychology, cultural geography, and popular culture is the work exploring ideas of connectedness to nature. Ideas emphasizing the experience of generalized, or nonspecific nature and the possible affective and/or cognitive relationship between the individual and nature is referred to as environmental connectedness and/or connectedness to nature. This environmental connectedness perspective encompasses a broad grouping of related ideas from how one thinks about oneself relative to nature (identity), to how one conceptualizes one's relationship with nonhuman nature (affiliation, connection, and relatedness) (Beery & Wolf-Watz, 2014). While there are some key differences between these connectedness ideas, they share a similar hypothesis, the position that spending time in nature will, given repeated experience, help an individual feel part of/connected to/affiliated with nature. Additional connectedness to nature study exploring how specific places (vs. generalized nature) may support human attachment/affiliation, and/or identity is closely related (Halpenny, 2010; Lewicka, 2011; Stedman, 2003; Scannell & Gifford, 2010; Williams & Vaske, 2003). The strong interest in this area of study is built upon a growing concern for the perceived human disconnection from nature.

A belief in an erosion of childhood nature experience (Pyle, 1993) and a generalized perception of a societal disconnection from nature has emerged over the last few decades. The provoking work of Louv (2005), *Last Child in the Woods: Saving Our Children from Nature Deficit Disorder*, raised public concern about this growing disconnect. Louv's (2005) basic thesis, shared by many education and health professionals (Charles & Loge, 2012a, b), proposes that a limited access to, and experience of nature has a detrimental impact on many aspects of human development. Another measure of the broad and generalized cultural reach of the societal importance of connectedness to nature in the United States can be noted in President Obama's America's Great Outdoors memorandum of April 16, 2010. President Obama noted concern for reduced experience of nature and connection to cherished outdoor places. This memo

was a good example of the widespread use of connectedness as a cultural term of reference. Preceding this recent popular culture attention on the disconnection from nature phenomena, is related longstanding interest and effort within the fields of environmental and outdoor education. There is a substantial line of scholarship exploring disconnection that is often framed as a gap in the nature experience to attitude or behavior progression (Beery, 2013; Bragg, 1996; Chawla, 1999; Clayton, 2003; Davis, Green, & Reed, 2009; Ewert, Place, & Sibthorp, 2005; Kals, Schumacher, & Montada, 1999; Mayer & Frantz, 2004; Nisbet, Zelinski, & Murphy, 2009; Palmer, 1993; Schultz, 2001; 2002; Stedman, 2002; Sward & Marcinkowski, 2001).

The works of Aldo Leopold provide a philosophical foundation for this noted progression of nature experience to action (Goralnik & Nelson, 2011) and while Leopold didn't use the term *nature* when he wrote of connectedness, he framed his ideas using the term land. Leopold stressed moving away from a commodity metaphor for land and emphasized the concept of community in his hope for a more relational perspective, he noted, "We abuse land because we regard it as a commodity belonging to us. When we see it as a community to which we belong, we may use it with love and respect" (1949, p. xviii). Leopold's ideas have encouraged many outdoor educators to re-conceive the human relationship with nonhuman nature emphasizing an essential connectedness. This idea of an essential connectedness from Leopold's message is captured by Freyfogle (2003) noting that people do not form a distinct entity from the rest of nature and are embedded in nature as much as any living thing. Leopold's deliberate emphasis on belonging and community are reminders of the importance of relational language, and yet non-relational discourse persists and may interfere with our efforts as outdoor educators.

Nonrelational Discourse

Something...must be wrong somewhere, if the only way to understand creative involvement in the world is by taking ourselves out of it (Ingold, 2000, p. 58).

Despite current popular culture and scholarly interest in the human relationship with the nonhuman nature, the discourse of outdoor education often relies upon a language of separation, what Head and Regnéll (2012) refer to as a "separationist paradigm" (p. 222). Educators concerned about environmental understanding, attitudes, and behavior may be blocked, in part, by discourse and practice that prevents an integrated understanding of nature and culture. Head (2012) notes that many of our dominant metaphors contain inherent dichotomies of nature and culture. One of these problematic ideas used extensively in outdoor education is *wilderness*. Exploring this idea provides an example of the potential for language to separate people from nonhuman nature.

The Wilderness Idea

Is it time for new definitions of nature that allow people their history? (Fairhead & Leach, 1996, in Jeanrenaud, 2002, p. 17)

The term wilderness is used and interpreted in many different ways, from generalized wild land to specific legal description of protected areas in places like the United States (Dudley, 2011) (it is significant to note that 2014 marks 50 years of legal wilderness land designation in the United States). Within a North American historical and philosophical tradition, various wilderness interpretations or themes can be found, themes ranging from the idea of wilderness as evil and a focus of human conquest, to the notion of wilderness as providing human liberation and transformation (Nash, 1967; Roberts, 2012). It is clear that human interpretation of the wilderness idea using themes from economics, religion, and philosophy have shaped widely contrasting views throughout Western history (Callicott & Nelson, 1998; Nelson & Callicott, 2008; Oelschlaeger, 1991). Given this breadth of interpretation, there is potential for misuse of the term, and given that wilderness is an idea that is widely used in outdoor education, this should be a concern for outdoor educators. Misuse or misunderstanding of the wilderness idea may be contributing to an inability for some people to conceptualize an integrated understanding of culture as a part of nature. For example, one of the most visible uses of the term, that of empty and/or pristine land, creates artificial boundaries between people and the world in which they live. Head and Regnéll (2012), outline how the 19th century romantic ideal of wilderness as timeless, unchanging, and remote, has shaped land management policy in the United States and Australia despite the contention that modern ideas of wilderness as empty or untouched landscapes have little historic precedence (Dudley, 2011). The empty wilderness idea is associated with outmoded equilibrium ecology and ignores the ecological interaction of at least 11,000 years of human habitation of the Americas and Australia (Callicott, 2000). This conception of wilderness contributes to static and time-arbitrary notions. For example, the arrival of Europeans as the beginning of the end of the expansive wilderness of North America, South America, and Australia creates an arbitrary baseline. By the time of contact between Europe and the Americas, much of the Americas had been modified: species hunted to extinction, forests managed for resource extraction, fire used to favor certain habitat types/species, etc. (Denevan, 1992). General characterization of wilderness as empty or untouched in a historic context risks overlooking important and long term human historical interaction with places.

Cronon (1995) makes a detailed argument that this social construction of wilderness (the wilderness idea as product of social forces) is based upon an inappropriate characterization of pristine places. Cronon articulates a well founded concern with the romantic use of the term wilderness as a stand in for

virgin or pristine as profoundly problematic for the indigenous peoples pushed from those very lands they once called home. The issue of dispossessed people is central to understanding the problematic practice of dehumanizing nature; for example, there is a long chapter of American land history that involves the dispossessment of indigenous peoples from public lands. Spence (1999) presents an alternative history for many of the signature national parks of the United States and contrasts the patriotic ideal of national park wilderness to the reality of episodes of genocide and forced migration of indigenous peoples. Beyond the abuses suffered, Head (2012) argues that the historic failure to acknowledge an indigenous presence allowed an inaccurate concept of natural landscape to emerge in places like Australia and North America.

The negation of indigenous cultural heritage is just one example of the problematic use of the idea of wilderness. Another related and potentially problematic application of the wilderness idea can be found in a critical consideration of the perception of nature in everyday experience. Marris (2011) warns that a generalized focus upon pristine wilderness may contribute to the idea of nature as "out there" somewhere. We come to romanticize the remote and perceived pristine, while often disregarding the wild nature in our daily experience of the world. Marris warns that urban, rural, and suburban citizens "can lose the ability to have spiritual and aesthetic experiences in more humble natural settings" (p. 150). One specific example of wilderness-related discourse used in the practice of outdoor education that may be contributing to this idea of nature as separate, pristine, and "out there" is the metaphor of *Leave No Trace*.

Leave No Trace.

If we allow ourselves to believe that nature, to be true, must also be wild, then our very presence in nature represents its fall (Cronon, 1995, p. 80).

Leave No Trace (LNT) provides a detailed structure for talking about human responsibility and respectful behavior in regard to public wild lands. The LNT intent to challenge and guide behavior is useful and important on a very practical level, and yet, if we think critically about this phrase, *Leave No Trace!* What is really being said? The metaphor emphasizes a separation of people and nature and as noted by Cachelin, Rose, Dustin, and Shooter (2011), there is great potential for unintended consequences that "may exacerbate a feeling of separateness from nature" (p. 12). Cachelin et al. (2011) provide a comprehensive review of why we need to question the language of LNT in order to better reach intended broad outdoor education outcomes of environmental awareness, appreciation, understanding, and behavior. In addition to questioning, Cachelin et al. (2011) provide constructive ideas for addressing the critique.

Examining the idea of wilderness and questioning the language of LNT is used to consider how we best support respect for nonhuman nature while en-

couraging an integrated understanding of nature and culture. If we continually remove the human element from our representations of wild nature, or imply nonbelonging, we may run the risk of strengthening the perception that people are not a part of nature. Just how such a message impacts an individual's affective and cognitive understanding is worthy of consideration and brings this concern into the realm of outdoor education once again. Cronon (1995) writes:

The place where we are is the place where nature is not. If this is so—if by definition wilderness leaves no place for human beings, save perhaps as comptemplative sojourners enjoying their leisurely reverie in God's natural cathedral—then by definition it can offer no solution to the environmental and other problems that confront us. To the extent that we celebrate wilderness as the measure with which we judge civilization, we reproduce the dualism that sets humanity and nature at opposite poles. We thereby leave ourselves little hope of discovering what an ethical, sustainable, honorable human place in nature might actually look like." (p. 80)

New language is needed to counteract discourse that (intentionally or unintentionally) supports a message of separation between nature and culture. It may be that lessons from cultural geography and inspiration from protected areas management can provide examples of practical application of more relational language.

The Language of Landscape

Nature plus culture equals landscape in this account. What we witness when we examine landscape is a process of continual interaction in which nature and culture both shape and are shaped by each other (Wylie, 2007, p. 9).

To simply make a claim for the social construction of wilderness (i.e., the wilderness idea as a product of social forces) as a concern does not provide practical support for moving forward in our educational endeavors. The reductionist idea that everything is socially constructed does as much disservice as ignoring social construction as a factor altogether (Cresswell, 2004). Further, it can be argued that a critique of discourse simply represents an exercise in semantics, however the power of language makes this a real concern. Critique, however, must come with constructive suggestions for how more relational messages can be used in outdoor education, hence the turn to cultural geography. The cultural geographical idea of landscape may be be able to serve as a tool to guide us toward a more relational discourse and potentially, a more integrated understanding of people as part of a dynamic biophysical world.

The common or everyday vernacular use of the term *landscape* conjures up the idea of scenery, or visual backdrop. From historical consideration of

use of the term, however, landscape emerges as a much more complex idea, an idea that may provide support to a more relational understanding of nature and culture. Adevi (2012) notes that the landscape concept has been associated with relationships between natural and cultural processes since the 16th century. Tengberg et al. (2012) note that the older Nordic concept of *Landskap* has a complex meaning, "including many different kinds of interactions between people and place" (p. 16). More recently, the European Landscape Convention (Council of Europe, 2000) defines landscape as "an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors" (p. 9). Closely related, the World Heritage Committee of the United Nations (2012) defines cultural landscape as "cultural properties [that] represent the combined works of nature and of man" (p. 14). This history and these definitions move us toward a more relational perspective, namely an integrated understanding of human and nonhuman forces in the ongoing creation of the world.

Recent scholarly work in cultural geography emphasizing the use of the landscape concept may be able to further guide us toward a more relational discourse. For example, Setten, Stenseke, and Moen (2012) argue that the landscape concept "...keeps people in: because landscape is both symbolic and material, the human is folded into the concept itself...a direct response to the problems that arise when culture and nature are separated" (p. 6). Head (2012) argues that the idea of cultural landscape is useful for putting people back into the biophysical big picture and supports dialogue about responsibility for environmental damage and restoration. Dudley (2011) notes that cultural landscapes provide a mechanism for considering the role of humans as *part* of natural systems. Wylie (2007), states:

...once we stop thinking of landscape as a part of a separate, God-given nature, or as simply a neutral backdrop or setting for human activity, and begin instead to examine the ways in which landscapes are implicated within and reflective of social, political and economic circumstances, then we also begin to move from a naive and simplistic understanding of landscape towards one which is more subtle, engaged and above all *critical*. (p. 103).

It is such a critical understanding that may be able to help us acknowledge landscape as a dynamic process in which culture cannot be separated from nature. Another source of inspiration for relational discourse can be found in the practical application of the landscape concept into protected areas management.

Learning from Protected Areas Management

...cultural landscapes are at the interface between nature and culture, tangible and intangible heritage, biological and cultural diversity (Tengberg et al., 2012, p. 15).

Phillips (2003) describes new paradigms for protected areas management that recognize the complexity of places and may be able to broaden our vision of culture as a part of nature. For example, UNESCO's Man and the Biosphere program (MAB) provides an illustration of this integrating idea in action. From the MAB website: "As places that seek to reconcile conservation of biological and cultural diversity and economic and social development through partnerships between people and nature, they are ideal to test and demonstrate innovative approaches to sustainable development from local to international scales" (2013, n.p.). The MAB program provides the concept of landscape as a functional definition showcasing the integration of people and nonhuman nature. Hambrey, Evans, Price, and Moxey (2008) note the following vision statement from the Madrid Action Plan: "The World Network of Biosphere Reserves of the Man and the Biosphere Programme consists of sites of excellence to foster harmonious integration of people and nature for sustainable development through participation, knowledge, well-being, cultural values, and society's ability to cope with change..." (p. 6). Important in this example is the reality that most of the world's biodiversity is in areas used by people (Berkes & Davidson-Hunt, 2010). MAB sites therefore play a crucial role in the idea that in order to conserve biodiversity we need to understand the human role in these rich systems.

A specific and prime example within the MAB program is the Kristianstad Vattenrike in Southern Sweden. This MAB site has deliberately set boundaries for the core biosphere area not only inclusive of the ecologically significant wetlands of the region, but also immediately adjacent to the small city of Kristainstad. The Kristianstad Vattenrike attempts to communicate that the protective efforts are inclusive of the people living within the designation. The UN uses the the term "biosphere reserve" to identify sites in the MAB program, however, when translated into Swedish, the Kristianstad Vattenrike site uses the term "area" in place of "reserve" in a deliberate effort to avoid any notion of set aside. This seemingly small action is another example of deliberate use of language to emphasize an understanding of integration of nature and culture. It is important to note that outdoor education plays a significant role in the efforts of the Kristianstad Vattenrike Biosphere Area, through the combined efforts of school-based educational outreach, public interpretive programming, and an infrastructure supporting research, recreation, and education. This brief example of the Biosphere Area approach from the Kristianstad Vattenrike is just one of the many significant changes in global conservation discourse and practice within the last 20 years that have implications for the promotion of relational discourse.

An Essential Connectedness

Words and metaphor matter, and outdoor educators will do well to embrace ecologically accurate language that moves us toward greater social justice and sustainability (Cachelin et al., 2011, n.p.).

As educators who care deeply about the human relationship with wild places, nonhuman nature, and the health and integrity of earth's biosphere, we need to be deliberate about a discourse that supports the potential for a shared identity to guide action on behalf of a dynamic world. An integrated idea of nature and culture may be a useful step toward nurturing environmental action and responsible human engagement. Changing our discourse does not guarantee a change in perception, but as stressed in this essay, there is power in language. If our ability to separate ourselves conceptually from the rest of nature may be partially to blame for environmental degradation, then we have a responsibility to address this problematic discourse. It was noted earlier that Aldo Leopold used the term community to emphasize an integrated relationship between people and nonhuman nature, similarly, the integrated idea of landscape as a more relational framing of nature and culture may serve this function as well. Head (2012), however, would advise us to keep searching for the right terms to support more relational discourse. And as we search, we need to remember that we must go beyond simply changing language without examining underlying structures or relationships; finding foundational ways to reconsider outdoor education that integrates nature and culture is needed.

Regardless of the exact terms and practices we choose to use, outdoor educators must be deliberate in their efforts to characterize an essential human relationship with nonhuman nature. Wattchow and Brown (2011) argue that a place-responsive outdoor education cannot be effectively implemented if the active doing overlooks the "nuanced, highly contextualised and interconnected webs of people, places, and contested meanings of experience" (p. 195). Deliberate efforts toward a more relational discourse might be able to illuminate these *interconnected webs* to guide educational efforts and in so doing support Wattchow and Brown's call for an alternative vision of outdoor education.

References

Adevi, A. (2012). Supportive nature and stress: Well-being in connection to our inner and outer landscape. (Doctoral Dissertation). Retrieved from Epsilon Open Archive.

Beery, T. (2013). Nordic in nature: Friluftsliv and environmental connectedness. *Environmental Education Research*, 19(1), 94–117.

https://digitalcommons.cortland.edu/reseoutded/vol12/iss1/3

DOI: 10.1353/roe.2014.0001

- Beery, T., & Wolf-Watz, D. (2014). Nature to place: Rethinking the environmental connectedness perspective. Journal of Environmental Psychology, 40, 198–205.
- Berkes, F., & Davidson-Hunt, J. (2010). Innovating through commons use: Community-based enterprises. *International Journal of the Commons*, 4(1), 1–7.
- Bragg, E. A. (1996). Towards ecological self: Deep ecology meets constructionist self-theory. *Journal of Environmental Psychology, 16*, 93–108.
- Cachelin, A., Rose, J., Dustin, D., & Shooter, W. (March 2011). Sustainability in outdoor education: Rethinking root metaphors. *Journal of Sustainability Education*, 2. Retrieved from http://www.jsedimensions.org/wordpress/content/sustainability-in-outdoor-education-rethinking-root-metaphor_2011_03/.
- Callicott, J. B., & Nelson, M. P. (1998). *The great new wilderness debate*. Athens, GA: University of Georgia Press.
- Callicott, J. B. (2000). Harmony between men and land: Aldo Leopold and the foundations of ecosystem management. *Journal of Forestry*, 98(5), 4–13.
- Charles, C., & Loge, A.S. (2012a). Children's contact with the outdoors and nature: A focus on educators and educational settings. Children & Nature Network.
- Charles, C., & Loge, A. S. (2012b) Health benefits to children from contact with the outdoors and nature. Children & Nature Network.
- Chawla, L. (1999). Life paths into effective environmental action. *The Journal of Environmental Education*, *31*(1), 15–26.
- Clayton, S. (2003). Environmental identity: A conceptual and operational definition. In S. Clayton, & S. Opotow (Eds.), *Identity and the natural environment* (pp. 45–66). Cambridge, MA: The MIT Press.
- Council of Europe. (2000). European landscape convention and reference document. Strasboug.
- Cresswell, T. (2004). *Place: A short introduction*. Malden, MA: Blackwell Publishing Ltd.
- Cronon, W. (1995). The trouble with wilderness; Or, getting back to the wrong nature. In W. Cronon (Ed.), *Uncommon ground* (pp. 69–90). New York: W. W. Norton and Comany.
- Davis, J., Green, J., & Reed, A. (2009). Interdependence with the environment: Commitment, interconnectedness, and environmental behavior. *Journal of Environmental Psychology*, 29(2), 173–180.
- Denevan, W. M. (1992). The Pristine Myth: The Landscape of the Americas in 1492. *Annals of the Association of American Geographers*, 82(3), 369–385.
- Dudley, N. (2011). *Authenticity in nature: Making choices about the naturalness of ecosystems.* London: Earthscan.
- Ewert, A., Place, G., & Sibthorp, J. (2005). Early-life outdoor experiences and an individual's environmental attitudes. *Leisure Sciences*, *27*, 225–239.

- Freyfogle, E. T. (2003). The land we share. Washington: Island Press.
- Goralnik, L., & Nelson, M. P. (2011). Framing a philosophy of environmental action: Aldo Leopold, John Muir, and the importance of community. *Journal of Environmental Education*, 42(3), 181–192.
- Halpenny, E.A. (2010). Pro- environmental behaviors and park visitors: The effect of place attachment. *Journal of Environmental Psychology*, 30, 409–421.
- Hambrey, J., Evans, S., Price, M., & Moxey, A. (2008). *The potential for biosphere reserves to achieve UK social, economic and environmental goals: Executive summary.* No. REF: CR 0393. Hambrey Consulting.
- Haupt, L. L. (2013). Close quarters: Where does the wild end and the city begin? *Conservation*, (December 11, 2013). Retrieved from http://conservationmagazine.org/2013/12/close-quarters/.
- Head, L. (2000). *Cultural landscapes and environmental change*. New York: Oxford University Press.
- Head, L. (2012). Conceptualising the human in cultural landscapes and resilience thinking. In T. Plienniger, & C. Bieling (Eds.), *Reslience and the cultural landscape* (pp. 65–79). New York: CambridgeUniversity Press.
- Head, L., & Regnéll, J. (2012). Nature, culture and time: Contested landscapes among environmental managers in Skåne, southern Sweden. In S. G. Haberle & B. David (Eds.), *Peopled landscapes: Archaeological and biogeographic approaches to landscapes* (pp. 221–237). Canberra: ANU E Press.
- Ingold, T. (2000). *The perception of the environment: Essays on livelihood, dwelling, and skill.* London: Routledge.
- Jeanrenaud, S. (2002). *People-oriented approaches to global conservation: Is the leopard changing its spots?* London: International Institute for Environment and Development.
- Kals, E., Schumacher, D., & Montada, L. (1999). Emotional affinity toward nature as a motivational basis to protect nature. *Environment and Behavior*, *31*(2), 178–202.
- Leave No Trace, (2012). About us. Retrieved from https://lnt.org/about.
- Leopold, A. (1949). A Sand County almanac. Oxford: Oxford University Press.
- Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years. *Journal of Environmental Psychology*, *31*, 207–230.
- Louv, R. (2005). *Last child in the woods: Saving our children from nature-deficit disorder.* Chapel Hill: Algonquin Books.
- Marris, E. (2011). Rambunctious garden. New York: Bloomsbury.
- Mayer, F. S., & Frantz, C. M. (2004). The connectedness to nature scale: A measure of individuals' feeling in community with nature. *Journal of Environmental Psychology, 24*, 503–515.
- Nash, R. (1967). *Wilderness and the American mind*. Connecticut: Yale University Press.
- Nelson, M., & Callicott, J. B. (Eds.). (2008). *The wilderness debate rages on: Continuing the great new wilderness debate.* Athens: University of Georgia.

https://digitalcommons.cortland.edu/reseoutded/vol12/iss1/3

- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2009). The nature relatedness scale: Linking individuals' connection with nature to environmental concern and behavior. *Environment and Behavior*, 41(5), 715–740.
- Oelschlaeger, M. (1991). The idea of wilderness: From prehistory to the age of ecology. Binghamton, NY: Yale University Press.
- Obama, B. (2010). *A 21st century strategy for America's great outdoors.* Washington DC: The White House.
- Palmer, J. A. (1993). Development of concern for the environment and formative experiences of educators. *Journal of Environmental Education*, 24(3), 26.
- Phillips, A. (2003). Turning ideas on their head: The new paradigm for protected areas. *The George Wright Forum*, 20(2), 8–32.
- Pyle, R. M. (1993). *Thunder tree: Lessons from an urban wildland*. Boston: Houghton Mifflin.
- Roberts, J. (2012). Beyond learning by doing: Theoretical currents in experiential education. New York: Routledge.
- Scannell, L., & Gifford, R. (2010). Defining place attachment: A tripartite organizing framework. *Journal of Environmental Psychology*, 30, 1–10.
- Schultz, P. W. (2001). Assessing the structure of environmental concern: Concern for self, other people, and the biosphere. *Journal of Environmental Psychology*, 21, 1–13.
- Schultz, W. (2002). Inclusion with nature: The psychology of human-nature relations. In P. Schmuck, & W. Schultz (Eds.), *Psychology of sustainable development* (pp. 61–75). Boston: Kluwer.
- Setten, G. Stenseke, M., & Moen, J. (2012). Ecosystemservices and landscape management: Three challenges and one plea. *International Journal of Biodiversity Science*, 8(4), 305–312.
- Spence, M. D. (1999). *Dispossessing the wilderness: Indian removal and the making of the national parks*. Oxford: Oxford University Press.
- Stedman, R. C. (2003). Is it really just a social construction?: The contribution of the physical environment to sense of place. *Society and Natural Resources*, *16*(8), 671–685.
- Stedman, R. C. (2002). Toward a social psychology of place: Predicting behavior from place-based cognitions, attitude, and identity. *Environment and Behavior*, 34(5), 561–581.
- Sward, L. L., & Marcinkowski, T. (2001). Environmental sensitivity: A review of the research, 1980-1998. In H. Hungerford, W. Bluhm, & T. Volk (Eds.), *Essential readings in environmental education* (pp. 277–288). Champaign, IL: Stipes Publishing L.L.C.
- Tengberg, A., Fredholm, S., Eliasson, I., Knez, I., Saltzman, K., & Wetterberg, O. (2012). Cultural ecosystem services provided by landscapes: Assessment of heritage values and identity. *Ecosystem Services*, *2*(0), 14–26.

- United Nations Organization for Education, Science and Culture (UNESCO). (2014). *Biosphere Reserves: Learning Sites for Sustainable Development*. Retrieved from http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/
- United Nations Organization for Education, Science and Culture (UNESCO). (2012). *Operational Guidelines for the Implementation of the World Heritage Convention* [1]. Paris: World Heritage Centre. Paris.
- Wattchow, B., & Brown, M. (2011). *A pedagogy of place: Outdoor education for a changing world*. Clayton, Australia: Monash University Publishing.
- Williams, D., & Vaske, J. (2003). The measurement of place attachment: Vailidity and generalizability of a psychometric approach. *Forest Science*, 49(6), 830–840.
- Wylie, J. (2007). Landscape. London: Routledge.