

Learning Our Relations:
Teaching reverence for living beings

Sonia MacPherson, Ph.D.
Department of Secondary Education
University of Alberta
(780) 439-1340
sonia.macpherson@ualberta.ca

*A paper prepared for the Global, Environmental and Outdoor
Education Committee (GEOEC) Conference
Edmonton, Alberta, May 2-5, 2002*

**Learning Our Relations:
*Teaching reverence for living beings***

And so we return again to the subversive tenet of Ecology: interrelatedness. ...How can the proper study of man be man if it is impossible for man to exist out of context? For the ecologist, then, the desire of some in the humanities to deal with the fragment of reality they term "human" is nonsense.

(Evernden, 1996, p. 95)

Introduction:

The central challenge we face in the coming years is to identify and cultivate a common ethic and awareness to negotiate accelerating knowledge and technological power, on the one hand, and increasing violence and selfish indifference on the other. This paper examines a frequently overlooked aspect of this challenge, that is, the cultivation of ethics through our relations with non-human beings. Referring to Albert Schweitzer notion of the *reverence for life*, I will begin by discussing the need for such an ecological ethic in education. I will follow this with some practical recommendations for classroom practice and conclude with a reflective piece on how and why I became concerned about the topic.

Albert Schweitzer's Mystical Ethic of *Reverence for Life*:

One of the first modern articulations of ecological ethics came from Albert Schweitzer (1875-1965), a European theologian and physician from Alsace who spent much of his adult life establishing a hospital in Africa for which he was given a Nobel Peace Prize in 1952. What he most wanted to be remembered for, however, was his ethic of *reverence for life*. This ethic was not based on moral law but on what he called the "mystical" experience of a fundamental and abiding "will-to-live" that unites all life in "a mysticism of ethical union" (Barsam & Linzey, 2001, p. 169) As an expression of this "will-to-live," ethics emerged from the desire to protect,

conserve and promote life in its myriad, interdependent forms. Reverence for life entailed the cultivation of ‘awe,’ ‘wonder,’ and ‘mystery,’ alongside a sense of “responsibility without limits towards all that lives” (p.170). Out of such this deep appreciation and responsibility for life emerged a practical form of ethical mysticism that combined *service to life* with “*non-injury to life as the central imperative*” (p. 171-172). In this respect, he believed the ethic of a reverence for life was best cultivated through empathic experience and service rather than reasoning:

Ethics alone can put me in true relationship with the universe by my serving it, co-operating with it; not by trying to understand it. ...Only by serving every kind of life do I enter the service of that Creative Will whence all life emanates. ...It is through the community of life, not community of thought, that I abide in harmony with that Will.

This is the mystical experience of ethics. (p. 171)

Educated in theology and medicine, Albert Schweitzer was uniquely positioned to articulate this common, “absolute” ethic of *reverence for life*. This ethic can be considered fundamental or “absolute” in that it is biological, derived from the propensity of living systems to conserve themselves and all living systems with which they necessarily depend and interrelate. As Schweitzer suggests, this propensity manifests as the “will-to-live.” This ethic combines human religious devotion and service (*reverence*) with contemporary scientific insights concerning our ecological embeddedness in biotic communities (*life*). In this respect, it is a hybrid cultural and bio-ecological value demanded of our time, a secularized ethic capable of articulating the deepest level of our most essential shared value: *caring for our interrelated biotic communities*.

Cross-cultural Articulations:

Educated as a Christian theologian, Schweitzer nonetheless drew extensively on the philosopher Schopenhauer, whose work was inspired in part by Buddhism. Echoing Buddhism’s contention that all sentient (sensing, living) beings are propelled into action by desire, and in particular the

desire for happiness and freedom from suffering, Schopenhauer described the essence of life as the cognitive imperative or desire of being—the “*will-to-be*” (p. 168). Just as Schweitzer uses this common will or desire to argue a primordial ethical responsibility to care for all living beings, so does Buddhism in its articulation of what HH the Dalai Lama calls *universal responsibility*, a parallel yet opposite concept to the Western Enlightenment’s idea of universal rights. With universal responsibility, the emphasis is placed on extending the scope of our concern from ourselves to an ever-expanding domain of interrelated others, up to and including an infinity of other species and life-forms. Like Schweitzer’s *reverence for life*, Buddhism’s universal responsibility is cultivated through compassion, service and experience, ultimately becoming a significant contributing factor to our own fulfillment. The basic ethic in Buddhism is: 1) do good; 2) if you can’t do good, then at least don’t harm, which offers an effective way to approach teaching ethics through *a reverence for life*.

Reverence for Life as an Ecological Ethic:

This ethic of *a reverence for life* is not only philosophical and cross-cultural, it is an ethic grounded in biological knowledge and well-being. Human beings are biological like all other species; cultures, in turn, are ecological phenomena derived from human biology and the human tendency to rely on a highly social, language-derived cultured niche in which to adapt. So, as integral components of human niches, cultures affect and are affected by both physiological and environmental factors. The problem is that these culture-biological relations are obscured in ordinary human awareness, either by the limitations of our perception or by our tendency to self-deceit. It is the responsibility of educators to cultivate this awareness of our interrelations with the biological through abstract reasoning and mindfulness, in such a way as to make more explicit children’s relations with the non-human, non-abstracted world. In many cases it is a case of not interrupting children’s natural, nascent appreciation for their relations with their bodies, environments and non-human beings.

Cultivating a *Reverence for Life* through Education:

Here are some principles and practical ideas to help teachers institute classroom environments that cultivate both a reverence for life and more eco-centred curricula. The suggestions are focussed on young children because the critical period for cultivating good relations with non-human beings is the primary and lower elementary levels. Nevertheless, there are some implications for more senior elementary and secondary levels as well, or the suggestions can be amended to suit these older students.

1. Establishing Classrooms as “Sanctuaries for Life:”

One way to establish eco-centred classrooms is to designate them *Sanctuaries for Life*, and then take time throughout the year to reflect on what it means to provide a sanctuary for life—both for living beings and for the environments that sustain them. The project of developing a classroom as a sanctuary provides a focal point for teaching applied ethics in context through the cultivation of non-harm and compassion. Furthermore, the sanctuary would include non-human and human beings alike, reinforcing our shared existence and common well-being. Students might reflect on questions such as: What does it mean to provide a sanctuary for life for human beings? For non-human beings? How are these similar or different? How do we resolve conflicts between these needs? How do we go about implementing a sanctuary? It could involve outreach to community and international programmes as well, that could incorporate fundraising or guest visitors into the project. It would require a ban on the killing of all insects in the classroom, and perhaps regular vegetarian days every week or month. The overall project would give teachers a meaningful context to discuss voluntary simplicity and recycling as part of a broader ethical and scientific educational agenda. Finally, it would include providing a sanctuary for children as living beings, respecting their biological needs as much as their intellectual and social needs.

2. Creating Schools and Schoolyard-niches as “Sanctuaries for Life:”

Once some classes have been established as sanctuaries for life, the next step is to get the entire school so designated. If this proves difficult, an intermediate step can be to establish an area in the playground as an outdoor sanctuary for life. Children could be responsible for planting trees, bushes, and plants that are native to the region and on which local animals, birds and insects could be supported. In this way, these sanctuary gardens can serve an important pedagogical function: teaching ecology as both an art (ethic and aesthetic) and as a science in the context of the children’s own biotic communities. Studies of this biotic community should be taught in tandem with studies of the human community, to reinforce the interconnections between the biotic and the social too often interrupted by formal schooling. Children could write stories and journals about the community, imaginary or based on their observations.

3. Cultivating children’s identifications with their environments and non-human beings:

Identity-formation transpires through associating and internalizing aspects of the environment with the developing self. In constructing their identities, children quite naturally include non-human beings centrally in their associations, as evidenced in their preference for animal characters in stories, cartoons, and toys. As flawed as these anthropomorphized stories of animals and non-human characters may be, they nonetheless point to children’s felt identifications with the broader domain of living beings, of creatures not so civilized as yet to forget their embodiment. These identifications, I would suggest, are the foundation on which subsequent healthy and compassionate relationships with people and the natural and civilized world are cultivated, which can become seriously disrupted and impaired through formal education (MacPherson, 2000). In this respect, I would suggest that children’s treatment of animals, whether with compassion, indifference, or abuse, is significantly related to their later treatment of and relations with their environments, their own bodies, and other human beings. In interacting

with animals, children feel sufficient power to express manifest or latent feelings and behaviours that with time can become conditioned into habit.

One important component to cultivating relations of non-harm and compassion is to nurture their identifications in such a way as to align their identity-formation with, rather than in opposition to, non-human beings. This is natural in young children, but tends to be disrupted by educational agendas that encourage them to over-identify with the human against the non-human world. So, the key is to cultivate students' identity development in such a way as to be inclusive of the biological as they move into the more sublimated, rational and abstract activities of the culture. In doing so, children animate their world and learn to relate to it all as a sanctuary to be protected and revered. As Evernden (1996) suggests, "Once we engage in the extension of the boundary of the self in the 'environment,' then of course we imbue it with life and can quite properly regard it as animate—it is animate because we are a part of it" (p. 101). He goes on to suggest that seeing the environment reflecting our own state of mind as metaphoric or "pathetic fallacy" is only a fallacy from the perspective of an "ego-clencher." He continues on to argue that knowing our identity is formed in the context of an animate environment, "...that the establishment of self is impossible without the context of place, casts an entirely different light on the significance of the non-human" (p. 101).

Evernden (1997) carries on to suggest that this connection between place and identity establishes a "right to place, to know where one is from, is a right that is difficult to argue with the tools of the scientist" (p. 102). He suggests that what is required instead are inquiries into place across the curriculum, and in particular from the arts and humanities. From my perspective, what is required is a more integrated approach to the study of children's communities that include the human, non-human and environment (place), that allows the multiple perspectives of science, ethics, history, social studies, literature, and the arts. The end of such a program might be to offer children a felt

sense of belonging to the place they inhabit, and to help them construct their identities on this basis. This could be furthered through some of the following:

a) Exploring stories, songs, and films using real animals and their life experiences.

Encourage children to discuss their experiences with non-human beings and their neighbourhoods or other special places.

b) Discuss how humans and non-humans share their communal place, how they interact and support or detract from one another's well-being.

c) Observe non-human beings in their natural environment, and help students to notice how these creatures, like the children, are motivated to be happy and free of suffering (that is, are attracted to what they desire and repulsed by the threat of pain.)

d) Enable student to explore their bodies, and compare these with non-human beings'.

4. Cultivating mindfulness of children's own biological bases and ecological relations:

Related to the previous point regarding identify formation, children recognize their shared proximity to the more basic biological necessities of existence, and their relative marginalization from the more abstract, sublimated activities of civilization. If this transition from a biological to a more civilized identity is founded on repression or denial, then it generates a repressive relationship not only to our own bodies, but to the biological world writ large. Accordingly, one important agenda of early education in particular, but education across the lifespan, is to establish a comfortable awareness and appreciation of our biological embeddedness in a body. Help them learn their relations gradually by moving through *stories* to *contact* through to *interactions*.

5. Cultivating empathy and compassion for non-human life:

One of the great errors of the scientific approach to the study of the non-human world is the tendency to see a natural empathy for non-human beings as anthropomorphizing. It is as possible to infer suffering and happiness in non-human beings as in human beings, given the considerable

similarity in our biological and genetic dispositions. As many biologists are quick to point out, we are not as different as we suppose. That they limit this to our physical or material formations is unfortunate, for it seems apparent that all life forms are motivated to seek pleasure or happiness and avoid pain or suffering. Recognizing this basic shared propensity establishes the basis for the cultivation of empathy and compassion for non-human life. With such empathy and compassion, we become disposed to try to alleviate their suffering and promote their happiness. This is no different than the cultivation of empathy for human beings, and if too much is made of the distinctions between these two groups it is easy to dismiss the value of empathy and compassion for human beings as well. So, fundamental to cultivating empathy and compassion is the stricture against perpetrating harm or suffering, and then moving this into actively promoting their well-being. As Albert Schweitzer suggests, we may be unable to avoid inflicting suffering on other beings, but that even if inflicting suffering is necessary, it does not mean that it is ethical (Barsam & Linzey, 2001, p. 170):

...Killing may be '*necessary*' but it can never be '*ethical*' as such. When one is constrained by 'necessity,' one must bear the 'responsibility' and 'guilt' of having injured life. 'Whenever I injure life of any sort,' wrote Schweitzer, 'I must be quite clear whether it is necessary. Beyond the unavoidable, I must never go, not even with what seems insignificant.'

6. Saving non-human lives:

In this respect, to move the ethic of a reverence for life from the abstract to the concrete, and from mere non-harm to compassion, it is helpful to engage children and students in projects that actually save non-human lives. This could be going on an expedition following a heavy rainfall to save earthworms stranded on cement, through to an adoption of a rat, cat, dog, or other creature destined for extermination. One particularly fun activity is to purchase a live crab or lobster from a restaurant or grocery store and release it again in the ocean. Finally, students could be encouraged to take on the plight of an endangered species, preferably indigenous to their region.

7. Cultivating mindful, direct experiences with non-human beings:

From all the above, it should be apparent that cultivating a curriculum of compassion for living beings requires more than the addition or subtraction of certain information or contents. It calls for the transformation of students' consciousness and awareness from an anthropocentric to an eco-centred awareness. In some instances this may simply mean not interfering with the natural awareness of interrelations in children. This was corroborated in an Irish-Canadian study that found, counter to what would be predicted, primary level students exhibited a greater awareness of systems' interactions than senior elementary students past the level of formal operations (CBC, Q & Q, 1994). This suggests that schools are educating children out of an awareness of their interrelations with their bodies, non-human beings and our shared environments, and that cultivating an eco-centred awareness may be simply a case of removing socially conditioned impediments as ego-centredness and individualism.

In either case, whether removing or preventing obstacles to an appreciation of interrelations, one key resource is mindfulness. This refers to the practice of carefully observing the mind and its experience of the world. In this case, the engagement would be with the body, non-human beings and their environments, to help to cultivate the direct observation of the experience of the natural world free of socially conditioned judgements and utilitarian exploitation. With such mindfulness, children learn to rely on their experience rather than simply social convention to understand their worlds, and how to respond uniquely to the particularities of that experience. This is the basis for the most advanced form of ethics, which is particular, practical and engaged rather than theoretical, abstract and universal. To cultivate such mindfulness, children need to learn to concentrate on what it is they are observing, and how to investigate use questions in their contemplations in such a way as to have insight about the phenomenon and their relationship to it.

8. Cultivating interdisciplinary approaches to the study of nature:

Neil Evernden (1996) laments the fact that scientific ecology has been entrusted with the voice defending our right to place, as “the logical choice as advocates in the environmental movement” (p. 102). He argues that science lacks the tools and lexicon to handle the aesthetics, ethics and means to endorse the value of landscape beyond its crude consumption as commodity. What is required instead is to understand its value from a broader, non-material perspective, to cultivate students’ appreciation, identification and felt affiliation with nature and the non-human world. The result of the hegemony of scientific discourse in ecology has been to segregate conversations about human beings and their environments within the humanities and sciences respectively:

Hence, there is man, and there is environment. The humanist need feel responsible only for man. If there’s a problem with the rest, call in a scientist. Indeed, even the suggestion that man is tied to anything but himself, or that he shares any biological imperatives with other creatures, is seen in some quarters as an affront to humanity. (p. 102)

What is called for instead is an interdisciplinary approach to the study of ecology, or even better, the cultivation of a common conversation about the value of non-human beings and our shared environments that embraces the multiple ways we know across the curriculum. Perhaps then we can join with Gary Snyder (1999) in the closing of his poem *For the Children*:

...In the next century
or the one beyond that,
they say,
are valley, pastures,
we can meet there in peace
if we make it.

To climb these coming crests
one word to you, to
You and your children:

*Stay together
learn the flowers
go light*

Where have all the mammals gone?: *An awakening*

We need a boundless ethic that will include the animals also.

Albert Schweitzer

As circumstances would have it, during one week last winter there were two overlapping radio news stories about animals approaching urban areas and being killed. The first case was in Banff, where cougars or mountain lions, I believe, had descended in search of food, one eventually attacking a hiker and molesting her to death. In the second case, wolves were unable to access a winter feeding island near Atlin, BC, because an unusually warm winter had left the water unfrozen between the island and the mainland. So, the wolves resorted to killing small local dogs for food. The municipal government responded by waiving a ban on the killing wolves to protect the dogs. I called the radio station about the latter story, asking whether or not anyone had considered feeding the wolves instead of killing them! It shocked me that we would be so cavalier about killing wolves in defence of dogs, without even considering that we could intervene more effectively by feeding them rather than killing them.

Personally, these incidents catalyzed a troubling realization. Though seemingly isolated cases, they indicate the possibility that we could lose our large mammalian wildlife on the planet Earth in the coming century. In overriding their natural fear of humans, these large mammals were communicating a degree of desperation that comes only with imminent demise—individual or possibly species-wide. The indifference and readiness of humans to kill these animals under circumstances of such abject suffering didn't promise much hope for our stewardship of the Earth. It made me very sad, and I wondered: Who is speaking for the animals? So, that is what I am trying to do, to give them a voice in this society that is all too indifferent to the suffering of humans let alone animals. We have forgotten ourselves in our greed.

On Love and Altruism:

Human beings have this awesome capacity to be conscious, rational and altruistic, in such a way as to override our primordial self-centredness and survival instincts. These capacities of consciousness are not just gifts of evolution with which to exploit the Earth; they are our genetic and biological responsibility. Yet, we squander them, as we squander the world, neglecting to apply our compassionate intelligence to address the challenges facing ourselves and the Earth. Instead, we have constructed a utilitarian culture in which our actions are guided almost exclusively by self-interest—of person, family, group, even species. We construct hierarchies of beings, with ourselves at the pinnacle. Our personal survival stands foremost, with everyone else in descending order according to their proximity to either our genes or our happiness. Accordingly, those closest to us are deemed more important than those at more of a distance. This raises the question: What is love?

The only reason a dog is valued more than a wolf, given they belong to the same genetic family *canus*, is either because we believe we “own” them, that they are our property, or because we are bonded with dogs but only relate to wolves at a distance. Similarly with human beings, we feel our family, children, and friends are much more valuable than the family, children and friends of a distant neighbour, let alone those of an Afghan, Rwandan, or Iraqi. It is natural to feel affection and attachment to the people and other creatures close to us, of course. These are the individuals with whom we engage in *loving relations*, sharing what Lewis, Amini and Lannon (2000) call *limbic resonance* and *limbic regulation*. Just as our bodily rhythms synchronize with the *circadian* rhythms of light, our emotional, *limbic* brain is co-ordinated with those nearby:

Our neural architecture places relationships at the crux of our lives, where, blazing and warm, they have the power to *stabilize*. When people are hurting and out of balance, they turn to regulating affiliations: groups, clubs, pets, marriages, friendships, masseuses,

chiropractors, the Internet. All carry at least the potential for emotional connection.

Together, those bonds do more good than all the psychotherapists on the planet. (p. 171)

So, there is a certain physiological grounding for our hierarchy of affections, a natural preference for those with whom we have greatest opportunity to interrelate and participate in mutual, loving care. Yet, we are also capable of abstract thought and reasoning, and therefore capable of validly inferring relations beyond ordinary appearances, beyond our conditioned biological preferences and desires. This enables us to understand relationships that serve our individual and collective interests outside of those we are naturally disposed to appreciate and prefer. Indeed, protecting these relations may be necessary for our collective survival on Earth, as Wilson (2001) and others argue about biodiversity. The challenge then becomes to extend the sense of limbic resonance with those near at hand to those at a distance to us spatially, temporally, and genetically.

This is the basis of the cultivation of altruism or universal responsibility: *to counteract a natural hierarchy of affection by intentionally cultivating a sense of equality between all living beings*. At this historical juncture, the cultivation of such altruistic affection is to understand that all sentient beings are our responsibility. If we harm one we harm all, including our children, spouses, families and friends. It is my personal conviction that our species inordinate advantage in securing resources came because of our considerable sensitivity and responsiveness to one another—because of love—and the limbic advantage that accorded in the development of higher neo-cortical functioning. Now, our advantage is to be accorded to the web of life on Earth, of which we are but a part. Yet, this collective advantage human beings can contribute to life on Earth can be secured only to the extent that we are able to integrate our rational and emotional brains in the cultivation of altruistic care for the Earth, other species, and those human beings living at a distance to us.

Another important ethical question concerning our relations with non-human beings is whether or not other species share our capacity for affection, emotions, and in particular our ability to experience suffering and happiness. After all, the ability to experience suffering and happiness is the ethical basis for extending rights and respect to all *human* beings. As veterinarian Allen Schoen (2001) suggests, the last twenty years have witnessed a shift even in the corridors of scientific laboratories, where it is increasingly accepted that all mammals, if not all animal, and possibly even plant, life have the capacity to experience suffering and happiness. It is no longer dismissed as anthropomorphism to suggest that the signs of pleasure and pain in a non-human being are comparable to the signs of pleasure and pain in a human being. Schoen provides extensive laboratory and experiential (narrative) evidence that the emotional complexity of other mammals approaches our own. Indeed, these species share many of the qualities of our limbic system. Candace Pert (1997) discovered opiate receptors that negotiate our emotional experiences of pain and pleasure not only in our brain but throughout our body, on every nerve cell such that our body could be considered one large sensing and feeling organ. Furthermore, these receptors and identical biochemicals are found in all animals, from single-celled organisms and up through the evolutionary scale. This provides a physiological mechanism to justify what Darwin observed long ago, that our emotions are an integral part of evolution, and that the signs of emotions are universal and consistent not only within a species, but often across species. This has been corroborated by subsequent research (see Schoen, 2001).

On sacrificing wolves for dogs: A Question of Relationship and Responsibility

What distressed me about the people of Atlin was not that they wanted to protect their dogs, it was their apparent disregard for the welfare of the wolves. They showed no creativity in attempting to find a solution for a problem generated principally by human beings in the first place through global warming. The wolves cannot adapt as readily as we can to the dramatic environmental changes we are wreaking on the Earth. Yet, rather than assuming responsibility for

our negative actions and changing them, we abdicate responsibility and rely yet again on just killing whatever obstacle or challenge crosses our path. I know Atlin has a large artistic community with a certain reputation of creativity, so to see that even they behave like George Bush in Afghanistan makes me mourn humanity deeply. For in the end that is what is most painful, not the terrible suffering of the wolves but the agony perpetrated on ourselves by the ignorance we wilfully subject ourselves and others to out of laziness, neglect and indifference. If we watched less TV and got our minds off our latest investments, perhaps we'd recognize the great treasure we are squandering, not only for ourselves, but for future life-forms on this planet.

My Buddhist teachers and training taught me to see all sentient beings as equal, and to feel an equal responsibility to cultivate and support their well-being. Indeed, given I am only one and sentient beings are infinite in number, they are more important than I am. My life is entirely contingent on them, on the web of life, without which I am nothing. This awareness has been nurtured through various solitary meditation retreats conducted in the forest or wilderness. During these retreats, I did not talk or read or have any contact with human beings; I just meditated and participated in the biological exigencies of living. Soon after beginning, my bodymind would disentangle itself from its human-centred preoccupations, perceptions and consciousness. As I embraced this expanded consciousness, the constraints of a rather narrow and stifling anthropocentric cultural conditioning dissipated as the animals and the other creatures around me expanded accordingly in my awareness, esteem, and interest. I entered limbic regulation with the web of life. From bald eagles to banana slugs, hummingbirds, raccoons, mice and scorpions, I came to perceive the sentience of all as part of a common nature. In doing so, I learned to communicate with my forest or wilderness companions more effectively, to understand their non-verbal language as they came to understand mine. These were times of great and deep communion for me, where I felt myself more than at any other time an integral part of a community. So, when I returned to human society, resumed my usual human preoccupations and

found my consciousness narrowing accordingly, I nonetheless remembered this sense of equality with all living beings. I now know in my bones that they share with us the capacity to experience pain, fear, desire and the wish for happiness, and that we are not so different as we suppose. We are constituted of more wild animal than we imagine, and they are constituted of more civilized relations than we think.

So, when I hear of the slaughter of the wolves, I hear it with the same sensitivity as I first learned of the slaughter of Rwandans, of the students of Columbine High School, or of the children of Afghanistan; I mourn what we have lost and what we are becoming. Our only chance for redemption is in loving that which we have so harmed, and by doing so healing the Earth, our fellow-species (Earth-friends), and our own broken body-minds and hearts.

With EO Wilson, I wonder “will humanity love life enough to save it?”

This research was supported by a Killam Post-doctoral Fellowship at the University of Alberta.

Sonia MacPherson, Ph.D.

Faculty of Education, University of Alberta

sonia.macpherson@ualberta.ca

References:

- Barsam, Ara and Andrew Linzey. (2001). "Albert Schweitzer, 1875-1965." In J. Palmer (Ed.), *Fifty Key Thinkers on the Environment*. New York: Routledge Press.
- Evernden, Neil. (1996). "Beyond ecology: Self, place, and the pathetic fallacy." In C. Glotfelty and H. Fromm (Ed.), *The Ecocriticism Reader: Landmarks in Literary Ecology*. Athens and London: The University of Georgia Press.
- Lewis, Thomas; Fari Amini; and Richard Lannon. (2000). *A General Theory of Love*. New York: Vintage Books.
- MacPherson, Sonia. (2000). Educating Nature: On being squeamish in science, a chapter in, *Unfolding bodymind: Exploring possibility through education*. Foundation for Educational Renewal, Inc.: VT.
- Pert, Candace B. (1997). *Molecules of Emotion: The Science Behind Mind-Body Medicine*. New York: Touchstone Books.
- Schoen, Allen M. (2001). *Kindred Spirits: How the Remarkable Bond Between Human & Animals Can Change the Way We Live*. New York: Broadway Books.
- Snyder, Gary. (1999). *The Gary Snyder Reader: Prose, Poetry, and Translations (1952-1998)*. Washington, DC: Counterpoint.
- Wilson, Edward O. (1984). *Biophilia*. Cambridge, MA: Harvard University Press.