

The call of nature writing: A framework of attributes and intentions for environmental awareness

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ABSTRACT

Nature writers provide intelligent and thoughtful works to evoke passion, to inspire connections, to illustrate a concept, and to challenge current ways of thinking. The genre of nature writing can help students realize that the environment is not merely a setting, but it speaks to us. To better appreciate and understand the call of nature writers, this paper introduces a conceptual framework that organizes writing attributes and intentions used in this genre. The study conducts a deductive content analysis of the literature to further explain the framework's core: An awareness of sense of place; its past, present, and future. The reviewed literature helps understand ancillary benefits of knowing one's place, including an expanded sense of community and thinking in systems. The explanations are supported with key insights from notable nature writers along with selected teaching ideas. This framework can help educators from many disciplines revitalize their curriculum by introducing words and wisdom from nature writers.

Keywords: environmental awareness, nature writing, sense of place, time-space continuum

INTRODUCTION

We are living in a new epoch, the Anthropocene (Li, 2017; Mychajliw et al., 2015; Waters et al., 2016). This era was created by human actions, and we continue to influence it. Several educators have noted the importance of recognizing this epoch in the curriculum. In her essay, Taylor (2020) discusses the need for environmental education and education for sustainability to break away from human-centered, stewardship models. These and other theorists advocate for an education about a more-than-human world, beyond the Anthropocene. Taylor (2020) discusses the importance of allowing children to be in the world and learn from its 'messy' messages. Rather than having children imagine or visit a natural world separate from humans, they need to acknowledge 'the hybrid naturalcultural real life worlds that [they will] inherit and inhabit, along with all other life forms' (Taylor, 2020, p. 1455).

Among the educational strategies for living in the Anthropocene advocated by researchers, some point out the role of writing in particular. Plumwood (2009) notes that writers have the ability to help us think differently and to move away from ways of thinking that helped create our current environmental crises. Writers can be 'open to experiences of nature as powerful, agentic and creating, making space in our

culture for an animating sensibility and vocabulary' (Plumwood, 2009, p. 46). We need to 'see creativity and agency in the other-than-human world around us' (Plumwood, 2009, p. 122).

One strategy that has been used to increase attention to one's environment is to keep a journal and to write or draw observations and perceptions of the world around them (Hammond, 2002; Hiemstra, 2001; Knapp, 2005). A related strategy is to study the works of famous nature writers to learn how they express thoughts and feelings about natural world (Goralnik & Nelson, 2011; Özdag & Lane, 2014; Place, 2016).

Nature writing, with its unique and emotional approach to human and nature connectedness, transmits ethical values that may ultimately address environmental concerns (Clark, 2011). Everyday discourse retains an anthropocentric stance and utilitarian value to the land and nonhuman life on Earth. Leading nature writers draw attention to this paradox by declaring that we need an intrinsic value in the land (Philippon, 2005; Satterfield & Slovic, 2004). Historically, nature writing essays are personal, reflective pieces that describe and interpret the natural world. This kind of nonfiction prose takes its inspiration from the natural world; while the writings are often narratives of empirical observations through images loaded with emotions, they often utilize scientific information and facts. In other words, a merging of arts and sciences is reason for their timeless appeal.

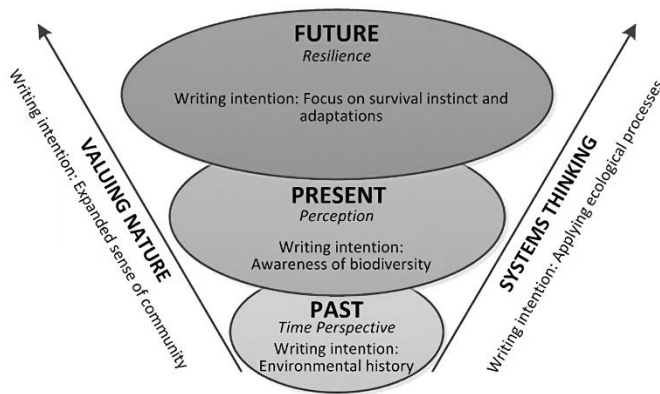


Figure 1. Themes & writing intentions of nature writers (Özdag & Lane, 2014) (used with permission)

Nature writing is a genre of literature that has a strong tradition in the United States and in the United Kingdom. As Finch and Elder (1990) state, nature writing has existed ‘as a recognizable and distinct tradition in English prose’ for more than two hundred years (p. 19). While Henry David Thoreau, John Muir, Aldo Leopold, Rachel Carson, Edward Abbey, Wendell Berry, Terry Tempest Williams, Scott Russell Sanders, Barry Lopez, and Annie Dillard figure prominently in American nature writing. While Gilbert White, William Cobbett, Richard Jefferies, William Henry Hudson, Robert Macfarlane, and Richard Mabey have a special place among British nature writers.

Although nature writing may be mainly associated with writings in English, this genre is relevant to other countries and cultures as they have conservationists, scientists, poets, and novelists who have authored writings about the environment in their regions of the world. The renowned botanist, Hikmet Birand, from Turkey, is a case in point; his published works have been identified as nature writing by the second author. She has published a collection on Birand’s nature writing essays, highlighting his interpretations of and messages about the natural world (Özdag, 2019).

To address the environmental issues associated with living in the Anthropocene, the authors of the current paper advocate for more reading of the works of nature writers to be included in environmental education. Furthermore, as a part of environmental education, learners should apply the nature writing skills they learned from their readings. Nature writing skills can be used to communicate observations, understandings, and needs of the natural world. Reading and creating nature writing can help develop a sense of place, its past, present, and potential futures. Through nature writing we can learn about the connections, interactions, and reactions of the living and nonliving elements in our local and global ecosystems. We can develop our expanded sense of community and better understand our place in the world. Now is the time to embrace the call of nature writers, whether famous, newly found, or amateur. To facilitate an understanding of this call, in 2014 the authors conducted a content analysis of two conservationists, the American Aldo Leopold and the Turkish Hikmet Birand (Özdag & Lane, 2014). The outcome was a conceptual framework that identified themes and intentions of nature writers (Figure 1).

The purpose of this paper is to provide a deeper discussion of the aspects of the framework. With this deeper understanding, we complemented the themes with writing messages from three American nature writers: Aldo Leopold, Edward Abbey, and Terry Tempest Williams. We also show how this framework can be applied to a non-American writer by applying it to the works of Hikmet Birand. Environmental educators can also use the framework to help students develop their own nature writing skills. Figure 1 serves not only as a framework for developing nature writing skills but for developing a deeper awareness and understanding of, and subsequently commitment to, one’s place.

Overview of the Nature Writing Framework

The framework has at its core a time-space continuum. This core of the framework, the time-space continuum, is presented as three overlapping circles. To the sides of the circle are two arrows indicating offshoots from this continuum. Rather than a single line, it is better to view these arrows as a cone that encompasses the time perspectives. The cone represents many ancillary benefits of spending time in and writing about one’s place. Two in particular are highlighted in the framework: Valuing nature and systems thinking.

These circles indicate how nature writing helps teach about the past, while describing the present, and giving insights into the future. As an individual learns about the biodiversity of one’s place at the present time, as well as the environmental history of the place, what follows is a future perspective, contemplating the resiliency of one’s local lands. A recent investigation into the concept of ‘space-timeScapes’ presented by Dunkley (2018) relates to the importance of temporal perspectives of environmental education. One of the learning contexts she described involved intergenerational experiences where elders shared stories about the past and helped young learners think about their future. She concludes that ‘storytelling and experiential learning techniques [were used] to create alternative future imaginaries . . . to explore the interconnections between the visible/invisible elements central to human well-being and addressing environmental change’ (Dunkley, 2018, p. 126). Although storytelling and nature writing are different, they both involve interpreting and sharing perceptions with others. American nature writer Barry Lopez points at the value of storytelling in that, it is ‘about us,’ and therefore creates meaning (Lopez & Bonetti, 1988).

METHODS

To further ground the conceptual framework in the findings of research in nature studies and environmental education, the authors conducted a deductive content analysis of the literature (Hsieh & Shannon, 2005; Mayring, 2014). We used the framework’s themes as key terms to identify relevant studies. We then analyzed those works to further explain the attributes and intentions of nature writers. For each of the time-space writing attributes, the work of a prominent nature writer (Aldo Leopold, Terry Tempest Williams, and Edward Abbey) is featured along with ideas for how writing intentions can be integrated into learning experiences.

Perception in the Present: Biodiversity of Place

A starting point of the framework is the section labeled *present*, subtitled *perception*. The attribute involves using all the senses to become aware of the local environment. One outcome of this experience is to become aware of the biodiversity of the local resources. Key to this section of the framework is developing a ‘sense of place.’

Different disciplines may have different perspectives of place (Cross, 2001), Kudryavtsev et al. (2012) present a psychological perspective of place for environmental education. Their literature review explains the concepts of place attachment and place meaning and they argue that both can be developed through direct experiences in the natural world and indirect experiences, including written communications. The authors acknowledge that they present a ‘positivistic’ view of understanding place and that alternative, perhaps more phenomenological, views are important to consider.

Indeed, in the literature, there are educators who argue for a purposive intention for being in nature, such as developing environmentally responsible behavior (e.g., Vaske & Korbrin, 2001). Alternatively, there are researchers and theorists who have argued for nature for nature’s sake and experiencing nature aesthetically (e.g., Iared et al., 2016). Somewhere in the middle of these views is the importance of being in the natural world to foster a greater self-understanding, including one’s relation with the natural world (e.g., Hill & Brown, 2014; Nicol, 2014; Quay, 2013).

When discussing being in nature and gaining a sense of place, educators and researchers provide and review a number of suggested activities. The use of written expression is often mentioned directly or can be inferred from the discussion. Back in 1999, Lindholdt (1999) described activities he uses in writing courses to encourage students to take action to protect one’s place. Warkentin (2011) shares how nature writing was used to help pre-service teachers in urban settings learn about and become more connected to their place. Given concerns about modern societies’ disconnect with nature, it is no surprise that the art of nature writing is being revisited in the literature (Barnhill, 2010; Moran, 2014).

An important outcome of spending time in one’s place is becoming more aware of details and interactions. As individuals learn more about the living aspects of local environments, they gain an appreciation of the *biodiversity*—or lack thereof—of their place. In this paper, we encourage looking at the writings of exemplary nature writers to provide learners with approaches of perceiving the flora and fauna of their local environments.

Exemplary nature writer and suggested learning experiences

The father of wildlife management, Aldo Leopold (1887-1948) was a conservationist, ecologist, educator, and a nature writer. His unique career was shaped at an early age, spending his time observing, cataloging birds, doing nature journaling, and writing about the natural world. After he pursued a career in forestry, he designed the first Wilderness Area in the Gila National Forest, as early as 1924. As a professor of game management at the University of Wisconsin-Madison, he developed a philosophy of how to live in harmony with nature.

In the 1930s, he introduced a concept called the *land ethic*, which stressed the fact that people are a part of the environment and not apart from it. The concept of the Land Ethic was explored and presented within Leopold’s (1968, 1970) famous work, *A sand county almanac*, which was geared for general audiences, and led to care of the natural environment. Leopoldian land ethic is one that evolves through ‘thinking communities’, which means open dialogue and conservation work in the local communities. As an expanded community concept, the land ethic celebrates biodiversity in the local lands.

Nature writers, such as Aldo Leopold, provide learners with diverse approaches to become aware of biodiversity. When Leopold (1968) inventories plant and animal species in *A sand county almanac*, he introduces the idea of the aesthetic species, the *numenon*. Leopold (1968) stated, ‘our ability to perceive quality in nature begins, as in art, with the pretty’ (p. 96). In his essay ‘*Guacamaja*,’ Leopold (1968) notes that ‘the grouse is the numenon of the north woods, the blue jay of the hickory groves, the whiskey-jack of the muskegs, the pinonero of the juniper foothills’ (p. 138). While this ‘pretty’ species may be an initial attraction, it actually serves to increase awareness of biodiversity. As the observer learns more about and cares for the *numenon*, he or she becomes aware of other living and non-living resources related to and necessary for its survival. Leopold’s ‘Prairie Birthday’ typifies deepening and broadening awareness as he focuses on the silphium plant (*silphium laciniatum*) and broadens to other species on the prairie.

Suggested nature writing activities: Observing and paying attention to detail are important for writing about one’s place and its biodiversity. Nature journaling guides provide many ideas for increasing awareness of the natural world. For example, one can compare the varieties of colors, look for and try to describe different shades of green. Notice how plants and animals interact. Apply phenomenological strategies to notice how one’s place changes throughout the seasons. Read the works of Aldo Leopold like his ‘prairie birthday.’ Find and explore the *numenon* of your place.

Deep Time Perspective: The History of Place

As an individual learns about the biodiversity of one’s place at the present time and becomes more attached to a place, she or he may wonder about the environmental history of the local lands and of wildlife. In other words, in addition to a spatial perspective one can gain a temporal perspective of one’s place. In the framework (**Figure 1**), this is presented as using nature writing to gain a time perspective.

Regarding historic aspects of place, researchers have advocated for the importance of natural history (Tewksbury et al., 2014) as well as cultural heritage (Jivé’n & Larkham, 2003). King and Achiam (2017) explain that natural history involves comparing current to past, often extinct, species in an area, and using this and other information to interpret changes to the landscape. They argue that studying the natural history of a place (along with visits to museums), helps students develop ‘abductive, inductive and retrodictive forms of reasoning for explaining many processes in the natural world’ (King & Achiam, 2017, p. 136). They suggest that as learners become more invested in understanding their place, they will be more inclined to take action to protect it.

People living in historic areas often value the cultural heritage of their place (Tan et al., 2018). Blizard and Schuster (2007) point out the value of developing children's cultural heritage in any place is important for fostering sense of place. In their study, students visited a forest to study the biodiversity of the place and later learned the cultural heritage of the place through storytelling. Students kept journals and wrote reflections on their experiences. While it was worthwhile for students to learn about the history of the built environment, Blizard and Schuster (2007) cautioned that it is important to simultaneously foster awareness of the importance of sustaining the biodiversity of place. Similar to other studies, the authors noted that learning about the past has the potential to enhance students' critical thinking skills. Comprehending past changes may encourage them to appreciate how current actions will in turn affect the future of their place.

Exemplary nature writer and suggested learning experiences

The works of renowned American nature writer and conservationist, Terry Tempest Williams, are rooted in the American West. She began studying bird populations around the Salt Lake in the Western United States. She monitored the rise and fall of wildlife populations, especially following decades long underground nuclear testing in Nevada. She defended public lands for more than three decades. While building an awareness of the environmental history of the local lands, she developed an affinity with non-human populations. She views herself as 'a storyteller of place,' with particular emphasis on the rights of species to continued existence.

As with Williams's oeuvre, the works of nature writers can foster an awareness of the environmental history of the local lands. They deepen learners' understanding of how humans have changed the natural and built environment. Readers gain an understanding of flora and fauna that have been lost, gained, and changed. While some nature writing about the past can be uplifting and nostalgic, many works of Williams are important for reminding readers of tragic past events that affect our lives today. In one of her essays about the effects of nuclear testing in the deserts of Nevada, Williams (1991) writes about the long-term devastation wrought to human life and to the land. She relates symptoms of environmental and human ailments. In *Refuge: An unnatural history of family and place*, Williams (1991) uses the analogy of cancer to compare the tragedies of environmental devastation (loss of bird species resulting from the flooding of Salt Lake) and personal loss (her mother's death). Her words simultaneously develop empathy on two levels: the personal and the environmental. Reading the works of nature writers like Williams helps develop a deep time perspective of the environmental history of local lands and an understanding of how humans have affected and been affected by human interactions with the natural world.

Suggested nature writing activities: To gain an understanding of the history of one's place, learn about natural and human caused succession. Speak to elders about changes to the landscape; write stories about short- and long-term outcomes of these changes. Read the works of Terry Tempest Williams, for example 'Burrowing owls' from *Refuge*,

to learn about her deep time awareness. Observe the trees in one place, what stories do their shapes talk about the history of the land?

A Future of Resilience: Survival and Adaptations

While nature writing can be used to learn about the past, Moran (2014) discusses how the purpose of nature writing itself has changed over time. Early conservationists spent time in natural areas sharing words about the beauty and complexities of the environment. Today the built environment is encroaching more and more on wild places. Nature, while often being destroyed or reduced, has also found ways to exist within the boundaries of human settlements. Moran (2014) notes that nature writers can help people understand the natural world and connect to their place.

In this way, there is an indication that nature writing has a forward purpose. In other words, even though very few studies discuss the role of nature writing and future perspectives, inferences can be made about place attachment and fostering concerns about long-term prospects of place. There are indications that nature writing may encourage writers and readers to think about the future of their place and consider what may be done to preserve it.

In the framework (Figure 1), this is presented as using nature writing to contemplate the resiliency of lands, wildlife and plants to survive. Krasny et al. (2010) write that there has been an increasing number of studies about the role of resilience in environmental education. They also note that researchers have different definitions and perspectives of the term. Resiliency is included in the framework presented in this paper because when Özdag and Lane (2014) examined the intentions of nature writers, they found that writers often contemplate how nature persists and is able to change over time. By studying the natural world, nature writers learn about and reflect on the qualities of plants and animals, along with symbiotic relationships that help them survive. While they may warn and mourn in their writings, telling sad tales of the destroyed and the extinct, they use their essays as cautionary tales to encourage positive changes to ensure a sustainable future of one's place. As resilience involves a will to survive in all species, nature writers explore and narrate the characteristics that a species has in protecting itself from all threats. Above all, they provide learners with approaches to become aware of survival instincts and adaptations of species over long periods of time.

Exemplary nature writer and suggested learning experiences

Readers can learn about and admire the resiliency of certain species through the writings of nature writers such as Edward Abbey. Known as the 'Thoreau of the American West,' Abbey (1971) wrote 19 works of fiction and non-fiction, including his nature writing classic, *Desert solitaire*, which became a landmark in the American environmental movement. He passionately felt the need for books to inform readers about industrial development projects and the commercialization of public lands. But what is significant about Abbey's (1971) writing is his storytelling by which he advocates ecological protection for the vast and beautiful landscapes. Many of his works describe qualities of specific plants and their habitats.

In *Desert solitaire*, Abbey (1971) uses his essay 'cliffrose and bayonets' to inventory his 'garden' within the desert land of the Arches National Monument. Among the plants he features are the cliffrose and a type of yucca plant. The former is 'a sturdy shrub' and the 'showiest plant in the canyon country' while the latter is 'formed of a cluster of bayonetlike leaves ... each stiff green blade tipped with a point as intense and penetrating as a needle' (Abbey, 1971, p. 29-30). Both plants evolved over time to adapt and thrive in their environment. He provides eloquent and in-depth information about how the organism has survived over time, often noting that these traits benefit others including humans. After narrating the defense mechanism of the yucca plant, Abbey (1971) goes on to describe its means of future survival: 'Out of the core of this untouchable dagger's-nest rises a slender stalk, waist-high, gracefully curved, which supports a heavy cluster of bell-shaped, cream-colored, wax-coated, exquisitely perfumed flowers' (p. 30). The sharp leaves of the yucca provide an obvious protection from predators, while it has an almost gentle symbiotic relationship with its pollinators. Ultimately, Abbey (1971) uses his words to emphasize the value of the plants to human survival (they are 'practical as well as pretty'). For example, Native Americans recognized the medicinal value of the cliffrose and many other native plants.

Suggested nature writing activities: Find and explore a resilient species of local lands (a plant, a tree, a bird or animal) to explore symbiotic relationships or interactions, as well as its usefulness for human survival. Read Abbey's 'Cliffrose and Bayonets' and notice how he describes the qualities of the cliffrose, the yucca plants, and other plants that ensure their survival and adaptations, as well as their use value to human survival.

Ancillary Benefits of Time-Space Awareness: An Expanded Sense of Community and Thinking in Systems

The final aspect of the framework (Figure 1) discussed in this paper are the two arrows that border the concentric circles. These arrows represent benefits or outcomes of the time-space continuum: an expanded sense of community and thinking in systems. Several authors have advocated for nature writing to help develop a sense of place (Hammond, 2002; Hiemstra, 2001; Iared et al., 2016; Knapp, 2005; Vaske & Korbrin, 2001). Observing and writing about one's place increases our understanding of how humans interact with the natural world (Morin, 2014). Nature writers provide a revolutionary discourse that gives intrinsic value to the fauna and flora of the land. As we come to appreciate the value of the land, our sense of community is expanded. Nature writing also serves as a bridge between the theories and discoveries of the science community and the societal community. Through this bridge the two communities are enhanced and expanded. This new discourse of an expanded community concept reminds us that we can no longer regard land on purely economic terms. There is a need for an awareness of the complexity of the land and its intrinsic value, that the ecosystem is as valuable as the individual members that comprise it. All this depends, in the words of Leopold (1968), on an expanded community concept that includes 'soils, waters, plants, and animals, or collectively: The land' (p. 204).

Understanding ecological processes fosters systems thinking, which can be applied to understanding the implications of living within the Anthropocene. Barnhill (2010) provides a new taxonomy for nature writing in his paper, that highlights 'an ecosystem approach.' His viewpoint is especially relevant to the current study in that many elements of his taxonomy involve using writing to develop new, systemic ways of understanding the world. Barnhill (2010) describes that effective nature writing observes, analyzes, and explains the interrelations and interactions among aspects of place. Understanding how the components of a system rely upon and affect each other promotes thinking in systems.

While different scholars may vary in how they define system thinking, in general it involves comprehending connections and interdependencies among societies, economies, and the natural world (Sweeney & Sterman, 2007). Furthermore, it is important to consider short- and long-term consequences of decisions and actions (Assaraf & Orion, 2005). Understanding the biodiversity of place as well as gaining temporal perspectives of place changes has the potential to contribute to systems thinking. The current paper has presented how writing and reading about nature can help individuals develop these understandings and perspectives.

Leopold, Williams, Abbey are among many nature writers who defy an anthropocentric language of human preeminence and embrace an expanded community concept. Their words provide an exemplary learning discourse that gives intrinsic value to the land. These prominent nature writers propose a new discourse of connectedness. Leopold tries to find a way for humans to interact with the lands. He talks about prairie birthdays, the extinction of plants and animals. Williams has organized a funeral for a bird that lost its life in the flooding of the bird refuge. While Abbey (1971) bemoaned the negative impact of human society, he ironically stated that he is a humanist. He warns that the lost unique and rare species have implications for human well-being. Their words help to remind us that we are mere members of the ecological community. As readers gain an expanded sense of community, they come to appreciate interconnections and interdependencies among themselves. The essays of Leopold, Williams, and Abbey contain examples of how changes to one apparently remote ecosystem (Leopold: Wisconsin marshes; Williams: migratory bird refuge in Salt Lake; Abbey: The Arches National Monument) can affect the quality of life in many other places. Although they may not use the term systems thinking, their writing helps the reader 'think like mountain' and appreciate how human and nonhuman species are ecologically intertwined. For example, one can see that Aldo Leopold recognized the importance of this skill for education back in 1938 when he wrote:

The question is, does the educated citizen know he is only a cog in an ecological mechanism? That if he will work with that mechanism his mental wealth and his material wealth can expand indefinitely? But that if he refuses to work with it, it will ultimately grind him to dust? If education does not teach us these things, then what is education for? (Leopold, 1970, p. 210).

Suggested nature writing activities: While writing about the present, past, and future of one's place, contemplate the relationships and interactions and how they affect the concentric aspects of society, economy, and the environment. It might help to create a concept map to illustrate connections and cause and effect. Read the works of nature writers and see if they exhibit aspects of systems thinking. What is their 'call' and what writing techniques do they use to convey this message?

Application of the Framework to a Non-Anglo-American Nature Writer

The field of nature writing, with writers dedicated to an expanded community concept and systems thinking, is important for conservation on a global scale. This paper has shown how three famous American nature writers have this intention in their writing. Authors from different countries and cultures also have works with the intention of developing a sense of place. For example, while one might not associate the country of Turkey with nature writing, many Turkish scientists, conservationists, and educators have produced works that share qualities of nature writing.

The exemplary nature writer from Turkey featured in the current paper is the pioneering conservationist, botanist, nature writer, educationist, and environmental historian, Hikmet Birand (1904-1972). He traveled extensively across the Anatolian landscapes and produced lyrical works that owe much to science and that have served to raise environmental awareness in Turkey.

Birand's importance lies in his eloquent storytelling and his advocacy for wilderness preservation. His works have been compared to the famous American naturalist John Burroughs because of his keen observation skills, attention to detail, and critical eye (Batur & Ozdag, 2020). In one of his writings Birand stated, 'In this country, texts on our soils, trees, plants, seas and mountains—our entire natural landscapes—are scarcely written. But just imagine, how much there is a need for that!' (Birand, 2008, p. ii).

In the 1940s, and 1950s, Birand (2008) wrote about diverse landscapes of Anatolia, with references to the destruction of forests in local areas and other degraded landscapes. His works reveal the early stages of a certain kind of modern environmental consciousness in Turkey. His writings bear similarities to the nature writing of Leopold, Williams, and Abbey in that the pieces reveal his understandings of the biodiversity in the local lands, complete with life cycles of endemic plants and their environmental history. His writings show an awareness of the place as it is today, its history, and concerns for the future. He indicates an appreciation for how we are connected with the land; that we affect it, and it affects us.

Overall, his nature writing leads to a new relationship with nature, recognizing humans as part of the larger community of life. 'In this desolate place, there is no difference between the grass, the clouds, the stones of the hillside and myself' (Birand, 2008, p. 52).

CONCLUSION

This paper introduces and explains a framework that highlights the attributes and intentions of nature writers (Figure 1). Through a review of supportive literature, we sought to explain how nature writers develop deep understanding of their place through time and space. Among the outcomes of this understanding are an expanded sense of community and the ability to relate ecological processes to human-nature-human interactions (systems thinking).

Three American authors and one Turkish writer were featured in this paper. Further analysis of other nature writers, including those of other cultures and ethnicities, is needed to further strengthen applications of the framework. The suggested learning experiences provided are ideas that need to be implemented and reviewed to ensure effectiveness. The framework provides a first step to purposefully and meaningfully interpreting and understanding the works of nature writers. All five attributes of nature writing, as well as the respective writing intentions, can work together to help readers develop an environmental awareness of local lands. This awareness serves as a foundation for the knowledge, skills, and dispositions we need to support a sustainable future.

Moran (2014) notes that nature writers recognize that humans and nature need to find common ground. While theorists and educators discussing the Anthropocene call for a more-than-human world, Moran (2014) indicates that nature writers acknowledge that humans being human will be limited in their understandings and interpretation:

The fundamental tension in the new nature writing lies in this sense that we need to find ways of being in the non-human world that are about cohabitation rather than ownership, but that our encounters with nature are necessarily language-filtered and human-centered (p. 61).

Nature writers are inspired by the natural world to write personal essays that communicate understandings and meanings of how humans and nature do and should interact. Their narratives are based on empirical observations coupled with images loaded with emotions. And therein lays the reason for their timeless appeal. The nature writing pieces draw heavily on scientific information and facts about the natural world, but the language of nature writing is one that connects arts and sciences. Their writings are a call, a call to look around and become aware of the details and intricacies of our local lands: They are fragile and easily altered, but at the same time they have lessons for resilience and sustainability.

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