Running Head: ECOCOACHING

EcoCoaching: An Integrative Health Coaching Model of Forest Bathing

Jenny Harrow

California Institute of Integral Studies

Professor Meg Jordan

Master's of Arts Degree Program

Integrative Health Studies

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Introduction

The Earth and its inhabitants are at one of the most perilous crossroads in history. The climate is changing at an increasingly rapid pace; several species of animals and plants are becoming or at risk of facing extinction, and humans are suffering from chronic stress and disease. The distress experienced by the planet and by individuals is not isolated from one another, but rather, is deeply interconnected. As human societies have become progressively more industrialized, Americans are now spending the vast majority of their time indoors.

Capitalism and consumerism have driven the need to continue to expand and grow, without an end in sight. It is a model based on infinite production on a finite planet, and humans are becoming more and more dependent on technology. During this period of evolution, our species has experienced a staggering shift from having a deep relationship with the Earth to a reliance on technology, yet we are not healthier or happier for it. In fact, studies purport that individuals who spend more time indoors than outside are more likely to suffer from depression and chronic disease (Hart, 2016).

The link between the lack of time Americans spend outdoors, and the astronomical levels of chronic stress and illness are staggering.

Humans have spent over 99.99% of their time living in the natural environment. The gap between the natural setting, for which our physiological functions are adapted, and the highly urbanized and artificial environment that we inhabit is a contributing cause of the "stress state" in modern people (Song, Ikei & Miyazaki, 2016, p. 1).

The year 2008 marked a significant transition in human population trends: for the first time in history, the majority of people lived in cities rather than rural environments. Across the globe, it is projected that two billion more people will move to cities in the next 30 years, which means

that more and more people will be crammed into smaller spaces (Williams, 2017). Dwelling in an urban environment is linked with increased activity in the brain's amygdala, the fear center, and in the perigenual anterior cingulate cortex, a key regulator of fear and stress, so urban citizens are at greater risk of developing an anxiety or mood disorder (Lederborgen et al., 2011). Modern life, in both urban and rural environments, is rather demanding and full of distractions, such as traffic jams and smartphones. This constant stimulation can trigger the sympathetic nervous system, which is responsible for regulating the body's fight or flight behaviors (Szabo, Tache & Somogyi, 2012). Individuals who suffer from chronically high cortisol levels, the stress hormone, and high blood pressure are more prone to life-threatening conditions such as heart disease, metabolic disease, dementia, and depression (Friedman, Karlamangla, Almeida & Seeman, 2012). In the United States, humans spend less than 5% of an average day outdoors, which is a dramatic shift from even a few decades ago (Louv, 2012). Our highly industrialized environment, full of artificial lights, loud noises, poor indoor air quality, chemicals, and electromagnetic pollution, is harmful to human health and is directly linked to chronic stress and disease (Seaward, 2015).

The American Psychological Association (APA, 2017) conducts a yearly nationwide survey as part of its Mind/Body Health campaign to study the state of stress in the United States and discern its effect. Data collected from the January 2017 poll shows a statistically substantial upsurge in stress for the first time since the survey was first conducted in 2007. In this recent study, the top sources of stress for Americans were money, work, and the economy. Over the last decade, and especially in the last year, a stressful political climate, concerns about safety, mass shootings, gun violence, and terrorism have been added the list of significant sources of stress for Americans. Chronic stress can dramatically affect a person's health. "It can make existing health

problems worse, and even cause disease, either because of changes in the body or bad habits people develop to cope with stress. The bottom line is that stress can lead to real physical and emotional health consequences" (APA, 2017, p.3).

The U.S. Centers for Disease Control and Prevention (CDC) declared that chronic disease is the public health challenge of the 21st century (2009). The current allopathic health care system does not focus a lot of time or money on prevention strategies for chronic disease (Benjamin, 2011). Integrative Health Coaching (IHC) has been developed over the last ten years "to fill a hole in our current healthcare system and address the need for skilled professionals trained in the science and art of health-related behavior change" (Smith et. al, 2013, p.67). With techniques obtained from humanistic and positive psychology, resolution-centered and mindfulness-based therapies, IHC offers a structure for patient health empowerment through stages of self-discovery, learning and lifestyle change (Smith et. al, 2013).

Revelatory research conducted over the last 30 years in Japan, South Korea, Europe and the United States demonstrates a variety of ways that spending time in nature reduces stress and significantly promotes overall health and wellbeing. These other nations, through government funding, have created forest therapy programs that guide individuals to be in nature in a safe, cohesive way to promote healing (Williams, 2017). In the United States, there is limited government funding for such programs, particularly since the 45th administration is introducing executive orders that are decreasing the financing of the National Park Service, environmental protections, and health care (Soffen & Lu, 2017). Though the American government is not actively seeking ways to integrate forest therapy programs with the allopathic healthcare system, the U.S. has a deep and rich history in environmental activism and in viewing nature as a partner for healing through the fields of ecofeminism, deep ecology, ecopsychology, and ecotherapy.

This paper will explore how human and planetary health are intrinsically linked, the vast body of research that supports this connection, the history of forest therapy around the globe, and how integrating the practices and principles of forest bathing and Integrative Health Coaching can offer individuals the opportunity to connect with the natural environment for personal and planetary healing.

Forest bathing is a slow, mindfulness-based walk in a forest that focuses on taking in the atmosphere of the forest environment by opening all five senses (Tsunetsugu, Park, & Miyazaki, 2010). The aim of forest bathing is to encourage individuals to use forests for therapeutic relaxation and as a cost-effective, simple way to manage stress. Research supports forest bathing as a holistic mind-body therapy, and at the core of this forest therapy practice is mindfulness (Ambrose-Oji, 2013). EcoCoaching aims to utilize and integrate the principles and practices of IHC and forest bathing to provide an effective mindfulness-based tool for individuals who are looking to manage stress and make changes in their lives toward achieving greater health and wellbeing. In addition to the mindfulness practices experienced and learned, clients will be able to manage stress levels through spending time in nature and absorbing the healing properties of the forest that are proven to reduce stress. "All of us have access to nature's wisdom, and yet in our human-centered, high-tech lives, we have lost the ability, sensitivity, and skill to listen, feel, and sense the natural world" (Coleman & Kornfield, 2006, p. xiii).

Problem Statement

Through the emergence of the modern capitalist, consumer-focused, and technology-driven society, Americans are spending less time in nature than ever before in human history.

Spending less time outdoors has resulted in astronomically high rates of stress, which has actively contributed to the dangerously elevated levels of chronic disease that plagues the United

States in 2017. In the face of this incredible era of chronic disease and severance from the Earth, EcoCoaching can help Americans connect to the natural world to attune to their body's profound wisdom and inherent capacity for healing.

Literature Review

The Biophilia Hypothesis

Social psychologist Erich Fromm (1973) first coined the word "biophilia" in 1973 as "the passionate love of life and of all that is alive; it is the wish to further growth, whether in a person, a plant, an idea or a social group" (p.366). Harvard entomologist E.O. Wilson popularized the biophilia theory through his 1984 book *Biophilia*, where he provides discussions and research of the genetic and emotional connection between humans and non-human living beings on the planet, such as trees and animals, as an evolutionary adaptation that not only facilitated the survival of human beings, but has led to further and deepen the human experience of selfactualization (Williams, 2017). Yoshifumi Miyazaki, Physical Anthropologist and Vice Director of the Center for Environment, Health and Field Sciences at Chiba University near Tokyo, believes that since humans evolved in nature, it is where people feel the most comfortable and at ease, even if they don't consciously realize it (Williams, 2017). "Throughout our evolution, we've spent 99.9% of our time in nature. Our physiology is still adapted to it. During everyday life, a feeling of comfort can be achieved if our rhythms are synchronized with those of the environment" (Williams, 2017, p. 23). The natural environment is one of the few places where all five senses are engaged (sight, smell, touch, sound, and taste), and Miyazaki argues this means that nature is where humans are the most wholly alive (Williams, 2017) Miyazaki and other prominent researchers in Japan have developed "a physiological assessment system, based on indicators such as cerebral activity, autonomic nerve activity, stress hormone levels, and

natural killer (NK) activity" (Miyazaki, 2006, p.3) that show how stress levels significantly decreases and immune function increases in natural environments (Miyazaki, 2006).

In *The Biophilia Hypothesis*, Yale scholar Stephen Kellert (1993) provides research that demonstrates how spending too much time away from the natural world goes against our human DNA. He maintains that people need to be in nature, just as they need air to breathe. Kellert illustrates a clear relationship between non-human living organisms and human biology:

"...humans possess an inherent biological affinity for the nonhuman world that is instrumental to their health, productivity, and well-being" (as cited in Beery, Jönsson, & Elmberg, 2015, p. 8842). Herbalist and Master Horticulturist Chanchal Cabrera maintains that when we put ourselves in a natural environment around trees and plants, there is a vibrational frequency. Every living thing has an electrical vibrational frequency; that's not fringe science, that's hardcore science. That frequency that trees are emitting has a vibrational resonance in our DNA, and we change our biochemistry in relation to the plants (2017).

Since "all life on this planet exists within a sea of vibration" (Muehsam & Ventura, 2014, p. 40), it is essential to begin opening up to the well-established notion that we, as individual human beings, are not isolated on this planet. There is a deep resonance between humans and non-living beings, through our genetic and vibrational connection. From a non-scientific perspective, one just needs to remember how they *feel* when they are in nature. It is not just coincidence that most vacations are spent on a beach, in the mountains, by a lake, or in a forest. We feel better in nature because it is our home. Our bodies evolved in the environments that are now only accessed during "vacation" time for many Americans. Nature is our birthright and it essential that humans spend more time experiencing nature in a slow, mindful way to reconnect with our true nature as

citizens of this planet. Forest bathing is one practice that can provide this type of connection and restoration in nature.

Ecofeminism

Inherent to working with nature as a partner for healing is the need to recognize that systems of oppression, such as misogyny, exist is the environmental movement. "The word 'ecofeminism' was coined in 1972 by Francoise d'Eaubonne who argu[ed] that the destruction of the planet is due to the profit motif inherent in male power" (Ruether, 2005, p.91). Ecofeminism affirms that the environmental movement, an effort that is focused on restoring the health of the planet that is being dominated and drained by humans, cannot make real progress until the patriarchal system is addressed and lifted. In a patriarchal system, men dominate women, just as humans dominate the Earth (Ruether, 2005).

Charlene Spretnak, an American scholar, prominent ecofeminist and co-founder of the Green Party, asserts that the link between the loss of respect and honoring of both nature and women were concurrent.

Considerable archaeological evidence indicates that both the earth and the female were held in high regard in the Neolithic settlements prior to the Bronze Age. Ritual figurines of a stylized sacred female with incised patterns of water or with the head of a bird, for instance, reflect perceptions of inherent interconnectedness with nature and seemingly "obvious" honoring of the elemental power of the female. After 4500 B.C. the archaeological record reveals a radical shift. Graves were no longer roughly egalitarian between the sexes (with women having somewhat more burial items than men) but suddenly followed the barrow model of burial, wherein a chieftain is surrounded by the

bodies of men, women, children, animals and objects that he owned or controlled. The westward migrations of nomadic Indo-European tribes from the Eurasians imposed in old Europe a warrior cult, the addition of fortifications around settlements, a patriarchal social system, and the transferal of the sense of the sacred from nature and the female to a distant sky-god (Spretnak, 1993, p.181).

The leaders of the ecofeminism movement inspired the subsequent field of ecopsychology, and while ecopsychology does not overtly address how the patriarchy impacts the health of the planet, it is important to honor and recognize this connection so full healing can commence.

Ecopsychology

The field of ecopsychology formed in the United States in the early 1990s and "is a child of the environmental movement which began in the 1960s in response to the dawning recognition that modern industrial civilization had engendered an environmental crisis" (Hibbard, 2003, p. 24). Ecopsychology has been defined as "an emerging field that is developing in recognition that human health, identity, and sanity are intimately linked to the health of the earth and must include sustainable and mutually enhancing relationships between humans and the nonhuman world" (Naropa, 2017). Ecopsychology integrates the wisdom, theories, and principles of western and eastern psychology, environmentalism, the biophilia hypothesis, Buddhism, deep ecology, ecofeminism and indigenous spiritual practices, that all living creatures on the planet are interconnected (Hibbard, 2003). "Ecopsychologists are drawing upon the ecological sciences to re-examine the human psyche as an integral part of the web of nature" (Brown, 1995, p. xvi). Mindful awareness is an essential foundation for the practice of ecopsychology (David, 1998). The link between psychological and planetary health that ecopsychology demonstrates supports the philosophy and practice of forest bathing.

Shinrin-yoku: Forest Bathing

The Japanese Ministry of Agriculture, Forestry, and Fisheries first coined the term Shinrin-yoku in 1982. It can be defined as making a connection with and absorbing the forest atmosphere through all five senses (Park, Tsunetsugu, Kasetani, Kagawa, & Miyazaki, 2009). "Since forest air is rich in volatile and nonvolatile components and other unseen constituents that might be absent (or found in lower quantities) in urban built environments, Shinrin-yoku was not merely an escape from toxic urban air. It meant bathing in biodiversity" (Craig, Logan, & Prescott, 2016, p.2).

According to Amos Clifford, one of the leading voices for Shinrin-Yoku inspired Forest Therapy in the United States and founder of the Association of Nature and Forest Therapy, there is no one single way to officially practice forest bathing, yet getting led and trained by a guide has real benefits.

We're really trying to promote this as something like yoga or a practice where people learn how to do it. And then it will change the way they are in nature. We hear anecdotally that it definitely changes an individual's approach to being in nature and so I think a lot of what we're doing is a lot of initial skill building for people (A. Clifford, personal communication, March 23, 2017).

Before the industrial revolution, humans had an intimate relationship with the natural world, "but now we need professionals to reacquaint ourselves with the woods" (Williams, 2017, p.159). Each country around the world that provides forest bathing programs for the purpose of health promotion and stress reduction has a slightly different protocol for employing the practice, but all forest bathing practices focus on a slow, mindful walk in a forest environment, and are generally guided by a trained professional (Williams, 2017).

The following discussions of the physiological, psychological, and psychospiritual healing benefits of forest bathing provide more details and examples of what the practice of forest bathing entails. At its core, this slow walk in a natural environment utilizes mindfulness practices such as awareness of internal and external states of being by developing a deeper connection to the natural environment. It is essential that distractions, such as smartphones, excessive chatter, or overly exerted physical exercise, be minimized. "To connect with nature in a healing way requires mindfully moving through the landscape in ways that cultivate presence, opening all the senses, and actively communicating with the land" (Clifford, 2013, p. 2).

Physiological Healing Benefits of Forest Bathing

Research conducted over the last 30 years demonstrates that forest bathing is not only one of the most accessible ways to get in touch with the natural world, but also one of the most simple ways to lower excessive stress levels (Tsunetsugu, Park, & Miyazaki, 2010). The Japanese authors of the *Therapeutic Effects of Forests* (Tsunetsugu, Park, & Miyazaki, 2010) document the physiological measurements of autonomic nervous system activity and show how stress levels can be reduced through walks in a forest. Results confirm that participants who walked in a forest versus those who walked in an urban environment had a more activated parasympathetic nervous system, which slows down metabolism and acts as a brake, allowing the body to recover from stressful exertion. Participants also displayed a less activated sympathetic nervous system, the mechanism responsible for triggering the "fight or flight" stress response. Field studies show that salivary cortisol concentration is significantly lower in those who participated in forest bathing when compared to those exposed to an urban environment (Tsunetsugu, Park, & Miyazaki, 2010). Several previous studies have demonstrated that lower levels of stress result in lower concentrations of cortisol (Park et al., 2007).

There are several components of forest bathing that provide stimulation to the senses and contribute to stress reduction: the smells, sights, sounds, tastes and textures of the forest all promote healing in unique and seemingly subtle ways (Tsunetsugu, Park, & Miyazaki, 2010). Phytoncides, the essential oils trees emit to protect themselves from germs and insects, can be emitted from many types of plants, trees, and some fruits and vegetables. (Clifford, 2013: Williams, 2017) and can decrease cortisol, reduce anxiety, increase pain threshold, increase natural killer cells, lower blood pressure, and have antibacterial properties (Selhub & Logan, 2012; Williams, 2017). Research conducted by Alvarsson, Wiens, and Nillson (2010) demonstrates that nature sounds, such as birds chirping and running water, promote sympathetic nervous system recovery after a stressful incident more quickly than urban environment sounds. Electroencephalogram (EEG) data indicates that subjects who viewed nature "had greater brain electrical activity in the alpha frequency range. High alpha amplitude is associated with lower level of physiological arousal as well as a feeling of wakeful relaxation" (Berto, 2014, p. 400). Psychologist, researcher and architect Roger Ulrich's infamous study on postoperative gallbladder surgery patients demonstrated that patients with a view of nature from their hospital window recovered quicker, were in less pain and were described by nurses as having a better attitude than patients who had a view of a brick wall (Ulrich, 1984).

Tsunetsugu et al. (2010) report on previous work, which shows how interior and wooden objects elicit favorable emotional responses compared to other natural or man-made materials. Mao et al. (2012b) also investigated the qualitative properties of wood experienced by participants and found positive reactions. Researchers, therefore, hypothesize that the touch and feel of wood within the forest environment is also likely to contribute to the overall impact of forest bathing (Ambrose-Oji, 2013, p. 16).

By opening up all fives senses in nature and bathing in a forest through open sensory awareness, the physiological responses of the human body can promote recovery from stressful situations.

Stress regulation has a tremendous impact on an individual's overall health and wellbeing. "Our perception of stress, our mental state, our immunity, our happiness, and our resiliency are all chemically influenced by the nervous system and its response to the natural environment" (Seaward, 2015, p. 549) The *Therapeutic Effects of Forests* study (Tsunetsugu, Park, & Miyazaki, 2010) provided additional research that forest bathing can significantly lower levels of systolic and diastolic blood pressure (Hart, 2016). Research supports that time spent in nature can lower inflammatory markers, and increase natural killer cells and anticancer proteins by up to 40% (Cabrera, 2017; Seaward, 2015). This abundance of research supports what humans have instinctually known for millennia: we feel better outdoors. Spending time on a beach, in the mountains, or in forest feels good; we know it in our bones. The research undeniably supports this inner wisdom we all hold, and now allopathic medicine, a paradigm that demands quantifiable research to take a treatment seriously, has the evidence it needs to start prescribing nature to patients.

Psychological Healing Benefits of Forest Bathing

The psychological benefits of spending time in nature through forest bathing have been well researched. Forest bathing can increase serotonin levels, the neurotransmitter primarily responsible for regulating mood (Selhub & Logan, 2012). An increase of serotonin often results in a decrease of depression, and individuals become more "calm, less angry, more focused, energetic, and relaxed" (Wurtman & Suffes, 1997). The Profile of Moods States (POMS) survey was developed by Douglass McNair, Maurice Lorr, and Leo Droppleman in 1971 and "is a well-established, factor analytically derived measure of psychological distress, and its high level of

reliability and validity have been documented" (Li, 2013, p. 41). Qing Li, Immunologist in the Department of Environmental Medicine at Nippon Medical School in Tokyo, discusses research studies that utilized that POMS Survey in his book *Forest Medicine*, with results that included "decreases in tension and anxiety, anger and hostility, fatigue, confusion, and total mood disturbance. Increased vigor was observed in forests by the POMS tests, suggesting that forest settings are capable of enhancing positive mood states and reducing negative mood states" (Li, 2013, p. 51).

In a randomized controlled study at the University of Illinois, 17 children diagnosed with Attention-Deficit Hyperactivity Disorder (ADHD) were exposed to three different environments: a city park, a downtown city neighborhood, and a residential neighborhood. After 20-minute walks in a city park, children encountered substantially improved concentration compared to 20-minute walks in the other environments (Kuo & Taylor, 2004).

Dr. Shin Won Sup, the minister of the Korean Forest Agency, has conducted several influential psychology research studies since 2007; most notably one he co-facilitated titled "The Influence of Interaction with the Forest on Cognitive Function." Through the POMS Survey and the Trail Making Test, a neuropsychological test of visual attention and task switching, the results of this study indicated that participants' cognitive function and mood significantly improved when they walked in the forest but not when they walked in an urban environment. (Shin, Shin, Yeoun, & Kim, 2011).

Carl Jung, the infamous Swiss psychiatrist, was deeply concerned about humanity's diminishing relationship to nature.

Through scientific understanding, our world has become dehumanized. Man feels himself isolated in the cosmos. He is no longer involved in nature and has lost his emotional

participation in natural events, which hitherto had symbolic meaning for him. Thunder is no longer the voice of a god, nor is lightening his avenging missile. No river contains a spirit, no tree means a man's life, no snake is the embodiment of wisdom, and no mountain still harbors a great demon. Neither do things speak to him nor can he speak to things, like stones, springs, plants, and animals. He no longer has a bush-soul identifying him with a wild animal. His immediate communication with nature is gone forever, and the emotional energy it generated has sunk into the unconscious (Jung & Sabini, 2008, p. 79).

As humanity becomes increasingly isolated and separated from the natural environment, practices such as forest bathing can have a dramatic influence on improving mood, attention, cognition, and connection to non-human living beings. Americans are increasingly feeling more isolated, through increased usage of social media (Primack et al., 2017) and are spending less time in nature than ever before. Jung predicted the isolation that would occur from the disappearing relationship between humans and the natural environment. Our culture is killing us. Human societies all over the world are hurting, not only through physical and psychological pain, but also through poverty, war, discrimination, hate crimes, and social/political inequalities of all kinds.

Thomas Berry, Ph.D., Catholic priest, cultural historian and ecotheologian in the landmark book *The Dream of the Earth* postulates that planetary health and well-being is the gauge of the full range of human health and happiness.

We must go far beyond any transformation of contemporary culture. We must go back to the genetic imperative from which human cultures emerge originally and from which they can never be separated without losing their integrity and their survival capacity.

None of our existing cultures can deal with this situation out of its own resources. We must invent, or reinvent, a sustainable human culture by a descent into our pre-rational, our instinctive resources. Our cultural resources have lost their integrity. They cannot be trusted. What is needed is not transcendence but "inscendence," not the brain but the gene (as cited in Plotkin, 2008, p. 1).

It is urgent that humans, once again, begin connecting to the natural world in a meaningful way. The physiological and psychological benefits nature brings to people are beyond compelling. The planet's health, from climate change to species extinction, will impact human health in increasingly catastrophic ways. Connecting to nature the way our ancestors did for millions of years is imperative for individual, societal, and planetary health.

Psychospiritual Healing Benefits of Forest Bathing

Time in nature can foster a deeper connection to the world outside the individual self. In a study showing the effects of time in nature on four war veterans with PTSD, the research revealed that "connecting with more-than-human nature provided each veteran with an alternate sensory experience, in which he described increased mindfulness and a feeling of being more fully present in the world" (Westlund, 2015, p. 166). Experiences in nature play a profoundly significant function regarding positive and negative existential anxieties: meaning in life, isolation, freedom, death, identity and happiness (Passmore & Howell, 2014). This has deep connections to the characteristics defined by posttraumatic growth, which is "an increased appreciation of life, setting of new life priorities, a sense of increased personal strength, or positive spiritual change" (Zoellner, Rabe, Karl, & Maercker, 2008, p.246).

Although the Association of Nature and Forest Therapy does not openly advertise the spiritual benefits of spending time in nature, Clifford shared his personal perspective on potential spiritual healing benefits of forest bathing

When in the forest, doing deep sensory connection and being really quiet in your mind, you really start experiencing this sense of interdependence, of what Thich Na Han calls interbeing. When that happens, there tends to be a kind of reduction of the role the ego plays and an expansion of a sense a unity, that you start feeling like I'm a part of all things (personal communication, March 23, 2017).

Various studies have been conducted since the 1960s about the ways spending time in nature provokes a transcendent experience. "Nature positively influences people to experience awe; wonderment; feelings of connectedness to nature and others; a Higher Power; heightened external awareness of surroundings; and a tendency to experience positive feelings of self, love, peace, and increases in emotional well-being" (Reese & Myers, 2012, p. 402).

Joanna Macy, eco-philosopher, activist, and scholar of Buddhism and systems theory, has spent several years "exploring the interface between spiritual growth and social change, years of adapting meditative practices to empower people as agents for peace and justice" (Macy, 1995, p. 251). Through a series of exercises and meditations, Macy (2016) outlines in *Coming Back to Life* how to undo the social conditioning that has estranged humans from their relationship to the Earth. She calls forth the essential shift from seeing our relationship to the Earth as only a place to gather resources and then dump onto, to a new form of understanding that humans are rooted in the sacred living ecosystems of the Earth, and how we treat this planet reflects how we treat ourselves.

In his influential book *The Nature Principle* author and journalist Richard Louv discusses the depth of interconnectedness between the planet and the human spirit.

The outer world is necessary for the inner world; they are not two worlds but a single world with two aspects: The outer and the inner. If we don't have certain outer experiences, we don't have certain inner experiences, or at least, we don't have them in a profound way. We need the sun, the moon, the stars, the rivers and the mountains and birds, the fish in the sea, to evoke a world of mystery, to evoke the sacred. It gives us a sense of awe. This is a response to the cosmic liturgy, since the universe itself is a sacred liturgy (Louv, 2012, p. 246).

Essential to this interconnected relationship is the importance of recognizing "that ecotherapeutic practices cannot be used to lasting effect within the old colonial-consumerist mindset" (Buzzell & Chalquist, 2009, p.20). The healing the forest provides to humans needs to be reciprocal.

At the core of this reciprocity is the prerequisite for an emerging awareness of the underlying anthropocentrism that is deeply embedded in Western culture (Zimmerman, 2014). Norwegian philosopher and mountaineer Arne Naess introduced the concept "deep ecology" to the environmental movement in the early 1970s, a philosophy that promotes the innate worth and value of all living beings, including non-human, regardless of their usefulness or value to human needs (Sessions, 1991). Louv (2012) asserts, "recognizing the mind/body/nature connection will be one of the most important actions that a revitalized environmental movement can take" (p. 257). He suggests that through the acknowledgment that nature is essential to human health, urban planners and governments will design human communities that are more nature-inclusive, and creates space for nature to thrive within an urban environment (Louv, 2012). Additionally, "evidence suggests that social and environmental justice movements, movements which build

upon environmental awareness, are frequently spawned by people's involvement in nature-based adventure sport" (Humberstone, 2013, p.569). Jung speaks of this interconnectedness between the health of humans and non-humans: "The contamination of air, water, and soil on the planet is paralleled by similar diseases of blood and tissue" (Jung & Sabini, 2008, p. 15). Given the perilous state of the planet, a new form of environmental activism needs to emerge, and the perceptions of interconnectedness that can be achieved through forest bathing, that human health is contingent on planetary health, might spark a new wave of environmental activism.

Shinrin-yoku: Japan and South Korea

Shinrin-yoku is based on ancient Shinto and Buddhist practices. Shinto is "a religion based specifically around devotion to the landscape of the Pacific island nation, as well as the principle that spirits are embodied in nature" (Malloy, 2017, n.p.). Mindfulness is an essential component to Buddhist practices and beliefs. "Mindfulness is the energy that sheds light on all things and all activities, producing the power of concentration, bringing forth deep insight and awakening" (Smith, 2000, p. 3).

Shinrin-yoku has become a standard in preventative medicine in Japan. In the 1980s several Japanese workers experienced "karoshi," which translates into death from overwork. The message became very clear that chronic stress is a life-threatening condition, so the Japanese government started funding research into stress prevention, and the term Shinrin-yoku was introduced in 1982 (Williams, 2017). There are now "forty-eight official 'Forest Therapy' trails designated for Shinrin-yoku by Japan's Forestry Agency; the agency has funded about \$4 million in forest bathing research since 2003 [and] intends to designate one hundred Forest Therapy sites within ten years " (Williams, 2017, p. 19). Medical doctors in Japan are increasingly becoming trained in forest therapy, and there are trained medical physicians and guides on site at each of

the Forest Therapy trails to prescribe a specific nature treatment, provide guidance, and conduct tests on patients before and after their nature therapy treatment to track if the nature prescription was effective (Williams, 2017). Individuals are supported by the mainstream medical system and society at large to participate in this type of healing practice (Cabrera, 2017).

South Korea also receives government funding and support to institute and run forest therapy programs in their nationally designated parks. The Korean Forest Agency currently has three designated Healing Forests operating right now, with 34 slated to appear in the next two years, granting access to a Healing Forest for most major towns throughout the country.

Buddhism has been a prevalent aspect of South Korean culture since the 4th century, a natural complement to the region's ancient animistic shamanism beliefs that natural objects have a spirit, most notably mountains and trees. Large majorities of modern Koreans are uncomfortable with psychotherapy, but still feel comfortable with the beliefs and practices of traditional shamanic healers. In fact, while most Koreans identify as Buddhist, Christian, or Atheist, up to 80% observe shamanism in some manner (Williams, 2017). "The nature and animistic earlier spiritual traditions of Korea and Japan, and the indigenous Ainu people of northern Japan all held nature and animals as a living cosmic forces or gods" (M. Jordan, personal communication, April 11, 2017)

Japan and South Korea currently have the most robust and comprehensive forest therapy programs in the world, both with plans to continue developing and growing. A handful of European countries are following the lead of their Asian counterparts and have also developed forest-healing programs, including the use of forest bathing, with some government funding and adaptation to fit the cultures and spiritual beliefs of their own nation (Williams, 2017). The correlation between spiritual belief systems that attributes a soul to plants, inanimate objects, and

natural phenomena and the successful integration of forest bathing programs with allopathic medicine is evident. American culture is deeply rooted in a dualistic belief system and has taken a much different, and arguably slower, path to integrating forest bathing with modern healthcare.

National Parks and Parks Prescription Program: United States

In the United States, the establishment of the city and national parks through government policy and mandates began in the mid-19th century. Although specific healing programs were not developed, the inception of government-protected land started a powerful movement around the U.S. and international community.

By the Act of March 1, 1872, Congress established Yellowstone National Park in the Territories of Montana and Wyoming "as a public park or pleasuring-ground for the benefit and enjoyment of the people" and placed it "under exclusive control of the Secretary of the Interior." The founding of Yellowstone National Park began a worldwide national park movement. Today more than 100 nations contain some 1,200 national parks or equivalent preserves. The National Park System of the United States now comprises more than 400 areas covering more than 84 million acres in 50 states, the District of Columbia, American Samoa, Guam, Puerto Rico, Saipan, and the Virgin Islands (U.S. Department of Interior, 2017).

This was a powerful precedent for the United States to establish. By designating natural spaces to be safe from development, to be left in their natural state for conservation, for human enjoyment, and for maintaining respect for the land sent a message to the American people that *nature is important*. Even amidst the rapid industrialization and subsequent extraction of the planet's resources to meet an increasingly consumer-focused nation, the National Parks have always been protected, until now.

President Donald Trump signed an executive order on April 26, 2017 against the Antiquities Act, "the 1906 law that empowers a president to take unilateral action to protect cultural, historic or natural resources on federal land that is under threat" (Eilperin, 2017, n.p.), which is aimed to remove federal protection from 25 existing national monuments and over 100,000 acres of nationally protected land. This executive order is "a move that environmentalists say will roll back protections on historic sites and scenic places where logging, mining, oil drilling and commercial fishing are often limited" (Krieger, 2017, n.p.). Additionally, Trump's proposed 2017 budget cuts funding for the Environmental Protection Agency (E.P.A.) by 31% and the President appointed an E.P.A. administrator, Scott Pruitt, "who has himself spoken out against some of the core missions of the agency he leads" (Thrush & Davenport, 2017, n.p.). On April 28, 2017, the E.P.A. updated their website, which included removing all the science and information about climate change, information that has been publicly posted for two decades, and rerouting the climate change page to a link that reads "we are currently updating our website to reflect EPA's priorities under the leadership of President Trump and Administrator Pruitt" (Mooney & Eilperin, 2017). The National Parks and the government agencies that have been established to protect the health of the land in the United States are under attack. Therefore, human health is under attack.

After National Park Service employees were silenced by the Trump administration in February 2017, which included "bans on social media postings at the Environmental Protection Agency, the Department of Agriculture, the Department of Health and Human Services and the Interior Department, which oversees the National Park Service" (Davis, 2017, n.p.), a resistance movement, Alt National Park Service, was started by the suppressed employees of the National Park Service in January 2017, "to stand up for the National Park Service to help protect and

preserve the environment for present and future generations" (Alt National Park Service, 2017). The resistance for standing up against the Trump Administration's attempts to annihilate environmental protection in the United States is over a million people strong. Although Americans are spending less and less time outdoors than ever before, it is not lost on our culture the importance and sanctity of nature.

The National Park Service developed the Healthy Parks, Healthy People Program in 2011 which endorses the idea that all parks, both urban and wild land, can be foundations for health and "works to advance the role of parks and public lands as places for people to derive physical, mental, and spiritual health, and social well-being" (U.S. Department of Interior, 2017). The National Parks Prescription Program is taking it one step further by building partnerships between the National, State and Regional Parks Departments and medical physicians by developing a prescription pad for doctor's to prescribe physical movement and time in nature for patients. There is no national program, and regions and counties must develop their own Parks Prescription Program, which aims to improve health incomes, improve public lands, and increase visitorship to public lands. There are no designated healing or therapy forests, and forest bathing is not included in the vernacular (U.S. Department of Interior, 2017). The Parks Prescription Program is largely about physical movement and does not contain any overlying instruction to help individuals disconnect from technology and truly immerse themselves in a natural environment. While physical activity is an important tenet of overall health and wellness, forest bathing goes a step further by opening up the mind, body, spirit connection, which would give Americans essential tools on how to slow down in our urbanized, rapid-paced, and technologyaddicted culture.

The United States was founded on puritanical Christian and patriarchal values and systems (Zinn, 1999). The religious and spiritual practices such as Shinto, Buddhism, and Shamanism that profoundly influenced the practice of forest in Japan and South Korea have limited in common with the duality and hierarchal beliefs so prevalent in modern American culture, but there is a distinctive link between the ancient wisdom and practices of the east to the ancient wisdom and practices of Native Americans (Gomes, 2012). Although Native American culture has been sadly obliterated in modern American culture, the wisdom and ways of the native people maintain an energetic footprint on American soil. By tapping into the knowledge held by the people who lived here for several thousand years before the conquest and subsequent massacre carried out by European colonizers (Zinn, 1999), lies a foundation for honoring the Earth and creating a healing relationship with her and self through forest bathing.

Forest Bathing: United States

Wilderness guide Amos Clifford founded the Association of Nature and Forest Therapy (ANFT) in 2012. It is located in Santa Rosa, CA and is the sole certifying body for forest bathing in the United States. Clifford "combined descriptions of Shinrin-yoku practice in Japan with his four decades of experience in wilderness guiding, Zen meditation, psychotherapy, and nature connection to begin creating a framework for Forest Therapy" (Association of Nature and Forest Therapy, 2017). Clifford is helping implement a more bottom-up approach to forest bathing in the United States, one that does not rely on government-funded programs. The ANFT has trained hundreds of individuals in forest therapy guiding, including physicians, psychologists, nature interpreters and educators, health coaches, and yoga instructors (A. Clifford, personal communication, March 23, 2017). Clifford was initially hoping for a partnership with the Parks

Prescription Program, but he is concerned that their vision on how to implement forest therapy does not completely correspond with one another.

The Parks Prescription Program doesn't contemplate a more structured approach to helping people maximizes the benefits of their time in the forest. So if I'm a doctor, and I say to you, get outside to a park, and you go to a park, and you don't know what to do, you don't know how to slow down, you're looking at your device the whole time, you're rushing to get from here to there, - you're going to get some benefits but they're going to be way less than if you are guided a couple of times. [At the ANFT] we're really trying to promote this as something like yoga or a practice where people learn how to do it, and then it will change the way they are in nature. We hear anecdotally that it changes their approach to being in nature and so I think a lot what we're doing is initial skill building for people. We hope to get the idea out into our culture that there is a different way to be in nature than going out and hiking really hard (A. Clifford, personal communication, March 23, 2017).

The Western world is entering into a new paradigm of consciousness. After centuries of industrialization, capitalism, consumerism, and a cultural identity that has been almost entirely focused on self, profit, materialism, and socio-economic status, many in Western culture are slowly embracing what has been celebrated by Eastern and indigenous cultures for thousands of years, a knowledge that is innate in every human being. This wisdom that comes from within is there to be harvested by any human. It requires action on the part of the individual to slow down, calm the mind, and to bring awareness and openness to sensations. This runs in direct conflict with the Western approach to success: that outside resources bring internal peace and happiness. There has been a slow integration of Buddhist wisdom, which is now commonly coined as

mindfulness, since the latter part of the 19th century in the Unites States (Seager, 2012). The last few decades have seen a more expansive inclusion of mindfulness practices into the mainstream culture, and forest bathing is well-suited to fuse the practices and ideas of mindfulness and connection with the Earth, as well as giving participants the opportunity to receive the physical, psychological, and spiritual healing benefits of the forest.

Integrative Health Coaching

Integrative Health Coaching (IHC) has been described as a multidisciplinary approach to behavior change because it integrates over 15 different theories and academic fields in its methodology (Moore, Jackson & Tschannen-Moran, 2016). Integral to IHC is the use of several evidence-based behavior change theories, models, and concepts, including the Transtheoretical Model, Self-Efficacy Theory, Motivational Interviewing, Appreciative Inquiry, and Mindfulness-Based concepts and practices (Jordan, 2013; Vigili 2013).

Coaching is a rapidly growing profession that is not about offering advice or providing therapy, but a way for people to be in a supportive relationship that results in a more effective, meaningful lived experience for the client. Through collaborative inquiring, reflection on strengths, values, and visions, and powerful dialog, coaches serve as catalysts and witness to their clients' transformations. IHC empowers you to make lasting health behavior changes that are the cornerstones of lifelong well-being. It bridges the gap between medical recommendations and your abilities to successfully implement those recommendations into your complex life (Duke Integrative Medicine, 2017).

The strength in coaching is that it is a way for individuals to safely explore the mind, body, spirit connection in safe, non-directive yet structured environment. Like forest bathing, IHC invites the individual to the see the whole picture in health, and that attention and care is necessary to

achieve optimal health and well-being. In forest bathing, one notices how the health and functioning of a forest's ecosystem are integrated and supports one another. With IHC, the client is invited to begin seeing how their own body's ecosystem is working, which includes their physical body, mind, spirit, and communities of support, environment, and a sense of purpose.

Since healthy lifestyle behaviors can help prevent the onset of chronic illnesses and help manage existing conditions, IHC has been proven to be an effective way to help maintain and improve outcomes for several chronic diseases (Butterworth, Linden, & Mcclay, 2007). In 2016, "a 12-month randomized controlled trial (RCT) comparing health coaching to usual care for patients with uncontrolled diabetes, hypertension, or hyperlipidemia [demonstrated] that the majority improved clinical outcomes, [which] persisted one year after the completion of the health coaching intervention" (Sharma, Willard-Grace, Hessler, Bodenheimer, & Thom, 2016, p. 200). To change the body, one needs first to change the mind. "Recent research on neuroplasticity and psychosocial genomics lends compelling support to this perspective by elucidating mechanisms through which psychosocial forces shape neurobiology. Investigations of neuroplasticity demonstrate that the adult brain can continue to form novel neural connections and grow new neurons in response to learning or training even into old age" (Garland & Howard, 2009, p. 191). Research conducted through a qualitative and phenomenological approach has demonstrated that a coach's facility to hold and reflect the emotional state of another can stimulate changes across a spectrum of consciousness, including in the body, mind, and spirit, which ultimately creates an 'aha' moments that can radically impact the course of a client's life (Longhurst, 2006).

Mindfulness Based Integrative Health Coaching

"Mindfulness is the art of paying attention to the present moment with intention, openness, and curiosity, and without judgment - there is no good, and there is no bad. It is a willingness to accept what is" (Mars & Oliver, 2016, p. 8). Research demonstrates how the implementation of mindfulness-based practices utilized by a health coach can strengthen their effectiveness as a coach through mindfulness training developed skills such as attention, presence, empathy, self-regulation, and compassion (Virgili, 2013), as well as the ability to be attentive and listen deeply to patients' concerns (Beckman et al., 2012).

For clients that received mindfulness-based coaching resulted in evidence from controlled intervention studies with non-clinical populations reviewed previously indicates that adults who are taught mindfulness practices and skills demonstrate improvements in aspects of psychological functioning and well-being, including psychological distress, negative emotions, stress and burnout symptoms, general relaxation, positive emotions, satisfaction with life, and interpersonal functioning (Virgili, 2013, p. 46).

Additionally, participation in a Wellness-Based Mindfulness Stress Reduction Intervention resulted in a significant decrease in psychological distress and medical symptoms (Williams, Kolar, Reger, & Pearson, 2001).

Integrative Health Coaches occupy a unique and powerful role in assisting others to achieve their optimal health and well-being. Coaches are not doctors or therapists, and while they can often act as health consultants, providing education and information, coaches are not directive and allow for the client to lead their own healing journey. Integrative Health Coaches receive an abundance of training in the most effective ways to achieve a healthy lifestyle from a holistic perspective, as well as aptitudes to help their clients tap into their deep motivation for

wanting to make these healthy lifestyle changes. Mindfulness is an incredibly powerful tool for coaches, as it provides their clients with skills and tools to recognize their own inner wisdom regarding best practices for physical, mental, emotional, and spiritual health and healing.

Mindfulness in Forest Bathing

The emphasis in forest bathing is on being, not doing, one of the defining characteristics of mindfulness (Cabrera, 2017).

Shinrin-yoku varies in the way it is undertaken. It may be practiced by walking through a forest mindfully, taking in the forest air, working with the breath, sitting and observing, and making an emotional connection with the forest environment (Miyazaki and Motohashi, 1995). It might also be more about simply spending time in, and gaining a therapeutic effect from a forest visit. Depending on the forest and the program, Shinrin-yoku may, therefore, encompass explicit mindfulness practice and techniques or be a more informal experience involving "being mindful" implicitly (Ambrose-Oji, 2013, p.14).

The ANFT has established "invitations" for forest bathing participants to try in nature (see Appendix C), which include practices such as gratitude, pleasures of presence, noticing what is in motion around you, and walking as silently as possible. By shifting awareness away from just the ego-self and to the greater ecosystem of life that exists both internally and externally, participants of forest bathing can establish a greater connection with themselves and the web of life that surrounds them.

In the early 1980s, Stephen and Rachel Kaplan, professors of psychology at the University of Michigan, observed that psychological distress and mental fatigue were often connected. Through a series of studies, they concluded that nature provided restorative

landscapes, as they were interesting but not over stimulating. They came up with the Attention Restoration Theory (ART), which purported that participants expressed clearer thinking and lower anxiety levels after being in or viewing nature (Williams, 2017).

A distinctive feature of Hindu meditation is the mantra, a word or phrase that functions as an incantation. As one can readily demonstrate for oneself, the repeated mantra is remarkably effective at eliminating the inner voice, the running dialogue with oneself that so often occurs in quiet moments. In this way, the focus on past and future events is greatly reduced (Kaplan, 2001, p. 484).

Cabrera suggests that instead of using a mantra in forest bathing, individuals let nature take the lead. By opening up all five senses and expanding one's awareness, it allows "nature to take us where we need to go, that nature knows [and] we don't" (Interview, March 23, 2017). Kaplan (2001) theorizes that even an individual who is relatively inexperienced in mindfulness or meditation could obtain the benefits of mindfulness without much exertion because of the inherently restorative properties of nature. Theologians and historians ascertain that the practice of meditation in Buddhist traditions is rooted in spending time in nature.

There's a long tradition of meditating in nature. Most, if not all, of the Buddha's ardent spiritual search, took place outdoors in the plains and forests of northern India and culminated in his enlightenment under a grove of Bodhi trees. He then spent the next forty-five years teaching and meditating in the woods and forest clearings and encouraging his students to meditate at the foot of trees. After these early pioneering days of meditating in nature, more-permanent monasteries were built, and meditation began to move indoors, perhaps mirroring how society similarly went inside and started to remove itself from nature (Coleman & Kornfield, 2006, p. xiv).

Personal Statement

Nature can have a tremendous impact on healing one's mind, body, and spirit. On October 6, 2014, a scooter I was driving in Austin, Texas malfunctioned: the throttle was stuck in gear, and I was taken across four lanes of downtown traffic before being thrown thirty feet into a creek bed. Upon impact, I severely lacerated both of my knees, fractured five of my cervical vertebrae, right scapula and two ribs, which punctured my lung, and caused a mild traumatic brain injury. Luckily, I was found by a gracious soul who ran down to the creek and saved me from drowning in the 5 x 5-foot puddle in which I had landed face down, and I was rushed to the nearest hospital. The care I received, from the surgeries to the pharmaceutical drugs, saved my life and I am forever grateful for the miracles performed in the hospital. Despite the necessity and efficacy of the care, the two weeks I spent in the medical hospital were incredibly confusing and downright scary. I had no memory of the accident whatsoever, so waking up in the hospital was a complete surprise to me. I was shuffled around from the Intensive Care Unit to the surgery floor several times within the first week, and the doctors would only come to speak to me for less than five minutes at a time. The drugs and the trauma made my brain so blurry that understanding anything, in general, was difficult for me. The nurses and physical therapists were the most friendly to me, yet everything was so hectic and busy that no one in the hospital treated me like anything more than a body with injuries. I was diagnosed with PTSD and found myself as an entirely new person after my two-week stay in the hospital.

During the first two months of my recovery, I had a large team of medical practitioners, from physical therapists to orthopedic surgeons. An Acupuncturist made the biggest impact on my healing because she introduced me to the mind, body, spirit connection. Through the practices of Traditional Chinese Medicine and her guidance, I started exploring other healing

modalities, and I discovered that meditation and mindfulness practices had an incredibly positive impact on my healing. Amidst the healing I was experiencing, the stress and physical and emotional pain I still felt after my accident made me go very inward; I felt incredibly alone. Because my internal landscape changed so drastically, I developed social anxiety and had a difficult time connecting with my communities of support. Often, I found myself drawn to hiking trails on my own, and it was amongst the forest environment that I felt a little less alone. In the forest, I discovered bits and pieces of clarity that would seep into my bones. There is so much going on in the wilderness, so much more than meets the eye. By learning how to be quiet and not only listen to the land but learn how to communicate with it as well, magic appeared. I loved feeling connected to all living creatures on the planet, and in the wild, this deep connection felt so alive inside of me.

This accident was an opportunity to explore the depths of my soul, and I found that not only did I heal my body, but also I was able to repair broken pieces of my spirit. Time spent in the forest was a rare opportunity to feel connected to my body, my mind, and the essence of my being. Roaming around the redwoods reminded me about the power of resiliency. I had time to reflect on my accident, which was such a traumatic shock to my system, both physically and spiritually. While my physical impairment and pain were severe, it was my fractured soul that needed the most attention. Spending time in the delicate, yet powerful ecosystems that exist within the forest reminded me of the interconnected pillars of support and strength in my own life. By breathing in the fresh and vibrantly alive forest of life that surrounded me, I was able to start healing my wounded soul. Traumatic events can change everything in a person's life, from their physical capabilities to understanding their greater life purpose. When treated delicately and with care, the period after a trauma is an opportunity to retrieve any parts that feel disconnected.

It is also an opportunity to open to a deeper connection to self and trusting your inner compass for guidance. I am grateful for the experience and now view the accident as a gift. Integrative Health Coaches can be a strong ally for individuals who are looking to dive deep and start healing and repairing their whole self, whether they are struggling with an injury, chronic illness, unrelieved stress or digestive challenges, and are ready to make a proactive change in feeling healthier and happier in their life.

By experiencing the profound impact spending time in nature had on my healing. I can understand the healing this planet needs on a different level of consciousness. The way nature has opened up to me and brought me solace and medicine in times of pain has inspired me to be a committed ally and advocate for healing the wounds of this planet. By completing a Master's of Arts Program in Integrative Health Studies and a certification in Integrative Health and Wellness Coaching at the California Institute of Integral Studies (CIIS) in San Francisco, I have learned and gained a diverse set of tools, resources, and knowledge to help others on their journey of self-discovery and healing. My accident, personal healing experience, and graduate education have taught me that true healing comes from within and must address the body, mind, and spirit. Doctors, therapists, and all other healing professionals play incredibly vital roles in healthcare, as do pharmaceutical and herbal medicine, surgeries, and the diverse variety of incredible modalities that constitute complementary, alternative and integrative medicine. My contribution is to bring healing to others is through EcoCoaching, an integration of the practices and principles of forest bathing and IHC. Through EcoCoaching, I will hold space and guide individuals and groups on a journey of self-exploration to achieve physical, emotional, and spiritual healing. By tapping into the healing power of nature, EcoWisdom seeks to share tools

and resources for clients to connect to their intuition to achieve optimal health, wellbeing, and purpose.

Discussion

The predominant countries that are implementing forest bathing as a way to help reduce chronic stress and disease receive significant funding and structural support from their respective governments. The federally funded programs that are currently in place in the United States, most notably the Healthy Parks, Healthy People Program and the Parks Prescription Program, are receiving limited funding and do not include forest bathing or other mindfulness-based tools in a meaningful way to mitigate stress and promote overall health and wellbeing. The U.S. tends to favor programs in nature that encourage a lot of physical movement, which is also a positive and significant contribution to health and wellness, but this approach is rather limited in that it does not incorporate the physiological, psychological, and psychospiritual healing benefits of forest bathing. Additionally, since the Trump administration is not supporting health care, parks, or the environment in general, we cannot count on the federal government to provide the type of funding and structural support other nations such as Japan, South Korea, Finland, and Scotland are experiencing.

Furthermore, I reached also out to the National Center for Complementary and Integrative Health (NCCIH), and through personal correspondence I learned that forest bathing is not on the radar at all with the "Federal Government's lead agency for scientific research on the diverse medical and health care systems, practices, and products that are not generally considered part of conventional medicine" (National Center for Complementary and Integrative Health, 2015, n.p.,). Therefore, I agree with Clifford's analysis that forest therapy will be a more bottom-up approach in the United States, and I propose EcoCoaching as one solution.

EcoCoaching utilizes and integrates the principles and practices of IHC and forest bathing to provide effective mindfulness-based tools for individuals who are looking to manage stress and make changes in their life towards achieving greater health and wellbeing. Integrative health coaches and the forest have a lot in common. Both hold space for others, encourage mindfulness practices, mirror feelings and situations, and facilitate an expansive exploration for an individual to discover their true inner wisdom in order to achieve optimal health and wellbeing. In addition to the mindfulness practices experienced and learned, clients will be able to manage stress levels through spending time in nature and absorbing the healing properties of the forest that are proven to reduce stress. EcoCoaching promotes the biophilia hypothesis that humans and the natural environment are genetically linked. Full human health and soul potential cannot be achieved if confined to an existence that is primarily indoors. Nature is our birthright and developing a relationship to the non-human world allows us to tap into a deeper knowledge of who we are and what our purpose on this planet is.

Through a variety of IHC and forest bathing practices and tools, the client will have time and space to explore what needs to be healed and how to achieve optimal health and wellbeing. Throughout this exploration, coach and client work together to formulate a plan to heal the body, mind, and spirit. Clients will be guided in establishing a community of support for their healing journey, including group forest bathing and a network of integrative health practitioners. Within this supportive container, the client can continue to practice and strengthen the new tools they have learned through EcoCoaching and forest bathing.

Planetary and human health is undoubtedly in a current state of critical challenge and strain, but the blueprint for healing and happiness surrounds us. Although Americans are spending less and less time outdoors, we have not entirely lost our connection to the Earth.

Outside our front doors, there are trees, animals, creeks, and an enormous diversity of life that research shows, and our intuition knows, has extraordinarily powerful healing effects on human health and well-being. Through opening up sensory awareness in a forest and working within the supportive framework of IHC, we have the potential to reduce stress, moderate chronic disease, and fully awaken to the gift of being alive. We, as a human species, and as individual humans, are not alone on this planet. The Earth holds and nurtures a vast ecosystem of life, life that is intrinsically interconnected and can mirror, support, and provide healing for one another. As humans reawaken to the physical, psychological, and spiritual healing that nature provides for us, perhaps we can begin reciprocating healing right back to the Earth and all the life she carries in a meaningful way. The future of our species depends on it.

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Appendices

Appendix A: 10 Forest Therapy Invitations



1 Shake Off the Road Dust

First, acknowledge that it likely took some effort and planning to arrive to this walk. Before you begin, do whatever you need to "shake of the road dust." How might you release any stress or preoccupations you might be carrying? After stressful times, some animals in the wild for example, shake their bodies for a few quick seconds as a way of releasing stress and lowering cortisol. If you feel called, take a few breaths, give your body a brisk shake, or use any method you would like to arrive to the present moment.

2 Gratitude

Close your eyes, and stop to reflect on what in your life you feel gratitude for.

To take this a step further, notice the natural environment around you and follow your intuition, allowing your body to guide you to a tree or plant that calls to you. In your own way, offer a moment of gratitude to the tree or plant for its presence. This can be a nice way of "introducing yourself" to the forest.

3 Pleasures of Presence

Close your eyes and notice your feet on the Earth. Take a deep breath. Notice how your body feels in this moment. The purpose of this invitation is to notice how pleasurable the senses can be. Gently sway and move your arms to get a sense of your body in space. Tune your attention to your skin: Experience the temperature of the air. Can you feel air movement? Tune your attention to your hearing: Notice the quietest sound you can hear? Is it near or far away? Tune into your sense of smell: Notice the scents that are present. Can you pick up any from the breeze? Tune your attention to your sense of taste: Stick out your tongue. What do you notice with your tongue exposed? Lastly, with your eyes still closed and holding your hands slightly out with palms exposed, begin to gently rotate your body in a circle until you arrive at a knowing of what direction you want to face. When you feel ready, open your eyes and take in the world as though this is the first time you are seeing with your two eyes. What are you noticing?

4 What's in Motion

What is the pace of nature? See if you can notice some of the things around you that are in motion. You may wish to be still for a moment and simply observe. What things are moving near you? What movement can you spot in the distance? Do you see blades of grass swaying in the wind? Are the leaves waving back and forth? Notice the different speeds of motion around you. Perhaps move towards something that doesn't look like it's in motion and observe until you notice movement. So often we don't notice things because of our fast pace.

5 Fox Walking

Walk as silently as possible, with all your senses on full alert, like a fox moving through the landscape. Try

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putting your toes down first, then the outside edge of your foot and finally easing onto the heel of your foot as you shift your weight forward. Pause when something catches your attention, and give it your full attention, as if your life depends upon it. As if, if you don't pay attention, you will miss your daily meal, or become the daily meal for something else. If you feel moved to do so, walk on all fours.

6 Close Gazing

Find something nearby that is fairly small; no more than about the size of a grapefruit. Even smaller can be better, something like a leaf or twig. Make it something that won't get away from you for five full minutes; a living butterfly is not suitable for this activity, but a crawling critter without wings might be. Give it your full attention, gazing at it without looking away. Notice small details you might not have previously noticed. What happened as you gazed at your object? What about this object stands out for you? What is your relationship like to this object? Is it different now than when we started? What can we learn from this activity?

7 Deer Ears

Cup your hands behind your ears to make them larger. Walk quietly and slowly like a deer, alert for the subtle sounds of the forest around you. Turn your 'deer ears' towards sounds that catch your attention. Did you notice anything new with your amplified hearing?

8 Sniff It

The main invitation here is to engage the sense of smell in relation with the natural environment. Be vigilant so as not to pluck toxic plants to smell! (We recommend only smelling plants that you are certain are safe). You may wish to crush leaves to release the scent of plants. What does this smell remind you of? How would you describe it? Based on smell alone, does it seem like it might be medicinal or otherwise useful?

9A Gift for the Forest

Find items that you are drawn to — leaves, sticks, moss, rocks, flowers — anything in the forest that appeals to you. With these natural materials and in a place of your choosing, create a gift of your expression for the forest. Let go of any worry about the end result or the need to make it perfect. Allow yourself to enjoy the process of creating and simply playing like a child. How do you want to create your gift for the forest? What ways of designing and assembling your items give you pleasure? When your piece feels complete, notice what came up for you in that process and any changes from before.

10 Thank the Forest

Before leaving, thank the forest for welcoming you and providing you with healing. The forest is an ecosystem -- alive with all sorts of beings -- and you've just entered and passed through someone's home. What's different for you after visiting this place? What did you most enjoy about this space and process? Is there anything in particular you want to thank the forest for?

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Appendix B: EcoWisdom Promotional Flyer (Front)





Jenny Harrow www.ecowisdomwellness.com

Appendix B: EcoWisdom Promotional Flyer (Back)

Easy Ways to Soak up the Healing Benefits of Forest Bathing

1. Fully Arrive

Begin the experience by leaving everything that has happened before you arrived go. Shake it off. Perhaps there was traffic on your way to the forest or you had a dispute with a loved one. Release it. You are choosing to spend time in the forest in a completely *present* and *mindful* way. Shake your hands and feet, take a few deep breaths, and allow yourself to fully arrive to the present moment.

2. Minimize Distractions

Modern life can be rather demanding and full of distractions, such as traffic jams and smartphones. This relentless stimulation can trigger the sympathetic nervous system, which is responsible for regulating the body's fight or flight behaviors. At its core, this slow walk in a natural environment utilizes mindfulness practices such as awareness of internal and external states of being by developing a deeper connection to the natural environment. It is essential that distractions, such as smart phones, excessive chatter, or overly exerted physical exercise, be minimized or eliminated during this time.

3. Practice Gratitude

Close your eyes before you begin your walk, and stop to reflect on what in your life you feel gratitude for. Friends, family, a roof over your head, food to eat, the air you are breathing, the opportunity to take a walk in a beautiful forest. Experiencing gratitude has a strong impact on cultivating positive feelings, which can contribute to one's overall sense of wellbeing.

4. Open Up Your Senses

Take a few moments to close your eyes, and start activating all five of your senses before beginning your walk. As you are standing in the forest, notice what smells, tastes, textures, and sounds you notice around you. Finally, open your eyes and really take in the images of the forest.

5. Walk Slowly and Mindfully

Forest Bathing is not the same as hiking; moving slowly is suggested. As you walk, notice what calls you. Whether it is a tree, insect, animals, flower, leaf, rock, or stream. Whatever it is, take your time in your exploration. You are invited to touch, smell, and the taste the forest in a safe and mindful way as you take in the visual and auditory aspects of the forest.

6. Treat This Practice as a Ritual

One of the potent powers of ritual is its ability to set off certain times and spaces as sacred, as something that feels very different than ordinary life. Honor this time you have allotted for this practice. You can integrate your own spiritual practices and beliefs with forest bathing. This is a time for you to connect to the forest and all of the life it contains. Most importantly, forest bathing is an opportunity to connect with yourself and your own inner wisdom.