Ecotherapy: An Introduction

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Mindful Ecotherapy Center

www.mindfulecotherapy.org
Definition of Ecotherapy

• Ecopsychology is the study of how nature impacts mental health and psychological and emotional wellbeing.

• Ecotherapy is applied ecopsychology; i.e. applying the tools and techniques of ecopsychology in a therapeutic environment.
Definition of Ecotherapy

Sempik, et al (2010) define “Green Care” as a diverse set of activities that use nature and nature-based activities as a form of behavioral health intervention.

The Need for Ecotherapy

A Look at the Ecotherapy Research Evidence by Craig Chalquist (2009) outlined three common themes in his rationale for ecotherapy:

1. Disconnection from the natural world in which we evolved produces a variety of psychological symptoms that include anxiety, frustration, and depression. These symptoms cannot be attributed solely to intrapsychic or intra-familial dynamics.

2. Reconnection to the natural world—whether through gardens, animals, nature walks outside, or nature brought indoors—not only alleviates these symptoms, but also brings a larger capacity for health, self-esteem, self-relatedness, social connection, and joy.

3. Reconnection also works across treatment modalities to replace a pathological sense of inner deadness or alienation from self, others, and world with a rekindling of inner aliveness and enjoyment of relatedness to self, others, and world.
The Need for Ecotherapy

• In 1900 40 percent of US households lived on farms
• By 1990 only 1.9 percent of US households lived on farms
• Urbanization has changed people’s relationship with nature
• Many aspects of our culture now teach people not to spend time in nature
• This urbanization has changed people’s relationship with nature
• Parents have become fearful about their children playing outdoors, and children who grow up in primarily built environments often fear nature, largely because it is unfamiliar
The Need for Ecotherapy

• Since the industrial revolution, urbanization has limited opportunities for experiences in nature (Maller et al., 2008; Townsend & Moore, 2005)

• Physical inactivity results in 1.9 million deaths worldwide annually (WHO, 2004) – roughly one in 25 of all deaths
  • Experiences in nature foster healthy physical activities
The Need for Ecotherapy

Time in natural spaces:
• Strengthens neighborhood ties
• Reduces crime
• Stimulates social interactions among children
• Strengthens family connections
• Decreases domestic violence
• Assists new immigrants cope with transition
• Is cost effective for health benefits
The Need for Ecotherapy

• Kellert (2002) said that a child’s direct and ongoing experience of accessible nature is an essential, critical, and irreplaceable dimension of healthy maturation and development
• Ruth Wilson (2008) Gives reasons why children need to feel nature and not just think about it
• E. O. Wilson (1984) believes that there is a biologically based, inherent human need to affiliate with life and lifelike processes
  ▪ human identity and personal fulfillment depend on our relationship to nature
The Need for Ecotherapy

• In 1986 the World Health Organization proclaimed that health care is not separate from caring for the environment
• Multiple studies have demonstrated the link between environmental health and personal health
• If you poison the well, the well poisons you
A Brief History of Ecotherapy

• At least as old as the Reindeer Age Shamans 40,000 years ago, who used the power of nature to heal

• Ayurvedic Medicine (the Indigenous Indian medical system), Tibetan Medicine, Native American Medicine, and Traditional Chinese Medicine, all at least 5000 years old, are examples of medical systems that see being in nature as integral to healing, health, and wellbeing

• In such systems people kept a physical and spiritual connection with nature

• Sickness was viewed as being out of balance with nature
A Brief History of Ecotherapy

- Over a thousand years ago people in both Asian and Western cultures believed that plants and gardens were beneficial for patients in need of healing (Ulrich and Parsons, 1992)
- European and American hospitals in the 1800s commonly contained gardens full of healing plants (Nightingale, 1860)
- In the wake of the Industrial Revolution, medicine became less holistic and therapeutic gardens were replaced with parking lots
A Brief History of Ecotherapy

• In the 1960s the Back to Nature movement began
• The 1964 Wilderness Act presumed the need for people to enjoy natural spaces as a requirement for mental and physical health
• Last Child in the Woods by Richard Louv (2005, updated in 2008) greatly increased awareness that children spend less time in nature today, leading to obesity ADHD, and poorer general health
• By the 1990s, the concept of ecopsychology and our need to heal and be healed by the planet had become more widespread. Today ecopsychology has developed into a discipline with college textbooks and graduate programs
A Brief History of Ecotherapy

• Many colleges and universities now offer programs in ecopsychology and ecotherapy

• Ecotherapy and ecopsychology are part of a wider back-to-nature culture sweeping the world that includes:
  • Sustainable farming
  • Local food movement
  • Organic gardening movement
  • Alternative energy movement
  • Environmental awareness movements
Types of Ecotherapy

Ecotherapy

• Strengthening your relationship to nature
• In formal ecotherapy a trained therapist leads you through different activities to develop a balanced relationship with nature that benefits your wellbeing
• Sessions can be adapted to suit different levels of mobility and fitness, and different disorders or emotional needs
• Sessions often include some type of psychotherapy, such as Cognitive Behavioral Therapy (CBT)
Types of Ecotherapy

- Adventure Therapy
- Animal Assisted Interventions (AAI)
- Animal Assisted Therapy (AAT)
- Care Farming
- Ecotherapy
Types of Ecotherapy

• Environmental Conservation (Green Gyms)
• Green Exercise Therapy
• Nature Arts and Crafts
• Social and Therapeutic Horticulture (STH)
• Wilderness Therapy
Types of Ecotherapy

Adventure Therapy

• Adventure activities focused on psychological support
• Fairly strenuous physical activities incorporated with psychological exercises
• Usually done in a group setting
• Might include activities such as rafting, “ropes” courses, rock climbing & caving
• Focused on ways to build trust and raise confidence
Types of Ecotherapy

Animal Assisted Ecotherapy

Natural history observations may be a starting point, but they are strongly molded by cultural constructs and by our need to affiliate with the rest of creation through metaphor. Signifying by means of animals takes place at deep levels of human consciousness, emanating from the same type of psychic experience as myth, poetry, and religion whose language is also symbols.

--Kellert & Wilson, 1993, p. 334
Types of Ecotherapy

Animal Assisted Interventions (AAI)

• Spending time with animals
• Being in spaces such as farms where you will come into contact with animals
• Spending relaxing time with animals while feeding or nurturing them
• Can be used to assist mobility and improve coordination
• Less structured than animal assisted therapy (AAT)
Types of Ecotherapy

Animal Assisted Therapy (AAT)
• Building a therapeutic relationship with animals
• Formal therapy using guided contact with animals such as horses or dogs
• Focus is on the interaction and bonding between you and the animal
• Led by an experienced therapist trained in AAT
• Could be one-to-one or group therapy
Types of Ecotherapy

Care Farming

• Looking after farm animals, growing crops or helping to manage woodlands and natural spaces
• Sessions generally run for half days to whole days
• Many farms hold open house days to try things out before joining a program
Types of Ecotherapy

Environmental Conservation (Green Gyms)

• Combining physical exercise with conservation work
• Tasks vary depending on location and time of year
• Sessions include breaks so you may work at your own pace
• Group leader instructs participants in how to use tools, etc.
Types of Ecotherapy

Green Exercise/Therapy

• Doing exercise in nature
• Physical activities in green spaces, like yoga, walking, running and cycling
• Can include a range of walks from gentle strolls to strenuous hiking
• Usually facilitated by a trained leader
Types of Ecotherapy

Nature Arts and Crafts Therapy

• Doing art in or with nature

• Artistic activities which take place in a natural environment, and use natural materials such as wood, grass, feathers, shells and clay

• You might work directly in the environment and create permanent installations outdoors using natural building

• You might use the environment or scenery as inspiration for artwork
Types of Ecotherapy

Nature Arts and Crafts Therapy

• Natural building – building with earth, sand, straw, clay, wood, stone, etc.
Types of Ecotherapy

Social and Therapeutic Horticulture (STH)
- Gardening or growing food in allotments
- Variety of tasks available
- Can be adapted to suit a wide range of abilities and mobility levels
- Usually takes place outside in community gardens or nurseries, or inside greenhouses
- Run by qualified and experienced tutors
- Could lead to work experience such as selling produce at a farmer’s market or working as a farm hand
Types of Ecotherapy

Wilderness Therapy

• Spending time in the wild with a group, doing physical and group-building activities such as making shelters, hiking, or survival skills
• Structured opportunity to challenge yourself in a wilderness or remote setting
• Building a relationship with an outdoors environment is central to this therapy
• Usually involves some therapy to help you improve your self-awareness and remove mental blocks that are holding you back
Types of Ecotherapy

Wandering (McCaffrey, 2014)

• The essence of wandering is to wander through the landscape without time, destination, agenda, or future purpose - to be present in the moment and to go off trail whenever curiosity leads.

Types of Ecotherapy

Way of Council (McCaffrey, 2014)

- Council is a practice of speaking and listening from the heart. Through compassionate, heartfelt expression and empathic listening, council inspires a non-hierarchical form of deep communication that reveals a group's vision and purpose. Council offers effective means of working with conflicts and for discovering the deeper, often unexpressed needs of individuals.

Nature as Nurture

Winter Camp

• Doucette, Ransom and Kowalewski (2007) described a winter camp of seven to ten days in the Canadian Arctic involving high school students between 1995 and 2006

• Instructors included both aboriginal guides and non-aboriginal high school teachers and visiting university professors
Nature as Nurture

Winter Camp

• Aim of the camp was to facilitate an experience where students were experientially introduced to “nature as nurture” for humanity as distinct from learning about nature in the classroom.

• Authors concluded that teaching nature as nurture resulted in an improved ability to handle fear, improved self-confidence, improved self-reliance and improved understanding of the benefits of social cooperation.
Nature as Nurture

Brief Nature-Based Experiences

• Consist of nature-based experiences of one day or less
• Researchers have found that wilderness experiences improve self-perception (Young & Crandall 1984), measures of well-being (Russell, 2005), self-concept (Kaplan, 1984) and improved occupational, emotional, physical and intellectual wellness (Miner, 1990; Priest, 1990)
Nature as Nurture

Nature and Anxiety

• MacKay & Neill (2009) investigated the effects of physical activity in green spaces on anxiety levels.

• While intensity and duration did not impact on state anxiety, higher degrees of perceived “greenness” of the exercise environment were associated with greater reductions in state anxiety.
Nature as Nurture

Nature Meditation

• Alvarsson and Nilsson (2010)
• Meditation in a natural setting, such as a park
• Members of the group identify something in nature which attracts them and then spend a few minutes contemplating how this aspect of nature relates to them and what they can learn from it
Nature as Nurture

Nature Meditation

• A person struggling with feelings of worthlessness might develop greater self-respect after meditating on how the older trees in a forest provide shelter for birds and shade for younger plants

• The activity usually ends with group members sharing what they learn
Nature as Nurture

Horticulture Therapy

• Chalquist (2009) Noted that plants and garden-related activities may be used to promote well-being

• May include digging soil, planting seedlings, weeding garden beds, and trimming leaves

• Recommended in cases of stress, burnout, and substance abuse, as well as in cases of social isolation among the elderly
Nature as Nurture

Horticulture Therapy

• Programs such as *Thresholds*, a Chicago-based mental health agency, have also helped military veterans experiencing PTSD through horticultural and ecotherapies
Nature as Nurture

Animal-Assisted Therapy

• Brooks (2001): Animal(s) introduced into therapy facilitates healing

• Studies have demonstrated that petting or playing with a dog, for example, reduces aggression and agitation in some populations
Nature and Child Development

Kellert (2002)

- Cognitive, affective, and moral development is impacted significantly and positively by direct contact with nature
- By “direct” contact, he means contact with wild nature unmediated by significant human manipulation, in contrast to “indirect” contact (e.g., parks, zoos) or “vicarious contact” which is mediated by technology (e.g., television nature shows or books)
Nature and Child Development

Kellert & Derr (1998)

• Reviewed programs by Outward Bound, National Outdoor Leadership School, and Student Conservation Assn (N=700+ adolescents)

• Studies noted increases in compassion, wisdom, guidance, and inner peace
Nature experiences for adolescents are significant and desirable as long as they also include the particular needs of adolescence, i.e., peer support, autonomy, and the opportunity to develop and demonstrate skill and strength.
When asked to identify the most significant environment from their childhoods, 96.5% of a broad sample of adults identified an outdoors environment.
Ecotherapy: An Educative Model

The Eco-Educative Model (Pedretti-Burls, 2007)

1. Experiencing challenges (by choice)
2. Reflecting on the activities and the associated metaphors
3. Processing by sharing thoughts and reflections
4. Applying the learning from the natural world to the personal everyday world
Ecotherapy: An Educative Model

Experiencing challenges by choice

• Living in True Self by acknowledging hidden talents and resources
• Using natural challenges as a metaphor for psychological and emotional challenges
• Overcoming psychological and emotional challenges by overcoming physical and mental challenges in nature
Ecotherapy: An Educative Model

Reflecting on the activities and the associated metaphors

• Nature as metaphor
• Using elements of nature as metaphors for mental, emotional and psychological challenges
Ecotherapy: An Educative Model

Processing by sharing thoughts and reflections

• Nature as teacher

• Integrating experiences in nature holistically by gaining feedback and insight with other members of the group

• Teacher(s) and student(s) produce the learning together
Ecotherapy: An Educative Model

Applying the learning from the natural world to the personal everyday world

• Nature as nurture
• Nature as healer
• Lessons learned in nature stimulate self-confidence, self-efficacy, nurturing and healing
Ecotherapy: An Educative Model

Develop Openness

1. Fully supported by nature
   Trusting and integrating natural experiences provides a sense of connection to something larger than self

2. Intentionally supported by nature
   An open approach integrating the power of intention by focusing on solutions rather than on problems

3. Regularly supported by nature
   Making nature a regular and routine part of life creates a sense of openness to new experience, leading to self-efficacy and diversity of expression
Ecotherapy: An Educative Model

Awareness

1. Nature as teacher enables people to become more cognitively aware of their place in nature
2. Nature as metaphor creates a sense of awareness of wider meanings
3. Nature as healer creates awareness of self-transcending or spiritual dimensions in their experiences of nature
Ecotherapy: An Educative Model

Adopting Ecologically Caring Lifestyles

• Ecotherapy enhances awareness that what we do to nature we do to ourselves
• Activities that heal the environment are also self-healing activities
• Saving the ecosystem and the biosphere is saving yourself
Ecotherapy and Mindfulness

- Kim et al (2009) describe using mindfulness and Cognitive Behaviour Therapy (CBT) in a mindful walk through a forest before the CBT exercises.
- A mindfulness meditation was included that concentrated on practice with the breath, awareness of wind in the forest, and other woodland sounds.
- Participants who suffered from depression improved their depression rating scores, saw improved HRV and decreased salivary cortisol levels.
Ecotherapy and Mindfulness

• Kim et al (2009) concluded that CBT-based psychotherapy applied in the forest environment was helpful in the achievement of depression remission
• The effect was superior to that of psychotherapy performed in the more conventional indoor clinical setting
• The remission rate of the forest group was 61% (14/23), significantly higher than both the hospital group undertaking similar CBT-based psychotherapy, (21%, 4/19) and the controls (5%, 1/21)
Ecotherapy: An Educative Model

The Eco-Educative Model (Pedretti-Burls, 2007)

The specific elements of the model are designed to enable people to enhance the self through three experiential dimensions (Clinebell 1996):

1. Develop openness towards being more fully, intentionally, and regularly supported by nature, in a caring and respectful interaction.

2. Enable people to become more cognitively aware of their place in nature and of the wider meanings, self-transcending or spiritual dimension in their experiences of nature.

3. Motivate people to learn how to adopt more ecologically caring lifestyles and behaviors and to participate in actions that will help save their ecosystem and biosphere.
Benefits of Ecotherapy

Physical Benefits: Sunlight

• Vitamin D (lowers blood pressure, decreases risk of colon, prostrate, and pancreatic cancers)
• Increases calcium uptake
• Better diet (kids who garden eat more vegetables)
• Immune system strengthening (kids who play outside have stronger immune systems)
• Promotes healing
• Reduces pain
Benefits of Ecotherapy

Physical Benefits of Spending Time Outdoors

- Decreases the effects of jet lag
- Increases life expectancy
- Provides opportunities for exercise
- Decreases BMI
- Lowers systolic blood pressure
- Reduces avoidable disease risk factors
- Reduces cancer risk
- Reduces osteoporosis risk
Benefits of Ecotherapy

Psychological and Emotional Benefits of Spending Time Outdoors

- Stress reduction
- Attention restoration
- Improves mood states
- Reduces depression
- Reduces anger and anxiety
- Enhances feelings of pleasure
- Increases mental acuity (kids who grow plants scored 12% higher on academic tests)
- Reduces mental fatigue
Benefits of Ecotherapy

Psychological and Emotional Benefits of Spending Time Outdoors

• Improve problem solving ability and concentration
• Improves body image for women
• Reduces the impact of stress
• Increases feelings of empowerment
• Encourages nurturing characteristics
• Decreases risk of seasonal affective disorder (SAD)
• Mitigate impact of dementia, including Alzheimer’s
Benefits of Ecotherapy

Spiritual Benefits of Spending Time Outdoors
• Gives children a sense of peace and oneness with the world
• Sparks creativity and imagination
• Inspires connections with the wider world
• Increases a sense of wonder
• Encourages reflection
• Quiets the mind
Benefits of Ecotherapy

Social Benefits of Spending Time Outdoors

• Cuts crime
• Strengthens family relations
• Decrease domestic violence
• Strengthens neighborhood ties
• Assists new immigrants cope with transition
• Cost effective health promotion
Benefits of Ecotherapy

Economic Benefits of Spending Time Outdoors

• Environmental economics – increases preference for environmental quality over other goods
• Increases environmental activism
• Increases park planning
• Preserves biodiversity
• Stimulates social interactions among children
Ecotherapy and Addiction

• Milton Erickson supported a man to release patterns of alcohol addiction by giving him a “homework” task in a nearby botanical garden, which entailed contemplating the survival qualities of the cactus (cited by Adhémar, 2008)

• Seifert, et al (2011) demonstrated that therapeutic community gardening is an effective way to treat symptoms of alcoholism
Ecotherapy and Trauma

• Ulrich (1984) discovered that patients following gallbladder surgery recovered faster with fewer painkillers when they had a view of trees through their hospital window than when they looked out on a brick wall.

• Lefkowitz et al. (2005) proposed an animal-assisted-therapy (AAT) model for survivors of sexual abuse suffering from post-traumatic stress, anticipating decreased number of therapy sessions.

• Chawla (1998) connected our relationship with nature to a childhood perception that the natural world is alive and conscious, thereby suggesting that nature plays a significant role in early development and attachments.
Ecotherapy and Trauma

• Hendee & Martin (1994): Wilderness journeys are a powerful antidote to depression, anxiety, and emptiness, with participants overwhelmingly reporting stress reduction, mental clarity, and inner calm.

• Putman et al. (2009) reported in a survey conducted with Guatemalan aid workers that levels of personal accomplishment were inversely related to PTSD symptoms, suggesting that the sense of accomplishment achieved from a wilderness experience could have a positive impact on a traumatized individual.
Ecotherapy and Trauma

• Driver et al. (1987) states that being in the wilderness is a physically demanding experience that leads to health benefits that work against the detrimental effects of trauma (ISTSS, 2004)

• Johnson (2002) reports that wilderness adventures facilitate healing because they have limited opportunities for an outward focus, thereby directing the participant’s attention towards self-reflection

• According to Linden & Grut (2002); “...using nature as a metaphor, it is possible very quickly to access deeply traumatic events and to work on the most difficult feelings, and the life cycle embodied in nature carries the promise of healing”
Ecotherapy and Trauma

• Adams (2005) advocated awareness practices such as mindfulness and meditation as powerful means of building relationships with nature

• Miller (2009) Spending time in nature is nourishing on a physical, emotional and spiritual level and being in a natural setting facilitates mindful awareness practices
Ecotherapy and Trauma

- Shaw (2000) researched childhood nature connections and trauma, observing that nature itself was seen as a protector by traumatized children.
- Ulrich (1984) proposed a genetic basis for our appreciation of nature in his Stress Recovery Theory (SRT), theorizing that emotional and psychological recovery from stress was enhanced and aided when observing natural scenes.
- Wilson et al. (2008) also cited evolutionary perspectives suggesting that humans respond positively to natural environments due to a genetic predisposition which once aided survival.
Ecotherapy and Trauma

• Wilson et al. (2008) Positive findings suggest that the application of nature can improve and conserve mental health

• With ecotherapy, symptoms associated with trauma such as self-esteem and depression (ISTSS, 2003), are observed to improve (e.g., MIND, 2007; Pretty et al., 2005; Reynolds, 2002)

• Linden and Grut (2002) maintain that nature enables people to “express the inexpressible”

• Pretty et al. (2007), illustrated that participants in an ecotherapy study reported an improvement in mood merely following a green outdoor walk, and recommended ecotherapy as an affordable treatment for mental distress
Corbett, Lisa and Milton, Martin (2011) demonstrated that a wide range of ecotherapy approaches could be effective in the treatment of trauma. These included:

- Wilderness adventure therapies
- Animal-assisted therapies
- Contemplative practices conducted in natural settings
- Therapeutic gardening
Ecotherapy: Ethical Issues

Clare (2014): *The Eco-Friendly Therapist: An Interpretative Literature Review of Obstacles and Solutions to Practicing Ecotherapy*

- Provide for safety for patients/clients in wilderness areas
- Provide respect for nature
- Insurance coverage concerns
- Privacy concerns
- Protection and safety for therapists/counselors
- Clinical competency issues
Ecotherapy: Ethical Issues

Provide for safety for patients/clients in wilderness areas

• Are there any accessibility issues?
• Are there any safety issues (wild animals, dangerous trails, fire, flood, storm or other safety hazards)?
• Does the client have any allergies (bee stings, poison oak, etc.)?
• Physical limitations?
• Health issues like muscular-skeletal problems, cardiac conditions, asthma, or other health concerns?
• Is the area relatively crime-free?
Ecoternary: Ethical Issues

Provide for safety for patients/clients in wilderness areas

• “Survival kit”
  • backpack containing bottled water, snacks (check for patients with diabetes or food allergies)
  • Cell phone in case of an emergency (always check for signal before using an area)
  • Basic first-aid kit, epi-pens, bandages, insect repellent, sun screen and other emergency supplies

• Rule of thumb = the more remote the area, the more precautions must be taken

• Downtown parks and gardens are generally safer than remote wilderness hiking areas
Ecotherapy: Ethical Issues

Provide respect for nature

• Take only photographs; leave only footprints
• Don’t take ‘souvenirs’ from the site without permission
• Don’t leave trash – might help to take a trash bag along
• Do not disturb nesting animals or their habitats
• Don’t collect plants unless you have been given permission
• Spend some time in nurturing activities (trash removal, watering plants, feeding wildlife, etc.)
  • Don’t feed wildlife unless it is permitted at your location!
Ecotherapy: Ethical Issues

Insurance coverage concerns
• Most insurance providers are not up-to-date regarding ecotherapy
• Might be able to bill under “home visits” for psychotherapy
• Check with individual panels for their own coverage for such services
• Follow all insurance panel guidelines for privacy, safety, handicap accessibility, etc.
Ecotherapy: Ethical Issues

Insurance coverage concerns

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Ecotherapy: Ethical Issues

Privacy concerns

• In outdoor, public environments, privacy cannot be guaranteed
• Can be handled through a waiver in your intake paperwork for ecotherapy
• Make sure patient has read and understands privacy issues and any other special informed consent concerns about doing therapy outdoors in natural environments
• Can discuss it by having a briefing about ecotherapy in your office prior to going out into the field
Ecotherapy: Ethical Issues

Protection and safety for therapists/counselors

- NEVER do one-on-one therapy in remote settings; you could be attacked or client could accuse you of attacking them
- If meeting one-on-one for ecotherapy, do so in a public park or other setting where there are plenty of people/witnesses
- If doing ecotherapy in a fairly remote setting, only do group therapy
- If the group is limited to one family, hold sessions in a public park, not a remote setting
Ecotherapy: Ethical Issues

Clinical competency issues

• Only a few years ago it was difficult to find ecotherapy trainings, but in the past decade there has been an explosion of research and training opportunities

• Make sure any trainings you take are evidence-based

• Make sure the agency or individual doing the training is clinically competent in ecotherapy issues

• Several colleges and universities now offer ecotherapy certificates and/or degree programs
Colleges with Ecotherapy Programs

- See handout
Future of Ecotherapy

Principles and Goals of the Children and Nature Network 2008

(see handout)