



# Among the Trees: Integrating Therapeutic Nature-Based Interventions in Cancer Care

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*When I Am Among the Trees*

Mary Oliver



# The Healing Effects of Nature – why bring cancer care outdoors?



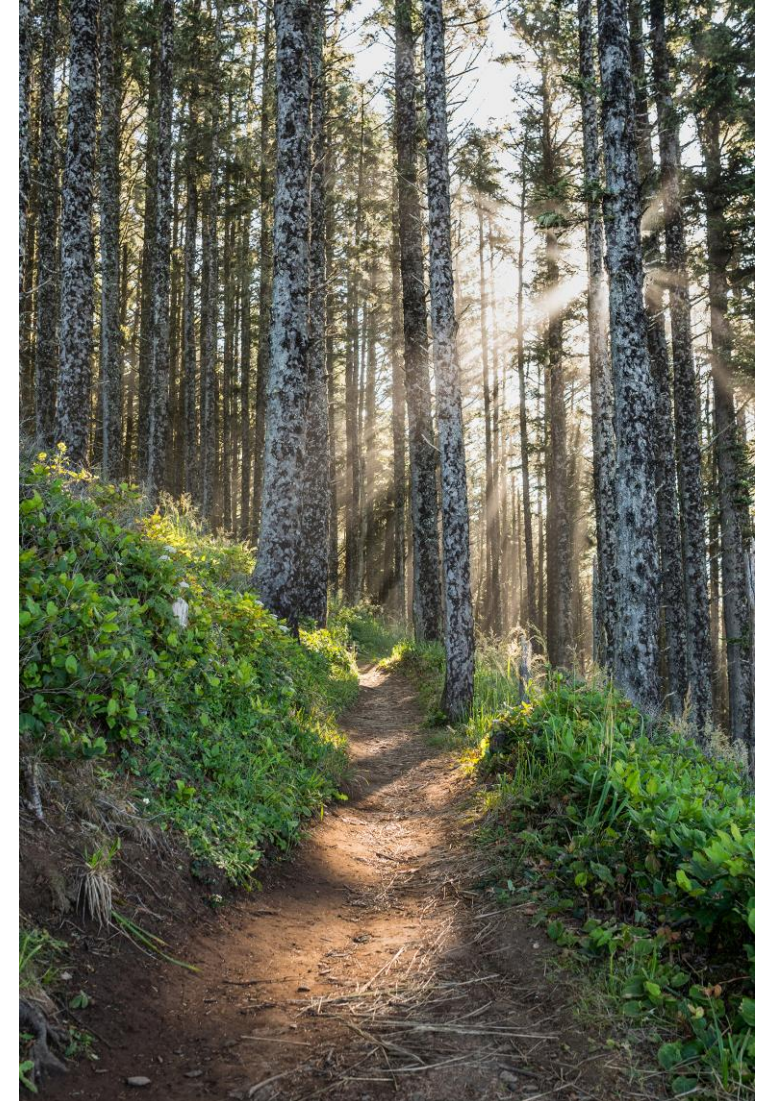
- Physical Health & Well-Being
- Emotional & Mental Health
- Spiritual Health
- Social Connection

# Physical Health & Well-Being

Nature offers a myriad of physical health benefits, not limited to:

- Reduced cortisol
- Reduced blood pressure
- Improved cardiovascular health
- Reduced inflammation
- Improved immune system markers

(Jimenez et al., 2021)





Nature stimulates  
our parasympathetic  
nervous system.

(Kuo, 2015)

Phytoncides boost natural killer cells that support our immune system.

(Kuo, 2015)





Mycobacterium vaccae  
reduces stress and  
inflammation, and boosts  
immune function.

(Kuo, 2015)

Moving water  
generates negative air  
ions, which increases  
serotonin.

(Kuo, 2015)



# Emotional & Mental Health



A 90-minute walk in nature significantly reduced rumination and negative thoughts.

(Bratman et al., 2015)

# Emotional & Mental Health

As little as 10 minutes of nature exposure has shown improvements in mental health, including:

- Depression
- Anxiety
- Stress
- Cognitive Function

(Bettmann et al., 2025)



# Spiritual Health



Nature can foster:

- Gratitude & wonder
- Dissolution of self
- Deep sense of unity and connection

(Clifford, 2021)

# Spiritual Health



“Awe walks”  
cultivate child-like  
wonder in the  
presence of  
something larger  
than ourselves.

(Sturm et al, 2022)

# Spiritual Health

Nature can be a wise spiritual counselor, holding space for life's deepest questions.



# Social Connection

Nature fosters meaningful connections with others.

We need each other's help to develop the capacity to notice what is around us.



# Nature is uniquely impactful for Cancer Survivors



- Connection vs. isolation
- Escape/respite
- Expansive perspective
- Safety & comfort
- Symbol of life & renewal

(Blaschke, 2017)

# Meditative Walks for the Seasons of Life

In 2017, we collaborated with a Horticultural Therapist at the Denver Botanic Gardens.

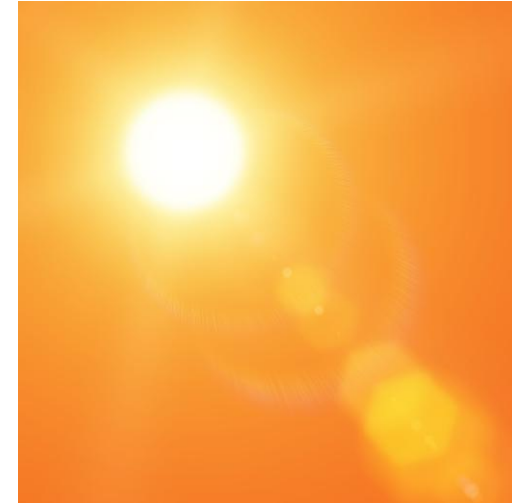
The vision was a mindful walking series based on the four seasons, each centered around a nature-based theme.





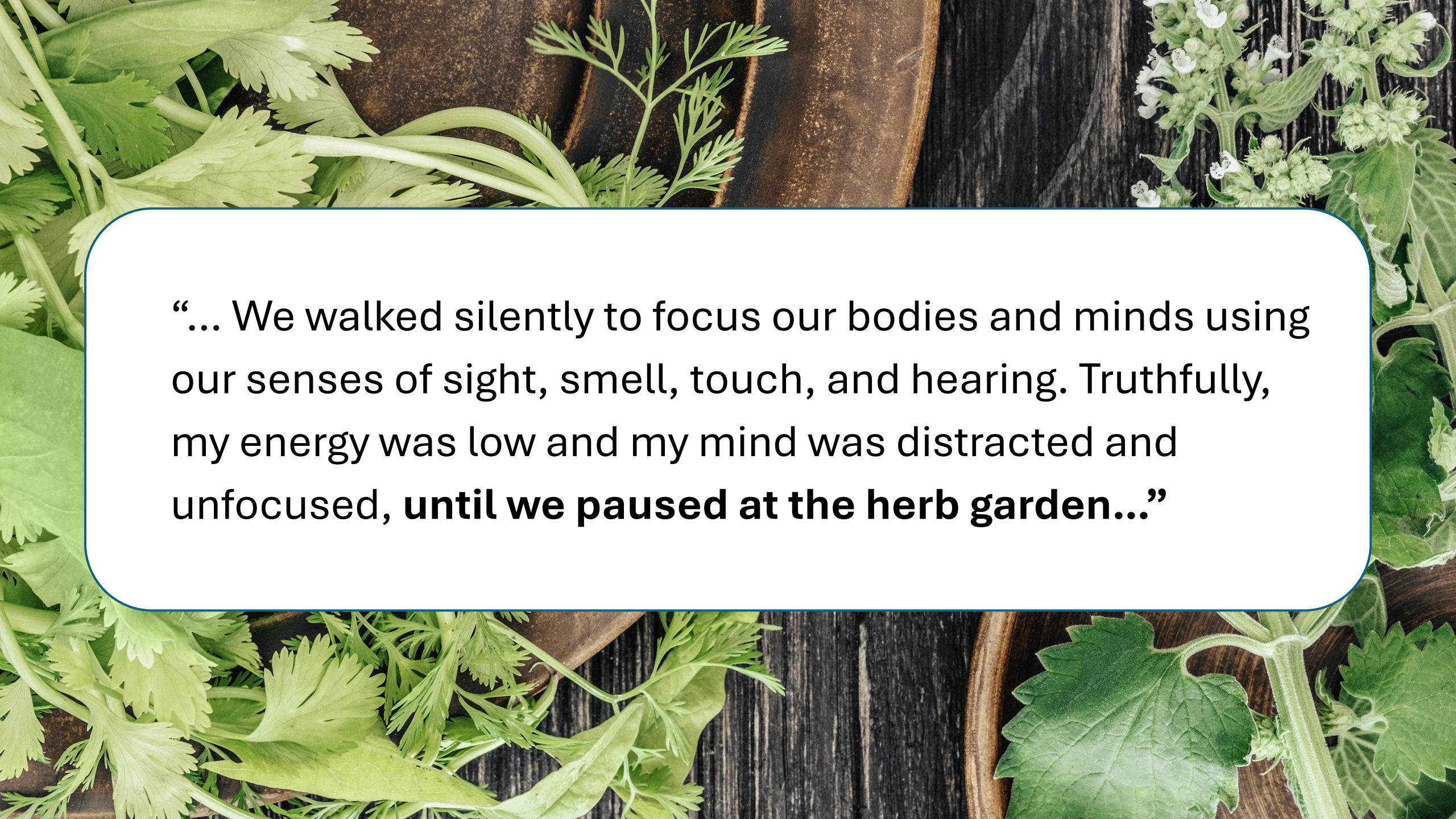
# What happens during a Meditative Walk

We walk slowly and silently as a group, noticing our surroundings with our five senses.




We pause and sit to share what we noticed.






“... We walked silently to focus our bodies and minds using our senses of sight, smell, touch, and hearing. Truthfully, my energy was low and my mind was distracted and unfocused, **until we paused at the herb garden...**”



“...We were handed fresh leaves of different herbs. We were to guess each herb using our senses. My sense of smell woke up as I inhaled the aromas of spearmint, peppermint, chocolate peppermint, purple basil, and lemon verbena (my favorite). I began to **focus and relax** for the first time during the walk!...”



“...When the woman seated next to me started *munching* on the leaves, I was surprised! She encouraged me to try it. So I bit on the leaves .... Wow! The leaves tasted surprisingly pleasant and pungent. "See!", she said with a smile. What fun and joy to experience the intense flavors. **I became fully relaxed and focused with a delighted and silly smile on my previously serious face!**”

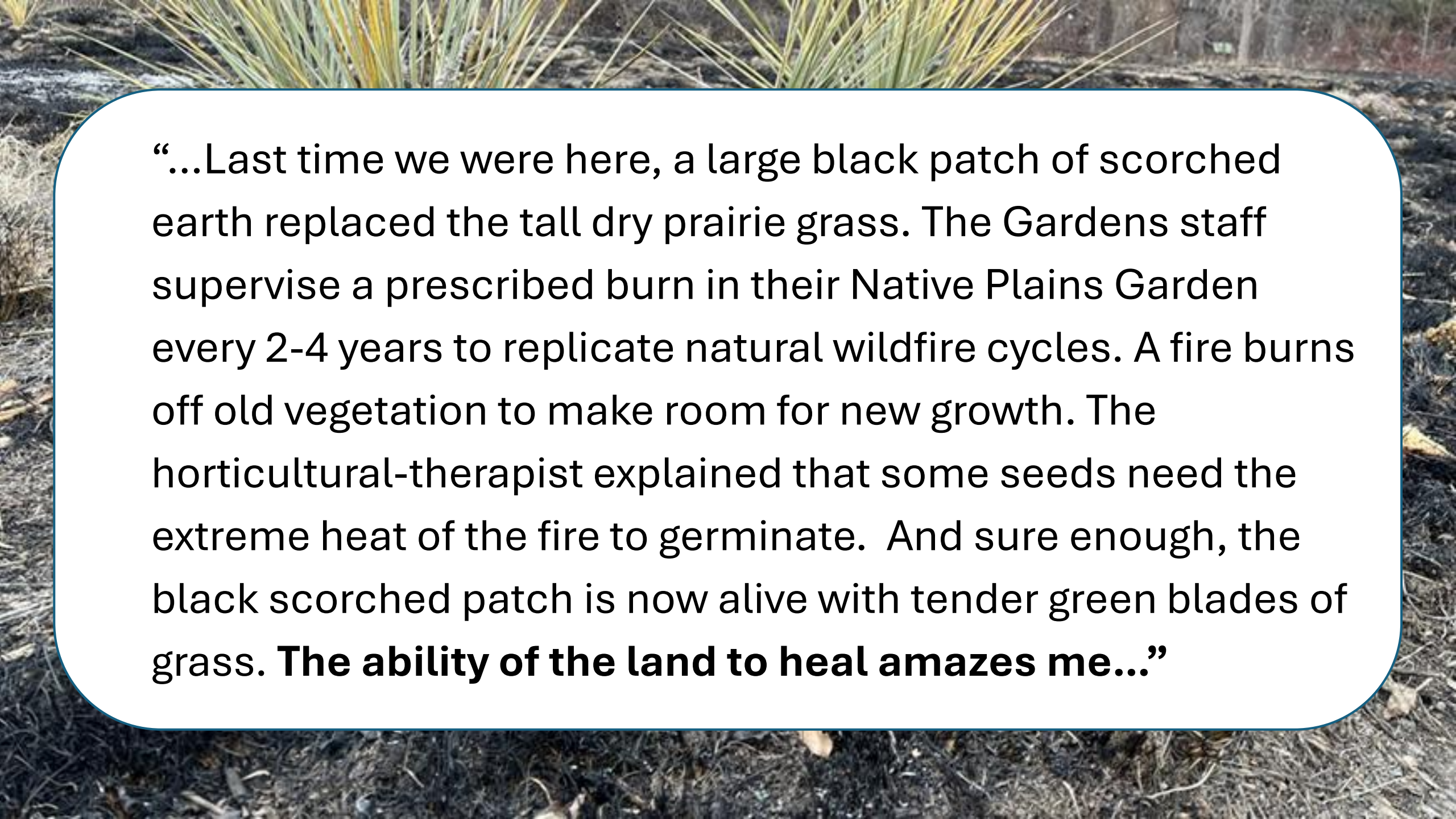
# Reflection on a Nature-Based Theme



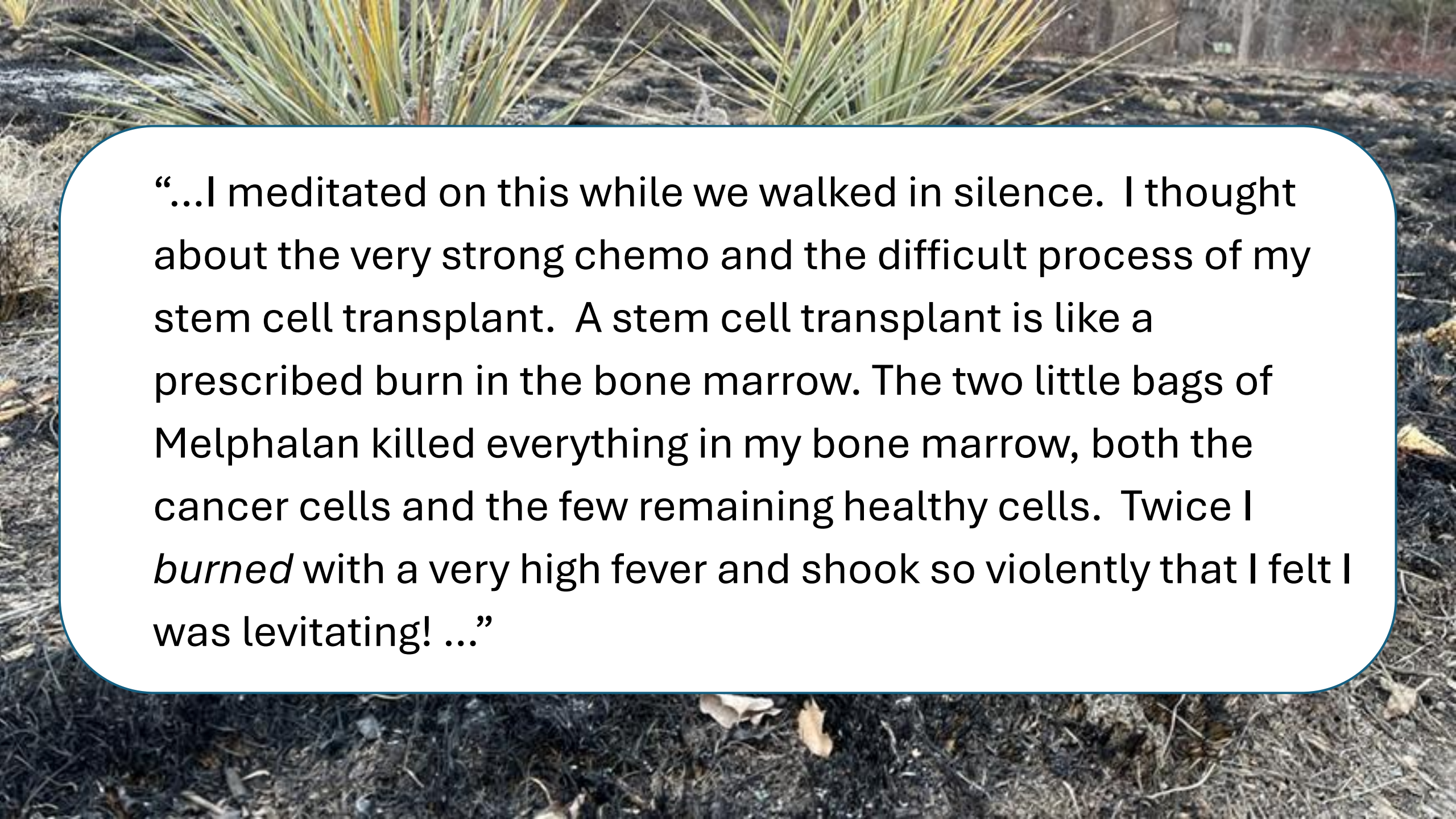
We reflect on what is happening in nature, and participants draw connections to their own lived experience.







“...Last time we were here, a large black patch of scorched earth replaced the tall dry prairie grass. The Gardens staff supervise a prescribed burn in their Native Plains Garden every 2-4 years to replicate natural wildfire cycles. A fire burns off old vegetation to make room for new growth. The horticultural-therapist explained that some seeds need the extreme heat of the fire to germinate. And sure enough, the black scorched patch is now alive with tender green blades of grass. **The ability of the land to heal amazes me...**”



“...I meditated on this while we walked in silence. I thought about the very strong chemo and the difficult process of my stem cell transplant. A stem cell transplant is like a prescribed burn in the bone marrow. The two little bags of Melphalan killed everything in my bone marrow, both the cancer cells and the few remaining healthy cells. Twice I *burned* with a very high fever and shook so violently that I felt I was levitating! ...”

“...However, the scorched earth of my bone marrow became a fertile soil with room for new stem cells to be transplanted, take root, and grow into new platelets and white and red blood cells. **The human body's ability to heal amazes me.**

In fact, I've been through many fires since my diagnosis in 2016. Yet I have survived them too. **The old was burned away and I feel that I've experienced new growth in many aspects of my life.**

*You turn mourning to dancing; You give beauty for ashes;  
You turn shame into glory.”*





# Closing the Meditative Walk

We end in a circle,  
each sharing a word or  
intention to take with  
us, and close with a  
collective breath.



# Mindfulness measures: pre & post-test



On a scale of 1-10...

- How aware and connected with your body ...
- How aware and connected with the natural environment ...
- How focused ...
- How at ease ...

...do you feel in the present moment?

# Meditative Walks post-group feedback



*“Reminder to experience the moment.”*

*“Very relaxing and extremely peaceful.”*

*“Camaraderie.”*

*“Living with cancer is stressful, to say the least. These walks help me center myself, relieve some anxiety, & are just plain enjoyable.”*

# Safety & Accessibility considerations

- Ease of access to site
- At least 2 facilitators present
- Use of assistive device, or caregiver
- Water, hat, sunscreen, jacket
- Walk slowly, take breaks to sit
- Acknowledgement form & Release of Liability



# Incorporating Nature into Cancer Care: Contexts



- Indoor
- Outdoor
- Phone / virtual
- Homeplay activities

# Incorporating Nature: Intervention Types



- Just being outside
- Evoking nature
- Sensory Awareness Exercises
- Sit spot
- Wanders
- Conversations with the Natural World

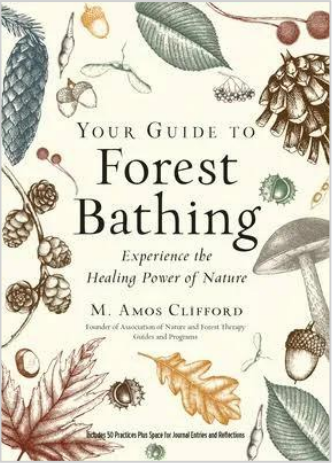
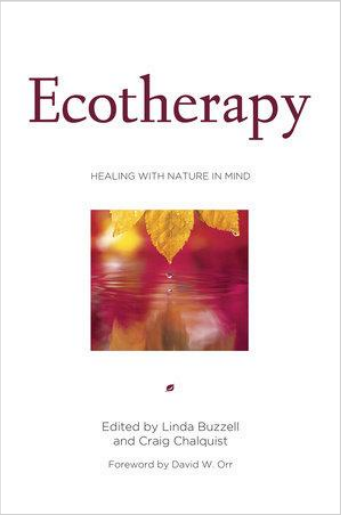
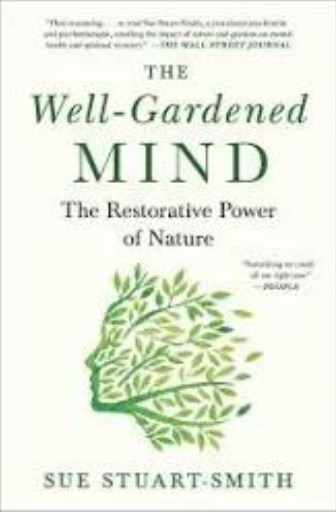
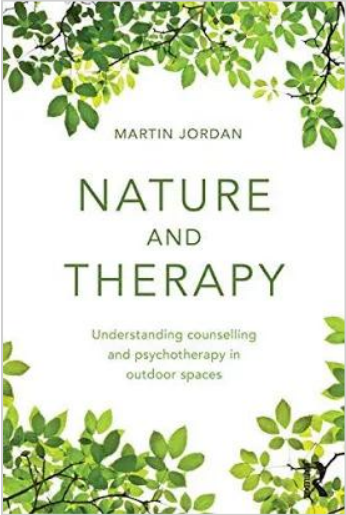
How might you  
incorporate nature...

...into your work with  
patients & caregivers?

...into your care for  
yourself as a  
clinician?



# Resources for Therapeutic Nature-Based Practice



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*Earth Teach Me*  
Ute Prayer



# Therapeutic Nature-Based Interventions in Cancer Care: Practices & Resources

Nature-based interventions can be adapted across settings. Direct outdoor experiences are valuable, but meaningful nature connection can also occur indoors, virtually, or through imagination and memory.

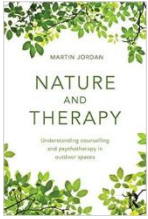
CONTEXTS:			
Indoor	Outdoor	Online/Phone	Homeplay activities
Indoor plants & pets	Hospital gardens	Being outdoors in parallel	Invite patients to spend time outdoors
Viewing nature through a window	Yard, porch, or balcony	Guided imagery	Offer individualized "nature prescriptions"
Nature photos, artwork, audio, or video	Local parks and green spaces	Nature poetry and readings	Encourage journaling or reflection on nature experiences.
Nature memories and storytelling	Walking paths and community gardens	Nature photos & audio	

Below are some examples of practices to incorporate nature into supportive care with patients.

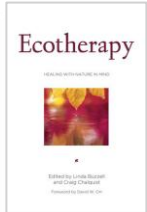
INTERVENTION TYPES:	
<b>Just Being Outside</b>	<p>One of the most accessible interventions is simply spending time outdoors.</p> <p><u>Examples:</u>            Sitting quietly in fresh air            Feeling sunlight or wind on the skin            Listening to birdsong            Observing clouds or changing weather            Taking a walk</p>
<b>Evoking Nature</b>	<p>Nature can be therapeutically engaged even when direct access is limited.</p> <p><u>Examples:</u>            Guided imagery            Nature memories and storytelling            Poetry, prose, and nature-based readings            Reflective journaling</p>

<b>Sensory Awareness Exercises</b>	<p>Invite patients to engage mindfully with the natural world <b>using each of the five senses</b>. This can be done sitting or walking, indoors or outdoors.</p>
<b>Sit Spot</b>	<p>A "sit spot" is a location visited repeatedly to develop familiarity and relationship over time. Invite patients to choose a spot they can visit frequently without much effort.</p> <p><u>Sit Spot example 1:</u> Choose a sit spot to develop a relationship with over time. This may be indoors with a view of nature through a window, or outdoors on a porch or a spot in the yard. Visit frequently and notice the stories that unfold there: a bird builds a nest; a tree drops its leaves; the seasons change. See what arises in you as you develop your relationship with this place.</p> <p><u>Sit Spot example 2:</u> Explore your sit spot using each of your senses one at a time. Spend some time engaging the senses other than sight with your eyes closed. Notice how your relationship to your sit spot feels after this exercise.</p>
<b>Wanders on the Land</b>	<p>A “wander” differs from a walk or hike. Curiosity, rather than destination, guides the practice. A wander is generally guided by a central <b>question</b> or <b>intention</b>.</p> <p><u>Question-based Wanders:</u> “What do I need to know about...balance; death; relationships; letting go...?” etc. Wander while holding the question, and notice what nature-being (i.e. tree, bird, stone) draws your attention. Spend some time with that nature-being. What insights emerge?</p> <p><u>Intention-based Wanders:</u> Intention example 1: Find a nature-being that represents...safety, resilience, your inner child, etc. Spend time with it, then wander to the next. Be led by curiosity.</p> <p>Intention example 2: “Awe Wander”: Allow yourself to wander and be drawn to what brings you awe or delight. Take it in with your senses as long as you like, then wander to the next. Be led by curiosity, pleasure, joy.</p>
<b>Conversations with the Natural World</b>	<p>Invite patients to engage imaginatively in dialogue with a plant, tree, bird, stone, or other “nature-being.”</p> <p><u>Conversation example 1:</u> Allow yourself to be drawn to a nature-being that reminds you of some aspect of <b>yourself or your life</b> as it is right now. If this being could speak about this shared aspect of your lives, what would it say? Journal to it, or dialogue with the nature-being in your mind.</p> <p><u>Conversation example 2:</u> Allow yourself to be drawn to a nature-being that represents <b>what you most need right now</b> (i.e. Belonging; Inner Wisdom; Nurturing). Spend some time with the nature-being, listening to what it has to say to you. Write a letter of care or support from this nature-being to you.</p>

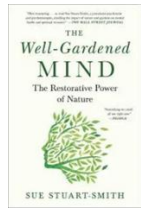
## Helpful Resources for Therapeutic Nature-Based Practice



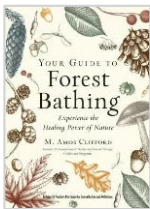
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