

Health Equity & Integrative Health through the Lens of Indigenous Technology/Permaculture



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Acknowledgement

In this presentation, I address the principles of permaculture, acupuncture, and other traditional medicines. These principles rely upon indigenous methods from all corners of the earth and as a result, I would like to acknowledge the deep history and roots in the theories in this presentation.

I created this presentation while standing on a part of the earth that was initially inhabited by the Lenni Lenape Native Americans and am presenting on land that was initially inhabited by the Erie People.

Ruthann Russo

Objectives

- Practice and assess evidence-based benefits of connecting to nature
- Analyze Permaculture Principles, derived from Indigenous Methods
- Explore Universal Integrative Health through the lens of Permaculture Principles/Indigenous Methods







Evidence-based research benefits of connecting to nature

- **Physiological:** reduces heart rate, pulse, and blood pressure, improves heart rate variability, increases natural killer cell activity and decreases the need for stress hormones
- **Psychological:** Nature improves concentration, life satisfaction, emotional functioning, self-esteem, self-regulation, social competency, vitality, and freedom to be our authentic selves
- Nature increases the ability to experience awe, connection to the greater whole, a sense of spirituality.
- Spending time in nature may improve social well-being and kindness and empathy towards others



Ethical Principles of Traditional Indigenous Medicine

Celidwen et al. (2023)

1. **Reverence** for Mother Nature
2. **Respect** indigenous ways of knowing and being
3. **Responsibility** for use, benefits, harms
4. **Relevance** of indigenous knowledge in conventional medicine
5. **Regulation** of tangible and intangible use of traditional indigenous medicines
6. **Reparation** and sharing of benefits
7. **Restoration** of indigenous authority
8. **Reconciliation** of Indigenous-Western relations


Indigenous Medicine Definition


Celidwen et al. (2023)

- ethical, ecosystem-protective and holistic
- interconnection of humans and the environment
- reverence for the planet that guides all relationships
- preserving all life/living compassionately
- collective care to sustain the wellbeing of the medicines and future generations

Permaculture Principles:



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- A wide-angle photograph of a lush green agricultural field, likely a soybean field, with rows of crops stretching towards a distant treeline under a bright blue sky with scattered white clouds. The perspective is from a low angle, looking down the center of the rows.
- ✓ a whole-systems design
 - ✓ based in *indigenous methods*
 - ✓ to create systems that:

- 
- ✓ benefit and teach others
 - ✓ *regenerate the earth*
 - ✓ promote equal distribution of resources
- (Morrow, 2006)

12 Permaculture Principles

1. ***Observe and interact***
2. Catch and store energy
3. Obtain a yield
4. ***Apply self-regulation and accept feedback***
5. Use and value renewable resources & services
6. Produce no waste
7. ***Design from patterns to details***
8. ***Integrate rather than segregate***
9. ***Use small and slow solutions***
10. ***Value Diversity***
11. ***Use edges and value the marginal***
12. ***Creatively use and respond to change***

Permaculture Principles: 3 Themes

Awareness

Diversity

Energy & Waste Management



Permaculture Principles: Themes

Awareness

- Observe & Interact
- Apply Self-Regulation & Accept Feedback
- Design from Patterns to Details
- Use Small and Slow Solutions


Diversity

- Integrate Rather than Segregate
- Value Diversity
- Use Edges and Value the Marginal
- Creatively Use and Respond to Change

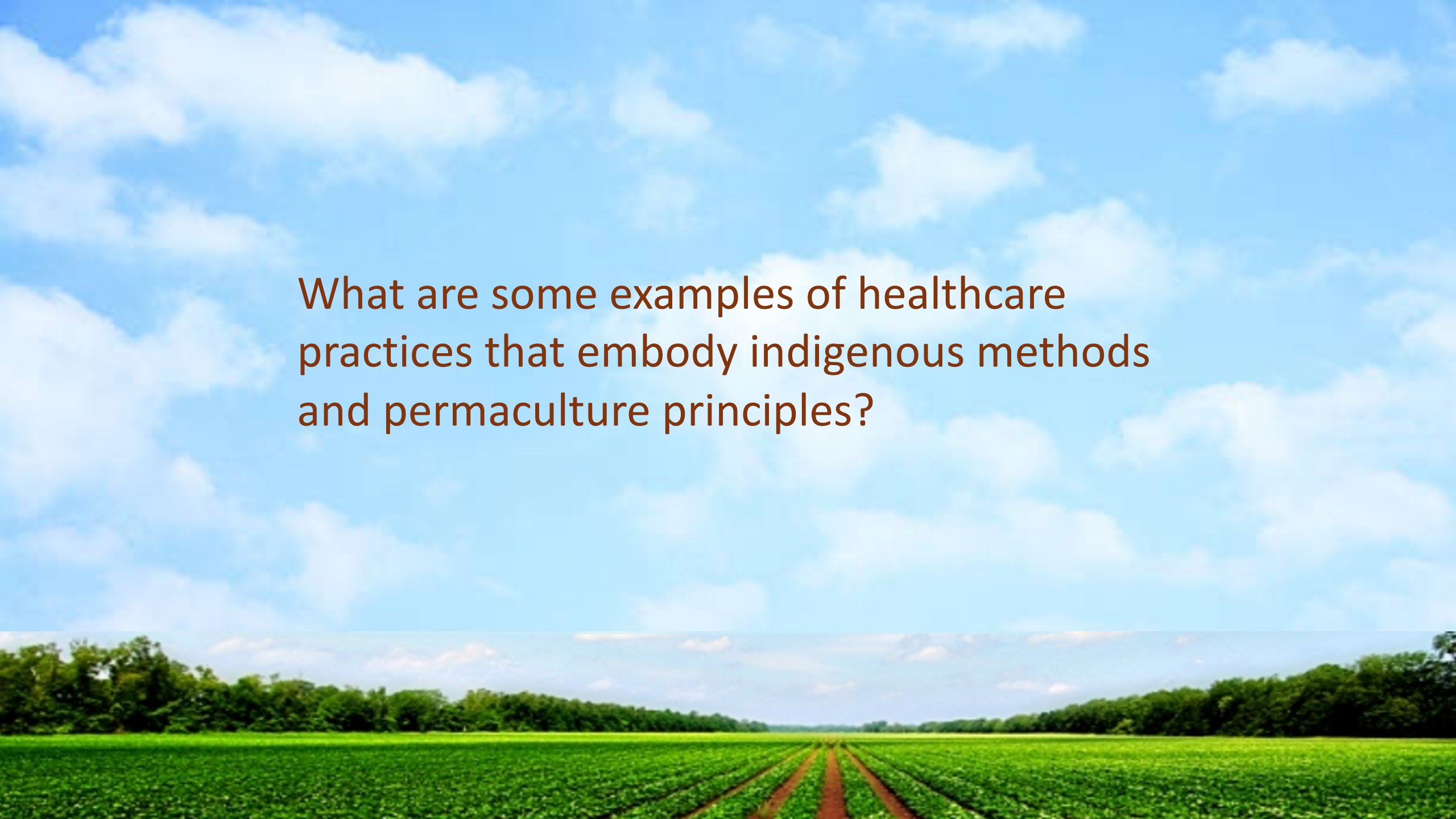
Energy & Waste Management

- Catch & Store Energy
- Obtain a Yield
- Use and Value Renewable Resources & Services
- Produce No Waste




A landscape photograph showing a vibrant green field in the foreground, with a dirt path leading towards a dense line of trees in the distance. The sky is a clear, bright blue with scattered white clouds. The overall scene is peaceful and natural.

“Indigenous healing traditions believe that human lives are interdependent with and contingent on living in ethical relations with other people, with our ancestors, and plants and animals and the natural world.” (Celidwen et al. 2023)

A landscape photograph showing a vast green field with rows of crops, a dirt path leading into the distance, and a bright blue sky with scattered white clouds. The text is overlaid on the upper portion of the image.

What are some examples of healthcare practices that embody indigenous methods and permaculture principles?



“Indigenous/Permaculture Healthcare”

- Home birth & breast feeding
- Complementary medicine
- Mind-Body Medicine practices
- Spirit of place, indigenous cultural revival
- Dying with dignity



Permaculture builds on a culture of *self-reliance, community values, and practical skills*





Working Class Acupuncture (WCA)

Peoples' Organization of
Community Acupuncture (POCA)



Awareness:

- Observe & Interact
- Design from Patterns to Details
- Use Slow and Small Solutions





Awareness:

- Observe & Interact
- Apply Self-Regulation & Accept Feedback
- Design from Patterns to Details
- Use Slow and Small Solutions



Diversity:

- Integrate Rather than Segregate
- Value Diversity
- Use Edges and Value the Marginal
- Creatively Use/Respond to Change

A series of acupuncture treatments can be a container for navigating change

- Lisa Rohleder, Working Class Acupuncture



A cluster of vibrant pink mushrooms with gills, growing on a mossy log in a forest. The mushrooms are the central focus, with their stems and caps showing a rich, saturated pink color. The background is a soft-focus forest scene with green foliage and a prominent red flower on the right side. The lighting is warm and natural, highlighting the texture of the mushrooms and the moss.


Indigenous Practices:

- honor the earth
- set an intention

Offer the patient the opportunity, at the beginning of their treatment, of *setting an intention* for their healing process.

- Lisa Rohleder, WCA



A close-up photograph of a person's hands. The left hand holds a clear glass filled with water. The right hand is open, palm up, and holds two pills: a red and white capsule and a white round tablet. The person is wearing a blue and white striped shirt. The background is a plain, light-colored wall.

Permaculture “Healthcare” Goals:

- ✓ Develop useful self-sufficiency skills
- ✓ Move from dependent consumers to interdependent producers (of health)

Holmgren, 2022

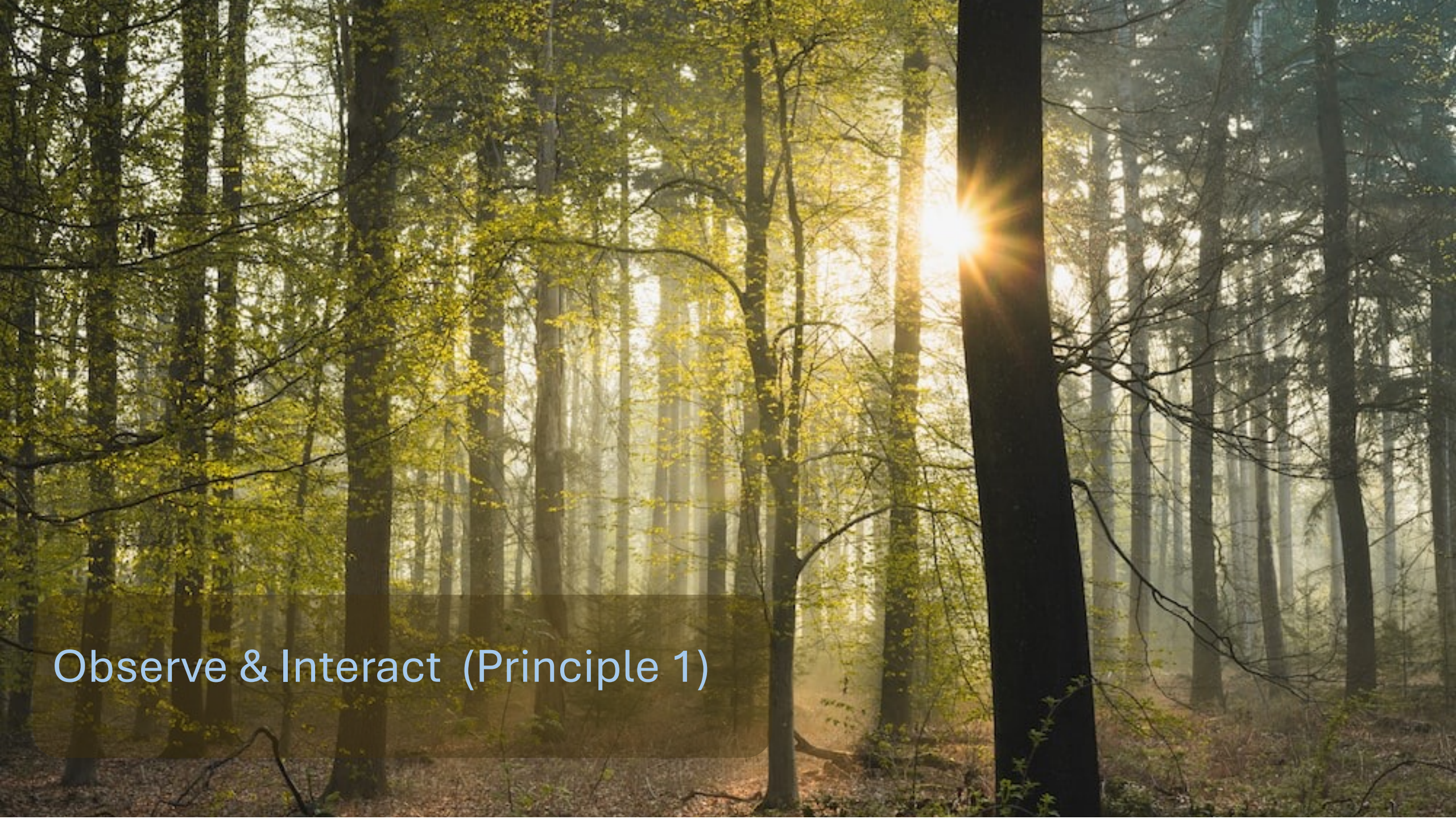


Lincoln Recovery Center, Bronx, NYC

A large, leafy tree with a thick trunk stands in a grassy field. The tree's branches are full of green leaves, and its shadow is cast on the grass. A semi-transparent green rounded rectangle is overlaid on the right side of the image, containing white text.

Awareness

- Observe & Interact (1)
- Apply Self-Regulation & Accept Feedback (4)
- Design from Patterns to Details (7)
- Use Small and Slow Solutions (9)



Observe & Interact (Principle 1)



Apply Self-Regulation & Accept Feedback (Principle 4)

An aerial photograph of a lush green forest. A winding river flows through the center of the forest, creating a path that curves and meanders. The trees are densely packed, and their vibrant green color dominates the scene. The river's surface is a deep blue, contrasting with the surrounding greenery. The overall composition is a harmonious blend of natural elements.

Design from Patterns to Details (Principle 7)



Use Slow and Small Solutions (Principle 9)

A lush green forest with a stream flowing over mossy rocks. The scene is vibrant with various shades of green, from the deep forest floor to the bright canopy above. The water in the stream is dark and flows smoothly over several large, rounded rocks covered in bright green moss. The background is filled with tall, thin trees and dense foliage, creating a sense of a deep, healthy ecosystem.

Diversity

- Integrate Rather than Segregate (8)
- Value Diversity (10)
- Use Edges and Value the Marginal (11)
- Creatively Use and Respond to Change (12)



Integrate Rather than Segregate (Principle 8)



Use and Value Diversity (Principle 10)

Use edges and value the margins (Principle 11)



Use edges and value the margins (Principle 11)



Observing nature reveals *that everything is connected*

Creatively use and respond to change (Principle 12)



The healthcare we desire¹:

- Focuses on the whole person, including physical, mental, social and spiritual dimensions
- Is patient-centered and supports self-healing and health creation
- Is participative and respects individual choices
- Is evidence-based by integrating clinical experience and patient values with the best available research
- Respects cultural diversity and regional differences
- Is an integral part of community and planetary health
- Uses natural and sustainable resources that are respectful of the health of our planet
- Integrates traditional, complementary, and biomedical practices in a supportive and collaborative manner



¹The People's Declaration for Traditional, Complementary and Integrative Healthcare, <https://tcih.org>

Principle

Observe and Interact

Apply Self-Regulation and Accept Feedback

Design from Patterns to Details

Use Slow & Small Solutions

Integrate Rather than Segregate

Use and Value Diversity

Use Edges and Value the Marginal

Creatively Use and Respond to Change

Example Practice

Body Scan

Mindful Digestion, Heart-Focused Breathing

TuiNa, QiGong, Ear Seeds (Any Traditional Medicine Practice)

Physiological sigh

Integrative Medicine!

Chiropractic + Acupuncture + Physical Therapy

Energy Medicine: Safe + Invisible: Reiki, TT, Prayer

Use with #4: Apply Self-Regulation and Accept Feedback....
Listen to the body's changes and choose IM therapy(ies)



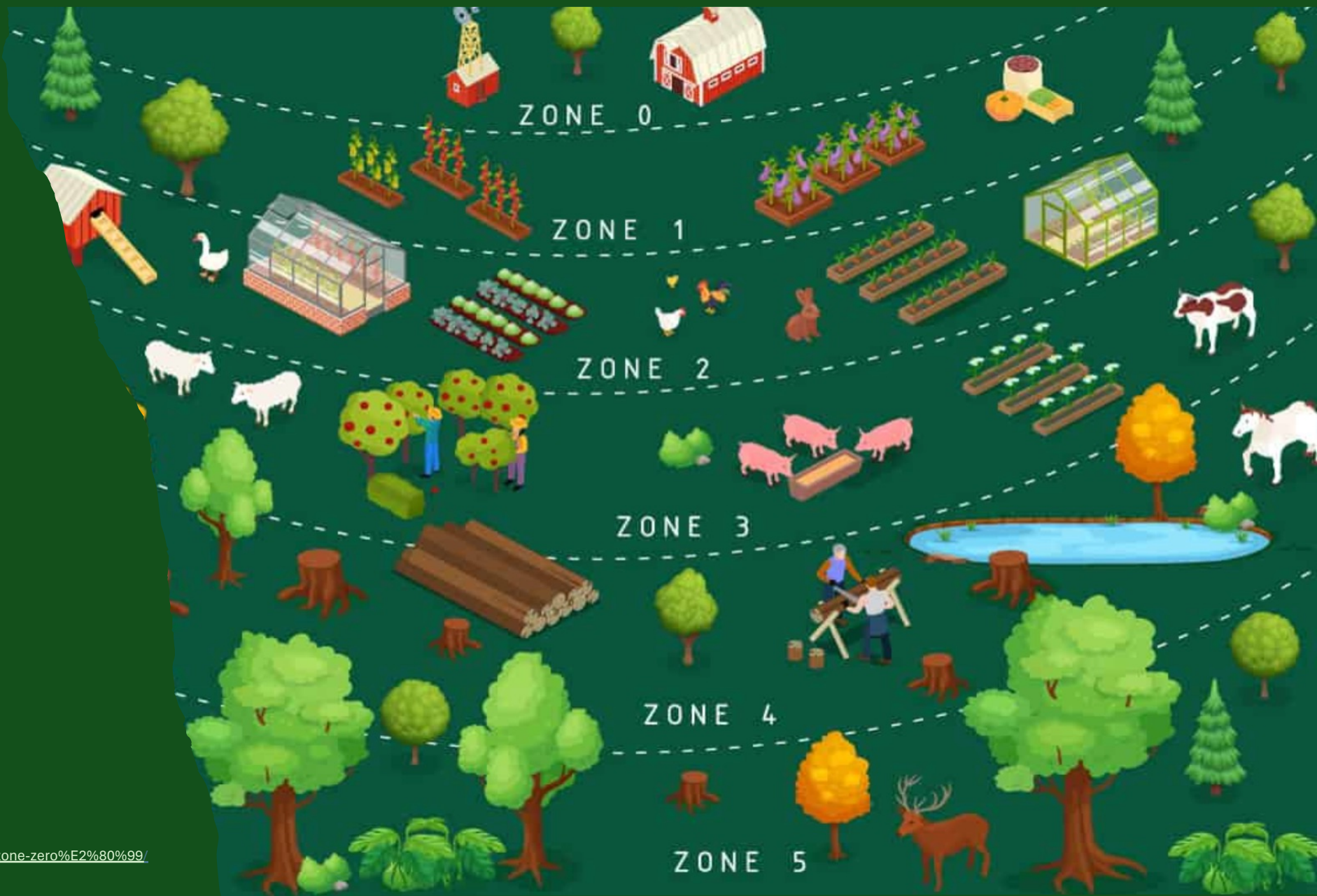
Permaculture Zones



ZONE 00



Permaculture Zones



00: Managing our internal landscape

ZONE 00



0: House/Dwelling

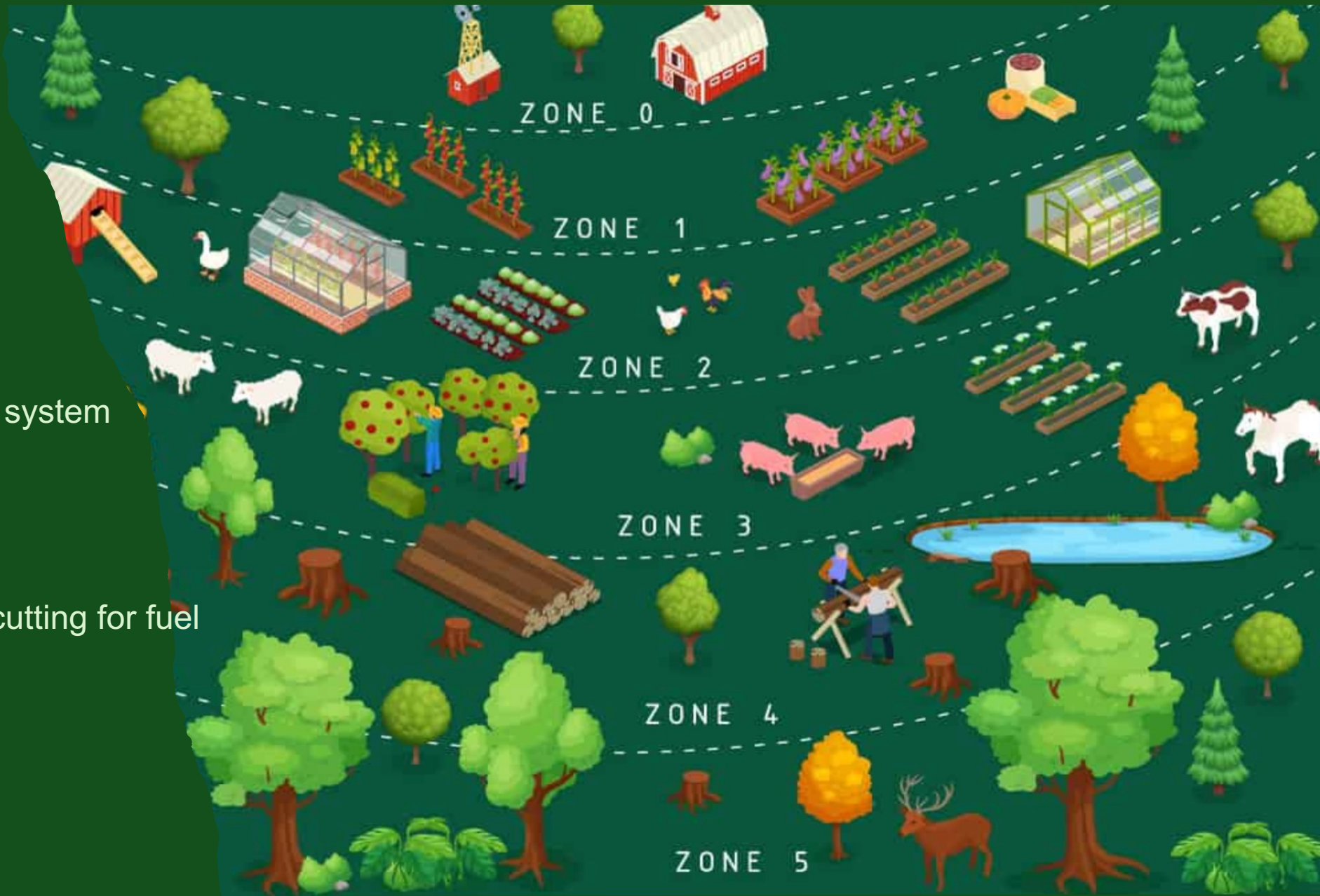
1: Observation/frequent visits

2: Less intensively managed

3: Occasional visit, part of the system

4: Wild food gathering, wood cutting for fuel

5: Natural unmanaged areas



00: Managing our internal landscape

ZONE 00



00: Integrative Health Practices

0: House/Dwelling

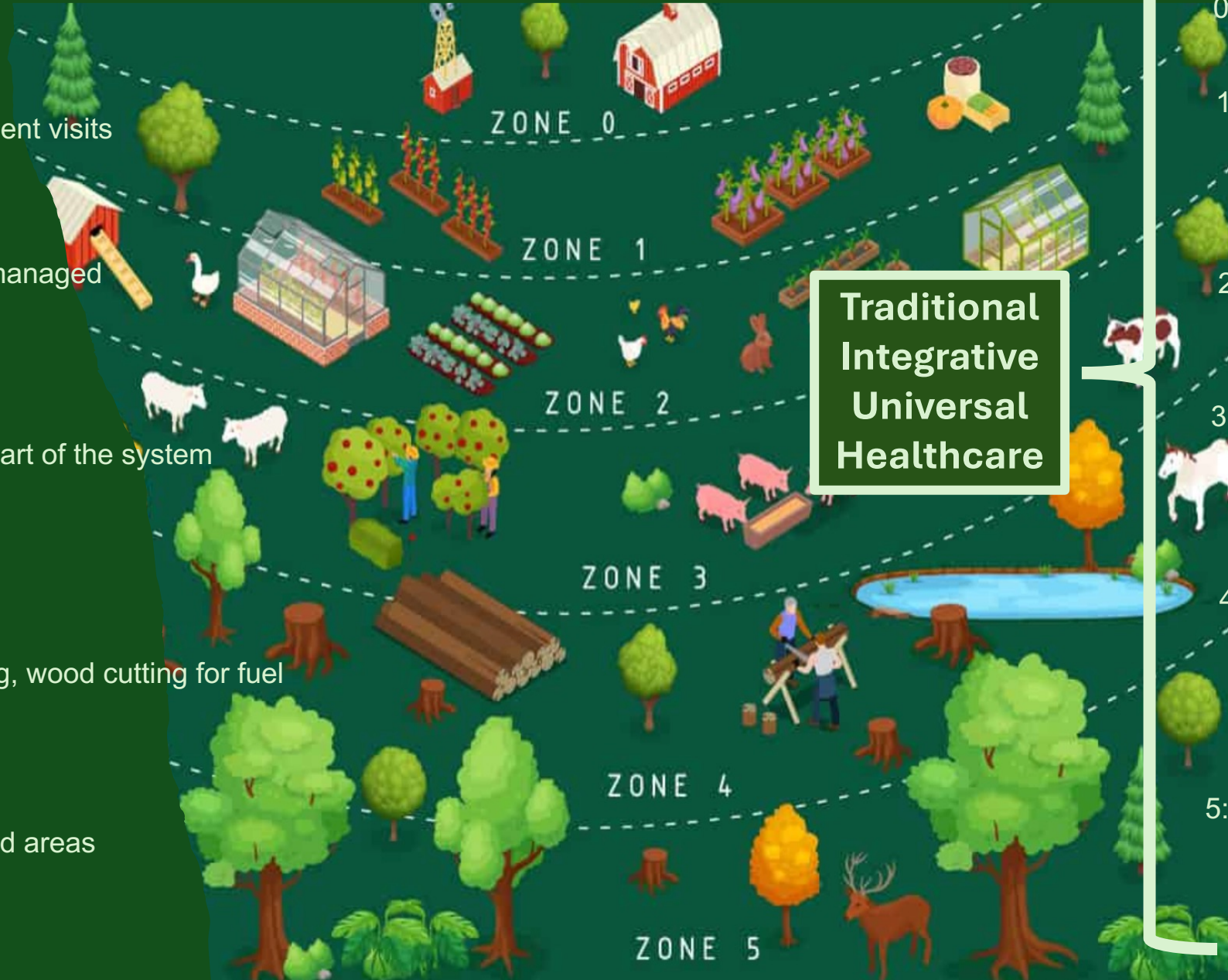
1: Observation/frequent visits

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**Traditional
Integrative
Universal
Healthcare**

0: Group/Community Tx/Interaction

1: Traditional/Integrative Primary Care/Choice/Relevance/Respect/Reverence

2: Person-Specific Needs/ Choice/Relevance/Respect/Reverence

3: Integrative Acute Care/Choice/Relevance/Respect/Reverence

4: System level – Local Responsibility/Regulation/Reparation/Restoration/Reconciliation

5: System level – Global Responsibility/Regulation/Reparation/Restoration/Reconciliation

Set an Intention



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Other References

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- [Integrative and lifestyle medicine strategies should include Earthing \(grounding\): Review of research evidence and clinical observations](#)
- [Spending at least 120 minutes a week in nature is associated with good health and wellbeing](#)
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