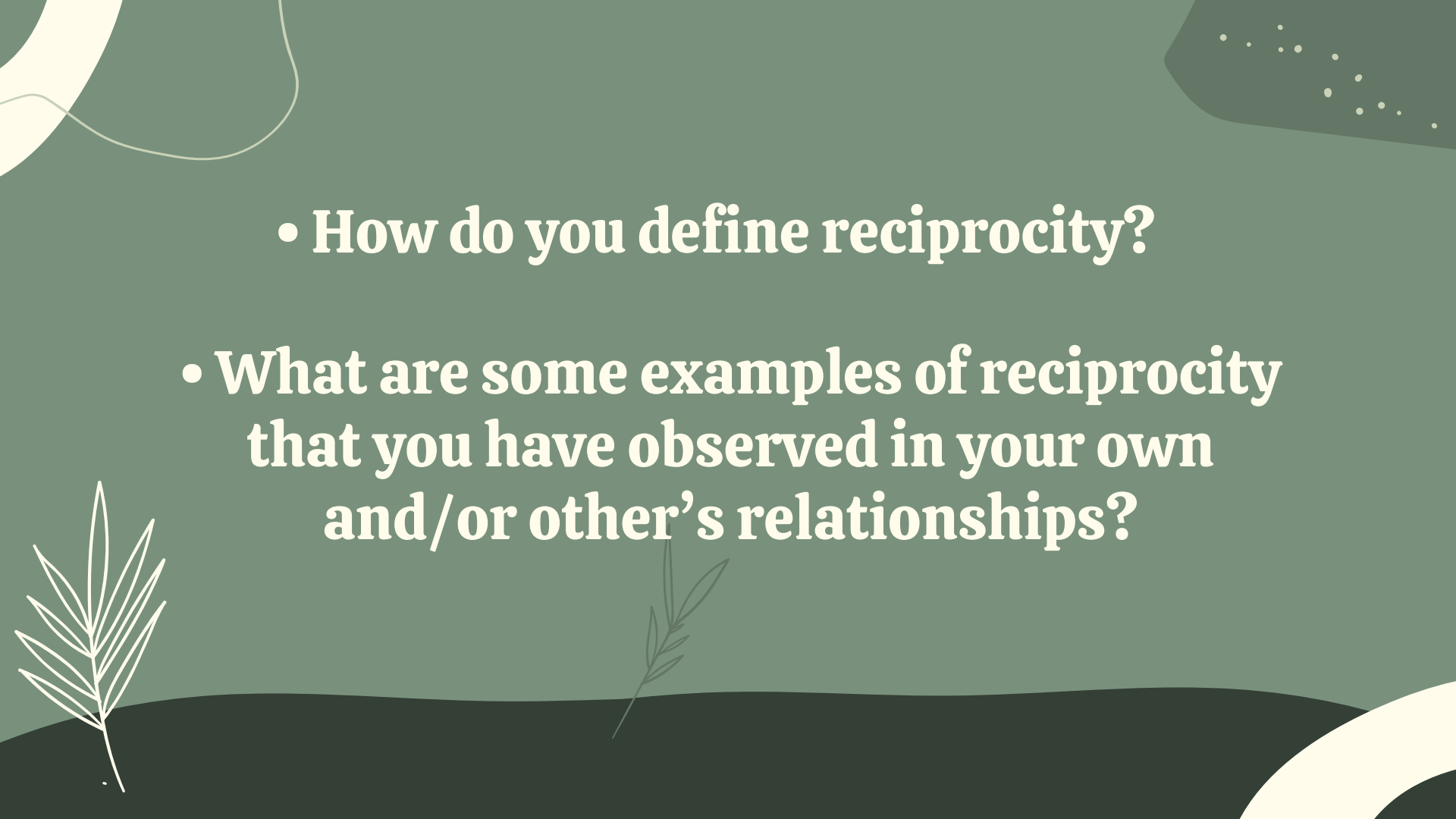


- 
- **How do you define reciprocity?**
 - **What are some examples of reciprocity that you have observed in your own and/or other's relationships?**



Reciprocity, Relationships, and Responsibility in Nurturing the Soil Food Web

Farm2Power Skillshare with Maddie Weikel

February 8, 2022

6pm-7:30pm PST

About

FARM 2 POWER

+ About Maddie



Welcome!

Name, pronouns, where you're
calling from, access needs, a place
you feel connected to



Community Agreements



Compassion: hold space for listening and empathy

Humble: take risks, embrace mistakes

Accountability: respect others, take responsibility for actions

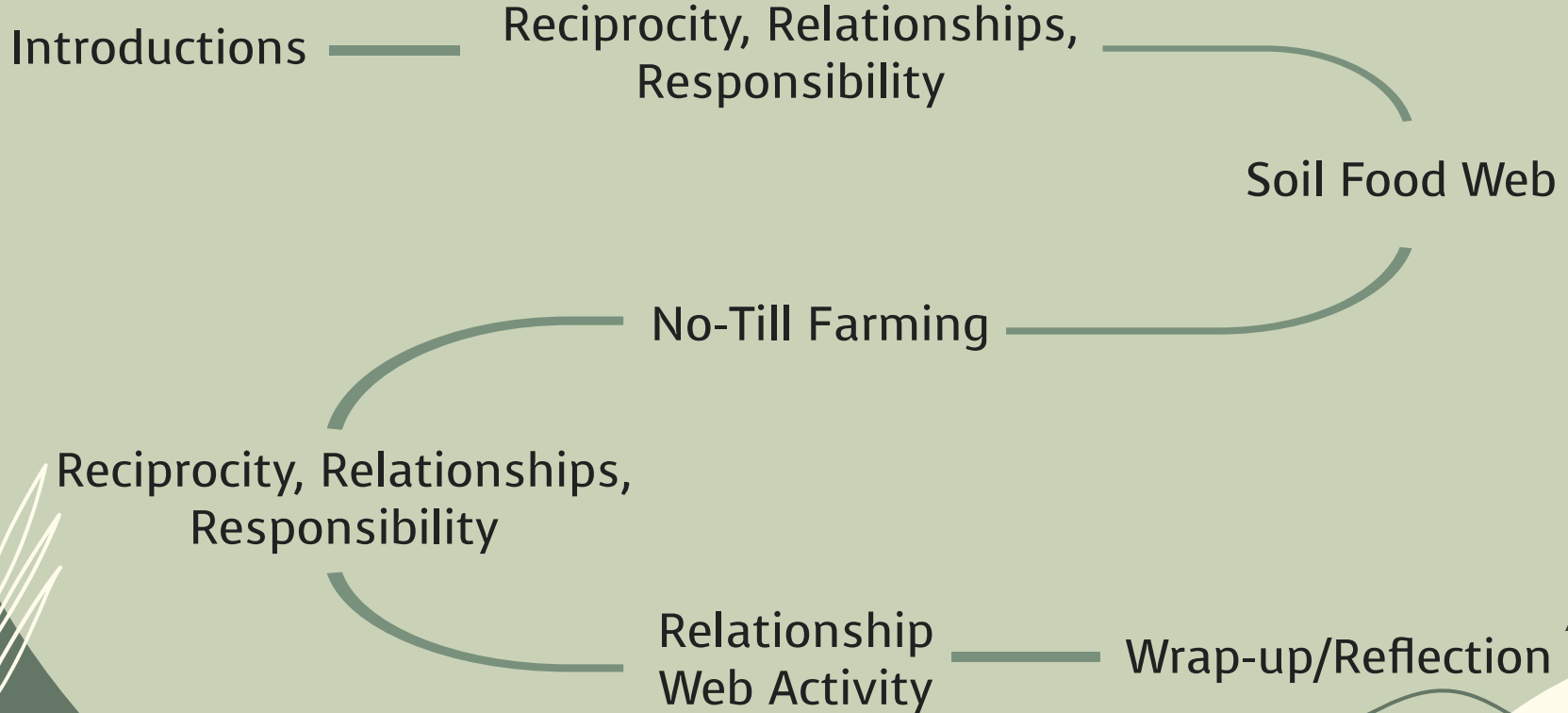
Natural: be yourself, use "I" statements

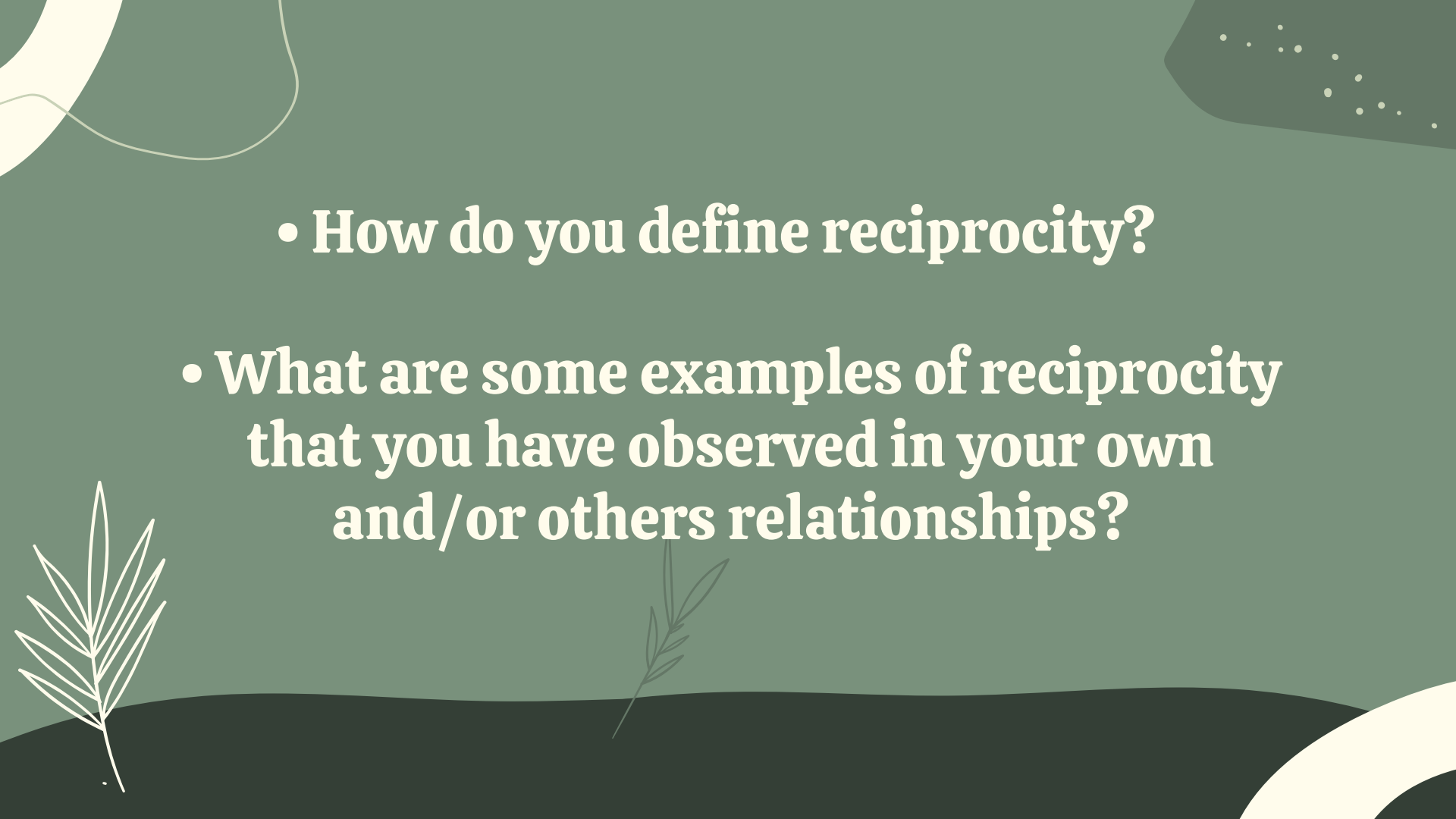
Grounding: be present, self-care

Educating: ourselves & each other



Session Flow



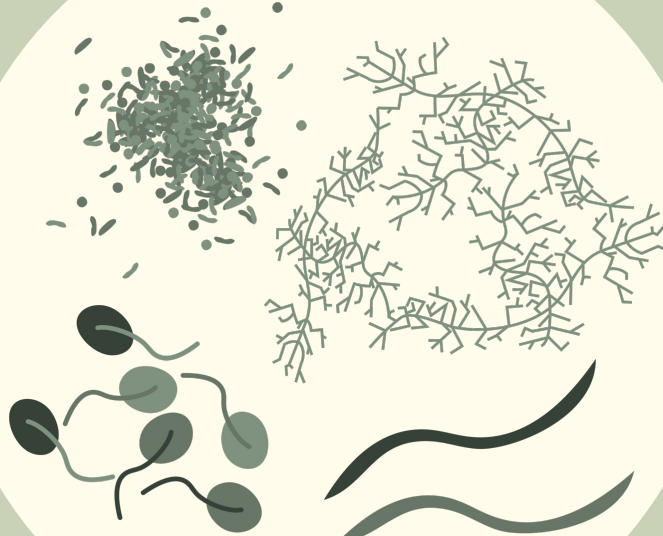
- 
- **How do you define reciprocity?**
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The Soil Food Web: Soil is Alive!

1 teaspoon of healthy soil houses...

1 billion
Bacteria

Thousands of
Protozoa



Several yards of
Fungi

Dozens of
Nematodes

Illustration by Maddie Weikel, adopted from Dr. Elaine Ingham Soil Food Web School

Plants

Microbes

Plants secrete special carbohydrates + proteins called **exudates** through their roots, which attract fungi + bacteria that want to eat the exudates

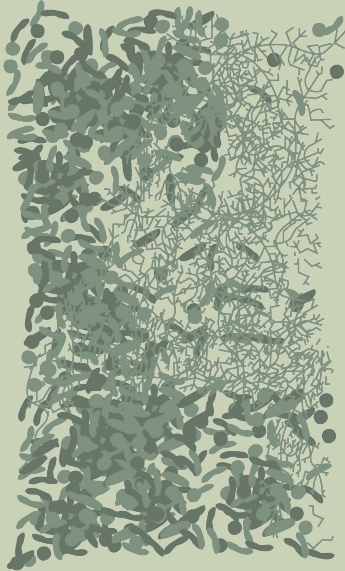


Bacteria + fungi are **decomposers** who collect nutrients that the plants want to absorb



Bacteria and Fungi

Fertilizer Bags



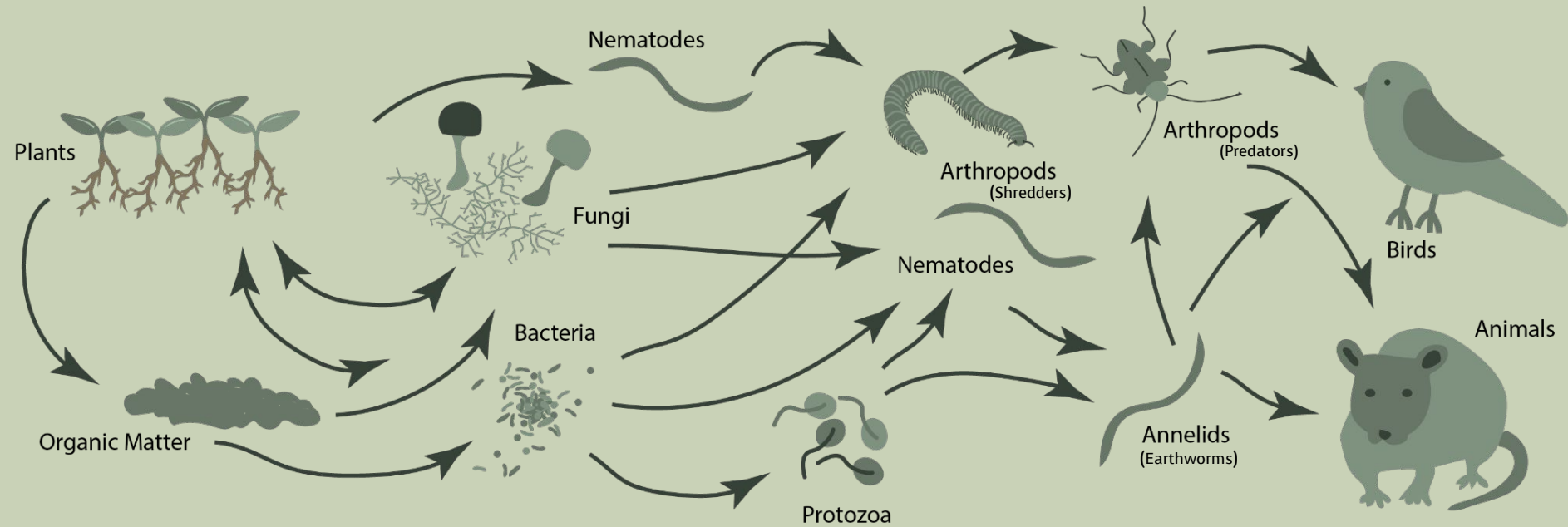
Bacteria and fungi **immobilize** nutrients in their bodies, preventing nutrients from washing out of the soil with erosion



Protozoa and Nematodes

Fertilizer Spreaders

The Soil Food Web



This diversity of organisms builds **soil structure** and packs the soil with **nutrients!**

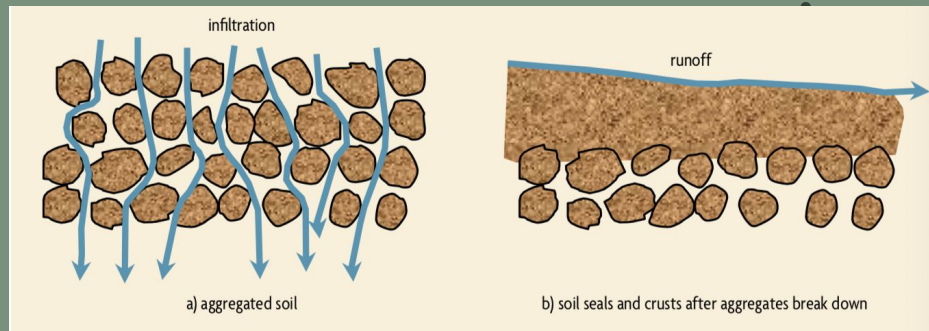
No-Till methods can help expand + protect the soil food web

Minimizing soil disturbance + maximizing soil coverage

Heavy use of mulches, compost, and cover crops + diversifying and rotating crops to protect the physical, chemical, and biological properties of the soil

Benefits of No-Till x Pitfalls of Tillage

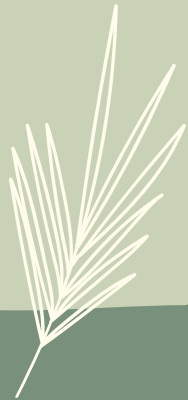
- Fluffy, tilled topsoil has poor structure + is more prone to erosion, nutrient run-off, poor aeration, poor drainage
- Tilling chops up microbial life, which forces organisms to continuously rebuild their networks + homes
- Poor soil structure + low microbial life inhibits soil's ability to hold onto nutrients, so nutrients need to be applied as chemical supplements



- Tillage greatly increases weed pressure in the long run
- Tilled soil = less effective at sequestering carbon

“Restoration of organic matter to the soil is part of healing from colonialism”

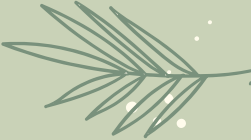
- Leah Penniman, Soul Fire Farm



No-Till Farming is about protecting + encouraging relationships

Where and how can we be active **stewards** of land +
(re)insert ourselves into **reciprocal social relationships**?

- Matthew Wildcat, assistant editor of *Decolonization: Indigeneity, Education & Society* and member of the Ermineskin Cree Nation



“A lot of the time you hear people say that the best thing people can do for nature is to stay away from it and let it be. There are places where that’s absolutely true and our people respected that. But we were also given the **responsibility to care for the land**. What people forget is that that means **participating**—that **the natural world relies on us to do good things**. You don’t show your love and care by putting what you love behind a fence. You have to be involved. You have to contribute to the well-being of the world”



- **Robin Wall-Kimmerer, environmental scientist and member of the Citizen Potawatomi Nation**



Responsibility + Reciprocity

"Participating" in the natural world means recognizing our **gift-giving** and **gift-receiving** responsibilities to one another, among humans and among other-than-humans

"Responsibilities are reciprocal (though not necessarily equal) attitudes and patterns of behavior that are expected by and of various parties by virtue of the different **roles** that each play in a **relationship"**

- Kyle Powys Whyte, Professor of Philosophy and member of the Citizen Potawatomi Nation

Activity: Relationship Web

“The living world is understood, not as a collection of exploitable resources, but as a set of relationships and responsibilities”

- Robin Wall-Kimmerer

Think about a space where you interact with food and/or land

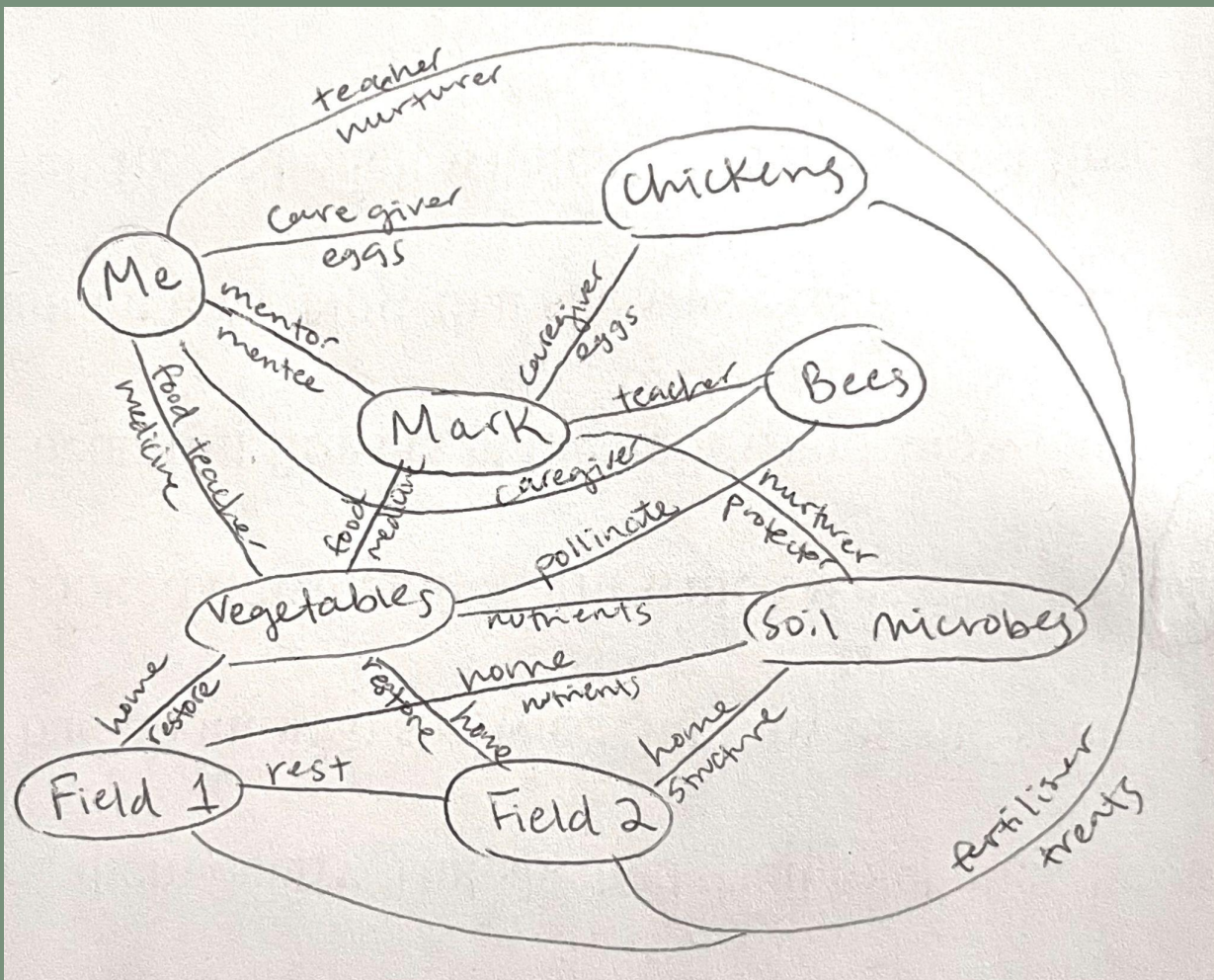
List/draw the relationships that exist in this space

List/draw one or more gifts you **offer** within these relationships

How do reciprocity + responsibility fit into your connection to farming, food, and/or land?

List/draw one or more gifts you **receive** within these relationships

Where in these relationships is there a lack of reciprocity? Is this lack caused and/or perpetuated by structural forces of racism, capitalism, surveillance, fatphobia, ableism, cisheterosexism, misogyny?



Relationships

- me - Mark
- us - vegetables
- us - chickens
- us - fields
- fields - microbes
- field 1 - field 2
- vegetables - bees
- rain - vegetables
- wind - microbes

Gifts I offer

- strength + movement to spread compost
- energy to zoom out
- gratitude + open heart during harvest
- protection for microbes

Gifts I receive


- food! medicine! love!
- lessons of community + camaraderie + care
- mentorship
- deep breaths

Activity Reflection



- Thinking about kitchen space, the relationships that are built in the kitchen and intention time to yourself. Having time to practice that skill

Middle eastern grocery store, familiarity of being in a small store, different than being in a larger store/chain. Thinking about living in an urban area where there are less options to purchase food. Relationship of being intentional about the places you go for food



Further Learning

This is a link!

On Soil and No-Till

- *Building Soils for Better Crops*, Magdoff and Van Es
- *The No-Till Organic Vegetable Farm*, Mays
- *Teaming with Microbes* series, Lowenfels and Lewis
- *Animal, Vegetable, Junk*, Bittman
- Dr. Elaine Ingham Soil Food Web School video resources
- *Farming While Black*, Penniman

On Reciprocity, Land, Relationships to Food

- *Braiding Sweetgrass*, Wall-Kimmerer
- *Settler Colonialism, Ecology, and Environmental Justice*, Whyte
- *Land as pedagogy: Nishnaabeg intelligence and rebellious transformation*, Betasamosake Simpson
- *Judaism Unbound* podcast episode: Nobody Owns Land
- *Mobilizing a knowledge economy of reciprocity, resurgence and decolonization*, Freeland Ballantyne
- *The Red Deal: Indigenous Action to Save Our Earth*, Red Nation

Thanks!



Do you have any questions?
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