# Questions from the New World

## Teacher Guides for Permaculture and Mythology

By William Paul, Planetshifter.com

Photo: Bee Naturalles on Unsplash



## Prelude

## Perma - what culture ...

Cultural resistance / resilience?

What part of perma culture is permanent to you?

The old world isn't going away

Who controls the supply chain?

What part do we want to play?

What is permanent culture?

Where are some strong cultural values in Permaculture?

- re-use recycle repurpose
- working with Nature, a love for Community and Earth
- sharing surplus with others

What are you receiving - and giving back - today?

Vote Perma Culture?

## Questions from the New World

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## Permaculture and COVID-19

A Teacher's Guide

## **Definitions** –

**COVID-19** is caused by a coronavirus called SARS-CoV-2. Older adults and people who have severe underlying medical conditions like heart or lung disease or diabetes seem to be at higher risk for developing more serious complications from COVID-19 illness. COVID-19 is a community-spread disease that has spawned the following protocols: washing hands, wearing masks and maintaining a six -foot distance from others. While vaccines are forthcoming to treat this pandemic, many fear that mutations will over-run the global health care system.

**Permaculture** is a set of ethics and design principles centered on whole systems thinking, simulating, or directly utilizing the patterns and resilient features (the capacity of an ecosystem to recover from change) observed in Nature. Permaculture principles and systems are now integrated into a growing number of fields from regenerative agriculture, rewilding, and community resilience. The Three Ethics of Permaculture are:

1. Care of the Earth, 2. Care of People, and 3. Returning surplus to the system.

[Mollison]

## Four of 12 Principles of Permaculture are:

Apply Self-regulation & Accept Feedback. Feedback is critical, whether applied to natural ecosystems, business processes, or personal relationships. It gives us the information on the effects of our actions and allows us to make better decisions based on those effects.

Integrate Rather Than Segregate. Use the synergy between different elements to your advantage. Integration allows complementary qualities to support each other.

Use Small and Slow Solutions. Here is where our economy has its real opportunities, scaling back from the industrial-sized systems we've developed. Slow solutions allow for feedback, adaptation and corrective action of any adverse impacts.

Creatively Use and Respond to Change. Given how dynamic living systems are, it is unavoidable that changes and problems may arise. As they do arise, turn them to your advantage, drawing on your personal and organizational assets to best address them. Consider how these principles might apply to ... resilience and self-sufficiency. [Jaber]

## Questions -

How are we integrating our knowledge of COVID-19's symptoms with the health protocols?

Given COVID-19's insidious nature, are local bubbles (i.e., permaculture "zones") the best way to stop its spread?

Do we now have the capacity to care for the sick? Taking care of the people?

Change; adapt; evolve: COVID-19. How do you see the impact from mutation?

Will you wear a mask for the rest of your life?

How might Permaculture leaders dissuade or de-escalate a superspeader event?

"Apply self-regulation"? How are you coping day-in and day-out with the threat of COVID-19 and possible death?

Can you tackle COVID-19 alone?

Are vaccines a show of resiliency?

In cities with high death rates due to COVID-19, how can communities be supportive?

## **Permaculture and Politics**

A Teacher's Guide

Definitions –

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[Mollison]

Politics is the set of activities that are associated with making decisions in groups. The branch of social science that studies politics is referred to as political science. A variety of methods are deployed in politics, which include promoting one's own political views among people, negotiation with other political subjects, making laws, and exercising force, including warfare against adversaries. Politics is exercised on a wide range of social levels, from clans and tribes of traditional societies, to the international level. In modern nation states, people often form political parties to represent their ideas. An election is usually a competition between different parties.

## Questions -

How are Permaculture communities making decisions? Working with different points of view?

Is Permaculture part of political science?

Are there people running for office with a Permaculture perspective? The Green Party perhaps?

Who owns Permaculture?

Are Permaculturists making a profit from Permaculture?

Is Permaculture being practiced in a range of social levels, from the poor to the rich?

Is sharing a political practice? Is profit-making sharing?

Do you see Permaculture ethics being engaged in politics these days?

Can you see a profit-less society being constructed with Permaculture principles?

Have you of "regenerative politics"?

Could Permaculture be "money-less"? "Post-Capitalist"?

## **Permaculture and Food**

A Teacher's Guide

#### **Definitions** -

Food is any substance consumed to provide nutritional support for an organism. Food is usually of plant, animal or fungal origin, and contains essential nutrients, such as carbohydrates, fats, proteins, vitamins, or minerals. The substance is ingested by an organism and assimilated by the organism's cells to provide energy, maintain life, or stimulate growth. Different species of animals have different feeding behaviors that satisfy the needs of their unique metabolisms, that are often evolved to fill a specific ecological niche.

Omnivorous humans are highly adaptable and have adapted to obtain food in many different ecosystems. Historically, humans secured food through two main methods: hunting and gathering and agriculture. Today, the majority of the food energy is supplied by the industrial food industry, which produces food with intensive agriculture and distributes it through complex food processing and food distribution systems. This system of conventional agriculture relies heavily on fossil fuels, which means that the food and agricultural system is one of the major contributors to climate change, accountable for as much as 37% of total greenhouse gas emissions. [WIKI]

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[Mollison]

## Questions -

How can Permaculture address the carbon intensity of the food and food waste systems to provide mitigation measures in the global response to climate change?

What is Permaculture's "food system"? How does it deliver food to us?

Does Permaculture play a role in reducing greenhouse gas emissions?

Is regenerative agriculture the same as Permaculture?

How does the practice of Permaculture depend on fossil fuels?

What are the surpluses in greenhouse gas emissions? In Permaculture? Are they good for the environment?

Should we go with hunting and gathering, or "rewilding"?

## The Maker's Role in Permaculture

A Teacher's Guide

**Definitions** -

To most, the word **maker** conjures up images of people working with their hands—designing, building, and crafting. A maker might be someone who bakes bread or someone who quenches steel; it might be someone who builds chairs or someone who paints portraits.

Certain characteristics exemplify the components typical of maker-centered learning experiences and seem to describe a particular:

**Culture** (e.g., disruptive, curious, forward-looking, experimental)

Community (e.g., collaborative, distributed, creative)

**Process** (e.g., iterative, interdisciplinary, flexible)

**Environment** (e.g., open, accessible, tool/media rich) [Jennifer Oxman Ryan]

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[Mollison]

## **Questions** -

How do you define Maker?

What boundaries, if any, would you place around maker-centered learning?

How are the permaculture and maker communities inter-wined? Separate?

How is Permaculture a Maker activity?

Are Making and/or Permaculture spiritual in any way to you?

Is Permaculture a disruptive activity?

How would you describe the Permaculture and Maker community building process?

Is Maker resilient? If so, to what forces and values?

## A Seed Library as Community Resilience

A Teacher's Guide

**Definitions** -

Seeds serve several functions for the plants that produce them. Key among these functions are nourishment of the embryo, dispersal to a new location, and dormancy during unfavorable conditions.

Seed sharing is the age-old practice of saving seeds from your own plants and sharing them with others. At first glance, it can seem like a quaint hobby, but seed saving and sharing can actually be an act of building resilience.

Resilience is defined as a small group or individual "innovative code" that can create and disseminate new values and refocus our view on Nature and consumerism. Resilience is also defined by diversity and security, both of which come with seed libraries.

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A local seed library serves many functions:

Storing / saving genetic material

Educating on beneficial crop types

Bartering and replacing poor performing seeds with superior seeds

Eliminating harmful chemicals

Coupling with permaculture practices to strengthen the community as a whole

## **Food Security and Permaculture**

A Teacher's Guide

#### **Definitions** -

Permaculture is a set of ethics and design principles centered on whole systems thinking, simulating, or directly utilizing the patterns and resilient features (the capacity of an ecosystem to recover from change) observed in Nature. Permaculture systems - including 12 principles - are now integrated into a growing number of fields from regenerative agriculture, rewilding, and community resilience. The Three Ethics of Permaculture are: 1. Care of the Earth, 2. Care of People, and 3. Returning surplus to the system. [Mollison]

Food security means having, at all times, both physical and economic access to sufficient food to meet dietary needs for a productive and healthy life. Food Security also means that the people who produce our food are able to earn a decent, living wage growing, catching, producing, processing, transporting, retailing, and serving food. Food access is closely linked to food supply, so food security is dependent on a healthy and sustainable food system. A family is food secure when its members do not live in hunger or fear of hunger. Affordability and nutrition are some factors. The availability of food irrespective of class, class, gender or region is another factor.

## **Questions** -

How is a food forest a means to food security?

Is soil or compost a currency in this blending of ideas?

Can Permaculture guarantee "... both physical and economic access to sufficient food to meet dietary needs for a productive and healthy life."

Can working a Permaculture life pay our bills?

Is Food Security addressed under the Ethics of Permaculture?

Is Returning surplus food to the system the same as "the availability of food irrespective of class, class, gender or region?"

How is Permaculture different from Food Security?

Do both Permaculture and Food Security work in a Capitalist system?

What drives Food Security (Nature, the supply chain)?

What is nutrition and does it play a role in Permaculture?

## Resource-based economy (RBE) and Permaculture

A Teacher's Guide

#### Definitions –

Permaculture is a set of ethics and design principles centered on whole systems thinking, simulating, or directly utilizing the patterns and resilient features (the capacity of an ecosystem to recover from change) observed in Nature. Permaculture systems are now integrated into a growing number of fields from regenerative agriculture, rewilding, and community resilience. The Three Ethics of Permaculture are: 1. Care of the Earth, 2. Care of People, and 3. Returning surplus to the system. [Mollison]

Social Permaculture is about connections – between people, economies, and governing structures – and creating the conditions for humans to flourish on a societal level and to develop beneficial relationships with the ecosystems which sustain them.

"A Resource-Based Economy (RBE) is a system in which all goods and services are available without the use of any system of debt or servitude like money, credits or barter. All resources become the common heritage of all people, not just a select few. The premise upon which this system is based is that the Earth is abundant with plentiful resource; our practice of rationing resource through monetary methods is irrelevant and counter-productive to our survival.

Money is only important in a society when certain resources for survival must be rationed and the people accept money as an exchange medium for the scarce resources. Money is a social convention, an agreement if you will. It is neither a natural resource nor does it represent one. It is not necessary for survival unless we have been conditioned to accept it as such."

RBE is promoted by various groups and might differ in the details but agree on the following:

- common holding of land by the people
- common holding of the means of production
- common holding of the resources
- common distribution of consumables / goods / commodities and so on

- automation of the manufacturing process i.e.- resources into semi-consumables and semi-consumables into consumables
- beyond the use of money, credit, barter, exchange, and all forms of interestbearing debt
- post-scarcity system of shared social abundance

Abundance, Efficiency and Sustainability are, very simply, the enemies of profit. This scarcity logic also applies to the quality of goods. The idea of creating something that could last, say, a lifetime with little repair, is anathema to the market system, for it reduces consumption rates, which slows growth and creates systemic repercussions (loss of jobs, etc.). The scarcity attribute of the market system is nothing but detrimental for these reasons, not to mention that it doesn't even serve the role of efficient resource preservation, which is often claimed. (source: The Venus Project in Wikipedia)

## **Questions -**

- 1. Is the local Farmer's Market an example of RBE?
- 2. What is necessary for survival to the permaculturist?
- 3. Do RBE and Permaculture each share the same definition of abundance?
- 4. Does Permaculture "serve the role of efficient resource preservation?"
- 5. Does "common holding of the land by the people (RBE) equate to "Care of the Earth (Ethic 1 from Permaculture)?"
- 6. Is Sustainability an "enemy of profit" to most Permaculturists?
- 7. Does Permaculture "fit" into the Capitalist system?
- 8. How does a seed library fit into the RBE model?
- 9. Define "common heritage" to RBE and Permaculture practitioners.
- 10. Define "efficient resource preservation?"

## **Permaculture and Climate Change**

A Teacher's Guide

#### **Definitions** -

- [1] Climate Change is a change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.
- [2] Permaculture is a set of ethics and design principles centered on whole systems thinking, simulating, or directly utilizing the patterns and resilient features (the capacity of an ecosystem to recover from change) observed in Nature. Permaculture systems are now integrated into a growing number of fields from regenerative agriculture, rewilding, and community resilience. The Three Ethics of Permaculture are: 1. Care of the Earth, 2. Care of People, and 3. Returning surplus to the system. [Mollison]
- [3] CO2 sequestration: A major step of photosynthesis is to take the CO2 out of the air. Then the roots of all plants extrude the carbon. The microbes in the soil utilize this carbon in a symbiotic relationship. We call this carbon sequestration. When the soil is plowed or chemicals are used, soil life is destroyed. CO2 sequestration or regenerative gardening are ways to slow the atmospheric accumulation of greenhouse gases, which are released by burning fossil fuels.

Currently, some farms are being criticized for producing too many greenhouse gases. Incorporating even some permaculture on any sized farm can help mitigate climate change. Experimenting with permaculture techniques can improve efficacy and sustain limited farm resources. Efforts to address the climate crisis must be rooted in social, economic, and ecological justice.

## **Questions -**

How can we improve carbon sequestration on a farm-by-farm basis?

Can a Food Forest help to reduce amount of CO2 entering the atmosphere? If so, how?

Can the ethics and principles in Permaculture have a positive impact on Climate Change? If so, where?

If Climate Change impacts a global or regional scale, how can it impact an ecosystem? How does soil play a role in CO2 reduction? What is regenerative agriculture?

What is social, economic, and ecological justice? How can these be addressed?

## A Food Forest for Permaculture

A Teacher's Guide

#### Definitions -

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[Mollison]

A food forest, also called a forest garden, is a diverse planting of edible plants that attempts to mimic the ecosystems and patterns found in nature. Food forests are three dimensional designs, with life extending in all directions — up, down, and out. Generally, we recognize seven layers of a forest garden — the overstory, the understory, the shrub layer, the herbaceous layer, the root layer, the ground cover layer, and the vine layer. Some also like to recognize the mycelial layer, layer eight (mushrooms). Using these layers, we can fit more plants in an area without causing failure due to competition.

A food forest does not have to be re-planted year after year. Once it is established, it is generally very resilient. Deer and rabbits might come and munch some of the herbaceous edibles in some areas, for example, but other species will not be palatable to them or will be out of their reach.

[https://projectfoodforest.org/what-is-a-food-forest/]

## Questions -

How is a food forest resilient?

Can a food forest be a spiritual place along with an agricultural space?

How can people help a food forest get established?

Is diversity part of the principles of permaculture?

What role does competition play in the growth of a food forest?

Which of the three ethics in permaculture best supports the role of the food forest?

A food forest is a garden, yes or no?

What would your food forest look like?

'A food forest mimics the ecosystems and patterns found in nature'. Is this not a central tenant of permaculture?

How can Nature play a role in the growth of a food forest?

## **Permaculture and Mythology**

A Teacher's Guide

#### **Definitions** -

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Mythology – The collected history and application of world stories.

MonoMyth – Joseph Campbell's multi-part structure for writing myths. The monomyth, or the hero's journey, is the common template of a broad category of tales and lore that involves a hero who goes on an adventure, and in a decisive crisis wins a victory, and then comes home changed or transformed – to tell the tale.

From mythology, it is new heroes and their stories that are bridging the gap between simple farming and the spirit of permaculture across the planet today. The monomyth is a prime template for testing and explaining the ethics and principles of permaculture.

Mythology is the fuel and structure that is helping share the successes and failures of permaculture in the form of experiences and stories.

Stories from regenerative agriculture projects to resilient community efforts are challenging our collective psyche, helping to grow a knowledge base that transcends language or cultural barriers. As permaculture grows, so will our associated initiations, journeys and heroes.

Are you on a journey to help your permaculture community? Is this not similar to returning the surplus?

Source: https://www.planetshifter.com/

The Community as Hero

A Teacher's Guide

## **Definitions:**

Challenging Joseph Campbell's classic monomyth vision, we now emphasize the community over the individual: favoring instead the community journey and the community as the hero (W. Paul, 2017). Today, there are more resources and power in the community and often too much short-term selfishness and corruption within individuals.

Community - a group of people living in the same place that share common attitudes, interests, and goals.

Community as Hero - The community is the hero when a local group educates and acts on pending opportunities or dangers and where the entire group supports the mission at hand.

Two additional concepts are related to the community as hero: Community traditions and Community Initiations.

Community traditions are the historic scaffolding of any community story or holiday ritual. Initiations, or journeys, serve to convey the values that support the community as hero and its traditions.

To illustrate: The spring Dance of the Maypole is a Community Hero tradition where all participate. CLOVID-19, on the other hand, is an example of the Anti-Community Hero where individuals must battle the pandemic.

## **Creating New Permaculture Rituals**

A Teachers Guide

#### **Definitions** -

- > Permaculture is a set of ethics and design principles centered on whole systems thinking, simulating, or directly utilizing the patterns and resilient features (the capacity of an ecosystem to recover from change) observed in Nature. Permaculture systems are now integrated into a growing number of fields from regenerative agriculture, rewilding, and community resilience.
- > The Three Ethics of Permaculture are: 1. Care of the Earth, 2. Care of the People and 3. Returning surplus to the system. [Mollison]
- > A ritual is a stereotyped sequence of activities involving gestures, words, and objects, performed in a sequestered place, and designed to influence (unusual) entities or forces on behalf of the actors' goals and interests. Rituals are characterized by traditionalism, sacral symbolism and performance and are a feature of almost all known human societies, past or present. Rituals may be prescribed by the traditions of a community.
- > The eRitual extends the traditional definition of ritual (above) through online, community-mediated events and shares comprised of two or more people connected synchronously by the Internet. Participants can share deep values, and create new eRituals from long distance, facilitated by video/chat applications like Hangouts, Skype and Zoom.

Key community and spiritual drivers to create new eRituals for Permaculture -

Nature protection

**Environmental justice** 

Resilience

Journey

Initiation

**Community Hero** 

Sharing

DIY

Localization

Cooperation

Re-use, Recycle, Reduce

## Some questions when building new eRituals -

Who is leading the event?

How long is the eRitual?

When and where does it take place?

What are the words?

What are the key symbols and supporting archetypes?

What values comprise the foundation for the event?

Is it integrated with other values, ethics, events, practices?

What are the sounds and songs?

What materials / space / tools / security are required?

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6 New eRituals and Symbols for the Permaculture Community Toolkit – (Could you facilitate any of these?)

Rocket Stove eWorkshop

Length: 8 hours

Symbol: Homemade Rocket Stove

Permaculture Ethic: Care of people

Seedball Recipe eShare

Length: 2hours

Symbol: Seedball

Permaculture Ethic: Care of the Earth

Online Séance

Length: 90 minutes

Symbol: screen capture of a participant

Permaculture Ethic: Care of people

3 Million eHugs (synchronous global event)

Length: 120 seconds

Symbol: selected participants hugging each other

**Ethic: Returning surplus** 

Resilience Poetry eSlam

Length: 2 hours

Symbol: screen shots of book covers and/or participants reading

Ethic: Care of people

Online Vegetable Seeds eTutorial

Length: 2 Hours

Symbol: Cornucopia

**Ethic: Returning surplus** 

Permaculture as Archetype:

A Teacher's Guide

#### **Definitions** -

Archetype -The concept of an archetype appears in areas relating to behavior, historical psychology and mythology. An archetype can be: a statement, pattern of behavior, prototype, "first" form, or a main model that other statements, patterns of behavior, and objects copy, emulate, or "merge" into. [Wikipedia]

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[Mollison]

Nature Symbols in Permaculture play an active role in creating archetypes. Here are ten to consider:

Shovel - turning, renewal

Cob bench - community

Pond - water birth, diversity

Sun flower - Nature Steward

Moon - magic, Nature wisdom

Bees - togetherness, eco-business

Lightning - ecoAlchemy - transmutation

Cob feet - dance, new Permaculture rituals

Broken concrete - reuse - recycling

Butterflies - metamorphosis, freedom

https://www.planetshifter.com/myth/2194/permaculture-carl-jung-and-the-new-archetypes-pdf

Six themes from permaculture principles that activate the archetype -

Observation - actively getting information from a primary source

Connection - putting two or more people or things together

Re-investing resources - adding energy and materials back into the system

Succession - the series of changes in an ecological community that occur over time after a disturbance

Abundance - the relative representation of a species in a community

Collaboration - is the process of two or more people or organizations working together to complete a task. Collaboration is similar to cooperation

## **Questions** -

Could "Care of the Earth" empower an archetype?

In your experience, what symbols have emerged to create Permaculture?

Is a new species an archetype? If so, how?

What is the relationship between Permaculture archetypes and ritual?

Is collaboration a "pattern of behavior (or archetypical)?"

How is Permaculture a prototype?

What came before Permaculture, if anything?

Can you give any examples of ecological disturbance? If so, can these instances support Permaculture as archetype?

Broadly speaking, can the cycles in Nature – or re-investing resources – help spark archetypes in Permaculture?

"Returning surplus to the system" is a powerful ethic and catalytic act for both humankind and Nature. Is this a "main model" for the development of the archetype in Permaculture?

Finding Enchantment in the Food Forest at the Synergy of Folklore and Permaculture

A Teacher's Guide

## **Definitions** -

Enchantment is a feeling of great pleasure and delight in rituals and the sacred.

A Food Forest is a low-maintenance, sustainable, plant-based food production system based on woodland ecosystems, incorporating fruit and nut trees, shrubs, herbs, vines and perennial vegetables which have yields directly useful to humans.

Folklore is the expressive body of culture shared by a particular group of people; it encompasses the traditions common to that culture, subculture or community. These include oral traditions such as tales, proverbs and jokes. They include material culture, ranging from traditional building styles to handmade toys common to the group. Folklore also includes customary lore, the forms and rituals of celebrations such as Christmas and weddings, folk dances and initiation rites. Traditions are passed along informally from one individual to another either through verbal instruction or demonstration.

Permaculture is a set of design principles centered on whole systems thinking, simulating, or directly utilizing the patterns and resilient features observed in Nature. It promotes ethics and principles in a growing number of fields from regenerative agriculture, rewilding, and community resilience.

## ####

The following can help create artful and enchanted experiences in the Food Forest for children:

The Food Forest is the theatrical stage and the playground where the community heroes dance and sing with "eco-mythology" and permaculture-driven rituals.

Seasons are the guides that bring changes to the Food Forest, teaching the children about local transitions.

Plays incorporating weather and farming themes can bring the generations together in the Food Forest.

Planting and Harvesting are Awakening and Hibernating rituals and inspirit kids to build their own Food Forests.

The maypole celebration is a nice community bridge to an old world woodland tradition.

The Full Moon dance: stir-up Wicca and howl!

Compost Magic - Scraps to Soil to Food Forest to table!

Nature-fueled Poetry and music festivals "eco-mythology" and permaculture-driven songs and spoken word.

Permaculture Ethics and Principals for System Design and Story Writing

A Teacher's Guide

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The Three Ethics of Permaculture are: 1. Care of the Earth, 2. Care of People, and 3. Returning surplus to the system. [Mollison]

Principals of Permaculture include:

Observe. Use protracted and thoughtful observation rather than prolonged and thoughtless action. Observe the site and its elements in all seasons. Design for specific sites, clients, and cultures.

Connect. Use relative location: Place elements in ways that create useful relationships and time-saving connections among all parts. The number of connections among elements creates a healthy, diverse ecosystem, not the number of elements.

Catch and store energy and materials. Identify, collect, and hold useful flows. Every cycle is an opportunity for yield, every gradient (in slope, charge, heat, etc.) can produce energy. Re-investing resources builds capacity to capture yet more resources.

Each element performs multiple functions. Choose and place each element in a system to perform as many functions as possible. Beneficial connections between diverse components create a stable whole. Stack elements in both space and time.

Each function is supported by multiple elements. Use multiple methods to achieve important functions and to create synergies. Redundancy protects when one or more elements fail.

Make the least change for the greatest effect. Find the "leverage points" in the system and intervene there, where the least work accomplishes the most change.

Use small scale, intensive systems. Start at your doorstep with the smallest systems that will do the job, and build on your successes, with variations. Grow by chunking.

**Principles for Living and Energy Systems** 

Optimize edge. The edge—the intersection of two environments—is the most diverse place in a system, and is where energy and materials accumulate or are transformed. Increase or decrease the edge as appropriate.

Collaborate with succession. Systems will evolve over time, often toward greater diversity and productivity. Work with this tendency, and use design to jump-start succession when needed.

Use biological and renewable resources. Renewable resources (usually living beings and their products) reproduce and build up over time, store energy, assist yield, and interact with other elements.

## Attitudes

Turn problems into solutions. Constraints can inspire creative design. "We are confronted by insurmountable opportunities."—Pogo (Walt Kelly)

Get a yield. Design for both immediate and long-term returns from your efforts: "You can't work on an empty stomach." Set up positive feedback loops to build the system and repay your investment.

The biggest limit to abundance is creativity. The designer's imagination and skill limit productivity and diversity more than any physical limit.

Mistakes are tools for learning. Evaluate your trials. Making mistakes is a sign you're trying to do things better. [Hemenway]

Key themes from permaculture for story writing include (from above):

Observation – actively getting information from a primary source.

Connection – putting two or more people of things together.

Re-investing resources – adding energy and materials back into the system.

Succession - the series of changes in an ecological community that occur over time after a disturbance.

Abundance - the relative representation of a species in a community.

Collaboration - is the process of two or more people or organizations working together to complete a task. Collaboration is similar to cooperation.

Soil Mythology

A Teacher's Guide

#### **Definitions** -

Mythology is the collected history and application of world stories. Myth is a folklore genre consisting of narratives that play a fundamental role in a society, such as foundational tales or origin stories. The main characters in myths are usually gods, demigods, or supernatural humans. [Wikipedia]

Monomyth is Joseph Campbell's multi-part structure for writing myths. The monomyth, or the hero's journey, is the common template of a broad category of tales and lore that involves a hero who goes on an adventure, and in a decisive crisis wins a victory, and then comes home changed or transformed – to tell the tale.

Soil is a mixture of organic matter, minerals, gases, liquids, and organisms that together support life. Earth's body of soil, called the pedosphere, has four important functions:

as a medium for plant growth

as a means of water storage, supply and purification

as a modifier of Earth's atmosphere

as a habitat for organisms

All of these functions, in their turn, modify the soil and its properties.

Composting is the process by which raw organic materials are transformed, primarily by bacteria and fungi, into a stable, nutrient-rich substance known as humus.

Humus is chemically complex, spongy, porous, and retains a high concentration of essential nutrients that are readily accessible to the roots of plants. Humus occurs naturally when plant and animal remain in marshes, forests, and grasslands break down over the span of centuries. Humans can hasten this process by constructing piles of various organic materials, and providing adequate moisture and aeration. Replenishing our soils with mature compost (i.e. - humus) is the best way of building long-term soil fertility and ensuring an abundant harvest.

## Questions -

How do you compare Nature's growth cycle vs the monomyth's cycle?

What traditions and rituals tie soil to storytelling?

Can soil be a hero?

What role does the soil play in climate change news, stories and songs?

What would the God of Humus look like?

Can we say that a successful crop, buoyed by humus, is a victory for the community?

How would a folktale about your local pedosphere play-out? Who is your villain?

If humus provides adequate moisture and aeration, what can the mythic hero offer?

What actions / beliefs modify our myths?

Is the monomyth like a seed, fostering both good and bad alike, to create a moral?

## ####

Please see Planetshifter.com for more information on permaculture and mythology