

MARCH 2024 @ PPI

OUR MONTHLY NEWSLETTER



SPRING PLANT PLANNING!

Any size property or garden begins with a plan. What is your dream? Would you like a salsa garden to have all the ingredients near your front door? Or maybe integrate animals for meat and eggs while installing a plan to feed them off the land and continually replenish the soil? Or growing grains using interplanting to hold moisture, reduce weeds and harvest more than one crop at a time?



Permaculture principles can encourage success in any situation. Most people come to know of permaculture through gardening and their love of plants.



Why not begin with one simple technique we use often at PPI, creating natural plant communities as found in guilds or polyculture. One of our productive areas features a **very happy cherry tree surrounded by strawberries and...**

COMFREY: a dynamic accumulator to bring up nutrients toward the surface with its deep tap root and it provides mulch several times a year when we "chop and drop" it around the plants to keep the ground cool and add nutrients to the soil.



BORAGE: for attracting beneficial pollinators and adding minerals to the soil.

YARROW: attracting beneficial insects like ladybugs, lacewings and hover flies to control damaging insects.



GARLIC: reseeds itself for grass and weed suppression and for food as garlic scallions strawberries ground cover for food and weed suppression [Gaia's Garden](#) by Toby Hemenway goes into this in detail. A permaculture design can put several of these guilds together **and then you have a mini food forest!**



Interested in more information?

**Join us March 13th for
Ecological Gardening, A
Permaculture Presentation**

**Articles, 2024 Events
& More...**



Our seed starting workshop shared many planting tips.

We made Eliot Coleman's mini soil cubes to plant in.

The advantage is to fit hundreds in a tray, compared to other seed trays. The little cube naturally air prunes the roots and they are ready to take off when placed in a larger cube, pot or the ground.



**TIPS, TRICKS
& UPCOMING
EVENTS**



Here is a tip for your seed starting trays (or in the ground!)

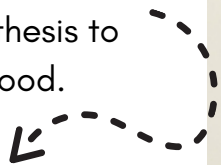
Have you had trouble seeding trays with minute seeds like lettuce?

Try using a toothpick, bamboo skewer, or the wooden end of a paintbrush sharpened, dip it in water then pick up the seed to place it. If that still is difficult to pick up use your own saliva!



(Kale seed on a skewer)

Seeds are intelligent and have everything they need to grow. We can wait till their true leaves, the second set of leaves, start to grow before fertilizing. The true leaves start to perform photosynthesis to supply the plant with food.



(Kale True Leaves)

There is a growing method using saliva before planting. To use the seed as a "physician," **place it under your tongue for nine minutes.** Your DNA is in your saliva and the seed picks up on this and produces fruit to meet the needs of your body. **Too far fetched for you?** Well, I can say when I tried this indoors with saliva **all my seeds germinated in a shorter time frame than on the packet!**

What if you **want to plant a row of beans outdoors and can't fit seeds in your mouth?** No worries, just put 2-3 under your tongue, plant them with the seeds without and **the seeds communicate when they are planted.**

Still unsure about this?

Think of how we know trees communicate, through **Peter Wohlben's findings.** He called this the "**wood wide web**" since trees communicate through mycelium in the soil. So this mycorrhizal network fungus has a fruit and that is mushrooms!

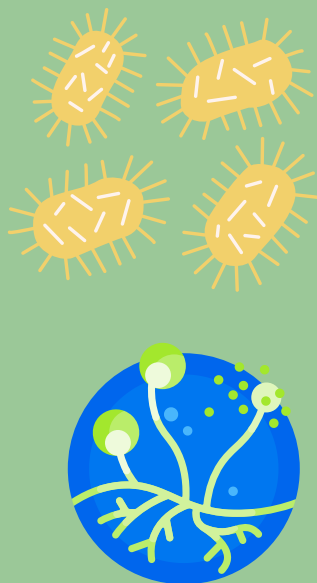
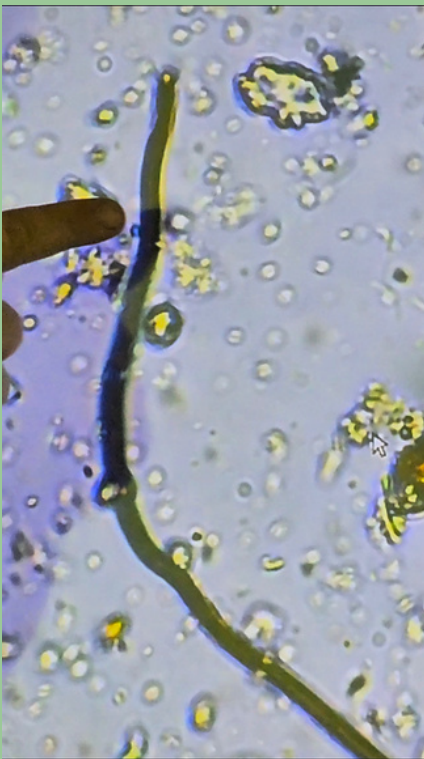


Many of you have seen first hand mushrooms growing in forest settings. **We will be talking about growing rich soil in our upcoming compost panel and Annalisa's compost class.**

Soil News from Annalisa



March is Nutrition month. Did you know that nutrition starts in how we steward the soil? Before you reach for a bag or bottle of NPK, **let's take a microscopic look at the soil.** Bacteria and Fungi are the miners of the rock, sand, silt, and clays. As long as we have a blue planet, we will never run out of nutrients, or topsoil. **These minute creatures and branching fungi each secrete fluids at a different pH.** That means every mineral element on the periodic table can be extracted. These minerals are then held in the bacteria and fungi body, until a predator comes along. The protozoa, microarthropods, and nematodes consume and concentrate these minerals- then poop it out in plant soluble form. The root then sucks it in, the plant knowing what it needs. **The plant can also ask fungi to bring it via the hyphae that has penetrated the root at an infection point.** It gets shuttled in from wherever the fungi has stored it. The moral of the story is to: keep this beautiful cycle of intelligence and strengthen the soil. **Come learn how,** at the classes we hold at PPI!



(Picture 1) Fungal hyphae very dark color shows carbon sequestration

(Picture 2) Testate amoeba sucking in bacteria

Up Next...

MARCH 2024 @ PPI

Join us Wednesday Mar 13: Ecological Gardening, A Permaculture Presentation, Mona Lewis Livingston Library 6:30-7:30pm, Free
Gardening Inspired by nature replenishes the earth!

Let's create spaces where all forms of life thrive. Natural ecosystems create more biomass, than traditional gardens, without tillage, synthetic fertilizers and pesticides, fossil fuels, and with less watering or weeding.

A plan for taking an urban lot to food productivity and PPI's plan for regenerative agriculture will be shared.

Join us for spring inspiration!

Join us Wednesday March 27: Composting Panel, Livingston Library 6:00 to 7:45pm, Free
Come learn from local successful composters and get your questions answered.

Maybe you have a tip to share.

Nate Brown / Amaltheia Dairy

Katherine Dunlap / Backyard Composter

Ryan Green / Happy Trash Can Composting

Michelle Evans / Earth Wind and Fire Solar

Annalisa Pedraza / Rising Crane Permaculture

Join us Apr 6: Compost Workshop with Annalisa, 10 am to 12pm \$24



FULL CALENDAR...

2024 EVENTS CALENDAR

Mar 13: Free Permaculture Presentation, Mona Lewis Livingston Library 6:30-7:30pm

Mar 27: Composting Panel, Livingston Library 6:00 to 7:45pm Nate Brown, Kathryn Dunlap, Michele Evans, Ryan Green, and Annalisa Pedraza

Apr 6: Compost Workshop with Annalisa Pedraza, PPI Demonstration site, 10 am to 12pm, \$24

Apr 17: Permaculture Class (what is Permaculture and how these principles increase yields & plant health in the garden, plus create your own Backyard Garden Design) Mona Lewis, 6:30pm to 9pm, \$45

Apr 20: Regenerative Agriculture Workshop building swales for linear food forests, moving water on the land for irrigation & creating sustainable edible ecosystems.

May: Starting a Garden and how to improve what you have, Meghan McCarthy

Jun: Volunteer Day Transplanting June 1 drop-in 9am to 12pm

****Watch for us at the Farmers Market through June and into September****