

Green Friends

Nature on its own is indeed beautiful and clean. The hills and rivers do not need us to clean them. In fact it is nature's water which cleans us; it is trees which purify air for us. Because we have littered, we have spoilt its pristine beauty.

Amma



March Greetings

This was a good month for the Litter Project! In February we went well over the 3000 hour mark!!! That was greatly helped by the fact that some of the residents in North Bend participated in work parties, which included litter pick up, to help Terry (Dhanusri) Barnard's son-in-law who is recovering from cancer.

Again this issue is filled with interesting material and stories. In fact, so many people submitted information/links to consider that there was more than would fit in the newsletter. If you submitted something that isn't here, know that we will likely use it in the next newsletter.

Our first Permaculture workshop is this month. See page 4 of this newsletter for more information.

Enjoy!

Karuna and Maheswari



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Green Friends is a global grassroots environmental movement which promotes environmental awareness and local participation in conservation efforts throughout the world.

Green Friends is one of the projects of Embracing the World, a not-for-profit international collective of charities founded by internationally known spiritual and humanitarian leader, Mata Amritanandamayi (Amma)

To join the Pacific Northwest Green Friends Litter Project write Karuna at

pnwgreenfriendslitterproject@gmail.com

Interesting Reading/Viewing



Picture by Daily Mail Reporter

From Tirtha in Victoria:

I think you'd enjoy watching the video. I want to send it to our politicians and ask how far ahead they are planning.

This four minute video is about working WITH nature.....creative and awesome.

http://www.snotr.com/video/7331/The_Living_Bridge

For more information and pictures of the Living Bridges of Mawlyngnong, Meghalaya (northern India) go to:

<http://www.dailymail.co.uk/news/article-2035520/Meghalaya-villagers-create-living-bridges-training-roots-river.html#axzz2KXSskBIYv>



Picture by Daily Mail Reporter

Litter Project Membership

As of February 28, 2013, we had 284 members.

Litter Project Hours

Forty five members and fifty-two guests reported picking up 248.22 hours of litter during February 2013.

(The statistics below relate to members and guests who report having picked up litter. They do not include those who do not report or who reported 0.)

Average: 2.56 hours

Range 2 minutes to 16 hours

Median: 3 hours

The group has completed 3117 hours of litter pick up since the project began in July 2011

Aluminum Can Report

Washington State Litter Project members collect and sell aluminum cans gathered from the litter they pick up and from friends, family and colleagues.

In 2011, they sold 323 pounds of aluminum cans for \$151.04.

In 2012 the total was 281 pounds for \$134.67.

As of February 28, 2013 they have sold 80 pounds and earned \$36.65.

Since the project began we have sold 684 pounds for \$322.36. All funds were given to the Pacific Northwest M.A. Center.

Cigarette Butts/ TerraCycle Report

In January 2013 we joined the Cigarette Brigade of TerraCycle. We can send the cigarette butts to TerraCycle at their expense and they will turn them into recycled products such as plastic pallets. This keeps the toxic butts out of the landfill and waterways.

In January and February we sent 10.50 pounds of cigarette butts to TerraCycle.

Stories and Reflections!

From Aditi in deluged Iowa:

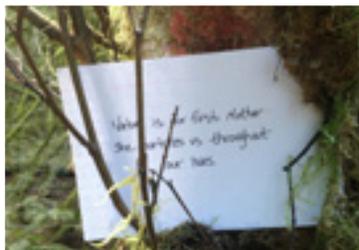
3 snowstorms, frigid temps and I'm just dug out from the latest 7 inches. And another is forecast for Monday. Woouuuuuuu. So not much walking or picking up - Really. Cannot in conscience claim any litter time.

Blessings to you and especially all the kick butts day pickup team. Hope it was a big success - again

From Visala in Seattle:

Some of the devotees at the PNW Winter retreat took a beautiful nature walk into the woods. As we were enjoying the trees and fungus, and forest, we noticed that there was some litter along the path. Since, as part of the litter crew, we keep a bag handy to pick up litter, we got it out.

Many devotees pitched in, picking up the pieces of trash along the way. By the end of the small hike, we had a grocery sized bag full of items that would no longer be burdening our Mother Earth. We were grateful for the opportunity to serve her.



From Terry (Dhanusri) in North Bend:

The North Bend community had several work parties for my son-in-law to clean up his plant nursery. He is recovering from surgery that has removed his cancer. The winter winds send lots of litter, so I had plenty to do. Entire families came to help clean up the 5 acres. Actually I felt AMMA everywhere while this community effort was taking place. It is always amazing to me how she can make litter pick-up a special happy event.



From Lin in Bellevue:

Well, what do you know... it turns out the shape of my veg garden is a keyhole garden! The two side wings are slightly larger than advised, but there's definitely the keyhole access in the recessed area in back of the garden. Now all I have to do is dig out the middle and turn it into the composting/watering area. Apparently the levels under the soil are sloped away from the center, which is how water and compost nutrients are spread (that's the theory anyway). Pretty interesting. [There is an article on keyhole gardens on the last page of the newsletter.]

From Marmot in Seattle:

I run a small preschool at my house. We started doing garbage pick-up as part of a day of service on Martin Luther King day. Since then, on our daily walks to the playground I have kept up the tradition and pick up litter while the kids are playing. As soon as I didn't include the kids and give them their own bags and gloves, they got upset that they didn't get to do it too, and insisted that I bring some for them. So now I do. Sometimes they choose to help, and sometimes they help by pointing out garbage to me and having me pick it up, but their enthusiasm for picking up garbage is infectious. I've warned their parents that they might need to start carrying bags and gloves when they take their kids to the park now!



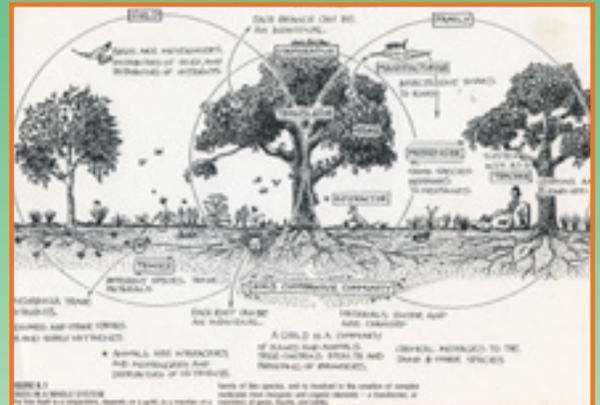
PERMACULTURE CLASS

“Caring for the earth, caring for people, and reinvesting the surplus this care will create.” Toby Hemenway

PNW GreenFriends is happy to announce our first Permaculture Class in the Pacific Northwest. Netsah Zylinsky, a certified Permaculture instructor from Oak Harbor, will teach an “Introduction to Permaculture” class in Seattle and in Port Townsend this spring.

This class will introduce participants to:

- Permaculture ethics - “Caring for the earth, caring for people, and reinvesting the surplus this care will create.”
- Permaculture principles
- Permaculture design
- Permaculture strategies for the Pacific Northwest
- How to get started and implement Permaculture design
- How to create a self-sustaining environment in an urban or rural setting



Seattle: Saturday, March 23rd, 9-5pm

Port Townsend: Saturday, April 13, 10-6pm

Cost: sliding scale \$65-\$75. Price includes a vegetarian lunch.

Registration: Contact Maheswari at PNWGreenFriends@gmail.com or call 206-542-6558

Registration link: <https://docs.google.com/spreadsheet/viewform?fromEmail=true&formkey=dDcxUlctSzhxWjU0bHd4aFVUZEZLakE6MQ>

Class size is limited. Register soon!

“The aim of permaculture is to design ecologically sound, economically prosperous human communities.”

Toby Hemenway



Report on Composting and Soil Building Class

by Lin and Maheswari



On February 2nd, GreenFriends hosted Maryellen a Master Composter and Soil Builder from the Seattle Tilth, at Karuna's house. The class was very informative.

Maryellen discussed the following topics with the class:

Three good reasons to compost

1. Composting keeps yard and food waste out of landfills where waste generates methane, a potent greenhouse gas.
2. Compost feeds the soil and removes CO₂ from the air.
3. Compost reduces the need for fertilizers and pesticides; it holds in moisture and keeps weeds at bay.

Soil Science

- Types of soils and how best to amend each (glacial till, sandy soil, clay, subsoil).

Outdoor Composting

- Composting systems: Compost piles, holding bins, worm bins, turning bins, mulching and grass cycling. Regardless of which system(s) you use bacteria, bugs and fungi will break down the garden and food waste into compost, with some systems taking less time than others.
- Balancing the pile: Composting bacteria thrive on a mix of green and brown materials. An equal mix works well. Mostly browns take longer to decompose. Too many greens can produce a smelly, soggy mess.
- Items to exclude from a pile: fish or animal products because they can create bad odors and attract animals;

pet or human waste (risk of infectious agents and bad odors); things that break down too slowly (such as avocado seeds and skin, branches); diseased plants (because usually there isn't enough heat to kill pathogenic organisms).

- Items to use in your compost pile: Greens-pesticide free grass clippings, garden trimmings, barnyard manure (horse, chicken, rabbit, and cow), garden vegetables and fruits, house plants & potting mix. Browns- autumn leaves, twigs, stalks, sawdust, shredded paper, cardboard, paper towels, napkins or tissue paper.

☉ Size and moisture of compost piles matters (3-foot square is ideal):

- Too small—not enough area to contain heat and moisture for microbial action
 - Too big—hard to turn to circulate air and regulate moisture
 - Too dry—turn the pile and spray all materials with water (but don't drench it)
 - Too wet—cover compost to protect it from getting too soggy during rainy periods
- ☉ Two types of compost:
- Cold compost—made by non-nitrogen microbes (a slower process)
 - Hot compost—a nitrogen source is added, such as manure, blood meal, fresh grass clippings to speed up the process. If the pile smells like ammonia, there is too much nitrogen.

Mulching

- ☉ Finished compost, green clippings and straw make good mulch for vegetables.



- © Sawdust, wood chips and bark will draw nitrogen from the soil to break it down—therefore, do not dig it in w/o composting it first. Makes good mulch for shrubs, trees. Composted sawdust is good for perennials.

Vermicompost

- © “Red Wigglers” are the type of worm that makes compost. They live near the surface, eating organic material and passing it out as compost. You don’t need many to start with because they’ll multiply quickly. Earthworms live deeper down and aerate the soil, but don’t contribute much compost.
- © Bins can be wood or plastic. You can make your own or buy a commercial one. It must drain well and be well ventilated (collect moisture underneath as “worm tea” for houseplants). Worms don’t like to be too wet or too dry. Coconut coir is a good water absorber. Keep the bedding fluffy so there’s plenty of air for the worms.
- © Leaves are ideal bedding because they speed up the decomposing process more than paper and wood shavings. Add fresh bedding as the old decomposes.
- © “Feed” your worms by burying chopped kitchen scraps in a corner of the bin (leave out citrus peels, which irritate the worms’ skin). As one feeding area is used up, move to a different one for the next batch. Keep the soil moist but not soggy.
- © Harvest the compost by either method:
 - Pour the bin into a pile on a tarp; shine a light on the pile (which drives the worms to the bottom), then scoop off the compost left on top. Worms don’t like light or handling.
 - Using trays with holes in the bottoms, place one with fresh bedding underneath a “used” tray, then shine a light on the upper tray. The worms will crawl downward into the lower tray, and you can harvest the upper one. The compost should look brown and crumbly (like coffee grounds) and smell fresh and earthy like a forest floor.
- © Fruit flies can be prevented by laying a piece of cardboard over the top of the bedding, inside the bin. This breaks their life cycle since they don’t like to lay their eggs on the smooth surface. Also, make sure to bury food scraps below the bedding surface.

Additional Resources

- © The Garden Hotline: 206-633-0224 or help@gardenhotline.org /www.gardenhotline.org call with questions
- © A gardeners guide to choosing safer pesticides and garden products:<http://www.growsmartgrowsafe.org/Default.aspx>
- © Composting food and yard waste: http://www.seattle.gov/util/groups/public/@spu/@conservation/documents/webcontent/spu01_001989.pdf
- © Growing healthy soil: http://www.seattle.gov/util/groups/public/@spu/@conservation/documents/webcontent/growinghe_200311261701557.pdf
- © Seattle Composting Resource Guide: http://www.seattle.gov/util/groups/public/@spu/@conservation/documents/webcontent/SPU01_001988.pdf
- © Good Bug Guide: <http://www.lhwmp.org/home/ChemToxPesticides/goodbug.aspx>
- © Growing food in the city: http://www.seattle.gov/util/groups/public/@spu/@conservation/documents/webcontent/02_013331.pdf

WORM COMPOSTING-Plastic vs Wood Bins



From Red Worm Composting- Worm Briefs 2/20/2013. Join their mailing list: bentley@redwormcomposting.com

WOOD Pros

- Much more “breathable” than plastic so easier to keep system, well-ventilated, and avoid excess moisture.
- This also helps cool systems during hot weather. - Can be inexpensive if you use scrap lumber.
- Can create bins/beds in shapes/sizes you want

Wood Cons

- Tends to be heavy - tough to move larger systems once set up. - Gradually breaks down over time.
- Can dry out more easily. - Can be expensive if new wood. - Can require more DIY skills
- Generally not great at holding in water (so leakage could be an issue)

Plastic Pros

- Relatively inexpensive and readily available
- Tough and durable (depends on the type of plastic though)
- Low-maintenance since holds in moisture well (assuming lid) - Light-weight so easier to move around.

Plastic Cons

- Often poor air flow and excess moisture retention (again assuming lid being used) - tends to be much less forgiving as a result.
 - Have to settle for whatever shapes/sizes available - Can overheat more easily. Generally, wooden beds are better suited for outdoor locations than plastic bins, and a better choice when you want something fairly large. Plastic bins offer an easy, inexpensive way for people to start their first worm bin - and if you keep the lid off (or at least provide excellent aeration) they can actually work very well. If using house demolition
- Generally, wooden beds are better suited for outdoor locations than plastic bins, and a better choice when you want something fairly large. Plastic bins offer an easy, inexpensive way for people to start their first worm bin - and if you keep the lid off (or at least provide excellent aeration) they can actually work very well. If using house demolition



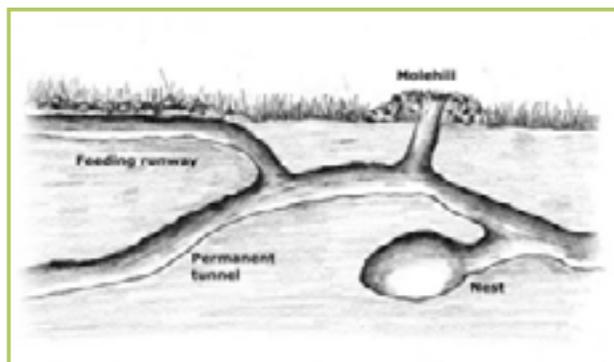
In Consideration of Moles

By Maheswari

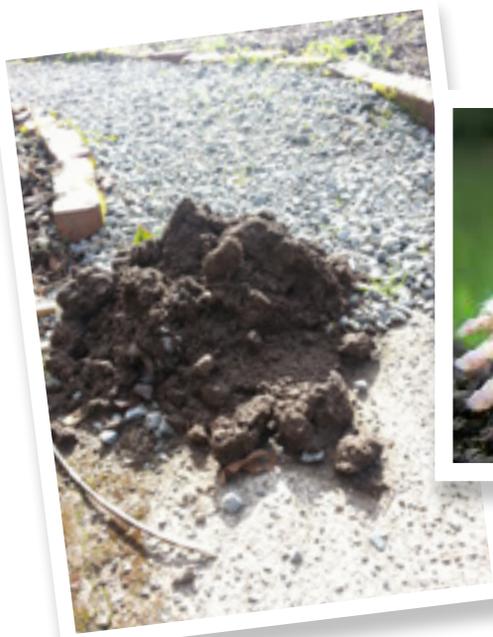
Moles are delicate creatures that improve the soil and unfortunately get blamed for damage they do not cause. As they look for pestiferous beetle larvae, grubs and other insects to eat along the surface of the soil they leave small mounds of loose dirt. The anxious gardener sees the mounds and is infuriated by the “mess” these creatures have made in the beautifully manicured lawn or garden. In a huff, they reach for the traps, poisons or homemade remedies to exterminate the poor mole. Have mercy on the mole, they are significant contributors to soil ecosystems and they are here to help us.

In reality as moles dig their runways in search of food, they are simultaneously aerating, mixing and providing drainage for the soil. They are also eating many of the bugs that could potentially harm your vegetables. Many gardeners panic when they see mole hills in their gardens or yards. The only real damage caused by moles is indirect, a result of their shallow tunnels lifting the soil and allowing plant roots to dry out. In which case, you press back the soil with your hand or foot and water the plant thoroughly to keep the roots moist.

Moles have two types of tunnels. There is an undetectable permanent tunnel located one to two feet underground, where the mole’s nest is located. And, there are feeding runways located closer to the surface sometimes only used once by the mole as they hunt for food. If you see many runways and tunnels on the surface of your soil it does not mean you have more than one mole. It just means you have a very active runway builder. Once a mole has eaten the soil insects it moves on and rarely stays in the same area for any length of time. Moles are very territorial and they will not allow other moles to use their borrows.



In the long run moles are beneficial to the garden, so embrace the little ones, thank them for their hard work and let’s try to live together.



A Testimonial for the Compost Crank

by Bob and Saroja

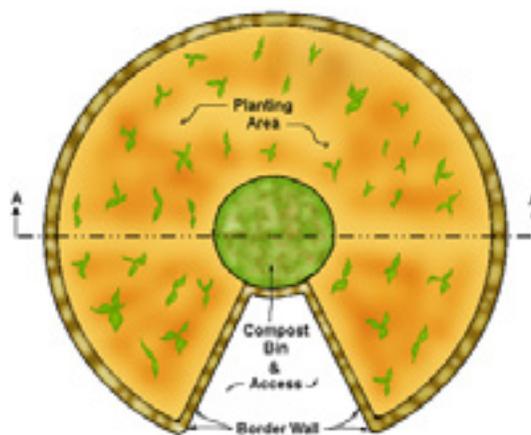
We discovered this Compost Crank about 6 years ago, and it has been our favorite tool ever since. One of our composting phases, the last one actually, is heating the materials in a bin that sits about four feet high. Reaching in there, going down deep, to turn over and mix with, say, a shovel is difficult, as it forces the back to roll forward and with the weight of wet materials increases the risk of spasm.

The Compost Crank is simple. The working end is a spiral and the other end you hold with both hands, “cranking” the shaft down deep with only a little force and then a pulling up motion, which amounts to aerating and mixing.

Any session with this mixing of the compost might entail 15-20 strokes, and the back is still happy. The Compost Crank can be found at <http://www.lotech-products.com>.



Keyhole Garden

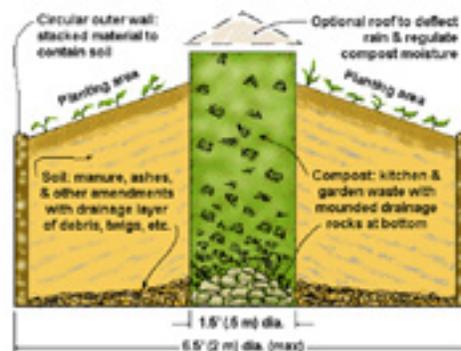


Keyhole Garden Plan View

<http://davesgarden.com/guides/articles/view/3726/#ixzz2M-WaBEqEc>

“The Keyhole Garden concept is brilliantly simple. A circular raised bed has a center compost basket that distributes nutrients to the surrounding lasagna-style garden bed. A small pie-slice section of the bed is used for easy access to the center compost basket forming the keyhole design. Kitchen and garden waste, along with household gray water, are added to the center basket. The soil bed layers are slightly sloped away from the center to aid water and “compost tea” distribution. As the materials decompose, soil, composting materials, and amendments are added to the bed in later growing seasons.”)

This video shows how to make an African style Keyhole Garden. <http://www.youtube.com/watch?v=ykCXfjzfac0> It is being built in Uganda as part of Send a Cow’s training in sustainable agriculture. They say “Keyhole gardens survive floods and arid conditions well as the raised bed holds moisture and is ‘fed’ via a central compost basket.”



Keyhole Garden Cross-section A-A