Trees, animals, birds, plants, forests, mountains, lakes and rivers — everything that exists in Nature are in desperate need of our kindness, of the compassionate care and protection of human beings. If we protect them, they in turn will protect us.

- Amma

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

GreenFriends 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 GreenFriends Litter Project, write Karuna at pnwgreenfriends108@gmail.com

For The Tree Planting and Habitat Restoration Project write:

Ananya ammasananya@comcast.net
PNW GARDENING

Cotton Does Come on Trees!

Homegrown Cotton Tree seeds germinate reliably in a summer greenhouse.

Most of our nursery offerings have a story behind them. For example, there I was, on the northern tip of the isle of Unguja in the Zanzibar archipelago, when I came across a mid-size tree with gobs of cotton hanging like Christmas ornaments on a Christmas tree. But it was not Christmas, and this was a tropical evergreen, not a fir or spruce.

How cotton could be found on a tree was beyond me, but I made a collection anyway. A large tropical praying mantis jumped onto my arm and let me know that tree was HER business, not mine. I screamed and, after a bit of recovery time, lifted her back into the tree.

Later, I cleaned the seeds while sitting on the white sand beach, pulling them with difficulty from their protective covering of downy white. (Where is the cotton gin when you really need it!)

Later, back at my desk in Oregon, I researched cotton and found that the cotton tree is native to India and is the source of some of the finest cotton worldwide, as well as being a very comely tree, with richly blowsy flowers of white, pink or yellow.

Now, some years later, though I go to Zanzibar no more, the cotton tree consoles me yet, and her progeny are just as strong as a tropical preying mantis, and a lot friendlier!

Article by Richo Cech, Horizon Herbs, Williams, Oregon

https://www.horizonherbs.com

Grass Cut for Mulch
During my visit to North Bend, OR, I was pleasantly surprised to find an herb that is so common in South India. It is called Karpooravalli in Tamil (south Indian language). It is called the Mexican mint or Cuban Oregano here in the US.

Karpooravalli is a medicinal plant just like tulasi and is used to cure cough, cold, fever etc. You can make a tea out of the leaves or can simply chew on the leaves. It is a handy herb to have and very easy to grow during the summer months. [https://en.wikipedia.org/wiki/Plectranthus_amboinicus](https://en.wikipedia.org/wiki/Plectranthus_amboinicus)
From Satyavati in Tacoma:

Because of University Place’s location near Tacoma’s past industry and mill pollution, I prefer to use raised beds and containers in my garden. That way I can have healthier soil. Last year I grew around 9 containers of tomatoes. This year I have only 3. This year I grew corn for the first time. Until May there was a large tree providing shade over the garden. Now it gets full sun. I am also growing onions, garlic and potatoes in fabric “pots”. So far I really like it!
From Karuna in Seattle:

I think the pictures say it all. What a year it has been. I’ve never had a garden grow like this before.

Beginning of the season:
June and July:

Now the pathways are covered and it is hard to even get into the driveway! But I have lettuce, cucumbers, potatoes, eggplant, 3 kinds of tomatoes, flowers, sweet peppers, kale, 2 kinds of strawberries, beans, hot peppers, zucchini, trombochino, yellow crookneck and acorn squash as well as some varieties of squash I don’t know the names of!
Terry Barnard sent pictures of her daughter’s Montessori School garden. The children look like they are having such a good time!
PNW GARDENING
The Dirt Pot

Lightweight and reusable, Hydrofarm's fabric planters offer value and versatility to all gardening enthusiasts. Made from porous breathable fabric, these planters allow your plants to thrive, promoting exceptional root health and vigorous plant growth. The soft-sided construction allows the planter to conform to your terrain, making it the perfect choice for all growing areas. Our planters are stronger than similar products, with reinforced seams and strength-tested fabric, so they won’t tear when supporting even the heaviest crop.

- Sturdy reinforced handle straps are sewn all the way around the bottom of the planter for easier, more secure lifting or moving
- No root circling
- Breathable fabric means superior drainage and aeration
- Manages plant temperatures, keeping plants cooler in summer and warmer in winter

https://www.hydrofarm.com/p/HGDB10

The pictures below are from Satyavati’s garden!
Interested in installing a solar electric system on your home or business, or just learning more about solar energy? Attend a SolarWISE workshop in Seattle to learn the latest on solar technology, installations, and incentives. These free workshops are being held now through October. Register today for a chance to win a Diablo Lake Boat Tour!

- August 11, 7PM: [Phinney Neighborhood Center, 6532 Phinney Ave N.](#)
- September 10, 7PM: [Mountaineers Seattle Program Center, 7700 Sand Point Way NE.](#)
- September 23, 7PM: [Bitter Lake Community Center, 13035 Linden Ave N.](#)
- October 3, 10AM: [Jefferson Community Center, 3801 Beacon Ave S.](#)
- October 11, 2PM: [Rainier Beach Community Center, 8825 Rainier Ave S.](#)

Hope to see you there!

- The Team at Northwest SEED
SAVING THE EARTH’S RESOURCES
Greywater 101

August 8 Class hosted by Beacon Food Forest
Saturday, August 8, 10 am – 12:00 pm – taught by Patrick Loderhose, $25
Sign up at Brownpapertickets.com

Greywater, water from sinks, showers, and washing machines, is a great source of irrigation and can greatly reduce your outdoor water use. Greywater systems are especially important in times of drought. Come learn about popular greywater systems, design considerations, water saving potential, costs, regulations, health and safety, soaps and products, and how to choose a system that is a good match for your home and landscape.

About the educator: Patrick Loderhose is a level 3 California trained greywater installer and designer. He has a background in Permaculture and teaches it professionally. Patrick also works as an on-site water management strategist and rainwater harvesting installer/designer.

CONTACT PERSON - Patrick Loderhose
EMAIL - patrick.loderhose@gmail.com
I imagine slugs are a problem for most gardeners; they sure have been for me. It is so discouraging to go to the garden in the morning and see only the stalks left on bean plants and other vegetable seedlings. In the “old” days I used to use powdered slug bait to get rid of them. Later on, I used beer to bait them.

I have become increasingly uncomfortable with killing the slugs. Early this year it seemed I had more than ever, especially in my two worm bins. Believe me, good compost and free food can raise some BIG slugs. During the early part of the summer, I relocated them to other parts of the yard and hoped the slugs didn’t make their way back to my garden. Occasionally, when I found them in the worm bins, I just left them there.

Then one day I decided to check out the relationship between worms and slugs. I was very dismayed to discover that slugs EAT worms! I even found videos that showed that happening. https://www.youtube.com/watch?v=xec_rQXmgjc

Eating my vegetable starts was one thing, but getting plump from eating my worms was completely unacceptable. From then on I took the slugs to the bottom of the lot behind my house, about 250 feet away from my garden and my worm bins. That area is full of blackberries vines but I made them a nice bed of morning glory plants I’d pulled up. Next year I will make a home for them that is more hospitable, but still far away from things I hold dear.

I will also experiment with other ways to protect my seedlings. For example, I like the gutter planters that my friend
SAVING THE EARTH’S RESOURCES

Saroja created this year. She didn’t put her seedlings into the garden until the plants were big enough to be of no interest to the slugs.

I am happy that I have found ways to protect my garden and worm bins without killing the slugs. I hope to be even more successful in that venture next year. If you have found peaceful ways to deal with the slugs in your garden, I would love to hear about them!

****

I found the information in the following articles very interesting:

Fascinating Slug Facts
Slimy Summer Invasion
Earthworms protect against slugs
Amma has been leading a beautiful meditation this summer, one that has us visualize white flowers of peace falling from the skies and covering everything in the world. The meditation inspired me to make a collage of white flowers.

Lokah Samastha Sukhino Bhavantu

May all beings in the world be happy
Did you know...

- Only 5% of the slug population is above ground at any one time. The other 95% is underground digesting your seedlings, laying eggs, and feeding on roots and seed sprouts.
- Slugs do play an important role in ecology by eating decomposing vegetation.
- A slug lays 20-100 eggs several times a year.
- Slug eggs can lay dormant in the soil for years and then hatch when conditions are right.
- In favorable conditions a slug can live for up to 6 years.
- Slugs used to live in the ocean, which is why they still need to keep moist.
- One individual field slug has the potential to produce about 90,000 grandchildren.
- It’s been estimated that an acre of farmland may support over 250,000 slugs.
- A cubic metre of garden will on average contain up to 200 slugs.

Slugs leave their own individual scent trail so they can find their way home.

A slug can stretch out to 20 times its normal length, enabling it to squeeze through the smallest of openings.

- A slug has approximately 27,000 teeth – that’s more teeth than a shark.

The above facts are excerpts from: [http://www.slugoff.co.uk/slug-facts/facts](http://www.slugoff.co.uk/slug-facts/facts)

Go there to read the full list! You can also find fascinating information about slugs at:

- [Slimy summer invasion: Don’t be beastly to slugs, they’re just snails with bad PR](http://www.slashunk.com/mtitle/slimy_summer_invasion.html)
- [Earthworms protect against slugs](http://www.slashunk.com/mtitle/earthworms_protect.html)
PNW Litter Project

PNW Litter Project Stats

Thirty-seven litter project members and their guests reported picking up 103.8 hours of litter in July 2015. The average pick up time was 2.8 hours; the range was 2 minutes to 13 hours and the median was 1 hour.

Members of the project have picked up litter for 6678 hours since the project began in July 2011.

TerraCycle credited us with turning in 139,534 cigarette butts in 2013 and 55,200 in 2014. Our 2015 count stands at 56,450 butts, bringing us to a grand total of 260,174 butts since we started sending them to TerraCycle in January 2013. (In addition to the butts we turned into TerraCycle we also have a 5 gallon jar of cigarette butts we use for the litter project display)

From Krista in Idaho:

Here where I live in rural Idaho everyone in the 10 mile radius takes their trash to dump. Most of the dumpsters are filled with recyclable things like, beds, glass, plastic, cardboard, aluminum cans. A person sits there all day to direct people as to where to dispose of their trash. People throw weeds, brush, and lawn waste into the dumpsters which are emptied into trucks where there are then driven to Oregon about 600 miles away. I have lived near these dumps for about 10 years and visit them about twice a week and each time never fail to leave appalled. I always go away thinking. "Why can't recycling be mandatory, and furniture, i.e., (mattresses) manufacturers buy back the used items to be remade?" Here one can't even recycle plastic or glass and there are almost 41,000 people in the county. What an expense to spend on trucking recyclables and grass all to avoid some well needed change.
PNW Litter Project

New PNW Litter Project Member!

Bruce Fast joined the Litter Project during Amma’s programs in Everett. He just sent me (Karuna) some interesting information about himself.

He wrote:

“In the last 13 years, I have removed about 10,000 pounds of garbage from the woods of Victoria, B.C. During the last 3 years, I have averaged 5 pounds a day. I estimate I have done a total of 6,000 hours of litter pickup. I try to recycle as much of the garbage as I can, and I even used about 1,000 items in an art show I had. [http://www.saanichnews.com/entertainment/301599281.html]

From this show I still have for sale (for $1,000 Canadian) the 100 most interesting things I found in the woods of Victoria, B.C. 50% of the sale proceeds of this art piece will go to Embracing the World and 20% to other local charities working for a healthy environment and sustainable food resources.”
Below is a rough estimate of the garbage Bruce has removed, all done in service to Amma:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>~ Lbs</th>
<th>% Recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium Cans</td>
<td></td>
<td>1,000</td>
<td>100</td>
</tr>
<tr>
<td>Construction Materials</td>
<td></td>
<td>1,000</td>
<td>80</td>
</tr>
<tr>
<td>Glass bottles</td>
<td></td>
<td>1,000</td>
<td>95</td>
</tr>
<tr>
<td>Plastic bottles</td>
<td></td>
<td>1,000</td>
<td>90</td>
</tr>
<tr>
<td>Tools</td>
<td></td>
<td>100</td>
<td>30</td>
</tr>
<tr>
<td>Broken Glass</td>
<td></td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Books</td>
<td></td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Toys</td>
<td>including teddy bears</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Bedding</td>
<td>including sleeping bags and foam mats</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Shoes</td>
<td>including boots and other footwear</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Car parts</td>
<td>not including 7 whole cars</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Bikes and bike parts</td>
<td>not including 7 whole bikes</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Clothing</td>
<td></td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Sports equipment</td>
<td></td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Boat parts</td>
<td></td>
<td>100</td>
<td>10</td>
</tr>
</tbody>
</table>
### PNW Litter Project

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>~ Lbs</th>
<th>% Recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bags</td>
<td>plastic, cloth</td>
<td>100</td>
<td>20</td>
</tr>
<tr>
<td>Dishes, Stoves, Cutlery</td>
<td></td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Bongs and other drug paraphernalia</td>
<td></td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Potted plants</td>
<td></td>
<td>100</td>
<td>60</td>
</tr>
<tr>
<td>Old steel scrap</td>
<td></td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Cement</td>
<td></td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Shovels</td>
<td>mostly broken</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Pens, Pencils</td>
<td>including caulk, pastels and other art supplies</td>
<td>10</td>
<td>40</td>
</tr>
<tr>
<td>Golf Balls</td>
<td>169</td>
<td>20</td>
<td>90</td>
</tr>
<tr>
<td>Golf Clubs</td>
<td></td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Tents</td>
<td></td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Canned gas, camping gas</td>
<td></td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Ropes nets and traps</td>
<td></td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Paintings</td>
<td></td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Sexual toys</td>
<td></td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Paint</td>
<td></td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>spray paint cans</td>
<td></td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>cigarette butts</td>
<td>over 1,000</td>
<td>10</td>
<td>0</td>
</tr>
</tbody>
</table>

Welcome to the Pacific Northwest Litter Project Bruce!
Interesting Information from Our Readers

From Shobana in Shoreline:

1) ‘Tree of 40 Fruit”, A Hyper Hybrid Tree That Grows Over 40 Varieties of Heirloom Stone Fruits

“Artist [Sam Van Aken](https://www.samanvaken.com/) has created the amazing “Tree of 40 Fruit“, a hybrid tree that can grow over 40 varieties of stone fruits in various shades of pinks, purples and oranges. Using the process of [chip grafting](https://en.wikipedia.org/wiki/Chip_grafting), Van Aken propagated the tree in order to preserve a number of heirloom varieties that have been marketed out of existence.”

[Watch it here](https://www.youtube.com/watch?v=7kz8z6s8x1A)

2) I imagine that you probably already know this, but here’s a short article about coffee grounds being good for plants. I went to Starbucks and got a free bag of coffee grounds and started using it. Easy! The article recommends digging the grounds into the soil, but the permaculture approach is to lay them on the surface like mulch rather than to disturb the soil’s microbiome with digging.


From Sheila in White Rock, BC:

I only had the opportunity for picking up litter briefly in June since I didn’t have much time for beach combing. However, I did about 6 hours in total; i.e., two long journeys across both east and west beach. One time was spontaneous and I didn’t have any bags for removal with me. Instead I moved any plastic I saw way above the high water mark into the embankment where I could pick it up in the future when prepared. Hopefully, every little bit is helping—but, according to articles in this newsletter, we are going to need a lot more action around the world.

Plastic entering the food web puts salmon and whales at risk

[http://livingoceanssociety.cmail20.com/t/ViewEmail/r/8CDC510EC663BF652540EF23F0F0F0FED/5E4CEFE-96CE77A7F7A4A88C2FAEAC43DE](http://livingoceanssociety.cmail20.com/t/ViewEmail/r/8CDC510EC663BF652540EF23F0F0F0FED/5E4CEFE-96CE77A7F7A4A88C2FAEAC43DE)