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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

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GreenFriends North America Newsletter



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 karunap108@comcast.net

Bringing Life Back to a Hillside by Jagati (Seattle)

When Amma told her followers that we should plant edible gardens, I began to look differently at the space behind my historic cottage. Decades ago, there had been another cottage there which burned down. The land that used to be underneath it was totally dead. The hillside was covered in blackberry vines and ivy.

The landlords built two retaining walls for me, the upper level to keep out the small patch of grass at the top of the hill, and the second to create a flat space for the garden plot above the steep hillside. A couple friends who are gardening experts, Tirtha and Maheswari, came over to give me advice on how to replenish the soil. These pictures show how the soil looked at the time.



They looked at the space and said, "What about the hillside?" "Huh?" I replied. Smiling, they said with enthusiasm, "You could have a food forest."

Their vision was much bigger than mine, but the idea grew on me. I could plant fruit trees and native bushes with flowers and berries for local wildlife. First, I had a family work party to pitchfork holes in the hard soil. Then I layered the garden area as they instructed, with cardboard, chicken manure, and wood chips. The truck load of free wood chips I got at Tirtha's suggestion was enough to cover the whole hillside, which added nutrients to the soil and killed off most of the invasive ivy. The soil was so poor, I used some of it to make a cement-like mud for small brick retaining walls, to create some terraced spaces on the steep incline for the fruit trees.

The next year, I planted some vegetables in the garden space, and planted apple and plum trees. Friends gave me raspberry plants, and I bought lots of native flowering plants for hummingbirds and butterflies. I used soil analysis from King County Conservation to add the nutrients for specific areas and the food planted there.



By the third year, with companion plants that replenish nutrients, and regular fertilizer, the garden was looking lush.

Now in my 4th year, I am eating out of my garden most of the year. Fruit for every season: strawberries, raspberries, blueberries, apples. My berries are so plentiful now, I don't mind sharing with the squirrels! About 70% of my veggies come from my garden. I love a good pot of collards, mustard greens and kale, and now I am eating it every week. My homemade soups are divine. Fresh salads with my own lettuce, cucumber and tomatoes, garnished with spicy nasturtium flowers, are too delicious to smother with salad dressing!



It is such a joy gazing at the lake after my meditation, picking raspberries for breakfast, watching the hummingbirds drink nectar from the many flowers. On a hot day, the chickadees dive-bomb the sprinkler for a little shower and the bees are everywhere, traveling from blossom to blossom.

Gardening brings me such peace and deep satisfaction. I find myself humming and my mantra flows silently in my mind. Eating my own food – no fossil fuels needed to get it here; native plants for the local birds and insects; giving back to Mother Earth who gives so much to us. I feel such a sense of nurturing – in a full circle that flows in both directions. I have absorbed so much from gardening: allowing things to emerge and fruit in their own time; to be observant: Which plants are thirsty? Which are pale and need nutrients? It makes me happy to smell the rich response from the tomato plant when it is watered, and to smell a flowering bush that gives off sweet fragrance as it soaks in the glorious moisture. I too, like a sponge, glory in soaking up the rich scents and in appreciating the beautiful bounty, supporting the natural cycle, knowing it is all a mystery that I do not understand but can intuit as I reconnect to the sacred circle of life.





A Few Ways to Prepare A Garden for Next Year by Josh



In this article I will cover a few permaculture-inspired ways to prepare a garden for next year during the late summer and fall season. I am going to focus on ways to turn an unused lawn space into a garden, but there will also be some ideas for those with already-established gardens. Most permaculture gardening methods are no-till (or with very little, very intentional tillage), so there will be information about that in this article as well.

In the first part of this article, I will give basic instructions for a few different methods, and then at the end, I have included some more in-depth information about soil, mulch, cover crops, and weeds that will explain more of the rationale behind the methods.

Method 1 - Most Basic

The most basic method to start a no-till garden is as follows: decide where the garden will be, put down a nice layer of cardboard on that site, so the ground is completely covered, and then put mulch on top of the cardboard. Straw that is loosened and shaken out over the cardboard in a nice layer is probably best for this, though wood chips or even shredded leaves would work as well.

Most stores, including grocery stores, have so much cardboard that they recycle and most will give you as much as you can use. Basically all cardboard will work, but not shiny cardboard, which is plastic, and of course it is best to remove tape and staples.

If this is going on a lawn, it is not necessary to cut the grass first. The cardboard will kill the grass by depriving it of light, and over the winter the grass will decompose. Then to plant in the spring, one simply pushes back the mulch in the spot to plant in, put a hole in the cardboard (which will be very soft and decomposing), and put your seed or start in the ground.

Method 2 - Basic but requires more materials

The next method starts the same way: put a layer of cardboard down where the garden is to be. Then, in this method, one covers the cardboard with finished compost to a depth of 4-6 inches.

This method is great because you can actually do this in the spring and then plant directly into the compost. Of course, it requires buying compost, and quite a lot of it too, in order to a depth of 4-6 inches. This is essentially creating a raised bed.

If one were to do this in the autumn to prepare for next year, I would suggest either covering your compost with mulch or planting a cover crop, or both!

(Methods 1 and 2 are simple forms of gardening styles referred to as lasagna gardening or sheet mulching.)

Method 3 - Turn Over Your Lawn

This spring, I unexpectedly was able to have a garden, which I hadn't prepared for. I would not recommend the method I used, but after I had finished I had an idea for how I could have done it better: just turn over the lawn!







As I hope you can see from the photos, I simply took a spade, marked out sections of sod, and essentially turned them over. In the chunk I pulled out was the grass roots, plus a few inches of soil. I also collected some more soil

from the pit, which I used to plant. Once the chunks were back in place, grass facing down, I spread some buckwheat seeds, and then covered them with the extra soil, the results of which you can see in the last photo.

Again, if you were to do this in the fall, I would highly suggest mulching and/or cover cropping once the dirt becomes exposed.

Method 4 - Hugelkultur

Hugelkultur is a method of making raised garden beds that are self-fertilizing and self-watering. Yes, that is the magic of permaculture. Hugelkultur is a method and can come in many variations, from very simple to complex. It is quite beyond the scope of this article to get into it, but while the energy investment up front is more than the other methods, this one requires far less total energy in the long run. There is a lot of great information on the Internet, this page is one which I have found to be among the best:

https://www.permaculturenews.org/2012/01/04/hugelkultur-composting-whole-trees-with-ease

Method 5 - Till (or Double Dig) ONCE

Usually, no-till methods will align more closely with permaculture principles, but sometimes tilling can be useful, perhaps even necessary. This could be true when preparing a new garden bed on soil that is compacted, such as might happen in suburban developments or urban spaces. I have also heard of a method called Double Digging that is a type of deep-tillage, again to be used just once when preparing a bed.

Once the area for the new lawn is tilled or dug, then you can follow methods 1 or 2 above, or alternatively, plant a cover crop, then continue to use no-till methods in the future.

In the next sections I will include some more general information related to these techniques.

Soil

Soil is a combination of tiny pieces of rocks, organic matter, and living things. The rocks get broken apart over thousands of years and these residues are grouped in three general categories by size, from large to small: sand, silt, and clay (loam is a term that describes a soil with specific portions of these three). Organic matter is anything that was, or was produced by, a living thing. In soil this is mostly the remains of ancestral plants and soil life. The life in the soil consists of many many different varieties, including bacteria, fungi, nematodes, worms, and more.

Just like in our human guts we have bacteria that digest most of our food, the life in the soil is indispensable for growing plants and food. I encourage you to think of the soil itself as a living being and treat it accordingly. Since

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permaculture is concerned with living in a way that benefits everything, it is important to know this about soil, and no-till techniques of gardening are designed with the life of the soil in mind.

A very important soil organism among many is called mycorrhizae, which are certain types of fungi. They form symbiotic relationships with plants, and can be essential for some plant nutrition. Tilling the soil destroys these fungi, which are in the form of delicate strands. They will grow back, but if the soil is tilled every year, they have to regrow every year. If the soil is not tilled, the fungi are not killed, and then they can help build a diverse, resilient soil ecosystem, while also helping new plants get started right from the beginning, to everyone's benefit.

Tending soil effectively can be a complex topic, but there is one method that is essentially always correct, is effectively a cure-all for poor soils, and will benefit any soil: adding organic matter. It is quite as simple as that.¹ One type of organic matter that builds soil and provides many other functions is called mulch.

Mulch

Mulch is anything that covers the soil. Often we hear about mulch used in a landscaping context, as wood chips that are likely dyed, perhaps otherwise treated, and have a strange smell to them. I don't suggest using that sort of thing on your garden. Usually mulch is some sort of organic matter, though gravel and plastic could also be used as mulch (though not usually in a permaculture setting).

Mulch has multiple functions. By covering the soil, it prevents soil from being lost to erosion. It also helps keep the soil moist by preventing evaporation, so much less watering is required. Mulch can also prevent weeds from growing. Perhaps most importantly, the mulch will decompose, adding organic matter to the soil, which will increase soil health and productivity, as well as maintain it for the long term.

The most straightforward kind of mulch to use is straw, which is simply the dried stalks left over from grass or grain. It works well because it is easy to spread, fairly cheap, and in some situations can allow cover crops to grow through it while still providing the function of a mulch. One important note: lately some pesticides have been used on some plants grown for straw, which unfortunately can stay on the straw for a few years and contaminate gardens, so be aware of that and ask when you buy straw.

Wood chips can also be used, and often can be gotten for free, since tree services often chip branches and may give the chips to you if you ask. It is worth doing some research about types of wood and also knowing what kind you will be getting; most kinds are suitable but some aren't. Wood chips are great at preventing weeds, and will also break down to form humus, which is a large-term store of nutrients for the soil, as well as cultivate beneficial fungi for your garden.

¹ For more information on organic matter and soil life, I recommend the book *The Hidden Half of Nature* by David R. Montgomery and Anne Biklé

If you have many leaves that fall in the autumn that may also be a possibility. I have not tried this but I plan to this fall; I have read they should be shredded to allow air to circulate more easily. Experimentation is very much a part of permaculture!

Cover Crops

Cover crops are essentially living mulch and living fertilizer. There are many excellent cover crops, such as buckwheat, alfalfa, or any kind of beans. Buckwheat for instance can germinate just by being strewn on the ground, so this is a good option if you are mulching bare soil with straw: throw some buckwheat on it, put on the loosened straw, and then you will have a cover crop and mulch!

A related concept is a catch crop: most of the energy on this planet comes from the Sun, and while mulch is great, it doesn't catch the Sun's energy. If we can plant a catch crop, we can catch that energy and use it to a good purpose, even if we just cut those catch crops and leave them on the soil, they will decompose and improve the soil through their organic matter.

Catch crops can also catch nutrients from below. For example, in very rainy places, the water may leach nutrients out of the soil, or take them so far down plants can't reach them. If we plant catch crops, especially deep-rooted ones like alfalfa, we can catch those nutrients before they go away, and bring them back up to the surface.

Weeds

Lastly, I want to say that weeds are not our enemies, in fact they are our friends. Of course, there are some highly invasive weeds that will simply overpower everything and cause many problems; I'm not talking about those. I'm talking about more common ones like dandelion, chickweed, purslane, plantain, etc.

I encourage you to learn what weeds are in your garden and then to learn about who they are. Firstly, weeds can act as cover crops. They are essentially nature's cover crops and nature's catch crops. The soil wants to grow something and be alive, so if you don't help it do that, it will on its own. With this in mind, you can use weeds to improve your garden. For instance, don't pull the weed out by the root, simply take some shears and clip the plant right where it meets the ground, and leave the foliage on your garden. Leave the roots in the ground. The roots and foliage both will decompose and add structure and nutrients to your soil, and if there are enough weeds they will also act as mulch.

Along with this, many "weeds" have useful properties. Dandelion root and plantain both have medicinal qualities. Purslane and dandelion are also edible. If you like salad and grow lettuce, you may happen to find some dandelion and purslane growing near your lettuce. If so, cultivate some of those "weeds", and add them right to your salad! They are delicious and nutritious.

Sarva's Container Garden- Update (Renton)

With the addition of two blueberry bushes, a pot of Lovage seed plantings, and several Motherwort transplants from a friend, I have squeezed my dog Jellybean's space in the garden down to a little more than a pathway! He still makes good use of the sliver of sunlight amidst the green, though. Lots of plants are flowering, and all of them seem to be thriving. I love the mix of edible and medicinal plants, it's a happy place.





Motherwort, the plant of the mother. Her botanical name, *Leonurus cardiaca*, means lion hearted. The atmosphere around Motherwort feels like a big, loving hug. It heals the nerves and makes one feel confident. It's a lovely plant ally for these strange times.



Sarva's Container Garden Timeline



April 2020

June 2020

August 2020

To see bigger and sometimes more photo go to previous articles in the series: <u>http://www.greenfriendsna.org/Downloads/04_Newsletter_106_May_2020.pdf</u> Page 11 <u>http://www.greenfriendsna.org/Downloads/GreenFriends_Newsletter_108_July_2020.pdf</u> Pages 14-15

Container Gardening: Part 3–Aphid Control and Garden Update by Emma S. (Lake Stevens)

A warm morning this summer, I came outside to sit on my patio. Looking over and admiring my kale, I noticed a leaf had very odd markings and was curling inward. Leaning in closer I found these tiny bugs huddled together within the leaf. I plucked off the leaf and kept inspecting my kale plants. Only to find that the one leaf I plucked off was not alone, there were many in the same condition. I knew immediately what they were, Aphids.



Instinctively I started to remove all the leaves affected by the Aphids. Once all the bugs in sight were gone, I began to wonder, now what do I do? I did know one thing that I did not want to use chemicals in my garden to rid of these bugs that were eating away at my kale.

Turning to Google, I started to research more about Aphids. I began to learn that there are dozens of Aphid species. The type of Aphid that I found is known as the Cabbage Aphid. I found many organic farming articles suggesting that you can spray a simple soap and water insecticide solution on to the leaves. Very eco friendly!



I isolated the kale so not to let the Aphids spread to other veggies in my container garden and every other day I would spray the affected and surrounding leaves with the soapy water solution. It seemed to be helping, but I was still finding that there were still large amounts of Aphids appearing about every 5 days. I recalled reading in an article about adding peppermint oil to the soapy water solution to help aid in controlling the infestation.

Since adding the peppermint, I have noticed fewer Aphids. If I see an Aphid or two, I'll swipe it off of the leaf and occasionally I will notice a large bunch of Aphids and remove the affected leaves. Once a week I will spray the base of the kale with the soapy peppermint solution. It has become part of my routine of caring for my garden. I'll continue to manage the Aphids as long as I need to. The plant seems to be still thriving and providing hearty leaves that are so tasty.

And other parts of my container garden have also produced beautifully this season!



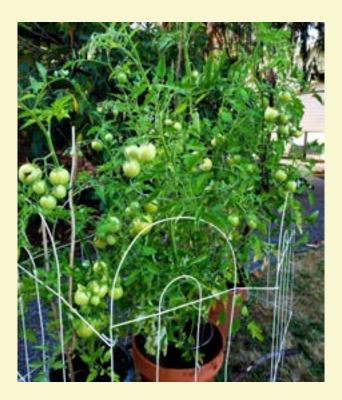
Sugar Daddy Snap Peas



Beets



My cat Annabelle especially enjoyed the catnip I grew for her!



You may remember my piece on tomato seeds from a previous article. My tomato plant is now thriving and has produced too many tomatoes to count. I am looking forward to the fruits ripening and being able to enjoy them very soon.

I am so grateful to have fresh organic veggies just steps from my kitchen!

PNW Gardening Kristin's Garden Photos (Seattle)









PNW Gardening Sarah's Family Urban Farm (Eugene)









PNW Gardening Woodinville Garden Photos



PNW Gardening More Garden Photos

From Lin in Bellevue:

Having clover as a companion crop created this huge tomato plant.



Bainbridge Bounty from Prarthana's Garden/Farm:



PNW Gardening Give a Bunny an Inch and He'll Take a Mile by Lin (Bellevue)

He was so cute. If I'd been able to hold him, he'd have fit in the palm of my hand. We met when he hopped up to my glass front door and peered inside. For me, it was love at first sight, and I started putting out lettuce and carrots to keep him around.

Still, it must have been his mother I chased out of my vegetable garden after she'd nibbled my newly-planted lettuces to the ground, along with my new-ly-sprouted peas—occasioning quick erection of a fence.





But the nut doesn't fall far from the tree. After a few weeks of feeding Baby Bunny by my front door, I went out to water the vegetable garden and who should be inside the fence? You guessed it. Like Peter Rabbit in Beatrix Potter's famous stories, he'd been able to squeeze under the gate, which explained the earlier disappearance of the peas' attempt at second growth along with my tiny kale starts.

Luckily, Baby Bunny doesn't seem to like the garden lettuce now that it's turned bitter after bolting, and he leaves the mature chard and kale alone. I hope it occurs to him that chewing the garden of the hand that feeds him is a bad idea. Grumble grumble. Meanwhile, he listens quietly when I talk to him on the front walkway or to his relatives when I encounter them on the gravel driveway. One even stretches out and relaxes while listening to my words praising his fluffy coat and asking if he's finding enough to eat that doesn't involve my vegetable garden.



Nature Watching Miracles of Nature- Part 3 by Sonali (Sammamish)



VIDEO From Egg Laying to Fledging Preparation

Sonali's video captures the daily life cycle of a robin family from egg laying, to feeding the hatchlings, to preparation for fledging. Enjoy!

https://youtu.be/uRGUks3Ytkg

To read or re-read Part 1 or Part 2 click the links below.

Part 1

http://www.greenfriendsna.org/Downloads/GreenFriends Newsletter 108 July 2020.pdf pp 23-25.

Part 2

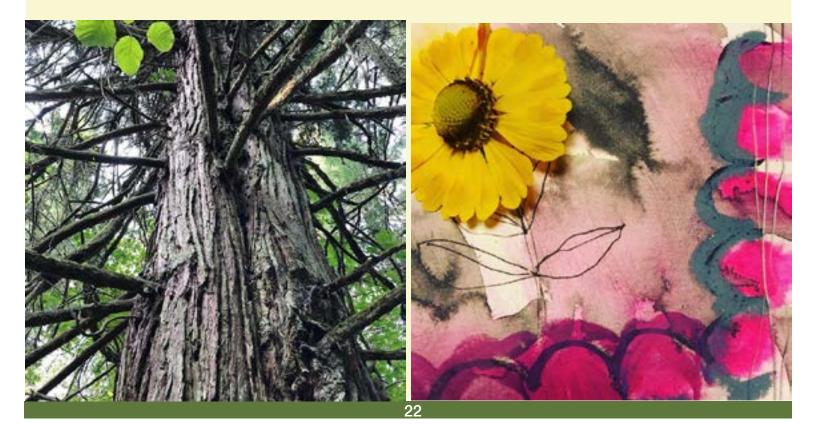
http://www.greenfriendsna.org/Downloads/04 Newsletter 109 August 2020.pdf pp 10-14.

Nature Nature Photos

From Kristin:



From Sarah:



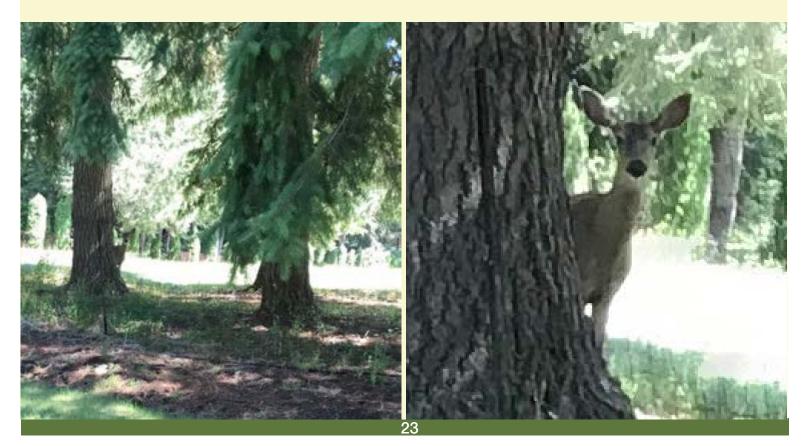
Nature

Woodinville Deer Photos

From Meera:



From Karuna:



Nature Hiking in the Olympic Mountains by Prarthana (Bainbridge Island)



Nature Rats, Charlie Brown! This Human is Being Outsmarted by Lin (Bellevue)



This looks like my backyard rat.

Who are we, as humans, to decide what's a pest and should be gotten rid of? Mother Nature has purposes for all her creatures, and humans have mostly upended the orderly functions assigned to each of them. If lockdown during Covid-19 has taught us anything, it's that we ourselves are the pests. Without us and our exhaust-spewing transportation and harmful commercial agriculture, the air and water cleared up almost instantly—all around the world. Swami Dayamritananda, a faithful reader of the GreenFriends Newsletter, recently suggested that, instead of having only stories such as those about how to foil rabbits and slugs, we also include articles about supporting such creatures.

It's all well and good to compassionately feed the bunnies and trap and relocate slugs instead of reacting with annoyance as they munch on our gardens. But what about rats? Their urine is poisonous and their droppings can spread disease. Their chewing can do a lot of damage, especially if they get inside. And, oh my goodness, they reproduce with lightning speed.



Roof Rat

In the nearly fifty years I've lived in my house there have been roof rats living in my ivy and tunneling in my vegetable garden. Probably their only offense was that they ate the red worms I'd introduced into the wire composting towers in my vegetable garden. Since they didn't do any other harm to speak of, I thought they were cute with their little black bodies and pink ears. So we lived in harmony.

Then about three years ago that changed. My first clue that Norway rats had moved in under my tool shed was the dreadful dead animal smell in my brand-new car. One

had made a nest in the air system and died there. The whole dashboard had to be taken out to remove the rat—about the size of a small cat—and the smell persisted all year despite fumigation. This year a racoon made a home under the shed, effectively ejecting the former rat tenants. Raccoon droppings are themselves a disease hazard, but I breathed a sigh of relief.



Nature

Then I discovered a new variety of rat was living in my yard, one not included in online information about Seattle area rats. One family had made a home under the big fern near my back patio. Another family moved in under the big fern by my front door. I think these rats are more like the ones seen around waterfronts and sewers... maybe because light rail construction along the Sammamish Slough near my neighborhood has displaced them. Recently I looked out the kitchen window and saw an entire litter of baby rats climbing in the ivy and walking on top of the leaves (actually, they were cute and very funny). After all, their parents were probably minding their own business until humans came along and displaced them from their home.

But they are way too close to the entrances to my own home. I like to keep my front and back doors open during the summer to enjoy the fresh air and birdsong (and to cool the house at the end of a hot day), but this year I'm afraid that will invite the rats inside! Accepting them in the yard as homesteaders is one thing. Having them as roommates is another.

I called an exterminator and he placed poison boxes front and back for a month. During that time, I watched the darn rats walk right over them and continue on their way. When he came to pick up the traps, we opened them... the poison blocks hadn't even been touched. Oh well. I hadn't liked the thought of poison anyway. I don't like the potential cruelty of snap traps any better.

I prayed for a cat. Then I bought a battery-powered box used in chicken coops to kill rats by instant electrocution. The instructions said to bait the boxes and get the rats used to free meals before turning the power on. I kept baiting the box but, with Swamiji's recent emphasis on compassion for creatures most of us consider to be pests, I just couldn't bring myself to turn the power on. But that means that now I'm essentially feeding the rats the suet I was formerly putting in the bird feeder!

Two days ago when I was watering the vegetable garden out front, what should emerge from the ivy but an orange-striped tabby cat. He rubbed up against my ankles and accepted my pets behind his ears and down his back. Had my prayer been answered?

This morning I finally said "enough"! and went out to turn the trap's power on. But when I went to add fresh bait I discovered the former bait hadn't been touched! Now what? Had the rats read my mind and started avoiding the box? Had the cat done a thorough job? Did my prayer inspire the rodents to move else-

where???? Whatever the case, this human is definitely being outsmarted.

Years ago, Charles Schultz originated the saying, "Oh, rats!" in his Peanuts cartoon. Along with "Good grief," it was one of Charlie Brown's favorite sayings. Now, for me, "Oh, rats!" has taken on new meaning.



NatureThe Winner: The Squirrels! from Shobana (Shoreline)



Photo Credit: Pixabay

Shobana sent a link to a fascinating and fun squirrel video: https://www.youtube.com/watch?v=hFZFjoX2cGgc

Another Squirrel Feeding Project

Article and Picture: An Ohio man built a backyard squirrel bar with seven varieties of nuts on tap

Video: Squirrel Bar - X Carve CNC project - The Nutty Bar- Thinking outside the nut!

NatureMy Gecko Friend by Shawn (from Seattle but who is in Florida)



I saw the gecko by my refrigerator. "What the... how did the little guy get in here?"

He quickly looked for safety under my refrigerator.

I wondered, "What has he been eating? Poor little guy."

A few days passed and I did not see him. I began to worry. "Is he gonna starve to death?" I had been leaving offerings of gecko food for him; but the food was untouched.

Then one day I saw him. Still alive! But once again he quickly sought safety under the fridge.

"C'mon, little one, don't you know I mean you no harm?"

Over the next week he would come out once in a while. I did not chase after him; but rather let him get used to me being in the kitchen.

One day after he had ventured out two feet from the fridge, I said a little prayer to calm myself, and I slow-

ly blocked all escape routes. Using a pan and cardboard, I delicately captured him!

I gently let him out the front door quickly closing the door, not wanting any of the Florida heat or bugs to come in. As I peeked through the side window I could see him walk a little. Then he turned his head and I swear he was looking at me looking at him through the side window for a long time. Long enough for me to take the picture. Maybe I've seen too many Disney movies, but I think he was thanking me and also astonished that he had not been harmed by this huge two-legged monster.

Epilogue: Three months later now, when I leave through the front door I often see a gecko close to the door. I like to think that it's my friend who survived my kitchen!

Nature The Symbiotic Relationship Between Ants and Aphids by Karuna (Seattle)



<u>Wikimedia</u>

When I blogged about experiences I had with ants earlier this summer (<u>Discrimination Opportunity</u> and <u>Watch, Wait</u> and <u>Wonder</u>), one of my blogging friends, Hariod at <u>contentedness.net</u> told me that ants and aphids have a symbiotic relationship. I was fascinated by his description of the process so decided to learn more about it.

Ants play the role of protector in the ant-aphid relationship. They do that in exchange for the honeydew that the aphids express when the ants stroke the aphids' bodies with their antennas. I found some videos that show those behaviors.

In the first part of this video, you will see the ant stroking the aphid, the honeydew being expressed, and the ant drinking it.

https://www.youtube.com/watch?v=0TJT90MJmQg

The next video shows how ants protect aphids from <u>lady beetles</u>. (I was surprised to learn that in other parts of the world lady bugs are called lady beetles, lady birds, or lady cows! Ladybugs is a North American term.)

https://www.youtube.com/watch?v=S8RTdznEFio

As I continued exploring YouTube videos, I found an incredible one which shows ants protecting aphids from an aphid lion, which is actually the larva form of a <u>Green Lacewing</u>.

Nature

https://www.youtube.com/watch?v=fbRK6E5crbg&feature=youtu.be

The video also reveals that there are some creatures which ants allow to stay near the aphids. The ants are very much in charge of the relationship. Some of the articles say that ants "farm" the aphids. When an ant finds a group of aphids, it leaves a trail of pheromones for worker ants to follow. The ants then enslave the aphids. They slow the aphids down by drugging them with a tranquilizing chemical from their feet. They may also bite off the aphids' wings to prevent them from flying away.

The ants protect and take care of the aphids in ways other than saving them from predators. They may move the aphids to parts of a plant that have the best sap. When it rains the ants may take the aphids to a more sheltered place, bringing the aphids back to the plant after the rain shower is over. Ants may even carry aphid eggs to the storage chamber of their own nest in order to help them survive a cold winter.

Nature is so amazing. Both ants and aphids are such common creatures, but I would never have guessed that they were so interconnected.

References:

Ants Farm Aphids in a Symbiotic Relationship Defensive Symbiosis What is the Symbiotic Relationship between Aphids and Ants?

Reprinted from the November 2015 issue of the PNW GreenFriends Newsletter, pp. 10-12.



Tree Planting and Habitat Restoration One Million Trees!



In November 2015, the King County Council passed a <u>Strategic Climate Action Plan</u> for the county. Part of that plan was to plant 1 million trees by the end of 2020. They surpassed their goal in two ways: by planting 1,122,535 trees and by reaching their goal months before the due date!

There were more than 100 partner groups that took part in the project—cities, tribes, nonprofits, youth organizations, schools, and businesses. <u>Green Seattle Partnership</u> (GSP) was one of those partners. The 134,166 trees Green Seattle Partnership groups planted during the 2015 Climate Action Plan were included in the million. (Our GreenFriends Greenbelt Restoration Project was part of GSP so the trees we planted on that site would have been included in that number.)

In 2020, King County will have another Strategic Climate Action Plan. The new Action Plan will include planting three million more trees!

More information is available at: <u>https://www.kingcounty.gov/elected/executive/constantine/news/release/2020/Ju-</u> ly/30-one-million-trees.aspx



Reduce, Reuse, Recycle Making Cloth Cards by Amritadivya (Sacramento)

Overview

Cloth cards came about during my Covid cleaning efforts. As I reviewed and reduced un-needed items in storage into: save, discard, or donate categories; some items did not seem to fit. They seemed too nice to go into a land-fill, but not suitable for donation. I love reusing - finding a new way to use what I have instead of buying something new. An idea was sparked--sewing the nice pictures onto cloth and then sewing the cloth onto a card that could be mailed to friends, pen pals, and family! I found this to be a good project for beginning sew-ers.





Materials needed:

- 1. Card stock or blank cards with envelopes
- 2. Pictures from magazines, family pictures, and/or recycled from greeting card pictures, flyers or discarded books.
- Sewing machine and thread or hand sewing supplies. Note: this process dulls needles quickly, so keeping a dedicated needle for this purpose can be helpful.
- Fabric scraps/pieces. If you need fabric for this project consider using garments you already have that may need repair or may not be suitable for donation. I found a store near



Reduce, Reuse, Recycle

where I live called Restore associated with Habitat for Humanity that sells(cheap!) discarded designer sample fabrics that are beautiful, but too small for many uses, however almost perfect for this project. Thrift stores can be another resource for fabric pieces.

Method:

- Select pictures to use. Crop or reshape image as desired or to fit within the card size you have selected
- Place the picture onto the fabric. If needed, place a dot of glue on the back of the picture to help keep it in place. Thread color can be neutral (clear thread or same as fabric color) or contrasting color to highlight the stitching lines.
- 3. Using a longer straight or zig-zag stitch (3mm in length worked well for me), sew the picture onto the fabric. Check the back of the work to see if tensioning needs to be adjusted. I have decreased the thread and bobbin tension slightly to help keep stitching even.
- 4. Trim the fabric to fit the card you plan to use. I use clips to hold it in place while sewing the fabric to the card. You may want to check to see how it fits into its envelope after sewing. Depending on how thick the fabric is, some trimming may be needed.



PNW Litter Project

Litter Stats

In August 2020, 24 Litter Project members and their families and friends picked up litter for 41 hours. (Average 1.9 hours; Median 1 hour; Range 1 minute to 10 hours). We have picked up litter for 11,503 hours since the project began in July of 2011.

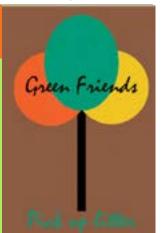
TerraCycle Stats

We have sent TerraCycle 356,874 cigarette butts since 2013. [TerraCycle is an organization that recycles items which are normally considered unrecyclable.]

From Kalavathi in Seattle:

PA and I have been going to the park and spending time in nature every day as an essential part of self-care. I hadn't really been noticing garbage on our walks, as foolish as it sounds. I guess I hadn't really thought nature "needed our help"! But, after buying some inexpensive gardening gloves at Fred Meyer (to keep the germ situation down), we just started bringing our gloves and a big paper bag (that we empty out and reuse each time) on our walks.

Once our attention turned to the ground, well... it turns out there is *way* more garbage in the park than I had been noticing. So now garbage pick-up is part of our daily walk. It's so uplifting to be in the park with the beautiful trees and all of the flowers, and animals...We still have ample time to look up and enjoy the park, and the beauty around us. But now it feels so good to be doing something simple to honor Mother Earth and let her know we're grateful, even if it's something small like picking up a few cigarette butts.



PNW Litter Project Making a Difference by Aparna (Redmond)



I don't have too many memories from when I was younger, but one of the things I do remember is going litter-picking with my friends and family. The first time I went, I was around four or five years old, but I still remember how fun it was. There was always a certain sense of accomplishment I felt each time that I found a piece of litter, no matter how small or big it was. This came from the idea that I got to add it to the bag of litter I had, and each piece made that bag grow fuller and fuller. This in turn made me feel more and more accomplished because I felt like I was making a difference because I was picking up more trash. I even remember one time when my father and I had gone to an Amma program in a different state, I saw some litter on the street. My immediate response to it was to tell him that we should bring Karuna Auntie there so we could clean it up. My words at this time were very innocent and came from the basic understanding that trash didn't belong in the street, so if it was there, you should pick it up and properly dispose of it. However, as I grew older, I realized how big of a problem littering was and the importance litter-picking had.

Every day, thousands of pieces of trash are disposed of improperly and as this accumulates, we harm mother nature and in turn harm ourselves as well. Pollution is one of the biggest problems we face as a society, and littering can cause air pollution, soil pollution and water pollution. Trash like cigarettes can be so harmful to the environment and to human beings as well. This is why litter-picking is so important. As a single person or even in a group of people, you may only be able to do so much, but no matter how much you do, it is still a big help towards the environment, and it is also the least we can do considering how much nature gives to us and how much we are harming it.

Litter-picking, aside from the help to the environment, is so important and helpful to me. Because I still go to school and I take different classes, I am not able to do seva very often. Amma always says that if there is ever an opportuni-

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PNW Litter Project

ty to help your community or someone in need, you should always take it. Litter-picking is an opportunity I am lucky to have, that allows me to help the community and mother nature. Getting this chance is so important because it allows me to grow as a person because I learn values like service, hard-work, compassion and humility. All in all, these experiences are really special to me, and I hope I am able to continue doing this!





August 2020

Green Friends North America



Green Friends - North America

Living in harmony with nature

Some small and big actions for a greener reality

Greetings GreenFriends!

Welcome to the Summer 2020 GreenFriends newsletter! In this edition we have more gardening articles, some wildlife stories and a few ideas for parents and kids.

> Lessons I Learned from Gardening Milk Crate Composting: Easy and Effective Ideas for Backyards & Balconies Bluebirds of Happiness The Daily Garden Ponderings at Amma Center New Mexico The Turtle Stories of the Amrita Nature Sanctuary for Native Wildlife - Part I An Inquiry into the Lotus Garden with Amartya from San Ramon Ashram Going Zero Waste - Strategies to Reduce and Recycle Packaging Parents and Children's Corner Amma's Words

We look at the ways we interact with the earth and the fellow beings we share it with. We consider more approaches to gardening from large scale projects to balcony gardens, as well as ponder the lessons gardening brings. We also explore our relationship with wildlife and share some environmental resources and activities to support parents' educational efforts surrounding Nature, plus tips on how to reduce our everyday waste.

To open the newsletter go to: https://www.greenfriendsna.org/gfnewsletter 0820.html

"The attitude of mutual understanding and respect between humans and nature must be incorporated into society." - Amma