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 karunap108@comcast.net
Hi Friends, let's practice gratitude for the glorious, irresistible and hardy herb Sweet Woodruff (*odoratum*).

I bet you have seen this sweet smiling green herb thriving throughout the Pacific Northwest in shady or woodsy spots. Sweet Woodruff has adorable little starry-shaped fragrant white flowers that arrive in spring. She is easy to grow and can spread rapidly. She is a perennial, which means she will return year after year to the spot where planted. Sweet Woodruff grows to be about 5-6 inches tall. She also goes by the names "Sweet Bedstraw" from the times when folks used her to stuff their mattresses and "Wild Baby’s Breath." Sweet Woodruff doesn’t seem to mind acidic soil and will even thrive well under a pine tree.

Sweet Woodruff contains the plant phytochemical Coumarin. Coumarin has blood-thinning, anti-fungal and anti-tumor activity, and increases blood flow in the veins. This helps if blood clots are present. Coumarin should be avoided if you are already taking anticoagulants. As with all herbs, please use Sweet Woodruff in moderation. Because she contains Coumarin, overuse can make her toxic and cause dizziness.

When Sweet Woodruff is dried, she smells like a cross between freshly mown hay and vanilla. As the freshly picked plant begins to wilt, the scent actually increases and becomes much stronger as it dries. This herb is perfect for putting a sprig in a vase on your alter and offering it to your beloved deity.
Because of its lovely fragrance, Sweet Woodruff has long been used in potpourris and perfumes and for stuffing eye pillows to aid in sleep. It can also be used to discourage insects from getting too comfortable in a chosen area. Farmers in Germany give Sweet Woodruff to their cows to make the milk taste and smell sweeter. It is a very important herb there that is used to make May Wine. The Germans call her "Master of the Woods."

The fresh wheel-shaped spiral leaves of Sweet Woodruff can be eaten directly or made into a tea or poultice for wounds. Adding a few of the fragrant glossy-green leaves to a salad is very refreshing! There are so many healing properties, it is hard to resist!

**Sweet Woodruff: Medicinal Benefits**

- Promotes a healthy appetite
- Can stop bleeding when applied externally to a wound
- Helps to heal wounds
- A tea can be made and taken as a sedative
- Helps improve circulation
- Can provide relief from muscle spasms
- Considered a purifying and detoxifying herb
- Lowers Blood Pressure
- Can be taken as a Tonic (to improve general health)
- Used to treat digestive and liver problems
- Used to treat skin diseases and hemorrhoids
- Has a laxative effect
- Is anti-arthritis
- Has anti-bacterial properties
- Is anti-inflammatory
- Reduces varicose veins
- Is good for headaches and migraines
- Gladdens the spirit

**Sweet Woodruff: for Honoring Harmony and Peace**

On the feast day of St. Barnabas (patron saint of peace makers) June 11th, one can wear a garland of roses, sweet woodruff, and wild William as the Saint once did. I hope you will try it.

Sweet Woodruff is indeed an important herb for backyard herbalists! It is very easy to get a start from a friend who will be happy to share! She will transplant easily.
Please join me in trying to get to know our friend Sweet Woodruff better. Take time to talk to her, express gratitude, and build a relationship. She can grow easily in a pot, so if you live in an apartment, no problem. This is a superb herb to plant in a neglected wooded or shaded parking strip or alley. Once planted, it is always available nearly year round! Soon those unloved portions of Mother Earth might become a frequent gathering spot for neighbors.

Here are two quick and easy ways to start using Sweet Woodruff intentionally and medicinally. Remember to thank the plant before gathering it and taking its medicine, and always give something back to the plant afterward. What you give back is up to you. It can be a chant or a song or just a simple message of gratitude, or maybe you will return the used portion of the herb back to the base of the plant.

1. HERBAL TEA: Cut off 1-2 tsp. of Sweet Woodruff to make a tea. Cut up the small pieces in order to release more of the fragrant herb and drop them into boiling water that is quickly removed from the heat. Let her infuse 10 minutes before drinking. Incredibly refreshing! You can either strain the herb out, or just enjoy the pieces when you drink the water. After all, Sweet Woodruff is edible, and Woodruff water is much better tasting and healthier than just plain water. It tastes as great cold as it does hot.

2. Herbal Infused Salad: Cut a few sprigs of Sweet Woodruff and gently add her to your next salad or smoothie. Enjoy the benefits!

I hope you will take time to reflect on what new connection you feel to the plant and ultimately to your Mother Earth by using the herbal leaves and drinking the infused tea water consciously and intentionally.

Happy Herbing!
What Is a Spiral Herb Garden?

A spiral herb garden is a beautiful and utilitarian design that mimics Nature. It’s design makes it drought resistant because its surrounding moat holds water for long periods, allowing the soil to absorb moisture into the spiral...slowly.

A spiral herb garden is a sustainable garden design ideal for creating microclimates to suit a variety of herbs and their needs. Many herbs come from Mediterranean climates and need dry, sandy soil conditions while others thrive in cooler, moister soils. A spiral herb garden is warm and dry at the top and cool at the base, where it retains moisture. It makes great use of small space. In a 6x6 foot area utilizing the spiral shape, 22 feet of plant space is available.

A spiral herb garden is easy to manage, plant and harvest, allowing one to stand outside the circle and reach into the middle without stepping on the herbs.
How to Create a Spiral Herb Garden

Location is key; you want the tail of the spiral in a shaded area and the center, the highest point, to have more sun exposure.

Once you have figured out where you want to construct it, pile up a mound of soil to your desired height. Beginning at the center, mark out the spiral with a trail of flour or small stones. Building a retaining wall following your trail is a good opportunity to use recycled items like brick pieces or rock. Work your way along one tier at a time. Stagger bricks to add strength to the tiers.

Next, add cardboard and old compost and lighter compost to the growing beds. This will create a solid nutrient-rich backbone for the spiral garden. These components also assist in regulating soil temperature, retaining water, and retarding weeds.

Lastly, before planting, dig a shovel’s width ditch around the bottom circle of the spiral garden. Start by digging shallow scoops of earth and placing the soil on the edge of the bottom tier. When the ditch is at the depth you desire… tamp down the earth in the bottom of the trench. Add a loose wet clay mixture and let it dry. If you want, add additional wetish decomposing granite in the ditch as well… let it dry. Finally, fill the ditch with river rock. When the spiral is all planted, fill the ditch with water to create a moat around your garden.

Spiral Herb Garden Plants
The outer tier has the richest soil and is great for chives, parsley, onions and garlic, flowers which attract pollinators and repel insects, and also mints (if you keep them trimmed).

The middle tier holds less water and works great for chamomile, parsley, oregano, thyme, sage, coriander and tarragon.

The center and the driest tier can also be used for the Mediterranean herbs and especially rosemary.

When adding any others, simply consider the water needs and the path of the sun over the spiral herb garden.

When finished, mulch!

Fill the ditch with water and check out how long it will be until you water again!

Enjoy your drought resistant spiral garden for many years…
Below is a picture I took yesterday of a bird sitting in the prasad tree...the tree that grew from a seed from an apple Amma gave me 4 years ago. I expanded it so it is all blurry but I rather like it that way.

Just as we enjoy the presence of trees planted by people in the past, we too should plant for the future generations.

- Amma
On March 25, around twenty eager volunteers gathered in Maltby to plant trees. During the day, they planted 22 trees—2 varieties of apple trees, 3 varieties of pears, 3 varieties of plums and a filbert tree. Eight more trees were planted within the next week.

A large hole was dug for each tree and then layers of regular dirt, forest dirt, compost, mycostim*, and fertilizer were added. Cardboard was put around the perimeter of the hole. Once the tree was planted, wood chips were added and a wire fence was placed around it to protect it from the deer.
It was such a fun and productive day!

* Mycostim is beneficial mycorrhize and root colonizing fungi. It includes kelp and humic acid.
Tree Planting and Habitat Restoration
Greenbelt Restoration Work Parties

Ananya and Karuna completed their Forest Steward training so began hosting bigger work parties. On Saturday April 8, nine volunteers started clearing land in one section of the four-lot Greenbelt strip we are restoring. We dug out blackberry root-balls and ivy and put them on racks to dry out. We covered the cleared land with burlap bags to control the weeds. We also discovered that there were many ferns buried in the debris so removed the debris that was around each of them and marked them with a yellow flag to make it less likely that they would be stepped on.
Our next work party was scheduled for Tuesday, April 18. The weather forecast was dismal, but we woke up to a dry day that even included some sun. We didn’t know if 11 a.m. on a Tuesday would be good timing for a work party, but six volunteers came! This time, once the root-balls were removed, and the burlap bags laid down, we put raked-up debris on top of the bags. Over time the debris will become mulch.

At the end of this work party, we planted a cedar tree that Ananya had raised from the time it was a four-inch volunteer sapling. We each placed handfuls of dirt around the tree as we chanted Lokah Samastha Sukhino Bhavantu.
In 2015, I added three bird houses to my back yard. The following spring (2016), birds flew in and out of the houses. I had thought they were making nests, but it seemed curious to me that none of them seemed to stay very long.

This February, I decided it was time for me to look inside of the houses so I could remove old nests, if there were any, and get the accommodations ready for this year’s guests. I was very surprised by what I found: a partially completed nest, a few building materials, and a nest that was built almost to the ceiling of the birdhouse.

That third nest was more than six inches high; and the top of it was completely flat. Both of those characteristics surprised and disturbed me. Later I found out that it was a wren’s nest and they are often that size. But I still didn’t know why a bird would make the top of the nest flat with no place to lay eggs.

As I read more about wrens I learned a possible explanation for the three nests. The Audubon Field Guide said that a male wren may build several nests. When the nests are finished, the female wren chooses between them. The guide went on to say that the male may build some incomplete “dummy” nests. After reading that, I realized that it was a good possibility that the same wren had built all three nests.

I took the big nest inside so that I could look at it more closely. Once I removed the top layer, I discovered a section that looked like a plug. It was much denser than the rest of the nest. I wondered what the plug had been plugging. When I looked underneath the plug, I saw an indentation. I realized it might have been an area that was meant for the female and her eggs!
The Audubon Guide had mentioned that wrens may puncture the eggs of birds that are nesting nearby. It also said that a female wren may leave the male to take care of her eggs, and go nest with another male. I wondered, partially in a joking way, if the female had not approved of any of the nests her partner had built and had taken off to find another mate. If that was the case, had the abandoned male decided to plug the nest and add a solid roof on top so no other bird could use it? How in the world had he built the plug? I was left with another set of questions.

After finding the plug and the place that might have been intended for the female, I went back to examining the whole nest. I discovered it was made up of at least ten different materials.
I looked at each item under the microscope.
While I love the beauty the microscopic photos revealed, there was one material that greatly disturbed me. That was item #10: plastic. I had noticed some plastic when I first saw the nest but, as I took the nest apart, I was shocked by how much additional plastic was in it.

I know that birds, fish and other creatures can get sick if they eat plastic. Here is a photo that was taken of the contents of the stomach of a dead albatross at Midway Island.

I have to wonder if the wren’s nest had a top on it because the bird was sick from eating plastic and its brain was not working correctly. There is no way to know.

May we be ever more conscious of how our actions may affect the wildlife around us.

Lokah Samastha Sukhino Bhavantu
May all beings in the world be happy
Shanti Shanti Shanti
Peace, Peace, Peace
Nature
High Flying Harris Hawks by Cindy Knoke
PNW Litter Project Stats

In April, 34 Litter Project members and their friends picked up litter for 101 hours. (Average 1.9 hours; Median 1 hour; Range 3 minutes to 10 hours) We have picked up litter for 8581 hours since the project began in July of 2011.

TerraCycle Stats

TerraCycle is an organization that recycles items that are normally considered unrecyclable. We turned in 9,654 cigarette butts to TerraCycle in March. They have credited us with turning in 309,654 cigarette butts since 2013. We have also sent them 394 Drink Pouches, 732 Cereal Bag liners, and 2,997 Energy Bar wrappers.

Interesting Information from Our Readers

From Tip in Vaughn:
The Couple Who Turned Barren Land into a Wildlife Sanctuary:

From Shobana in Shoreline:
This is a video clip of Adam, my nephew who is continually working to create a Jewish environmental learning experience in Berkeley. It’s called Urban Adamah. Thought you’d appreciate the work he’s doing.  
https://vimeo.com/211729468/50f2a9eacc

and

Weeds in Path? Use Vinegar, Not Roundup

From Arati in California:
California winery hires earthworms to clean up its waste water: