



Garlic Bonanza!

July 20th, 2018 | 10:00-12:00 pm | Thimble Farm

Growing garlic involves little work for the great satisfaction of harvesting and using your own grown garlic!
You'll never buy garlic again!

Garlic History and Folklore

- According to Pliny, garlic and onions were invoked as deities by the Egyptians at the taking of oaths.
- Egyptian slaves were given a daily ration of garlic, as it was believed to ward off illness and to increase strength and endurance. As indicated in ancient Egyptian records, the pyramid builders were given beer, flatbread, raw garlic and onions as their meager food ration. Upon threatening to abandon the pyramids leaving them unfinished, they were given more garlic. It cost the Pharaoh today's equivalent of 2 million dollars to keep the Cheops pyramid builders supplied with garlic.
- During the reign of King Tut, fifteen pounds of garlic would buy a healthy male slave. Indeed, when King Tut's tomb was excavated, there were bulbs of garlic found scattered throughout the rooms.
- When Moses led the Hebrew slaves out of Egypt (around 1,200BC), they complained of missing the finer things in life - fish, cucumbers, melons, leeks, onions, and garlic.
- The Koreans of old ate pickled garlic before passing through a mountain path, believing that tigers disliked it.
- Greek athletes would take copious amounts of garlic before competition, and Greek soldiers would consume garlic before going into battle.
- It became custom for Greek midwives to hang garlic cloves in birthing rooms to keep the evil spirits away. As the centuries passed, this ancient custom became commonplace in most European homes.
- Roman soldiers ate garlic to inspire them and give them courage. Because the Roman generals believed that garlic gave their armies courage, they planted fields of garlic in the countries they conquered, believing that courage was transferred to the battlefield.
- Homer reported that Ulysses owed his escape from Circe to "yellow garlic".
- European folklore gives garlic the ability to ward off the "evil eye". Central European folk beliefs considered garlic a powerful ward against devils, werewolves, and vampires. To ward off vampires, garlic could be worn on one's person, hung in windows, or rubbed on chimneys and keyholes. When diseases caused by mosquito bites were considered "The touch of the vampire," garlic came in handy as a mosquito repellent.
- Dreaming that there is "garlic in the house" is supposedly lucky; to dream about eating garlic means you will discover hidden secrets.
- This old Welsh saying may indeed have merit as a health remedy: "Eat leeks in March and garlic in May, Then the rest of the year, your doctor can play."

Growing Garlic

Garlic grows asexually, cloning itself from a beginning clove. So if you grow your own garlic, save the biggest, best looking heads to be your seed garlic (the best garlic bulbs are never for eating, only for planting!!!), and at planting time you can divide it into however many cloves you've got and plant each clove into its own space and that one clove will make an entire bulb of itself. Amazing!

- **Buying Garlic "Seed":** until you have your own seed garlic, you can ascertain some from a friendly gardener, buy some from a local farmer, or order some from a seed company (I have used garlic seed

saved from our Island Grown Schools gardens which began from Sow True Seed garlic seed; also love garlic from Seeds from Italy and Rosasharn Farm)

- Choose a variety that looks good for the Northeast region, you'll pick between hardneck and softneck varieties. The neck is just the stalk that grows up from the bulb.
- Hardneck Garlic:
 - Produces a tasty scape which can be harvested before the garlic is (if not harvested then it produces a flower)
 - Cannot be braided
 - Very cold hardy, complex flavor
 - Cloves form in a ring around the neck; not as many cloves as softneck
 - Larger, but fewer cloves than softneck
 - Not as long of a shelf life as softneck (4-6 months)
- Softneck Garlic (the type typically sold in grocery stores)
 - Less cool hardy
 - Cloves form in clumps, more cloves than hardnecks, though smaller
 - Less flavorful than hardneck
 - Long shelf life (9-12 months)
 - Do not produce a scape, and keep a flexible neck - great for braiding!
- There are about 50 cloves per pound of cloves - so if you desire 50 bulbs then you'll want to buy a pound of garlic seed

● **Planting Garlic**

- Pick a sunny well drained area to plant; plant cloves root-side down, about 2-3 inches deep, 2-4 inches apart, in rows 10-12 inches apart (for example: first make your rows by drawing in the soil, two lines 10 inches apart, then poke holes for the cloves in the line about 3 inches apart from each other, then plant in your cloves at about 3 inches deep
 - You can also pick an area, say 2 feet by 2 feet and just plant each clove in a grid or in a triangular pattern 6 inches apart from one another
- Plant once the weather is cold enough that your garlic will not start sprouting upwards, but warm enough that your clove will have time to grow downwards and form roots before winter (this year I did it on November 29th with 2nd graders and on December 4th with high schoolers)
 - 1) Loosen the soil - you are planting a clove into the ground that you want to become a great delicious bulb, so if your soil is cement, it will have trouble spreading out and becoming large and tasty, so use a pitch fork or shovel and just loosen up that soil a bit!
 - 2) Generally - make a hole 2x the depth of your clove, so if the garlic clove is 1 ½ inches long then you'll want to make a 3 inch hole so that when the clove is sitting in there, it has 1 ½ inches of dirt above it (1 inch clove, make a 2 inch hole)
 - 3) Make sure to plant the garlic with the bottom side down! So the fat part of the clove where the roots once were is touching the bottom of the hole and the tip is above
 - 4) Cover with soil
 - 5) Cover with about 6 inches of mulch (use seaweed, straw, leaves, etc.)

● **Growing garlic**

- Remove the mulch in early spring to allow the soil to warm up and prevent any rotting or excessive wetness around the bulbs
- Add fertilizer to bulk up your garlic bulbs!
- Water only as needed, if there is a dry spell

Harvesting Garlic

● **Harvesting garlic scapes**

- Hardneck varieties of garlic will make scapes that are delicious sauteed, pureed, raw and sliced, in pesto and sauces
- Harvest when they make a shepherd's hook and store in the fridge or on a table in a vase of water

- **Harvesting garlic - there are various opinions on this**
 - Harvest in July once the cloves have filled out the skins
 - Harvest when 6 leaves are brown; or when the lower 1/3 leaves are brown
 - *I harvest garlic in July after a dry spell, before incoming rain, by gently pulling it out of the ground

Curing and Cleaning Garlic

- Different opinions on the best practice for this:
 - 1) After harvesting, lay the garlic in a dry, dark, warm place with good ventilation until dry - which takes about 2 weeks at 80 degrees F, can sometimes take a month or two if the curing space is warmer or more humid (the roots should look shriveled and feel stiff like a bottle brush, and the leaves should be completely brown and dried)
 - Once dry, wash off the dirt by swishing in a bucket of water or under running water
 - Clip off the roots to your liking (1/2-3/4 inch is nice)
 - Peel off leaves until you have a nice white head - leave at least 3 layers of skin
 - Clip off the top to your liking (2-4 inches is typical)
 - Store at 50 degrees with relative humidity of 65 to 70%, for about 6-7 months
 - 2) Immediately after harvesting wash off the dirt by swishing in a bucket of water or under running water
 - Clip off the roots to your liking (1/2-3/4 inch is nice)
 - Peel off leaves until you have a nice white head - leave at least 3 layers of skin
 - Clip off the top to your liking (2-4 inches is typical)
 - Cure in a dry, dark, warm place with good ventilation until dry - which takes about 2 weeks at 80 degrees F, can sometimes take a month or two if the curing space is warmer or more humid (the roots should look shriveled and feel stiff like a bottle brush, and the leaves should be completely brown and dried)
- Both methods seem to work for different farms and situations, some say that leaving the entire garlic plant intact for curing is better for the garlic, it allows the energy from the leaves to go into the bulb as it dries - also that cutting the stem of the garlic before it's dried can invite fungi or bacteria into the garlic. They also say that washing garlic before curing can make the papery skin look like pruney fingers. Others enjoy that washing and processing the garlic before curing takes up less space and have not had any issues with this method.

Garlic Infusions

Infuse your garlic, fresh or dried, into different mediums to make the most of your harvest and add legendary flavor to your dishes! When making herb infusions, be mindful of the following:

- After the infusion has reached the flavor you like, you'll want to strain out the garlic and herbs and store in the fridge for up to 7 days
- Herb pieces that are not completely submerged in the infusion of oil, vinegar, honey, alcohol, etc. will likely rot or mold - so be sure to submerge completely
- Good rule of thumb for infusing is about 4-6 weeks (I tend to use tons of herbs, so mine only take a couple days, but if you use smaller amounts, it will take more time)
- When using vinegar, put some wax paper between the lid and the infusion to avoid the vinegar corroding the metal
- Use your senses of smell and sight to determine if any of your infusions have invited sour populations of bacteria and/or other microbes (this is especially true with fresh herb and garlic infusions because they have a water content) - never hesitate to discard and try again!

Infusion Ideas:

- **Infused honey:** fresh or dried garlic and/or herbs in honey; store in a cool, dark place indefinitely
- **Infused oil:** fresh or dried garlic and/or herbs in oil; store in fridge with fresh ingredients, store in cool dark place with dried ingredients indefinitely

- **Infused vinegar:** fresh or dried ingredients in vinegar; store in a cool, dark place indefinitely
- **Oxymel:** fresh or dried garlic and/or herbs in ½ honey ½ vinegar mixture; store in a cool, dark place indefinitely, store in fridge if using fresh ingredients

Dehydrating Garlic to Make Your Own Garlic Powder or Garlic Salt

- You can dehydrate your garlic in a dehydrator sliced, whole, or food processed into little pieces at 115 degrees F. It takes about 2 days for small pieces, so about 4 days for entire cloves - keep watch on it, you know it's dry when you can grind it with the side of a knife or mortar and pestle into a powder.
- You can dehydrate garlic in an oven on a sheet pan at the lowest setting your oven will go to, up to 170 degrees, and bake for 30 minutes or so. Stick around the kitchen and keep watch so that it doesn't burn!
- **Garlic Powder**
 - Grind up dried garlic with a coffee grinder, food processor, or mortar and pestle into a fine powder
 - Store in a cool, dark, place with your other spices and dried herbs indefinitely
- **Garlic Salt (with dried garlic)**
 - Put dehydrated garlic, sea salt, and any desired dried herbs into a food processor or coffee grinder and grind until at desired fineness. Use on roasted veggies, meat, and/or fish, on avocado toast, as a rim for Bloody Mary's, french fries, etc.!
 - Store in a cool, dark, place with your other spices and dried herbs indefinitely
- **Garlic Salt (with fresh garlic)**
 - Preheat oven to 180 degrees. Line a large baking sheet with parchment paper and set aside.
 - In a food processor, combine 1 cup of salt and ¼ cup of peeled garlic cloves. Process until the garlic is finely minced and the consistency is like moist sand, approximately 20 seconds.
 - Pour salt/garlic mixture onto lined baking sheet; spread out evenly. Bake until dry and crisp, approx. 1 hour. Return to food processor and pulse until the consistency of cornmeal. Store in airtight container.
 - Use to season meats, vegetables, sauces, eggs, & popcorn

Making Garlic Oil (recipe from Martha Stewart)

- **Ingredients:**
 - 1 head of garlic
 - 1 cup of olive oil
- **Directions:**
 - Smash and peel cloves of garlic
 - Transfer to a medium pot, add olive oil, and heat over medium-low until bubbles form around garlic (takes about 3 minutes)
 - Keep cooking for 10 minutes more, reducing heat to low if garlic begins to brown
 - Remove from heat and let cool to room temperature

Making Black Garlic (recipe from ShinShine)

Black garlic is garlic that turns black from being low and low roasted over the course of many days. It's deeply caramelized taste comes from this slow breakdown of garlic sugars over time. Make a delicious paste with it, cut it up and roast it with meat, fish, or vegetables, enjoy in dressings and sauces for a deep, sweet, and earthy flavor.

- **Ingredients**
 - Whole garlic bulbs
- **Directions**
 - If using your own:
 - Choose nice whole heads of garlic - examine and remove any rotting or sprouting bulbs; we want to use only happy non rotting or sprouting garlic for black garlic making

- Wash and clean your garlic very well - it can't have any dirt on it - then place in a dry place for a minimum of 6 hours or longer until completely dry. Do not start the fermenting process while the garlic is still wet or damp
- If using grocery store, you can just get started
- Place the rice cooker in an area with good ventilation (near a window). Peel the outer skin of garlic so that you can see the separation of garlic cloves. Put whole garlic bulbs in one layer in a rice cooker. Close the lid on the rice cooker and press the button 'Keep Warm.' Leave it as is for 9 days.
- After 9 days, turn off the rice cooker, take out the garlic bulbs and rest to let them come to room temperature. Peel and place the cloves on a parchment lined baking sheet. Cover with another parchment and air-dry in a cool area for a week. As a side note, I ended with about 80% of what I started with because I kept eating the garlic in the drying process.
- Keep them refrigerated in a container

Garlic as Medicine (Sources: The Herbal Academy and American Folklore online)

- Garlic as medicine accounts:
 - Hippocrates (300BC) recommended garlic for infections, wounds, cancer, leprosy, and digestive disorders. Dioscorides praised it for its use in treating heart problems, and Pliny listed the plant in 61 remedies for a wide variety of ailments ranging from the common cold to leprosy, epilepsy and tapeworm.
 - During World War 1, the Russian army used garlic to treat wounds incurred by soldiers on the Front Line. Although Alexander Fleming's discovery of penicillin in 1928 largely replaced garlic at home, the war effort overwhelmed the capacity of most antibiotics, and garlic was again the antibiotic of choice. The Red Army physicians relied so heavily on garlic that it became known as the "Russian Penicillin".
- Treating animals infested with ticks showed that garlic was able to effectively kill the ticks within 30 minutes, while garlic proved to be a repellent toward new infestations
- Treating cattle with hoof and mouth disease
- In a study conducted in Russia in 1955, garlic extract used therapeutically was found to bind with heavy metals in the body, aiding their elimination. Workers suffering from chronic lead poisoning while working in industrial plants were given daily doses of garlic extract and saw a decrease in their symptoms. Other experiments that took place in Japan using mercury and cadmium also found that garlic bound with the heavy metals.
- Garlic medicinal properties:
 - Anthelmintic: kills intestinal worms
 - Anti-asthmatic: eases constricted breathing caused by asthma
 - Antilipemic: promotes a reduction of lipid levels in the blood.
 - Anti-epileptic: reduces frequency or severity of convulsions
 - Anti-hypertensive: benefits high blood pressure
 - Antimicrobial: kills microorganisms or inhibits their growth
 - Antiseptic: reduces the possibility of infection, sepsis, and/or putrefaction
 - Antispasmodic: combats cramping and spasmodic pains, particularly in the digestive tract
 - Antiviral: fights viral infections
 - Carminative: helps to expel gas
 - Diaphoretic: induces sweating
 - Emmenagogue: promotes menstruation
 - Expectorant: helps to expel mucus

Garlic Scape Dressing

- **Ingredients:**
 - 4 to 5 Garlic Scapes (if the outside skin is tough, give it a quick blanch)
 - 2 tbsp Apple Cider Vinegar

- 1 tbsp Lemon Juice
- 2 tsp Honey or Maple Syrup
- Salt & Pepper
- 1/3 cup Sunflower Oil
- **Directions:**
 - Place everything in a food processor, blender, nutribullet, etc. or immersion blend it in a suitable container
 - Taste and adjust flavor as needed
 - Transfer to a serving container and enjoy immediately, or cover and refrigerate up to 7 days