



Growing Garlic Up North

This guide describes the way I grow garlic on my farm in Grant (Stillwater), MN. I hope you find it useful.

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1. Planning

Pick your garlic profile! Fun! There are hundreds(!) of great garlic varieties available today. Keep in mind that you want **hardneck*** varieties for up-north planting.

Consider the characteristics: flavor profile, bulb size, number of cloves, and storage life. Try a few varieties to find your favorite! Or choose more than one favorite!

How much space will you prep? Consider both how much growing room you have and how many bulbs you would like to have at harvest. See the [Cloves per SF calculator](#) guide (p. 5).

**Soft neck garlic* is generally the grocery store variety – mostly grown in CA or outside the US. It is *not* grown for flavor; it's grown for travel and storage. It is not recommended for northern climate planting. Also, it may have been treated to prevent sprouting.

2. Bed preparation

Look for a full-sun location with good drainage (you do **not** want standing water at any time!) Garlic likes well-drained soil that is high in organic material!

A month or so before planting lay out and till your beds to 8"+ depth.

Prepare the soil by adding organic matter like compost and/or composted manure. I try to add 2-3" of composted manure and then till it in.

One more tilling may be necessary in a week or two for weed suppression.

Just before planting, add any additional nitrogen and other amendments and till one more time to help loosen soil to make for easy planting, weed suppression, and distributing soil amendments.

Garlic is a heavy feeder and needs a good amount of nitrogen to grow big healthy bulbs.

After the initial bed prep, you may want to get your soil tested to check pH. The ideal soil pH for garlic is 6 to 7.

NOTE: You must wait four (4) years before planting garlic again in that same bed.

3. Planting

Timing: Garlic is planted in late fall so it starts to develop a good root system before the ground freezes. Target your planting for October 15th plus or minus a week or so. Planting too early - garlic will start to emerge from the soil and then freeze back, so it may set the plant back. Planting too late - it won't have a chance to develop a strong root system before the ground freezes.

Reminder: After your first planting, you must wait four years before planting garlic in that same bed.

Break open your bulbs: Break through the outer skin of the bulb and separate the cloves. Do this *no more than* a few days before planting.

Clove size: The larger your clove, the larger your garlic bulb at harvest. Size does not matter (although many do prefer larger), it's a preference for how large you want your cloves or your bulb, depending on your chosen variety. Garlic bulbs classified as *Seed Garlic* are 2" or larger.

Tips up: Plant each clove with the tip of the clove pointing up (where the roots were pointing down).

Spacing: Space cloves 6-8" apart in all directions. See the [Cloves per SF calculator](#) guide (p. 5).

Depth: Plant 2-3" deep, a little deeper if your soil is sandy.

Add mulch: Cover your newly planted garlic cloves with 3-6" of mulch (cover hay), straw (you may get sprouted wheat or rye in the spring), or shredded leaves. Leave

mulch on throughout garlic's growing season – it helps keep weeds down and retain soil moisture.

Water if needed: Right after planting, if the ground is dry and rain is not expected soon, water your newly planted cloves.

4. Growing season

Watering: You may not have to water your garlic. If we're in a drought season, do a deep watering as garlic has deep roots. Remember to not allow standing water.

Early spring: Garlic will start poking through your mulch in early spring. Most plants can easily find their way through mulch unless it's too thick or has become matted – in which case, you may need to fluff your mulch.

To fertilize or not to fertilize: Some sources recommend fertilizing garlic in the spring; however, if you add enough nitrogen *before* planting, you shouldn't need additional fertilizer in the spring. If you do add spring fertilizer, take care to not overdo as it can burn the roots. Do not fertilize after May as it will stunt the bulb size.

5. Scapes

Scapes are the long, curled shoots that grow from the garlic bulb. They're edible and a bit milder than garlic cloves.

Scapes: Scapes start to form in early summer and should be removed when they start to curl upward. Removing the scapes is beneficial for the garlic bulb as it will promote its growing larger than if the scape is left on.

Eating scapes: Add scapes to your refrigerator pickles. Eat 'em in stir fry. Add them to any of your favorite recipes. They store well in the fridge for several weeks.

6. Harvesting

Start watching the plants: Garlic is usually harvested in mid to late July in MN. Here's what you're watching for beginning in July: the plants' leaves will start to dry starting at the bottom. Once about half the leaves have died, it's time to start harvesting.

Timing: Harvest can vary by a week or two depending on the variety. Also, if garlic is left in the ground too long, the outer skin of the bulb can deteriorate which exposes the cloves which is not good.

Weather: Weather can also affect the timing of the garlic readiness. Also, try to harvest when the ground is not too wet.

Removing from the ground: Depending on soil condition, garlic can be harvested by simply pulling out the bulb. When garlic is heavily mulched, I have found that pulling garlic straight up with both hands works well. It is much less time-consuming than digging up each bulb individually (recommended by some). And pulling by hand alleviates the chance of injuring bulbs with a shovel.

Tap off soil: After pulling the bulb from the ground, gently tap off soil from the roots and bulb. NOTE that garlic can bruise, so be gentle when handling or storing your harvest.

Bundling: If it's helpful, bundle your harvest in bunches of 10-15. I use colored zip ties to track my varieties.

Exposure: Do not leave garlic in the sun for very long as it can get sunburnt.

7. Curing (drying)

Garlic can be used 'fresh' right after harvest but needs to be cured for it to store for a long period of time.

Post harvest: Garlic should be cured (dried) right after harvest.

Timing: It takes 2 to 4 weeks for garlic to fully cure (depending on temp and humidity).

How to: To cure, hang garlic in bundles of 10-15 bulbs in a dry location out of direct sun allowing for good air circulation around the bundles to promote drying and prevent mold. You may want to direct fans on the garlic for the duration of the drying process.

No scent: Curing is done when there is no longer a strong garlic scent when you cut off the garlic top. Test a bulb or two after two weeks. Larger bulbs generally take longer to cure.

8. Storing (post curing)

Cut stem: Cut off garlic stem leaving about 1".

Cut roots: Cut off roots to about ¼".

Skin / wrapper: The more wrappers (outer skin), the better (longer) the garlic stores. But, if you want your garlic to be 'prettier', you can remove one or two of those skin layers. If you don't care how your garlic looks, brush off most of the dirt and don't remove any wrappers – longer storage bonus.

Storage: Do **not** store garlic in the refrigerator or in a container. Mesh or paper bags or baskets are best for storage. Keep in a location that's cool, dry, and airy.

Cloves per square foot calculator

To calculate the approximate number of cloves you'll need for a planting area, use the following formulas that use measurements in feet.

6" spacing: *(times 2)* – (width x 2) x (length x 2) = # of cloves for bed size

Ex. 4' x 8' bed with 6" spacing: (4 x 2) x (8 x 2) = 128 cloves needed

8" spacing: *(times 1.5)* – (width x 1.5) x (length x 1.5) = # of cloves for bed size

Ex. 4' x 8' bed with 8" spacing: (4 x 1.5) x (8 x 1.5) = 72 cloves needed

Resources

Sustainable Farmers Association (sfa) has some great resources for helping with garlic growing in our region.

<https://sfa-mn.org/>

<https://sfa-mn.org/the-garlic-project/>

University of MN offers a great PDF resource for growing garlic in MN. Here's a link to their Growing Garlic in MN guide:

<https://conservancy.umn.edu/server/api/core/bitstreams/be62c977-1d80-49c7-ac5f-d2b55b9f5d88/content>

Good luck! Have fun!

Contact me via my website form if you have questions.

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