



Southern Appalachian Garden Timeline

Your Month-by-Month Roadmap to a Thriving Garden



Tri-Cities • East Tennessee • Southwest Virginia • Western North Carolina



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Know Your Frost Dates

If you've gardened anywhere else before moving here, you already know that frost dates matter. But around here, elevation changes everything. Your neighbor up the hill might get frost a full week before you do. The table below shows average frost dates for towns throughout our region.

Important: These dates are based on NOAA climate data (1991-2020) using a 30% probability threshold. Your specific location may vary—valleys tend to be warmer, while hilltops and hollows run colder. When in doubt, cover your plants!

Location	Last Spring Frost	First Fall Frost
Kingsport, TN	April 16	October 24
Knoxville, TN	April 19	October 22
Johnson City, TN	April 27	October 18
Elizabethton, TN	April 27	October 18
Jonesborough, TN	April 30	October 17
Erwin, TN	April 30	October 17
Greeneville, TN	April 28	October 16
Mountain City, TN	May 1	October 11
Roan Mountain, TN	May 7	October 7
Bristol, VA/TN	April 28	October 15
Abingdon, VA	April 28	October 15
Marion, VA	April 30	October 15
Wytheville, VA	May 4	October 12
Asheville, NC	April 13	October 26
Blowing Rock, NC	May 3	October 14
Boone, NC	May 10	October 8
Banner Elk, NC	May 7	October 9

Source: *Farmer's Almanac* / NOAA Climate Data



Prepare Before You Plant



The secret to a successful spring garden isn't what you do in April. This guide will show you what to do from month to month, so you don't miss important planting windows. Timing is crucial to get the maximum harvest rewards for your hard work of planting and tending your garden.



Late Winter/Early Spring Garden Planning

January: Planning & Purchasing

- **Order seeds** from your favorite suppliers (they sell out fast!)
- **Don't forget** your seed potatoes!
- **Purchase raised bed** materials or kits
- **Reserve your custom** raised bed build through Rooted in the Mountains—availability is limited!
- **Purchase your compost** and topsoil, so it's ready by planting time.
- **Plant the following** seeds indoors this month:
 - Broccoli
 - Cabbage
 - Cauliflower
 - Brussels sprouts
 - Swiss chard
 - Peas
 - Cool-season herbs: Cilantro, parsley, dill, and sage
- **You can also plant** lettuce, kale, spinach, green onions, carrots, and arugula outdoors this month if you're up for it. I take a break from outdoor gardening in January.
- **If you have anything growing**, watch the weather so you can cover your plants when hard frosts are expected.

February: Building & Setup

- Have raised beds in place by mid-February (March 1 at the absolute latest)
- Purchase compost and soil amendments if you haven't already
- Fill beds with soil and amendments
- Set up irrigation if using drip systems
- Install hoop hardware for row covers (leave it up year-round)
- Start the following warm-season plants indoors from seed: Peppers, tomatoes, eggplant, and melons. Use dissolvable pots (cow pots or peat pots for melons, so you don't disturb their roots during transplanting).



***Pro Tip:** If you wait until March to shop for raised beds and soil, you'll be competing with everyone else. Stores run out, delivery times increase, and prices go up. Beat the rush!*

These crops can handle light frost and actually prefer cooler temperatures:

- **Lettuce & Salad Greens:** Direct sow as soon as soil can be worked in late February/early March.
- **Peas:** Plant anytime in February to early March. They are one of the few legumes that love cool weather.
- **Spinach & Kale:** Very frost-hardy. Great for early harvests.
- **Broccoli & Cabbage:** Transplant seedlings in late February. Planting early allows them to finish before hot summer temperatures arrive and stunt their growth.
- **Onions:** Plant intermediate-day or long-day onion sets or slips this month.
- **Cilantro:** Cilantro loves cold weather and will bolt (go to flower and become bitter) once temps warmup. Plant this month to enjoy a month-long harvest.
- **Parsley:** Another cool-weather herb to plant this month.
- **Dill:** Don't forget to plant this herb this month, especially if you're growing cucumbers for pickles this summer!
- **Sage:** A perennial wonder that will produce for years to come, especially in cooler weather
- **Carrots:** They take a while to sprout and grow slowly at first, so be patient. They thrive in cooler weather, and February is an ideal time for planting them.
- **Radishes:** Plant every two weeks from February through May. These cool-season wonders grow fast, and they make an excellent living mulch.
- **Potatoes:** Potatoes are cool-weather plants that need a lot of time to grow. Plant now. Give them their own bed or plant them in the ground in their own space, as they take up a lot of room underground and above the ground. You can plant fast-growing greens and radishes with potatoes and enjoy them until your potato plants get large.

It's not too late to plant broccoli, cabbage, and cauliflower indoors if you missed the January window. You can transplant them next month if you start them this month.



Spring Planting Guide



March: Cool-Season Crops

Even if you missed the February window, it's not too late to plant these cool-season lovelies in March:

- Lettuce & salad greens
- Peas
- Spinach & kale
- Onions & green onions
- Cilantro, parsley, sage, and dill
- Carrots
- Radishes
- Potatoes

March is a special month in the garden because it marks the beginning of spring, but don't get in a hurry to plant those tomatoes in the yard just yet! Nighttime temperatures are still too cool, and the danger of snow, frost, and even hard freezes is still very much at play. However, if you haven't planted these plants indoors yet, do it now.

It's too late to plant cabbage-family plants from seed this month, but you can still transplant them into the garden. If you didn't plant them at all, some local garden centers may carry them. Check the following garden centers:

- Garden Barn in Mountain City
- Sibley Farms in Blountville
- Reems Creek Nursery in Weaverville, NC



April: Transitioning from the Cool Season to the Warm Season

April is perhaps the trickiest month of the year because we'll have some warm weather and cold weather. It seems like most years, we get one bad storm in April.

Can You Put Your Warm-Season Transplants Out in April?

Don't let the warm temperatures lead you astray. It's not safe to put tender plants like tomatoes, peppers, eggplant, cucumbers, melons, or squash outside just yet.

If you planted these indoors, keep them indoors at least during nighttime hours. If you want to start hardening them off, you can start doing this anytime in April. Just take them outside for an hour the first day, and increase by an hour each day, until you reach six hours. Then put them outside during the day and bring them in at night until it is safe to transplant them.

Even with a frost-protective covering, young, tender warm-season plants can die if they get too cold. These plants are sensitive to cold temperatures as well as frost. If you happen to have a high tunnel or a greenhouse, you may be able to get away with keeping them outdoors at night as long as you have a heat source for those cold nights.

Cool-Season Crops in April

Ideally, your cool-season crops should already be growing in April, and you should be harvesting salad greens, kale, collard greens, and maybe even broccoli, cabbage, cauliflower, and Brussels sprouts. Cool-weather herbs like cilantro should be thriving during this time, although they may start to elongate, flower, and go to seed if the weather gets too warm.

April is not a good month to plant most cool-season plants, as hot weather will be here before they can mature. However, you might still be able to get away with planting fast-growing radishes and heat-resistant lettuce varieties. This is a great time to plant herb seeds indoors, like oregano and basil. Rosemary is kind of tough to sprout, so I recommend buying it as transplants.

May: Time for Warm-Season Crops to Make Their Debut in the Garden (after last frost)

Wait until after your average last frost date—that's Mother's Day in most of our area but could be as late as June 1 in higher elevations.

- **Tomatoes & Peppers:** Transplant after the danger of frost is over and nighttime temps are at least 50°F.
- **Peppers:** Need warm soil. Wait until nighttime temps stay above.
- **Squash:** If you're not concerned about squash bugs, go ahead and plant summer and winter squash as soon as the danger of frost has passed.



- **Cucumbers:** Plant after the danger of frost is passed in late May or early June. I love to grow cucumbers on a trellis, but you can also allow them to trail over the sides of your raised beds.
- **Melons:** Plant melons as soon as the danger of frost has passed, as they need lots of time to mature. Plant them on the edge of your raised beds so their vines trail over the edge. Otherwise, one melon plant can take over your bed! You can also grow these on a trellis if you support the melons.
- **Corn:** I like to plant my glass gem corn on June 1. Plant seeds in the ground as soon as the danger of frost has passed. My favorite mantra about corn: Four feet high by the 4th of July. Yes, it grows that fast!
- **Mediterranean herbs:** Plant your oregano, basil, sage, and rosemary as soon as the danger of frost has passed. Oregano and sage can handle a little frost, but wait until the danger of frost is over before planting rosemary or basil.
- **Beans:** Plant green or wax beans anytime during the month of June. If you're growing shelling beans, plant those as soon as the danger of frost is over, as they'll need time to mature before picking. Most bean varieties come in both bush and pole types. I prefer pole beans because they're more productive, and I can use bean tunnels, like this one:





The farmer's markets in most areas open in May, and you may be able to find warm-season vegetable transplants at your local farmer's market if you didn't grow your own. Many plant nurseries will also offer them for sale. You can find them at big box store garden centers like Walmart and Lowes also, but I don't recommend these because they are not organic. However, if this isn't important to you, these transplants often do great.

Summer Planting Guide





Strategic Summer Plantings

Remember: timing your plantings strategically helps avoid pest problems!

- **Winter squash:** Plant in late June to give it time to ripen before frost while avoiding squash bugs. Plant it on the edge of your garden beds so it can trail over the edge, like in the picture below, so it doesn't take over your bed.



- **Summer squash:** This includes crookneck squash and zucchini. While you CAN plant it in May after frost danger is over, waiting until late June helps you avoid squash bugs. If you wait even longer until mid-July, you may also be able to miss the squash vine borer. You can continue planting early-maturing varieties of summer squash until mid-August. After that, here is a danger of frost hitting before they mature.

A few notes about growing plants in the squash family:

- Check cucumber vines every morning, as they seem to grow inches overnight.
- Don't let summer squash get too big—they're most tender when young.
- On the other hand, don't harvest winter squash too early. Let it mature until the vine dies and you cannot prick the skin with your fingernail.

***Pro tip:** Winter squash, such as butternut squash, can be harvested unripe. Unripe winter squash slices, cooks, and tastes like summer squash!*

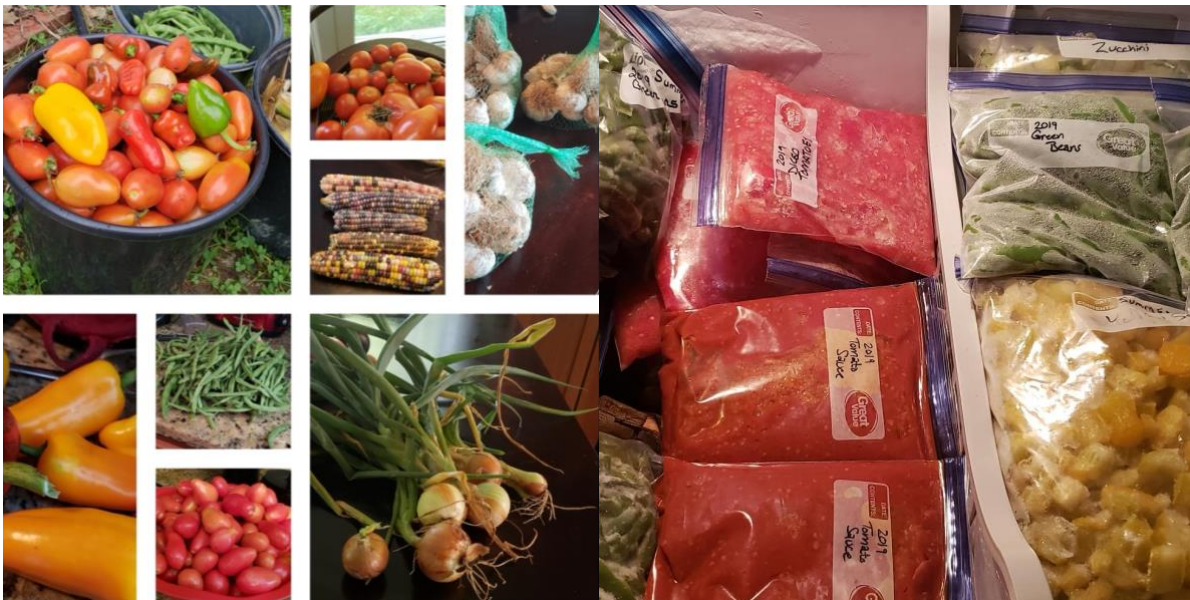


Starting Fall Plants in the Summer

Fall is the ideal time to grow cool-season crops like brassicas (cabbage family) because these plants prefer to mature in cool temperatures. However, you don't want it to be too cold at maturity. Start these slow-maturing varieties from seed a month ahead of time and transplant at the following times for the best results.

- Broccoli: mid-July
- Cabbage: mid-July
- Cauliflower: mid-July
- Brussels sprouts: mid-June

The Summer Bounty



There's nothing quite like walking out to your garden on a summer morning and gathering this kind of abundance. Yellow squash, zucchini, cucumbers, tomatoes, and herbs fresh off the vine—this is what all that planning and planting is all about.

By July and August, you'll be harvesting daily.



Fall Planting & Season Extension

Don't put your garden to bed just yet! Fall gardening in our temperate climate can be incredibly rewarding. The cooler temperatures bring back the sweetness in greens, and many crops taste better after a light frost.

August

Although it's still hot in August, the nights are getting shorter, and mornings are usually starting to feel a little cooler. August is an idea time to plant many cool-season crops for a fall harvest. Most cool-season crops should be planted from seed directly in the garden. Here's what I recommend planting in August:

- Lettuce, spinach, arugula, and other salad greens
- Kale, collard greens, and other cooking greens
- Radishes—plant every two weeks for a continuous fall harvest
- Turnips
- Beets
- Carrots
- Potatoes
- Sage
- Dill
- Parsley
- Cilantro
- Green onions

While not a cool-season crop, you can continue planting early maturing summer squash until around August 15 in the lower elevations, but August may be too late if you're in upper elevations. August is an ideal time to start shopping for frost-protection supplies if you don't already have them. You'll need garden hoops and cloth row covers.

If you don't want a winter garden, that's okay. I recommend planting cover crops. You can read more about cover crops on rootedinthemountains.com. It can be tough to plant cover crops while you still have summer plants in your garden. If this is the case, consider using daikon radishes as your cover crop. They are a great cover crop that aerates and nourishes the soil, and you can pick and eat a few during the winter! Once you have more space after fall cleanup, you can plant other cover crops.



September

- Shop for frost protection supplies if you haven't already.
- It's not too late to plant greens, radishes, carrots, and potatoes
- Plant your favorite cool-season herbs this month, like cilantro, parsley, sage, and dill.
- Plant peas now. Plant them near a trellis if you get the vining type.
- Your warm-season crops should continue producing throughout the month but have your frost protection ready in case of an early frost!
- Plant green onions and regular onions this month.

This is a great month to do some fall cleanup for any plants that are done. Plants like bush beans and bush tomatoes are probably done by now, so go ahead and remove these from the garden, leaving the roots in the ground. Then plant your cool season crops in their place or cover crops if you're not going to have a fall or winter garden.

Cover crops you can plant now include winter rye, oats, hairy vetch, crimson clover, and tillage radish.

October

- **Install frost protection hardware by October 1.**
- If you planted greens in August or September, you'll enjoy many harvests this month, possibly even daily harvests.
- Keep planting radishes.
- It's not too late to plant greens, beets, or early maturing varieties of carrots
- You can plant garlic this month, but I prefer to wait until November. There's no advantage to planting it early. However, this is an ideal time to buy your planting garlic. My favorite supplier is Keene garlic online.

A frost is almost certain this month, so have that frost protection ready if you still have peppers, tomatoes, squash, and other tender warm-season plants maturing. Keep in mind that once nighttime temperatures are consistently below 50°F, these plants will generally stop producing or maturing. Your best bet is to go ahead and harvest what is left and let tomatoes and peppers ripen off the vine (or better yet, enjoy some fried green tomatoes!).

If you're not planning to have a fall/winter garden, this is the last month to plant cover crops. As an alternative to cover crops, you can also use mulch made of natural materials. Just don't leave your soil bare all winter, as the cold temperatures and lack of plant growth can kill/starve out microorganisms. The best natural materials to use as mulch are shredded leaves, grass clippings, or leftover litter from corn if you grew it.

November

November is a magical month because it's garlic month! Plant it anytime in November. It needs the chill of winter to produce. Some of it may sprout during the winter, but it usually



doesn't. Your garlic will usually sprout in the spring, and you'll harvest bulbs in late June/early July.

It's not too late to plant the following for a winter harvest:

- Green onions
- Short-day onions
- Cilantro
- Sage
- Lettuce
- Arugula
- Spinach
- Kale
- Radishes
- Carrots

November is generally too late to plant cover crops. So if you're not planning to have a winter garden, cover the garden with your favorite type of natural mulch. Don't forget to leave some tall grass, hollow stems, or drilled wood blocks nearby so your beneficial predatory insect friends have a place overwinter! However, remove overgrown weeds or areas of dense plant growth, diseased plant parts, and fallen fruit from the plants you grew, as these providing nesting areas for pests you don't want.

What To Do in the Winter

I personally don't enjoy being outside in cold weather, so I don't actively plant or harvest in the winter, except in December. If you didn't plant garlic in November, it's not too late to plant it in December. However, it may be hard to find if you haven't already purchased it. I've planted garlic in December with great results.

Although you probably won't be planting any seeds in December, there's plenty to do in the garden if you planted during the fall months.

- Watch the weather for hard freezes and be ready to cover anything you have growing when temperatures are expected to dip below their freeze tolerances.
- You can remove frost protection during the day, but if your cloth is a light fabric, you can just leave it.
- You may need plastic frost covers for extra cold nights, but **make sure you remove it during the day if temperatures will be above 50°F**, as the greenhouse effect can cook and instantly kill your plants.
- Lettuce, kale, collard greens, and arugula will continue to grow through December, and I've seen arugula grow into January.



- Ideally, you'll want to harvest your broccoli, cabbage, cauliflower, and Brussels sprouts by mid-December. Although they're cold-season vegetables, they won't produce well if it gets too cold.
- You may be able to harvest carrots in December, so be sure to check. If they aren't ready by the end of December, they may stop growing until the weather warms up in the spring.
- December is the ideal time to plan your spring, summer, and fall garden for the following year.
- Shop for cool-season seeds, so you'll be ready to plant them indoors in January.





Frost Protection & Season Extension

Row covers and low tunnels can add weeks to both ends of your growing season. Here's when to set them up and take them down:

Fall Setup Timeline

- **Mid-September:** Start shopping for frost protection supplies (row cover fabric, clips, earth staples)—See [this blog post](#) for info on where to purchase.
- **By October 1:** Have your hoop hardware installed and row covers ready to deploy
- **Earlier for high elevations:** If your average frost date is before October 15, move this timeline up accordingly

Spring Removal Timeline

- **Keep row covers in place until Mother's Day** for most of the Tri-Cities area
- You can unclip the covers from the hoops, but leave them attached at the bottom so they're easy to pull back up if a late frost threatens
- Watch the weather closely—we've had frosts after Mother's Day
- **Row covers are essential** if you're putting tomatoes out early

***Pro Tip:** Leave your hoop hardware in place year-round! You can use it for shade cloth in summer and insect netting for pest protection. It's one of the best investments you'll make.*

For detailed instructions on setting up row covers, hoops, and low tunnels, visit the following blog post: [Embrace a Longer Harvest Season with Frost Protection for Your Vegetable Garden](#)



Outsmart the Pests: Timing Secrets

You can avoid many pest problems entirely just by timing your plantings strategically.

Squash Bugs & Squash Vine Borers

These are the two biggest threats to your squash, zucchini, and cucumbers. But you can outsmart them:

- **Squash bugs** have their primary egg-laying season in late spring
- **Squash vine borers** emerge in early to mid-July
- **The solution: Wait until mid-July to plant summer squash and zucchini!** You'll miss both pest peaks.

Summer squash grows fast—you'll still get a great harvest. If vine borers do get to a plant, you can replant through mid-August with an early-maturing variety.

Winter Squash Timing

- **Plant in late June** to avoid the worst of squash bugs while still giving fruit time to ripen before frost
- Squash bugs do reappear in late August/September, but by then your plants are mature enough to handle some pressure
- Winter squash needs time on the vine to sweeten, so don't plant too late

***Warning:** If you let a squash bug infestation happen and then remove your squash plants, those bugs will move on to your tomatoes and other plants. Prevention is key!*

Harlequin Bugs & Brassicas

Harlequin bugs are shield-shaped insects (red, yellow, or orange with black spots) that devastate brassicas—kale, broccoli, cabbage, cauliflower, and pak choi. They suck the sap out of leaves and can destroy plants quickly.

- **For spring brassicas:** Plant as early as possible so they're done by late July/early August before harlequins peak
- **For fall brassicas:** Plant in June/July but use row covers for protection

This is another reason to leave your row cover hardware up year-round—you'll need it for pest protection too.



Quick Reference Guide

January/February
Start Indoors
Broccoli, cabbage, cauliflower, Brussels sprouts, Swiss chard, peas, cilantro, parsley
Plant Outdoors
Lettuce, kale, spinach, onions, carrots, arugula

March/April
Start Indoors
Tomatoes, peppers, eggplant, melons
Plant Outdoors
Cilantro, potatoes, carrots, onions, lettuce, kale, peas, spinach, arugula, radishes, beets

May
Plant Outdoors in Early May
Cilantro, potatoes, carrots, onions, lettuce, kale, peas, spinach, arugula, radishes
Plant Outdoors after Mothers' Day
Tomatoes, peppers, eggplant, beans, cucumbers, squash, melons, corn, oregano, basil, sage, rosemary

June
Plant Outdoors
Tomatoes, peppers, eggplant, beans, cucumbers, squash, melons, corn, sweet potatoes, oregano, basil, sage, rosemary, early-maturing potatoes for summer harvest
Plant in Late June for Fall
Brussels Sprouts

July
Plant Outdoors
Early varieties of summer squash, beans, cucumbers
For a Fall Harvest
Broccoli, cauliflower, cabbage, carrots, beets

August
Plant Outdoors
Early summer squash varieties, broccoli, cabbage, kale, collard greens, peas, carrots, potatoes, spinach, Swiss chard, lettuce, arugula, radishes, beets, parsley, sage, onions, green onions, beets

September
Plant Outdoors
Kale, collard greens, peas, carrots, potatoes, spinach, Swiss chard, lettuce, arugula, radishes, beets, cilantro, parsley, sage, onions, green onions, beets

October
Plant Outdoors
Lettuce, arugula, kale, spinach, radishes, beets, cilantro, parsley, onions, green onions, carrots, garlic, sage

November
Plant Outdoors
Garlic, onions, cilantro, sage, lettuce, arugula, spinach, kale, radishes, carrots

December
Plant Outdoors
Garlic, onions, cilantro, sage, lettuce, arugula, spinach, radishes

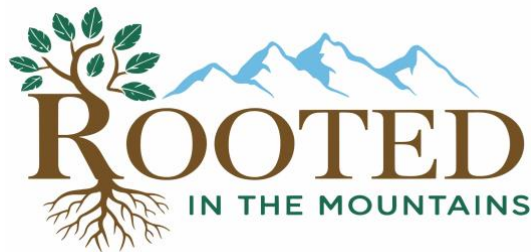


Let's Grow Together

Gardening in our part of the world is both a challenge and a joy. We deal with unpredictable weather, persistent pests, and clay soil. But we also get to experience the magic of growing food in one of the most beautiful places on earth.

Remember: every garden is different, and every season teaches us something new. The frost dates in this guide are averages—your specific microclimate matters. Pay attention to your garden, note what works, and don't be afraid to experiment.

For more tips and tricks, [visit our blog](#) and [follow us on Instagram](#). Happy gardening!



www.rootedinthemountains.com

