Fall & Winter Basic Growing Guide

Adapted from Territorial Seed Company’s Guide <http://www.territorialseed.com/category/fall_winter_growing_guides>

What can you grow in early spring, fall and winter?

* Leafy greens: kale, spinach, lettuce, collards, arugula, Asian greens (pac choi, tatsoi, mizuna), Swisschard, celery, beet greens, turnip greens, mustard greens
* Root crops: radish, carrots, beets, turnips, parsnips, rutabaga
* Vegetables: Peas, fava beans, broccoli, cauliflower, cabbage, asparagus, fennel
* Alliums: onions, garlic, leeks

It’s important that you carefully choose varieties for fall and over-winter growing. Seed catalogs will generally tell you what are their most cold hardy selections, but be sure that it’s something that will perform well in our Zone 6b region. You can generally call and talk with seed sellers about their recommendations, if you aren’t sure.

There are several ways to approach fall and winter growing, and certain vegetables will perform better when planted and harvested within the appropriate time frame. If possible, plant certain crops to harvest in fall, winter, and spring to guarantee yourself a continuous supply of produce throughout the cold months. Consult the attached High Mowing Winter Gardening Chart and individual crop culture information to determine which crops will work best for your needs.

**Planning for Fall & Winter**

* For fall harvest: schedule your plantings so that tender crops mature by our frost date of Oct 31st.
* Other cool-season vegetables can last into winter but should generally be harvested and stored inside or in a root cellar before temperatures reach freeze-out point (listed on the chart)
* For winter harvest: crops need to reach maturity before growth is effectively halted by decreasing day length and cold temperatures. Plants will stop growing between Dec 1 and Jan 15, so they need to be mature by then if you plan to harvest them during this time.
* For spring/overwintering harvest: time your crops so that they are established but not mature at the onset of winter; successfully overwintered crops will produce early in spring before the temps heat up.
* Crops that overwinter well include leafy greens, some root vegetables, peas, onions, garlic, and sprouting crops like broccoli

**Site Selection & Soil Preparation**

* Choose a site that has the greatest amount of sun exposure; areas that are sunny in the summer are often not so throughout the winter. The garden space at your house is pretty ideal, though.
* Soil should be well drained to handle winter precipitation—raised beds are best for this. This doesn’t mean wooden structures, just raising the soil up a few inches with soil from pathways or lots of compost is helpful.
* Overwintering crops should be spaced wider than spring or fall planted crops; this increases air flow, discourages pests, and allows the soil to dry out

**Light**

* Growth slows throughout the fall and nearly stops when day length is less than 10 hours; for those crops that you want to harvest throughout the winter, plan to have them near or at maturity by this time. Again, this is between Dec 1 and Jan 10 in our region. Cold hardy crops will go dormant at this time and will resume growth slowly in late January.

**Timing**

* The challenge to successfully growing winter crops is getting them established in the right time frame, often in summer when the weather is hot and dry —starting seedlings indoors, as well as using shade cloth and overhead watering will help keep seedlings cool during establishment
* Delaying planting a few days in the summer can translate to delayed fall or winter harvest by weeks
* For the most part, days to maturity (DTM) listed for each variety are for spring planting; to adjust DTM for fall/winter harvest, take stated DTM and **add 2-3 weeks** to account for slower growth due to shortening days
* Direct seeded crops should be watered lightly and frequently to encourage even germination and to prevent the soil from crusting
* Please keep in mind that planting and harvest dates listed are just guides and it’s important for you to keep good records on what happens in your own garden. With good recordkeeping, you’ll be able to hone in on the best times for planting and harvesting.

**Fertility**

* Because nutrient uptake slows during the winter, avoid fertilizing too heavily in the fall
* Foliar feeds are a good way to feed plants in the fall
* I like to plant winter greens in the spots where summer beans and other legumes are harvested in August

**Fall Harvest**

* Tender crops can be fall harvested up until the cold weather kills them off
* When making successive sowings of fall crops, start seeds at a shorter interval to account for slower growth

**Winter to Spring Harvest**

* Only plant overwintering varieties for winter or spring harvest (check the seed catalogs for best recommendations)
* Sprouting vegetables such as broccoli, cabbage, and cauliflower may be overwintered at an immature stage and will produce the next spring
* Overwintered greens such as kale and collards will produce delicious flower stalks in the spring
* Most root vegetables can overwinter in the ground; plan on harvesting them all by spring, as they will bolt when the weather warms up and the days get longer

**Season Extension Methods**

* Using season extension techniques can prolong harvest of tender crops into the winter, overwinter otherwise not hardy crops, and allow for earlier planting in the spring
* When used properly in combination, season extension can add up to a month on either end of the growing season • Raised beds elevate plants above the ground, warming the soil and improving access to light
* Frost cloth can be used to cover plants, trapping in solar warmth, and protecting against frost damage
* Low tunnels are waist-high frames fashioned from PVC or electrical conduit, and covered with frost cloth or greenhouse plastic that cover a row or two
* Cloches are small bell-shaped vessels that create a mini-greenhouse around individual plants
* Cold frames are small boxes that create a greenhouse around small plots, usually using glass or clear plastic panes

High Tunnels

* See Section X on high tunnels for more about this
* High tunnels can extend your growing season by up to 6 weeks in both the spring and fall. They can also make it easy to grow cold-hardy crops through the winter. High tunnels effectively bring you down a growing zone in terms of frost extremes (from Zone 6b to 7b). Using low-tunnels inside of a high tunnel can drop you down 2 zones (from 6b to 8b).
* Unfortunately, the ability to trap heat can also turn deadly if you do not carefully monitor the temperature inside the high tunnel. On a sunny day, it could be 40 degrees outside but over 100 degrees in your tunnel. You need to open the sides and doors to keep temperatures steady and your plants happy.

Resources on Winter Production

* Pam Dawling’s books: Sustainable Market Farming and The Year Round Hoophouse are excellent primers
* Elliot Coleman’s books: The New Organic Grower, Four-Season Harvest, and The Winter Harvest Handbook
* <https://www.sare.org/product_search/results/(limit)/10/(sort)/published/(crop_production)/Crop%20Production,Season%20Extension?q=>
* ATTRA
* <http://ag.umass.edu/vegetable/resources/winter-production-storage/production>