Garden Mastery Tips

from Clark County Master Gardeners

Early Spring in the Vegetable Garden

By now, you are sitting in your favorite chair curled up with a seed catalog, while the weather outside is taunting you with its bluster. Your garden has been tucked in under cover crops or mulch, quietly preparing for a new season. January is a good time to outline a garden plan so that you don't go overboard with the seed catalogs. Think about what you truly enjoy and also what is expensive to buy. Figure out how much space each plant needs and allocate your garden space accordingly. On each variety you intend to plant, note the days to maturity (regional seed catalogs are good for this information) and work backward to see when the seeds need to be started either outside or indoors for transplanting.

In setting out your plan, keep crop rotation in mind because plants in the same family share the same insects and diseases. Rotating your planting will help prevent the build up of pests and diseases in the soil and manage soil fertility. A succession from leaf to root to flower to fruit is a good protocol to use. Leaf crops (lettuces, kale, greens) require the most nitrogen. Once these are done, plant root crops such as carrots, beets, or turnips that require less nitrogen and more potassium and trace minerals. Annual flowers are light feeders and bring the beneficial insects to the garden to pollinate. Legumes can be grown as part of the flower rotation and turned under to provide nutrients for the summer fruit crops. A good manuring and composting in the fall will set up your garden for a new season.

Toward the end of February some very hardy herbs and vegetables can be sown outdoors, but first, your soil needs to be properly workable. Cultivating when the soil is too wet breaks down its structure. To see if the soil is properly workable, dig down about 6 inches and gather up a ball of soil. Throw it in the air and let it fall into your open hand. If the ball falls apart, you can plant. If it stays a ball or only comes slightly apart, it needs more drying time. Tunnels or cloches can speed up drying, but the process can take several weeks at this time of year. Even many of the hardiest plants require a soil temperature of 50° F to germinate. These plants may be able to take light frosts, but they will not germinate unless the soil reaches a suitable temperature. If your soil is properly workable, go ahead and plant arugula, radishes, garlic, onion sets, and snow peas. Sow under cover - beets, spinach, broccoli raab, mustard, oriental greens, and some lettuces.

Late February and March are great times to set up your indoor transplant station. Here are some tricks to get your seed started successfully. It is tempting to want to start seeds on a bright windowsill, but at this time of the year, our light is too diffuse to support healthy growth. Supplementary light is needed. Something as simple as florescent shop lights hung from a chain will work. The highest rate of seed germination will be achieved with a soil temperature at 60° - 72° F, so some bottom heat is necessary. A shelf with a heating pad underneath your seed trays will work. It does not have to be fancy. Once your seedlings are up, remove the heat source. After the seedlings develop their first true sets of leaves, they can be transplanted to larger pots and moved to a cold frame or cloche (covered tunnel) until the soil temperature and the evening temperature warm sufficiently to plant out in the garden. Transplants are a great way to get a jump on our sometimes short growing season whether you start your own or buy them from growers. Here is a useful timeline which can be found on page 207 of Steve

Solomon's *Growing Vegetables West of the Cascades*. His book is a valuable and entertaining reference for the vagaries of growing some vegetables in our climate.

Much planting advice is given in terms of the last frost date, which we all know can be a moving target in the Pacific Northwest. Most generally we don't get a frost after May 1 so we can seed cool season vegetables in

A Typical Transplanting Calendar

Sow Under Lights	Species	Move to Cold Frame	Transplant in Garden
Feb 1	Autumn leeks	April 1	May 1-31
Feb 1	Bulb onions	March 5-15	April 1-15
Feb 15	Early cabbage, broccoli	March 5	April 1
Feb 15	Celery, celeriac	April 15	May 15
March 1	Cauliflower	March 20	April 10
March 1	Earliest possible lettuce	March 20	April 10
March 15	Tomatoes	April 15	May 1-15
April 1	Peppers, eggplant	May 5	June 1-15
April 15	Squash	April 25	May 1
May 20	Cucumbers, melon	June 1	June 5-10

Note: Dates in this table are for Willamette Valley, Oregon, gardeners. South of Drain, Oregon, these dates may be a week or two too late, even more so in the redwoods. North of Longview, Washington, and at higher elevations in western Oregon, these dates may be a week or two too early.

mid-March. The following is a list (by no means comprehensive) of seeds that can be planted out directly in the garden, as opposed to starting indoors for transplants.

ARUGULA (ROCKET, RUCOLA, ROQUETTE) is an easy-to-grow early spring green which will germinate in the wettest, coldest spring soil, at soil temperatures as low as 40° F. Sow every few weeks in loose, well-composted soil. If flowers develop, pinch them off to prolong plant growth. Use a floating row cover to prevent flea beetle damage.

BEETS, which appreciate slightly alkaline soil, can be sown 2 - 4 weeks before the last expected frost, and successive sowings made 3 weeks apart after that.

BOK CHOI (PAC CHOI) AND OTHER CHINESE MUSTARDS may bolt when seedlings are exposed to prolonged temperatures below 55° F. Strategies for preventing bolting of early sowings include using "bolt-resistant" varieties, or treating bok choy as a cut-and-come-again seedling crop. If plants do bolt, harvest the flower stalks before the flowers open and use them in a stir-fry or salad. Optimum soil temperature range for germination is 50° - 75° F.

BROCCOLI RAAB (SPRING RAAB, RAPINE, RAPA), a member of the mustard family selected for its shoots and flowers, is direct seeded for a quick crop of small florets with the few small leaves that surround the sprout. It doesn't hold long, so harvest before it bolts to seed.

CARROTS may be sown 2 - 3 weeks before the last predicted frost, or when the daily average soil temperature is about 55° F, and every 3 weeks through July.



CELTUCE, also called stem lettuce, celery lettuce, asparagus lettuce or chinese lettuce, germinates at soil temperatures as low as 45° F. Celtuce is the most common lettuce in China and is used in stir fries.

CHARD, which germinates at soil temperatures of 45° - 75° F, may be sown 2 - 4 weeks before the last expected frost. PERPETUAL SWISS CHARD, sometimes called PERPETUAL SPINACH (slim stalk, smooth leaf chard), is grown in the same fashion as Swiss Chard.

CHINESE CABBAGE grows best in the shortening days of fall. If you choose to try it as a spring crop, wait for soil temperatures to be above 50° F.

CORN SALAD (FELDSALAT, LAMB'S LETTUCE, MÂCHE, NUSSLI) is a cold-hardy salad green with a mild, nutty flavor. Because it is able to withstand frost, it is a favorite for fall planting. With appropriate protection or in mild climates, it can be harvested during the winter; and, in any case, it will provide late winter/early spring greens when little else of that nature is available. For spring sowing, select a variety such as "Large Seeded Dutch" from Nichols Garden Nursery or "Vit" from Territorial Seed Company. These tolerate the heat of summer better than the varieties bred to stand the cold of winter. Germination may take up to two weeks. Protect seedlings from slugs, rabbits, and deer. At the three-leaf stage, thin seedlings to 6 inches apart and use thinnings in a salad. Corn salad, which is edible at any stage, can be treated as a cut-and-come-again crop. Young tender plants (which look like tiny Bibb or butter lettuce plants) may be used whole. Cut the rosette-like heads 1 inch above the ground - the plant will resprout (more slowly in warm weather than in cool).

FAVA BEANS germinate in soil temperatures as low as 40° F and grow well in air temperatures ranging from 45° - 70° F. Try the "Windsor" type for a spring planting.

KALE, which is tastiest after a hard frost, is best planted mid- to late summer. If planted in spring, it will germinate at soil temperatures as low as 40° F.

KOHLRABI can be sown directly in the garden 2 - 6 weeks before your last expected frost, at soil temperatures ranging from 50° - 75° F.

LETTUCE requires a minimum soil temperature of 40° F. If you plan to harvest entire plants (instead of just the outer leaves) of leaf lettuce, seed at two-week intervals, starting, as some "old-timers" will tell you, "when the apple trees begin to bloom."

ONIONS should ideally be direct-seeded in mid-April in western Washington and Oregon, but if your soil seems ready, try some in the latter part of March. The optimum soil temperature range is 48° - 90° F.

PARSNIP culture is similar to that of beets. Direct seed at soil temperatures in the 50° - 70° F range. Parsnips don't transplant well.

PEAS are definitely at the top of the list of seeds to plant as early as possible.

POTATOES grow best when soil temperatures are in the 55° - 70° F range. At the <u>Irish Eyes Garden Seeds</u> website, read <u>How to Grow Potatoes</u> for some expert guidance.

RADICCHIO will germinate at 40° F, but several successive nights with temperatures below 50° F could cause seedlings to bolt, so growing transplants indoors may be advisable. Otherwise, treat like heading lettuce (romaine or iceberg), but don't expect the radicchio to mature quite as fast as the lettuce.

RADISHES may germinate at 40° F, but their **ideal** soil temperature range for germination is 50° - 65° F. Interplant these fast-growers with slower-growing vegetables or plan to replace them with something else when you have harvested them. Make sowings every 10 to 14 days from 6 to 8 weeks before the last expected frost until daytime temperatures are expected to average 80° F or above.

SALAD GREENS, in general, are good candidates for early spring sowing.

SHALLOT bulbs, for a good crop, are **best** planted in the fall, but they may be planted in very early spring. The <u>Irish Eyes Garden Seeds</u> website offers good information in their Grower's Guide, <u>Growing Shallots</u>.

SPINACH does best in well-aerated, well-limed, fertile soil that is well-drained but moisture retentive. Spinach will germinate in soils as cold as 35° F, so begin sowing it as early as 8 weeks before the last frost, making successive sowings every few weeks. As the days lengthen, it will "bolt" and you will be able to replace it with another vegetable.

TURNIPS are often better tasting and more productive if planted midsummer (about two months before your first fall frost). If you are going to plant turnips in the spring, direct seed them 3 weeks before the last expected spring frost. If the greens interest you more than the roots, look for varieties selected and bred specifically for greens production.

The following references are great resources for growing vegetables in our climate.

References

Seattle Tilth. The Maritime Northwest Garden Guide. Seattle, WA: Seattle Tilth Association, 2009.

Solomon, Steve. Growing Vegetables West of the Cascades. Seattle, WA: Sasquatch Books, 2007.

Seeding Hardy Vegetables in March. Garden Mastery Tips, March 2000.

Celtuce, Wikipedia, the free encyclopedia.