

# Winter Gardening

One of the greatest joys of gardening near the Salish Sea is the opportunity for winter vegetable harvest. Success will depend upon proper timing. In general, by late autumn it is too late to plant a vegetable garden for harvest that winter. The winter vegetable garden, if it is to be thriving and bountiful, must be planted during the summer months. By mid-autumn the plants must be fully established and grown mostly to full size. The plants put on little to no growth during the winter, during that time the garden is simply a place to hold them so that the gardener may enjoy the fruits of their labor all season long.

Plant growth is regulated by a few different factors. Soil, soil fertility, soil temperature, air temperature and number of daylight hours are the most influential. By late October, when the night temperatures are often near freezing and the days are significantly shorter (and cooler), most plant growth has stopped. The period of time between the Autumnal Equinox and late October is the twilight of plant growth. Knowing that little growth will occur past this time, we plan to have our late autumn and winter garden fully established with the plants close to the desired harvest size by early October.

Planning this requires a little math and a calendar. Let's say, for example, that we want to harvest fresh carrots from the garden throughout the winter. Nothing is more satisfying than a fresh carrot in January that has been sweetened by the frosts. According to the seed packet, a Nantes-type carrot may take 70 days (from seedling emergence) to mature. Remember that 70 days is probably just an average and represents the days to maturity when planted in the early spring for summer harvest. When planted in mid-summer for late autumn maturation, it will take longer because the temperature will be steadily decreasing as will the number of daylight hours. To compensate for this, add an extra 10-14 days on to the original 70. Remember also, that the 70 day count begins from the time the seedling emerges (8-12 days, average 10, from planting the seed). So, with all of that in mind,  $(70+10+10)$ , we need approximately 90 days from the time we plant the carrot seed for it to be full-sized for continuous winter harvest. We want our carrot to reach full size by mid-October when plant growth stops. So we note October 15 as our desired harvest date (or storage in the field), and work backwards from there. October 15 minus 90 days, or three months, brings us to July 15 for our winter carrot sowing date!

The same method may be used for any vegetable we plan to harvest throughout the winter.

Let's use kale as another example, which needs 65 days to reach maturity. While it is true that kale is a hardy crop, it still does not grow much in the winter. We want our kale plant to have what is called a "full frame" by mid-October, so that it will have plenty of leaves on it for a good winter supply. Kale is most often grown from transplants. The 65 days to maturity listed on the seed packet is counted from the day it is transplanted into the garden. 65 days plus 10 days (added for late season slow growth) means that we must transplant the kale plants 75 days before October 15<sup>th</sup>. The seeds, therefore, must be started the first week of July in order to

be ready for transplant by August 1<sup>st</sup>. Of course, kale may be eaten at any stage, so if we do not get it planted by then we will just have smaller plants going into the winter and that is fine too.

Slower-growing crops such as leeks, Brussels sprouts and parsnips usually take more than 100 days to reach maturity. That means they may need to be started in the spring for winter harvest!

Vegetables that mature more quickly such as Asian turnips, arugula or radishes can be direct seeded into the garden as late as early September.

## Winter Hardiness Chart

### Light Freeze

### Medium Freeze

### Hard Freeze

Broccoli  
Chard  
Leeks  
Onions  
Baby mustard greens  
Carrots  
Escarole  
Beets  
Kale  
Some lettuce varieties  
Spinach  
Rutabaga  
Radish  
Celery Root  
Brussels sprouts  
Celery  
Arugula  
Parsnips  
Full sized mustard greens  
Green onions  
Parsley  
Cauliflower  
Radicchio  
Collard Greens  
Peas  
Kohlrabi  
Purple sprouting broccoli  
Pac Choi  
Turnips  
Overwintering cauliflower  
Napa Cabbage  
Short to mid-season cabbages  
Storage cabbages

Depending on the specific microclimate, some of these vegetables may need a little extra attention to make it through the winter and still be edible. Most of the root vegetables will benefit from mulching or top dressing with a few inches of straw before the year's first really

hard freeze. Generally the part of the root that is beneath the soil will be fine, but the part that is at and above the soil line can be damaged by prolonged freezes and the continued freeze/thaw cycle. Mulching the tops provides insulation by retaining some of the earth's natural heat around those vegetable tops. Polyester row cover also can provide a few degrees of frost protection for slightly more tender leafy greens such as chard, escarole and radicchio.

The final treat of the winter garden is that in the spring, many of the surviving plants will begin to grow again. Certain plants may even be planted later in the autumn in order to keep them at a small, immature size through the winter. This provides a measure of protection from hard freezes. In the late winter and early spring the increase in both temperature and daylight hours will induce the plants to put on a lot of delicious, new growth. Some varieties of cauliflower and sprouting broccoli have been bred specifically for this purpose.

From the new book, *Vegetable by Vegetable: A Guide For Gardening Near the Salish Sea*, by Marko Colby and Hanako Myers of Midori Farm.