Fall & Winter Vegetable Planting Guide

Fall and winter gardening, although an old practice, is an excellent solution for keeping the physical condition and fertility of your garden's soil at its peak levels. At the same time, it yields crops of delicious vegetables throughout the fall and winter that cost a fraction of the price of produce purchased in the supermarket.

When it comes to vegetable and flower gardening, the climatic patterns of the lower elevation areas west of the Cascade Mountains in Washington, Oregon, Northwestern California, and British Columbia are quite suitable for fall and winter gardening. Winter low temperatures range from 35° F. to 45° F. with occasional cold continental arctic air outbreaks lowering it to +20° F. to zero° F. The garden soil can freeze 3 or 4 inches deep for short periods, but the usual winters are not severe enough to damage carefully mulched winter vegetable plants.

Many southern areas of the U.S. are actually more suited to winter crops, while some northern regions have to rely on cold frames, hot beds, or greenhouses.

The key to successful winter gardening is knowing the average date of the first killing frost in your region (for example late October in the Pacific Northwest). You then plant your winter crops early enough to let them reach their full maturity before that killing frost. Local garden authorities can give you information about the timing of first frosts and the hardiness of various crops for your area. The planting suggestions in this booklet are based on a late October 1 freeze. If the killing frosts come earlier or later, adjust accordingly.

LATE MATURING CROPS

Approximate maturity is 90 days. Plant by mid-July for fall harvest, later for spring harvest.

ROOTCROPS --Beets /Carrots /Parsnip / Rutabaga /Globe Onions LEAFCROPS --Brussels sprouts /Cabbages /Cauliflower /Fava Bean

MID-SEASON CROPS

Approximate maturity is 60 days. Plant by mid-August.

ROOTCROPS-- Early Carrots / Leek /Turnip /Kohlrabi
LEAFCROPS-- Early Cabbages /Winter Cauliflower /Collards
PERENNIAL FLOWERS-- Perennial Herbs /Swiss chard

EARLY MATURING CROPS

Approximate maturity is 30 days. Plant by mid-September.

ROOTCROPS-- Chives /Bunching Onions /Radishes

LEAFCROPS--Broccoli /Cover Crops /Leaf Lettuces /Mustard /Spinach/Lawn seed

LENGTHENING YOUR GROWING SEASON

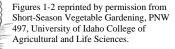
Windbreaks and Walls

Windbreaks and walls can add from 100^{0} F. to 150^{0} F. of warmth to your fall and winter garden. Many gardeners have discovered by surprise that a south-facing wall of the home, shed, or greenhouse is ideally situated for constructing easily built structures that use the free solar energy of the sun.

Figure 1.-Plastic Jug Cloche



Figure 2.-Tunnel Cloche



Cloches

Cloches provide an elevated warm climate around your winter row crops. They can best be described as portable green houses of various designs that work with solar energy to warm the immediate row or plant they are placed over. Many designs have been tried. Ideas range from very stiff wire frames holding glass panes, to clear gallon-size plastic bleach or pop bottles with their bottoms removed. All cloches have two drawbacks to consider. First, on bright sunny winter days they have to be manually ventilated, to prevent excessive heat build up. Second, poorly constructed or "staked-down" cloches can become kites during winter windstorms.

Cold Frame



Photo Courtesy of Sunset Publishing Corp.

Cold Frames

Cold frames are permanent structures that considerably lengthen the growing season. They are an excellent way to grow fall and winter crops. Cold frames provide protection from strong winds, elevate the daily and nighttime temperatures around the plants, and protect frost sensitive vegetables or flowers. They are easy to build and the vegetables and flowers in them will require minimal care. In short-season areas, a cold frame will allow you to start seed up to 8 weeks earlier than you can outdoors.

You can use an old window sash of any dimension to build a cold frame. Fiberglass or polyethylene can be used if the glass is broken. The ideal cold frame is built about 18 inches at the back and 12 inches at the front. The slope allows rain to run off and affords a better angle for gathering the sun's heat. Your cold frame should face south for maximum exposure to sunlight. Also, select a location with a slight ground slope to provide adequate drainage away from the frame. To provide ventilation, partially open your cold frame during sunny, warm weather. During cold snaps, cover the cold frame with burlap or heavy cloth to provide extra warmth.

Hot Beds are cold frames with a source of bottom heat. Today, that heat comes from electric heating cables. A few hot beds are still constructed using the old method of a layer about 1 1/2 feet thick of decomposing manure beneath the soil of the cold frame as the source of heat. Either way the hot bed remains frost-free during the winter.

Greenhouses

Greenhouses are structures that provide frost-free climates all year round. There are perhaps as many designs for greenhouses as there have been imaginative gardeners. Unheated greenhouses are great for raising seedling crops of many of the most delicious leafy and root vegetables. Greenhouses can also be heated for raising tropical plants. Some greenhouses as far north as North Pole, Alaska have been used for extensive winter production of commercial crops of tomatoes and cucumbers.

Raised Beds

Permanently edged raised beds have been used for growing vegetables and flowers for centuries. They may be made of stone, bricks, concrete, or with untreated lumber. (Many beds are made with untreated 2X10 lumber.) The soil in a well-made and maintained raised bed can be between 8 and 12 degrees F. warmer than the same soil in the surrounding garden areas. Another advantage is the lessening of the need to bend over to work in, or harvest from, the raised beds.

Single plant raised beds can be made from old tires stacked together. The black tires absorb heat from sunlight, warming the soil even more than ordinary raised beds. They are great for growing tomatoes, peppers and potatoes during the spring growing season and are good for crops like cauliflower and broccoli during the fall and winter.

MULCHING

Raised Bed

Late October-early November is an excellent time to begin preparing the vegetable garden for normal cold winter weather ahead. Mulching serves many purposes in the winter garden. In addition to insulating the plants with a blanket of protection over the root system, it will help discourage the winter growth of weeds and annoying grasses. Mulch also helps reduce evaporation of moisture from the soil during dry periods. During winter's heavy rainstorms, it helps prevent the soil from eroding away.

The most common materials used for winter mulching are peat moss, bark, sawdust, and shredded newspapers. Both sawdust and bark leach nitrogen from the soil. Therefore, steps must be taken to replenish this nitrogen before replanting. We recommend a layer of one to two inches of mulch material. The best winter crops to protect this way include beets, carrots, onions, parsnips, rutabagas and turnips.

Occasionally, dig down through the mulching material and check to see that the soil has sufficient moisture. Plants that are in dry soil will not survive the winter as well as plants that are in moist soil.

As spring begins, and the sunlight warms the soil, a layer of mulch prevents the soil from warming. Remove or spade in (dig or cut into the soil) the winter mulch to enable the sunshine to reach the soil and warm it as soon as possible. Seeds can be sown much earlier in unmulched soils.

ROTATION OF VEGETABLE VARIETIES

This is a very critical part of any garden scheme. Do not plant the same fall or winter vegetable crops in the same location as they were planted the previous year or the summer season. It is important to note that if the same crop is planted in the same location, not only will the soil be weakened through continual loss of the same nutrients, but the plants will also attract the same insects and diseases to that part of the garden.

COVER CROPS-GREEN MANURES

Even though a portion of your acreage or garden lies idle for a time, the soil can be built up by growing cover crops. Cover crops are fast growing green plants that can be chopped up and spaded, plowed, or tilled into the soil, adding green organic matter that then composts into humus. Plants of the Legume family also add nitrogen to the soil. Some cover crops can be spaded into your garden, but it is better to cut off the green tops, add them to the compost pile, and spade only the roots left behind into the soil. In the fall, sow the following cover crops to turn into the soil in spring: Alfalfa, Austrian Field Pea, White Clover, Alsike Clover, Crimson Clover, Red Clover, Purple Vetch, Hairy Vetch, Woolly Vetch, Common Vetch, Fava Beans, Wheat, Oats, Cereal Rye, Winter Rape, and Lupines. The following are some Warm Winter Cover Crops: Cowpeas (Southern peas), Hairy Indigo, Bell Beans (a small Fava Bean) Lana Vetch, Winter Peas, Lupines, and Purple Clover.

QUICK TIPS

- Try successive plantings of quick growing items like leaf lettuce, beets, spinach and radishes.
- Do not be afraid to try planting some crops later than recommended. While it is a bit risky, the rewards are definitely worth the risk.
- Harvest over-wintered carrots early in spring before they start to go to seed and the roots get woody.
- Self-blanching celery makes an ideal crop in cold frames if planted during July.
- The Chinese Cabbages and Mustards also grow especially well in cold frames. They taste great, too.
- Parsnips are best when pulled in January or early February after the heaviest frosts have turned them the sweetest.
- Try using cheesecloth or clear agricultural cloth over rows of leafy crops. It will keep out pests and may hold in a bit heat.
- Keep a record of what you planted and when, and what succeeded or failed to help you do better in the future. We hope this guide, combined with your own experience, will help you have a bountiful late season garden.

Fall & Winter Vegetable Planting Guide adapted from ED HUME SEEDS - http://www.humeseeds.com/falwint.htm