KPOV – *The Point*

Gardening: Get Good at It

“Season Extension Techniques”

August 3, 2021

Although the Central Oregon growing season is short, you can help make the most of your garden by protecting your plants from frost and cold. Season extension is a bundle of techniques used to provide an earlier and/or later harvest in the garden. Today we’ll examine a variety of season extension tactics available to home gardeners and compare how they may be used differently to match your own garden.

Most season extension methods rely on heating the air and soil under a cover during the day to retain some of that heat at night. There are many options but some of the most common and available are low tunnels and cold frames.

Floating row covers are made of spun-bonded polyester and polypropylene fabric that is permeable to sunlight, water, and air. It provides a microclimate similar to the interior of a greenhouse (giving 2 to 8°F of frost protection) and is typically placed directly over crops without support. The exception is when you need to cover crops that have tender growing points, such as tomatoes, in which case low tunnels should be used. Row cover (or frost cloth) over PVC pipe or metal hoops creates a tunnel to help insulate plants.

Low tunnels are often best built on a raised bed frame using rebar and PVC pipes or wooden structures. Hoop houses and high tunnels are much more portable than permanent greenhouses.

High tunnels, also called hoop houses, are typically arched or hoop-shaped frames covered with clear plastic and high enough to stand in or drive a tractor through. High tunnels are usually solar heated, and do not require additional energy sources.  Compared to greenhouses, high tunnels are relatively inexpensive. You’ll find more information about buying or building a high tunnel in the transcript of this episode on our website.  
  
Gardeners in Alaska have found that when the nighttime temperature is zero, in a high tunnel it will be 11°F and in a cold frame it will be 14°F. 1

Cold frames are low structures use to protect crops in cold weather.  They can be insulated and traditionally rely on solar heat, though more recently developed models can include heating systems.  Though cold frames work well in protecting crops and can be more durable than row covers or low tunnels, construction costs of cold frames can be high compared to plasticulture systems, which provide many of the same benefits. You can also make a temporary, seasonal cold frame with straw bales and old windows.

Greenhouses are similar to high tunnels, but are traditionally more durable and permanent, and use either glass or greenhouse-grade plastic to protect crops and capture heat.  Greenhouses also typically use a heating source in addition to solar energy, as well as automated heating and cooling systems, allowing the gardener the ability to plant a greater variety of crops throughout the year.

Lettuce and spinach are great crops to use with season extension techniques to prolong your harvest. Choose cold-hardy crops, like watercress, chard, collards, kale, bok choi and arugula. Beets, carrots, leeks and scallions can also be harvested into the late fall.

Don’t wait until the temperatures drop to plant your late-season crops. Plant them in mid- to late summer, depending on days to maturity. Plant them early enough to give them time to establish roots and mature some, but not so early that they have already reached their peak during the regular growing season.

Try these season extension techniques to enjoy nutritious greens and vegetables longer this fall and in the early spring next year.

For more information about season extenders and a link to the free OSU Level Up webinar on August 10th, visit our website: [www.gocomga.com](http://www.gocomga.com) and click on the KPOV tab on the orange bar. This has been Gardening; Get Good at It on KPOV’s The Point.

Resources:

1Stretch Your Growing Season into the Fall <https://itgrowsinalaska.community.uaf.edu/2020/10/08/stretch-your-growing-season-into-the-fall-with-season-extension-techniques-and-cold-hardy-vegetables/>

Season Extension <https://cmg.extension.colostate.edu/wp-content/uploads/sites/59/2020/09/Season-Extension-v2-3-1.pdf>

Season Extension <https://smallfarms.cornell.edu/2017/05/10-season-extension/>

Penn State University - purchasing, building, and using high tunnels <http://extension.psu.edu/plants/plasticulture/technologies>

Samuel Roberts Noble Foundation - instructions for building a small $90 hoop house <http://www.noble.org/ag/horticulture/minihoophouse/>