

May 2018

TO DO THIS MONTH – Prepare for Spring Frosts

In Wexford County, the date of our average last spring frost is right around May 28. But with our short growing season, jumping the gun on getting crops planted and then protecting them from frost can be a great way to increase your garden's bounty. Some things to keep in mind and helpful techniques:

- If you want to plant early, you need to warm the soil, not just protect from frosts. Clear plastic laid on the ground two weeks ahead of your planting date should warm the soil by several degrees.
- You can go from simple to complex, and correspondingly from essentially free to a significant investment, and from one-week head start on the growing season to year-round harvests:

Option	Cost for 250 ft ² of garden beds	Additional Time Gained
Milk jugs with bottoms cut off	Free	1 week in the spring
Chenille: floating row cover (AG-19, 83" x 50') with hoops made of #9 wire (2 - 50 ft. rolls)	\$28.00 (b) \$21.96 (a)	2 weeks in spring & fall
Green Wall O' Waters (48)	\$181.18 (c)	3 weeks in spring
Low hoops: 6 mil greenhouse film 12' x 55' long (4+ years of use) ½" x 10' EMT conduit (14)	\$84.00 (d) \$39.90 (a)	4 weeks in spring and through fall & winter
Rustic hoophouse: (6 mil construction plastic / 1 season), 7 bows, ¾" PVC (see chart for details)	\$241.67	6 weeks in spring and through fall
Really Good Hoophouse (Plans from Eliot Coleman)	\$2,800	Year-round

Prices obtained from Home Depot (a), Johnny's Selected Seeds (b), Amazon (c), and Greenhouse Megastore (d) in March 2018. Sales tax and shipping not included.

IN THE KNOW – The Pros & Cons of Tillage

Tillage is a two-edged sword. The benefits of tillage are that it can:

- Warm the soil
- Speed up decomposition
- Incorporate nitrogen
- Kill weeds

The downside of tillage is that it can:

- Kill worms
- Destroy fungal networks
- Destroy soil structure
- Create a compacted layer in the soil
- Expose soil to erosion

Ask yourself if the benefits derived are worth the negative impacts. Sometimes they are, sometimes they're not

Many people like to till their garden to get rid of the weeds. Options in lieu of tillage include:

- Plant cover crops in September that smother weeds and then die back over winter, leaving you with essentially weed-free ground that is ready to plant. Field peas and oats are good cover crop choices.
- Mulch heavily during the previous growing season. Most of the mulch will decompose over winter, and again, leave you with essentially weed-free ground.
- Use a broadfork to loosen and aerate soil and make the weeds super easy to pull.
- Farmers can use specialized equipment to do “no-till” planting. A better term might be “micro-tillage”, as there are usually coulters (wavy disks) in front of the seeding mechanism on a planter that prepares a narrow strip of soil to receive the seed.

CROP OF THE MONTH – Carrots

Carrots are both delicious and nutritious. There are all kinds of shapes, types, and colors of carrots available these days.

- Colors include orange, yellow, red, white, and purple
- Shapes include round (good for heavy soils) as well as very long and thin.
- Some carrots such as Mokum and Napoli are sweet when harvested in summer. Others keep through the winter, and their sweetness develops in the cold weather (Bolero).

Carrots can be tricky to get established.

- They need a very well-prepared seed bed. If the roots hit something like a rock or hard clay, they will “fork” or twist. They are one crop where double digging (extreme tillage) may provide a pay-off that is worth the price your soil structure will pay.

Germination takes longer than for most other seeds. It can be challenging to get the carrots to sprout while at the same time avoiding a bumper crop of weeds. Options for this include:

- Lay a wide, heavy board over the newly-planted row, and then remove it after a week (weeds will germinate and then die from being smothered; the carrots then have a weed-free area in which to emerge. The board also helps keep moisture in).
- Plant seeds in furrows, water well, and then “mulch” with compost. This will suppress weeds, retain moisture, and provide valuable nutrients.
- Germinate seed prior to planting in a tray with just a very small amount of water. Make a gel made from 1 part corn starch to 8 parts water, and mix the sprouted seeds into this. Place in a plastic bag, snip the corner, and “pipe” out the seed (thing of cake decorating).
- Seeds coated with clay (pelletized) can have more uniform germination, and they are easier to place.

Other Considerations:

- Make sure to give each carrot enough elbow room. The need about 9 square inches each, and you can do this either in rows, or by equidistant spacing in beds.
- Weed control is imperative! Mulch is very helpful with this.
- Carrot seeds do not keep well. Consider purchasing a fresh supply every year.