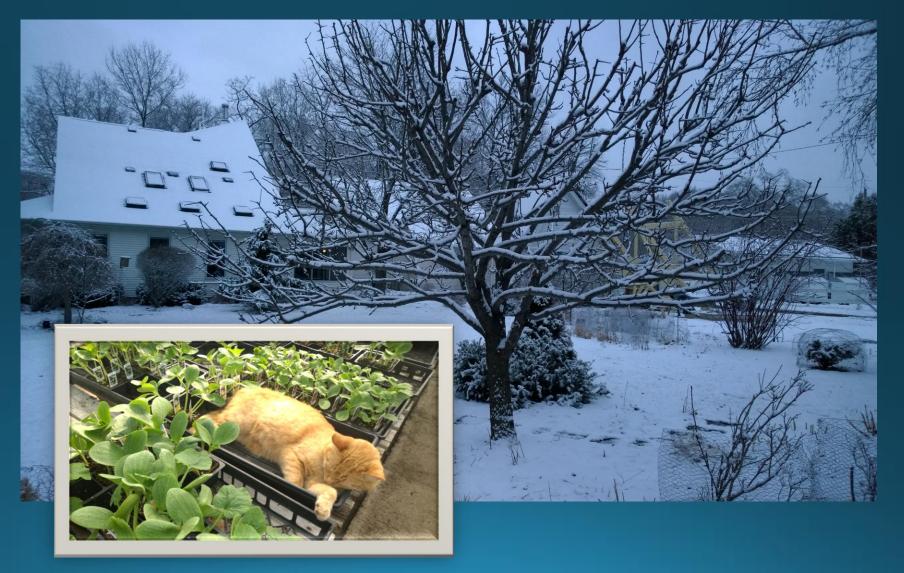


Its time to start your own Seedlings

Ellen Terwilliger – Master Gardener Volunteer

Why Start Your Own Seedlings?

It's fun to watch things grow inside while its still cold outside



Why Start Your Own Seedlings?

It saves money

• It costs a lot to
buy all your
plants from a
nursery



Why Start Your Own Seedlings?

 You have seedlings that have not been sprayed with any herbicides.



Why start your own seedlings

 You can try seeds that you might not find in your local nurseries or stores





What do I need to do first?

- Decide what you would like to grow
- Order or buy your seeds
- Figure out when you need to plant the seeds
- Gather your supplies







Decide what you would like to grow

- Flowers, vegetables?
- How much space to you have?





Order or buy your seeds

Catalogs, online, local stores or nurseries, saved or exchanged seeds

Look for disease resistant varieties and for varieties suited to the Upper Midwest – Zone 4



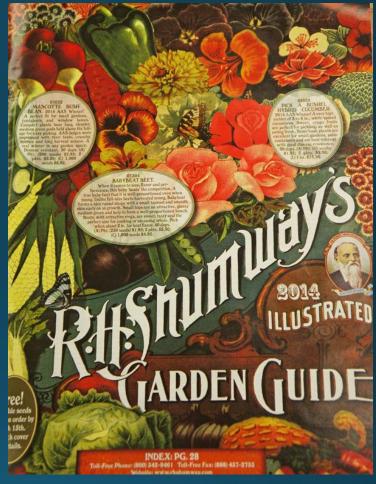


Figure out when to plant your seeds

			March 2010			
Sunday	Monday	Tuesday	uerday Wednesday Thursday		Friday	Saturday
		1	2	3	4	5

6	7	2016 APRIL								
		SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY		
13	14						1	2		
20	21	3	4	5	6	7	8	9		
27	28	10	11	12	13	14	15	16		
		17	18	19	20	21	22	23		
		24	25	26	27	28	29	30		



Gather your supplies





What are the next steps

- If you have used equipment in the past wash it in warm soapy water to make sure there are no plant diseases
- Fill your planting containers with seed starting or potting mix, leave room on the top for watering
- Water with warm water
- Plant the seeds at correct depth for kind of seed you can soak seeds for 24 hours before you plant
- Cover the seeds
- Set in a warm sunny spot or put on heated seed warmer
- Label your seedlings with name and date of what is planted



Wash your potting containers

Planting Seeds is easy and fun



Put your soil in the pot/container



Seed Starting - Germination

- Temperature
- Water
- Oxygen



Right Temperature - Goldilocks



Water to get things started

- Seeds need close contact with growing medium
- Wet paper towels
- Soaking
- Trenches





Water the soil with warm water



Plant your seed no deeper than it is wide



Oxygen for Germination

- Seeds need oxygen too.
- Plant little seeds too deep and they are starved for oxgen

If seeds are too wet they don't get oxygen





Label your pot with name and date



Cover the pots



Watch them grow – inside under lights





I use our greenhouse once seedlings have germinated.

Many people use windows or grow lights.

How long until seeds germinate

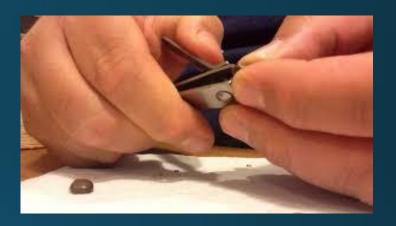
- It depends on how sunny and warm it is
- It depends on the kind of seeds
- From 2 14 days is typical for the spot I have the seeds in
- Broccoli is always the quickest for me
- Once seeds germinate take the cover off and make sure there is some ventilation



What if my seeds don't germinate

- Water can't penetrate the seed coat
- Hormones are preventing germination
 - Abscisic acid induces dormancy
 - Gibberellin release dormancy
 - Use Stratification to shift dormancy
- Seeds have no access to light that need light
 - Lettuce, foxglove, cardinal flower







Soaking seeds

- Soak 12 48 hours
- Speeds up germination
- Change water



How do I care for the seedlings

- Adequate sun or grow lights
- Thin seedlings if there are too many in a container
- Seedlings get leggy without adequate light
- Turn seedlings if they are in a window
- Adequate water, but not too much
- If you used a seed starting mix you won't need fertilizer – its built in.



When do I plant seedlings outside

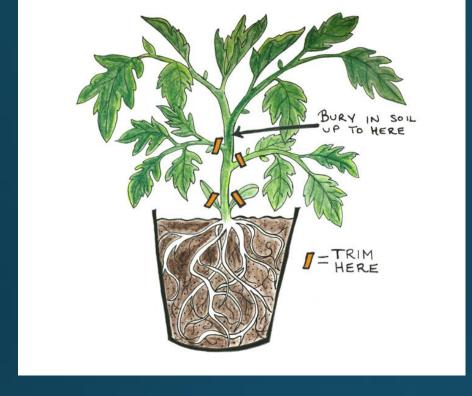
- It depends on the kind of plant
- Cole crops; broccoli, cabbage, lettuce can be early in late April or early May
- Tropical plants like tomatoes and peppers we wait until after Memorial Day
- Look at the seed packet instructions also



How do I prepare to plant outside

- Harden off seedlings by placing outside
 - First in a shady, protected place for an hour
 - Then to partial sun for longer
 - Then to being outside on a steady basis
 - Watch that they don't dry out
 - If you can plant them on a cloudy day it is helpful





Now you are ready to plant. Dig the hole for the seedling.



Place the seedlings in the ground



Water your seedlings

- Don't over water or plants will not have enough oxygen
- Don't underwater or they will not thrive



Mulch the seedling.





When should I plant directly into the soil?

- Shorter growing season
- Plants that don't transplant easily like corn, potatoes, squash,
- When you want a lot of something its easier to plant direct
- Much cheaper than buying seedlings to transplant



3 Ways to plant seeds directly

- Drills Or Rows
- Broadcasting
- Hills







Drills or planting in rows

- Use a hoe to make a shallow indendation in the soil
- Space according to instructions
- Depth is shallow. 1/8" to 1" depending on seed size



Broadcasting Seeds

- Use for cover crops
- Use when you have a large amount of seed that doesn't need to be in rows
- By hand or with a broadcast seed spreader







Planting in Hills

 Use for vining plants that have long runners







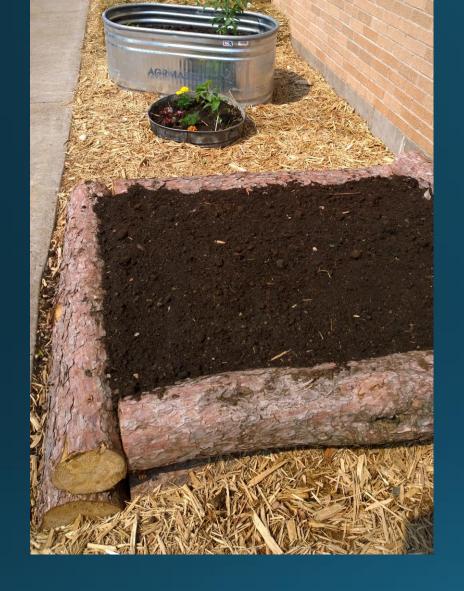


Demonstration Gardens – Square foot



Demonstration Gardens - Vertical







Raised Bed and Brick Spiral Gardens



Your Next Steps

- Get your pots and potting soil
- Select your seeds
- Depending on what your seeds are plant them in later March or April
- Water with warm water
- Cover the pot until the seeds germinate
- Keep your pot in a sunny place
- Try a variety of seeds
- Be the seedy person you have always wanted to be!



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