



Photos by Patrick Mangan

Start Your 2020 Victory Garden!

Section 5: What to Plant. Seeds and Transplants, and When

A practical guide on the ins and outs of developing a backyard garden plot to grow your own fresh vegetables for a local, sustainable, secure food supply in the times we are having.

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WELCOME BACK!

Table of Contents: Where we have been and where are going...

Previously:

- Section 1: Bitterroot Valley Climate data for gardening. Site selection for a garden, and keeping the deer out.
- Section 2: Garden soils, taking soil samples.
- Section 3: Garden beds, raised beds, and container gardening.
- Section 4: Soil amendments and preparing the garden. What a soil test analysis tells you.

Current Section:

- Section 5: What to Plant? Seeding and transplanting plants when the time is right.

Coming Soon:

- Section 6: Watering and weed management in the garden.
- Section 7: What could possibly go wrong? Disease, insects, and other things to keep a watch out for. IPM management practices.
- Section 8: Harvest time! Canning and storage
- Section 9: Putting the garden beds to sleep for the winter
- Section 10: Next year...

These are the fun questions!

- What do I want in my garden?
- What do I want to eat?
- When do I plant it?
- What should I transplant and what should I direct seed?

These are all the fun parts of the gardening world. 'It depends' will be the answer for some of it. BUT, I'll give you some tidbits and things to think about in this unit.



Agenda for this unit:

- Making a plan in your garden about what to grow.
- Backward planning= climate tells us when to plant
- Reading a seed packet
 - Starting our own starts before the season
 - Direct seeding
- Buying transplants for the garden
- A few plant protection strategies to jump-start the season



Making a plan: (so many choices)

- There are so many things out there to plant and grow. Here are some ideas to manage the ideas so you don't go and grow crazy!
 - What do you like and how much do you like it?
 - How does it grow?
 - How much space does it take, and how much space do I have?



It's easy to over-plant, and have way too much in the garden. Also easy to set up a competitive environment that reduces the success of some or all of the plants. So, plan ahead!

Make a Plan of Action: Be Realistic

- List your favorite vegetables in order of preference
- Don't plant what you won't eat
 - On the other hand, EXPERIMENT!! Lots of cool veggies and cultivars out there.
- Identify candidates for transplanting; what can I buy from a nursery, farm stand, or store that has been started for me?
- What are my friends growing, and should we plant different things and then exchange produce?
- Is there a time limit on productivity for the produce? When will it be ripe? When will it stop being edible? How does it store long term for fall and winter use?



FIND THIS PUBLICATION!

- This MSU Extension publication is gold!!!!!!
- “Can I Grow That Here?” from MSU Extension
- It gives you some guidance on how long it takes for different kinds of vegetables to grow to maturity, when to seed, and thoughts on transplanting.

<https://store.msuextension.org/publications/YardandGarden/MT199308AG.pdf>

REFLECTING BACK= Climate Take-Homes (section 1):

- We have approximately 120 days of frost-free growing in the Bitterroot
- Our last spring frost usually occurs sometime in late May/ early June
- Our first fall frost usually occurs sometime in early September
- So use that information. If I can't put it out until June 1, and it should be 8 weeks old when I transplant it, then I need to seed it myself April 1st, OR, I should buy it as a transplant from a nursery.
- If I want to plant snap peas, and they finish in 45 days, then I can plant them whenever. They're certainly going to finish up on time, no matter when I seed them in the spring (as an added bonus, peas tolerate cold well, so can go in early).

Growing from seed versus pre-started plants

- A couple of thoughts when deciding between what to seed into your garden and what to start indoors, or buy as transplants
 - How many days does it take to mature?
 - How tender, or tolerant of exposure to cold is the plant?
 - When is your last frost date in spring?
 - Do you have space to start seeds indoors?



The back of a seed packet= Lots of information!

- Type of vegetable
- Days to maturity
- Sowing seed
 - Spacing
 - Distance between rows
 - Seeding depth
- Thinning/transplanting
- Germination
- Year it was packaged for use
- Special notes from seed company



Days to Maturity can help you choose to seed directly or transplant

- Days to maturity= length of time to harvest from the day that seeds or transplants are placed in the garden
- It is an average. Actual time will vary with growing conditions
- Remember, we have about 120 frost-free days in the Bitterroot Valley.
- So, for crops that take a long time to mature, you can buy transplants, or start indoors, shave some of that time off.

Examples of veggies normally grown from direct seeding

Beans	carrots
Peas	lettuce
Corn	onion bulbs
Radishes	turnips

Examples of veggies normally grown from transplants

Tomato	tomatillo
Peppers	herbs
Cabbage	winter squash
Broccoli	Eggplant

Tenderness of plants= cold tolerance

- Some vegetable plants are more cold tolerant, and therefore can go into the garden a little earlier. Plants like peas or lettuce should be fine with a light frost. Others, like peppers and tomatoes, want nothing to do with any cold whatsoever.
- As spring nights transition into summer, always be on the lookout for nights that will get down near freezing, and cover the more tender plants to protect them.
- Use tenderness as a guide of when to plant in the garden. Some can go in early, while others will need to wait until after the last frost.

Cool season and hardy plants

- onions, spinach, cabbage, kale

Cool and mostly hardy plants

- potatoes, lettuce greens, carrots, beets

Warm season tender plants

- beans, corn, squash

Warm season and very tender

- tomatoes, peppers, melons, eggplant

Transplants - Starting Seeds Indoors

It's fairly easy to buy supplies to start your own seeds indoors in your house.

Visit a nursery or garden supply store and see what start up products they offer.

While seed starts don't need light until they emerge, they might want some low heat on the bottom.

Once emerged, natural light in a sunny window location, grow lights, or fluorescent lights will give starts the light they need.



Starting Seeds Indoors

- Sow 1 - 2 seeds/pot or container
- Thin to one seedling per pot or container
- Peat pots, peat pellets, soil blocks and paper pots may be planted directly in the garden
- Transplant into larger pots if necessary, when there are 2-3 true leaves showing
- Bottom Water



Choosing transplants from a retail outlet

- A stocky plant is better than a tall spindly one
- Flip over leaves and look for insects
- Check to see that they are not root bound in the pot
- You won't want one that already has flowers or fruiting bodies on it growing. A smaller, younger plant will be better suited to grow better.



Hardening Off Transplants

- Before you put your transplants out in the garden you will want to expose them to the outdoors, “toughen them up” and get them ready for the harsher outdoor environment (when compared to your grow room, or a commercial greenhouse).
- This “Hardening off” experience will encourage them to develop a cuticle that can withstand being outside and exposed when you plant them in the garden.
- For the 2 weeks before you intend to plant outside, move them outside into a sunny location, on the patio or some place like that.
 - Start off with only a couple of hours a day, and increase the time outdoors to the full daytime over the course of the 2 weeks. Be sure to bring them back in at night.



Time to Plant Outside

- When your transplant is officially hardened off, and the air temperatures suggest it won't freeze at night, then its time to plant it outdoors.
- Plant in the cool of the morning, if possible, and water in well.



Direct Seeding

- If you are going to direct seed, then read the back of the seed package for information you'll need to be successful.
 - Seed depth
 - Days it takes for germination
 - Spacing between seeds
 - Spacing between rows
 - If you need to thin the plants to a certain spacing
- A string can help you mark a straight row, so you can more easily identify weeds versus germinating vegetable seeds in your beds



So Get Ready, the time is almost upon us!

- One of my favorite nurseries has a sign by their register that says “Not yet! We should plant these outside in 3 weeks. So wait, the plants will still be here!”
- I always appreciate that sign. It captures the excitement we as gardeners have to get plants in our garden, as well as tells the cautionary tale that, while some things can go out, many starts are not ready yet.
- But now is the time to get ready for your garden, find the cultivars you want, and get those potatoes in the ground! It’s almost time for the garden to shine!

PLEASE HELP ME OUT!

- If you've been following along for all five Sections of this garden guide (or even just a few of the sections) I would love your feedback about how you are finding it.
- Please take a few minutes to follow this link to an online survey and fill it out for me. It helps me out, and gives me some feedback on anything you might need for the rest of the series.
- Thank you for completing it!

<https://forms.gle/5yJgxUqrQ8y8wsaK7>

Next Up:

- Section 6: Watering and Weeding Strategies

We got our plants in the garden, now we need to keep them watered, fed, and keep the competition down.

Happy gardening!



Questions?

- If you have thoughts or questions, feel free to reach out to your local extension agent.

Or, give me a call

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