OL 304 Assignment Six Discussion Online Learning: Vegetable Garden Care and Maintenance for Family Gardens and Community Gardens. Center for Sustainable Development: https://csd-i.org/vegetable-garden-care-family-gardens-community-gardens/

This week we're going to learn about planning the next garden - and starting seeds in containers for transfer to the garden later.

Part 1: Planning the next garden

By now your gardeners have had a chance to have a successful first garden -- they're probably harvesting vegetables by now. It's time to begin thinking about the next planting cycle. Depending on where you live the next cycle may be seasonal -- or it may not be seasonal.

Seasons may be based upon the return of warm weather after a cold winter - or may be the upcoming rainy season at the end of the dry season. If you live in a warm area and have regular access to water for your plants you may be able to grow crops year-round - and your 'season' is simply planting on a regular cyclical basis so that a new crop is ripening before the previous crop has been fully harvested.

Your gardeners have had time now to decide if they want to expand their garden. They also will have discovered what their favorite things were to eat from their garden -- and which things weren't as interesting to them. They will have had a chance to see some of the good things that their neighbors have grown -- that they would like to try. And, you may have suggestions for additional fruits and vegetables that provide essential vitamins and minerals -- that they haven't planted yet.

So our first step will be to go back to the garden map that they drew, and plan where our next beds should go. Are we going to plant a succession of the same crops in the new beds -- or are we going to begin trying some new crops? Are we going to experiment with intercropping? Can we list the crops that we want to plant in the next planting cycle -- and write their names down on our map where we hope to plant them?

Make sure that as you mark on your map where you're going to plant your next crop, that you change the locations -- rotate your crops. In other words if you planted tomatoes in one bed the first time plant them in a distant bed the second time. This allows different kinds of plants such as peas to add nitrogen to the soil in one cycle, and the tomatoes to benefit from last cycles pea bed in the next planting cycle. It also is a form of pest management -- pests will have to work hard to find where the tomatoes have been replanted.

Secondly we want to look at the season. If you're entering winter, you may need to wait before planting again. So we want to look at calendar for two reasons.

1. Let's say that it will be warm enough to plant outside on March 15. You will want to begin planting seeds in containers indoors 6 to 8 weeks before March 15 -- so that you can plant seedlings outside on March 15 rather than simply seeds. You may also want to plant again on May 15, but these may need to be plants that are more accustomed to warm summer weather. You might also want to plant again on July 15 in order to have crops for fall garden. You can ask your agriculturalist partner for good replanting dates. Once you've determined these dates mark them on a master calendar. This is called succession planting; planting three crops of vegetables at different times will give you three harvests.

2. Let's say that you can plant continuously all year long in your location. You'll want to think about how frequently do you need to plant in order to be able to continuously harvest (as with lettuce, or tomatoes, or carrots, or herbs) -- or have appropriately spaced harvests of things like beans for drying. You can ask your agriculturalist partner for good replanting dates. Once you've determined these dates mark them on a master calendar.

So you will have two overlaying graphics -- a map of the garden, and a calendar.

We want to continue making sure that our gardeners have a winning situation so that they will adopt home gardens for nutrition. A suggestion that I would make would be to keep the second garden still fairly simple so they won't feel overwhelmed with changes. In your demonstration garden you could demonstrate a succession garden so they could see the process -- this way they will know what to expect if they were to plant in their garden.

In conclusion, this part of the assignment focuses on what, where, and when.

Part 2: Planting seeds in containers

Planting seeds in containers accomplishes several things for us. If it's cold or windy outside, we can start the seats inside where they will be warmer and protected - and you will get a two-month head start on the season by having plants to put outside when it becomes warm rather than starting with seeds planted directly in the soil outside.

Other reasons for planting seeds in containers is because some plants have very small seeds that wash away when it rains. Other plants need protection from the sun, the wind or from pelting rain at the beginning of the rainy season before they're put out side.

Through the year, you should encourage your gardeners to collect containers. These can be plastic bottles, food containers, paper cups and small cardboard boxes; let them use their imagination. Small plastic bags for planting seedlings can also be purchased very inexpensively at agricultural supply stores.

Types of seeds that are typically planted in containers include:

- broccoli
- cabbage
- cauliflower
- chard
- kale
- onions
- cucumber
- egg plant
- lettuce
- peppers
- squash
- tomatoes

You're going to want to plant the seeds in a fairly light soil -- possibly straight compost mixed with something like fluffy like rice husks or wheat husks to lighten the soil. As a general rule of thumb, seeds should be planted at a depth of about two times their size -- but seed packages tell you the depth and the spacing. Don't plant the seeds too close together -- because you could risk damaging their roots when you separate them for planting outside. Be sure to label the containers so that you know which varieties of which plants you've planted -- and the date.

Before the seeds germinate you can mist them with a hand mister so that you don't disturb the soil and the seeds within it. Even after the seeds have germinated, it's a good idea to mist them with a hand mister until they have some strength -- and then you can begin using a watering can with a nozzle that breaks the water up into a gentle spray.

Most seedlings will be ready to plant outside in between 6 to 8 weeks from being planted; the seed packet usually gives a range of time. When the seeds begin to germinate they will need to have a good source of light; so if you have planted in containers inside of your house they will need to be in a very bright area inside the house or they won't grow well. If you're fortunate enough to be able to plant in containers outside, then you might want to consider putting a simple thatched roof over the seedlings to protect them from intense sun and harsh rains.

If you've planted inside, you will need to set the plants outside for a week before you plant them in the ground to give them a chance to become acclimatized to the outside weather.

Part 3: Transplanting the seeds outside

After your raised beds have been prepared by loosening the soil and mixing in more compost and organic material -- and beautifully smoothing off the tops of the beds again -- you can begin planting the new transplants after they've been hardened for a week outside. Each year as you fluff up the soil in the raised beds -- and add compost -- they should grow in height.

Be sure that the design of your bed includes intercropping so that you have perhaps tomato plants mixed up with the onions, garlic, and with marigolds in order to confuse insects. If you carefully smoothed off the top of your bed with a rake, you can use the spacing dimensions from the seed packages to mark the locations of where you're going to put the different kinds of seedlings.

Have some nice soft compost available. When you take the seedling out of the container make sure that you're taking a ball of soil that is larger than the roots. Make sure that you dig a small hole which is 2X larger than the ball of soil around the seedlings' roots. Fill in the remaining space with the soft compost to give the new seedlings a little boost of nutrients. Gently hold the seedling by its stem so that the root ball is hanging straight down and set it in the small hole. Gently cover the root ball up with new compost up to the first set of leaves so that the stem will be supported. Be sure to label the plants.

If you like you can even have your upside down plastic root watering bottles in place eight or 10 inches away from where you're going to set the seedling, so that you don't need to disturb the plants' roots by digging a hole for the bottle in the future.

Don't plant seedlings at midday when the sun is the hottest. Make sure that you carefully water the plants without knocking them over with a stream of water -- sneak up alongside of them with a watering can and try to water the soil underneath their leaves for a few days until they gain strength. If you're in an area of intense sun consider providing temporary shade for the seedlings for a week or so.

Again, we don't want to scare our gardeners away with too much detail but you might want to have them make note when they planted seeds in the containers and when they transplanted outside. A few months later next to this they can note when they first begin harvesting from those plants. And then next to this they can make a note whether the plants grew successfully. This will help with planning for future planting cycles.

Please move on to Assignment Six Homework.