

# Growing with GPGP

2003 Summer Newsletter

Hello everyone!

We hope you all are enjoying your gardens and have been able to harvest some of the produce from it. This news letter is just chock full of good information on all sorts topics such as watering, pest control, harvesting and cooking with your harvest. We are trying to provide as much information as we can in the hope that you'll keep these newsletters for reference over the years that you work with your gardens. If you think of a topic that you'd like to see addressed, please let us know. If you have a seasonal recipe to share, that would be great too!

This has been a tough spring for the crops that need a bit more sun than we've been getting but at least you haven't really had to worry about watering your gardens. Now that we seem to have suddenly shifted into summer, water will become more important and we provide some information about that in this newsletter. In the next few weeks, we will be bringing around straw to mulch your beds - this helps keep the weeds down and also helps to conserve the moisture in the ground so that you don't have to water as much or as frequently. But remember to never let your garden beds dry out!

Have you noticed that a lot of your lettuces and spinach have changed over from making leaves to making flowers? It's time to pull them out of the garden now because the leaves will taste bitter but take heart! With the exception of spinach which really doesn't do well in the hot summer, you can still plant lettuce and get another crop. In fact, you can also plant more beets, carrots, radishes and beans. This is called **succession planting** where you continually replant so that you will have a continuous supply throughout the growing season. Find a blank square and put in some seeds. Carrots and beets can be planted in the squares surrounding the tomatoes. Radishes can go around the squash plants. Lettuce and beans can go pretty much wherever there is a blank square.

If you notice that something seems to be eating or chewing away at the plants in your beds and you can't figure out what to do about it, please let us know as soon as possible. We want to stay on top of any potential problems so that you can obtain the maximum harvest.

And please feel free to call us with **any** questions or concerns you have. There is no such thing as a stupid question – we'll do our best to answer you right away, but many times we'll have to do some digging ourselves to find an answer! We are here to help you make a success of your garden.

Enjoy!

*Cindy and Kate*

# Watering

*Consistency in watering is key. Lack of water can cause a break in the growth cycle – the plant will restart growing once water is available, but the crop produced won't be as tasty or yield as much.*

## **I know my garden needs water, but just how much?**

Crops in the summer garden generally fall into 2 categories: those that we eat as greens or roots before they flower and those whose fruits we eat after flowering. Examples of the first category are basil, parsley, lettuce, spinach, chard, kale, cabbage, broccoli, beets, carrots, onions, and radishes. Examples of the second category are cucumbers, squash, tomatoes, peppers, eggplant, beans, etc.

The “greens and roots” category requires a nearly continuous source of water to produce the best eating. Thus, in the dry heat of summer (July and August), it's important to water them every other day or so.

The “fruits” category needs deep less frequent watering, about 1-2 times per week. If they get too much water, they'll just keep making leaves and spend less time making the flowers that turn into the goodies you'd like to harvest.

So what does all this mean for you as a gardener? It means striving for a balance between getting the plants the water they need while using as little water and time as possible. If you can, try to water your garden in the morning. When the air is cool, less water will evaporate and more will make it down through the soil to the roots of your plants. If you can only water in the afternoon, please make sure to run water through your hose for a few minutes until the water coming out the end is cool. When hoses sit in the sun for too long the water inside them gets very hot and will harm your plants. This is especially important for those of you using soaker hoses. Watering at night also lessens the amount lost to evaporation but tends to encourage other pests such as fungus and slugs.

How much water does your garden need? Most people say that a vegetable garden needs about an inch of rain per week to grow well. You can make a simple rain gauge out of a tuna can. If the can is filled by rain over the span of one week then you don't need to add any water to the garden unless a particular plant is wilting in the sun. Just be sure to empty out your can once a week. It is also important to know the watering regulations for your town. There may be outdoor watering bans. If so, then you should still be able to use your watering cans to keep your plants alive. Below there is a table with some guidelines for watering. If you use these guidelines remember that the capacity of your GPGP watering can is about 1 gallon or 16 cups. Therefore, according to our table, you can water 32 bean plants (about 3 squares worth) or 4 tomato plants with a full watering can.

For those of you who can use soaker hoses, you can use the tuna can gauge by placing a section of your soaker over the can and running water through the hose until the can is full. This will probably take about an hour.

## Watering (continued)

*Keep leaves of cukes, melons, beans and squashes dry to prevent fungal diseases.*

*Withhold water when tops of onions begin to fall over.*

*When melons are almost ripe, water them less to keep them from splitting.*

### Watering Chart

Plant	Volume per plant	Hot Weather Frequency (Times per week)
Beans	1/2 cup	2
Beets	1/2 cup	2
Cabbage	1-2 cups	2
Carrots	1/4 cup	3
Chard	1-2 cups	2
Cucumbers	2 cups	2
Eggplant	2 cups	2
Lettuce	1 cup	2
Melons	2 cups	2
Onions	1/4 cup	1
Parsley and other herbs	1 cup	1
Peppers	2 cups	1
Radishes	1/4 cup	2
Spinach	1/2 cup	2
Summer Squash	2 to 4 cups	2
Winter Squash	3 to 4 cups	2
Tomatoes	1 quart	2

This watering chart is adapted from Mel Bartholomew's book Square Foot Gardening.

# Garden Wildlife

*Destroying pests can be broadly defined as squashing them, drowning in soapy or salty water or whatever it takes to get rid of them!*

## **Ewwwww!!! What's that thing crawling in my garden???**

Unfortunately, there are a number of garden pests that you may find on your crops. Most will cause some damage but not destroy your crop – some can simply devastate your entire crop. Here are some descriptions of a few of them and what you can do about them:

**Colorado potato beetles:** These are fingernail-sized beetles whose dome-shaped shells are brightly colored with black and orange stripes. They can affect eggplant, peppers, potatoes and tomatoes. They also like to hang out in the flowers of squashes, cucumbers and melons where they can spread disease. Handpicking and destroying is effective.

**Striped and spotted cucumber beetles:** Yellowish beetles about ¼” long with either 11 black spots on the wings or 3 wide black stripes. They can be found on squash, beans, peas and obviously cucumbers and feed on their leaves, stems and flowers and can spread diseases. Handpicking and destroying is effective.

**Cabbage worms:** These are medium green caterpillars with subtle yellow or white stripes along their sides and can be up to 1” in length. They are often found on the underside of many cabbage family crops (includes cabbage, broccoli, kale, etc). The leaves develop ragged-shaped holes. Cabbage and broccoli heads are great hiding places. They can be handpicked and destroyed. Kate's children love to go on “broccoli worm” hunts.

**Tomato hornworms:** Now here is one really interesting caterpillar and, despite its size, really hard to spot due to its coloring. These caterpillars are pale to medium green with chalky white streaks across their body. Small eyelike spots are found along their sides and their backside has a red or black spiky tail. They can grow up to 4” in length and be as thick as your pinky finger. They can do major damage to a tomato plant, devouring leaves, stems and fruit. If you see tomatoes with that look like they have been cut off or simply mostly devoured, start looking for these guys. Handpick and destroy **UNLESS** they have clusters of small white eggs on their backs. These eggs belong to a parasitic wasp, which will destroy the worm and make more of the parasitic wasps to boot.

**Japanese beetles:** Approximately ½” long, this beetle is a shiny metallic green with brown wings. If the foliage on some plants looks like a leaf skeleton, suspect these beetles. You can purchase a pheromone trap and place it 15-30 feet away from your garden or you can handpick and destroy the beetles. It's often best to pick them in the morning when they are still covered with morning dew and have a hard time flying (tapping them into a bag or jar filled with soapy water will work well). You will mostly find them on your bean crops.

## Garden Wildlife (continued)

**Slugs:** Slugs are basically slimy snails without a shell. They are brownish in color and feed on the soft tissue of pretty much any plant. They leave rough-edged holes and slime trails and can generally be found hiding under something in the garden during the day (they usually do their destruction at night). You can handpick them at night using a flashlight and dropping them into a can of soapy or salty water. Or you can set traps such as boards, stones or overturned pots in the garden and then check them in the morning when the slugs go there to hide.

**Squash vine borer:** If your squash vine suddenly starts to wilt then you probably have one or more of these. Look for moist sawdust-like debris piled outside of a small hole. Slit the stem lengthwise above the hole with a sharp knife and search for fat white 1" long caterpillars with dark brown heads. Destroy the borers and cover the cut stems with moist soil so they will grow new roots. These borers can affect cucumber, melon, pumpkin and squash plants.

**Squash bugs:** As if the previous squash problem weren't enough! These are about ½ to 1" long, brown to black in color, with a very flat back and shield shaped body. They feed on the juices from the leaves causing the leaves to wilt, dry up and turn black. If your leaves are starting to get yellow or brown spots on them, suspect this bug. They will affect cucumber, melon, pumpkin and (of course) squash. You can lay traps of boards or something for them to hide under (similar to slugs) and collect and destroy in the morning. Look for reddish-brown egg masses on the underside of the leaves and remove and destroy these by crushing between two flat surfaces.

### **Aren't there any good bugs out there????**

Yes, indeed there are – lucky for our plants and us!

**Ladybugs:** Small orangey red in color with zero to many black spots, these wonderful bugs are a gardener's delight. They feed on many nasty pests such as aphids, Colorado potato beetle larvae, chinch bugs, bean thripes, mites and numerous other soft-bodied insects. If you see these in your garden, be happy!

**Parasitic wasps:** The adult wasps feed on nectar, but they lay their eggs on or within the grubs or caterpillars that they use to host their young. These wasps are non-stinging.

There are many others as well, but we figure that you're pretty tired of reading about bugs at this point. Unfortunately, the good guys tend to reproduce more slowly than the pests. Thus, we strongly recommend **against** using pesticides, which kill the "good" bugs as well as the "bad". Most of the time, if you are patient, the predators will find your pests and the garden's ecosystem will balance itself out. In addition, plants have their own ways of defending against pests, so it's important to keep them as healthy as possible. So, please let us know if you are seeing any problems with your garden and we'll try to help.

# Harvesting

*Harvesting most vegetables and fruits frequently will lead to the plants producing more harvest – yummy!*

*Don't forget to sample while harvesting – one of the best things about having an organic garden!!!*

## **So just how do I know when to harvest this stuff?**

Sometimes is hard to know when to pick and when not to pick. Here are some basic guidelines for vegetables that many of you have. If you have questions about something you have that isn't listed here, please give us a call.

**Beans:** Pick when the diameter of the pod is about  $\frac{1}{4}$  to  $\frac{3}{8}$  inch or about the thickness of a pencil. Use a knife or simply snap them off from the stem with your fingers. Keep beans picked for a more continuous production. Try not to harvest in the morning when the leaves are damp as that may cause the spread of fungal disease.

**Beets:** Pull or dig roots and remove tops (by twisting off, not cutting) when beets are about  $1\frac{1}{2}$  to  $2\frac{1}{2}$  inches in diameter or the size of a ping-pong ball (dig around the root with your finger to check the size).

**Broccoli:** Main head should be dark green, buds tight and fully formed. Cut head off stalk with a knife – small side shoot heads often will form continually into the fall and should be harvested.

**Cabbage:** Cut off the head any time after it reaches the size of a softball, they can grow larger but are more tender and tasty at this stage. Cut with a knife (sometimes more heads will grow from the cut stem).

**Carrots:** Pull carrots from the ground by their tops and clip the foliage about 1" from the root. Pull up the ones with the largest tops first (you can dig around the plant with your finger to test the size). Picking earlier rather than later will yield a sweeter, tenderer carrot.

**Cauliflower:** Harvest when the head is tight and fairly regular and the curd have not begun to separate. Remove from the stem with a knife

**Swiss chard:** Begin harvesting when leaves are 6-8" long. You can harvest chard by any of these methods: picking individual outer leaves (the center leaves will continue to produce); cutting the entire plant off at soil level when the leaves are large and full; cut the entire plant 1" above the ground to encourage regrowth.

**Cucumbers:** Cucumbers can be harvested whenever they are big enough to use, though the smaller ones tend to be more flavorful (3-5 inches). Fruits grow quickly so check vines often. Cut from stem, don't pull.

**Eggplant:** Harvest any time after they have reached half their mature size. Younger fruit is generally tenderer and continuous picking stimulates further production.

**Lettuce:** Gather outer leaves from all lettuces except iceberg when they are big enough for a salad bowl (or a size you like to eat). Leaf lettuces can be cut about 1" above the soil when most leaves are salad sized and the plant will continue to grow another harvest or two. Or you can harvest the entire plant after it has matured but before it bolts (grows a central stalk which means it's going to flower and the leaves will now be bitter). Harvest the entire plant by removing its roots and all.

**Kale:** Kale can be harvested at any time – when the leaves are small and tender or when they are large – it's pretty much up to you. Just leave enough leaves so that the plant can continue to grow and produce more. Cut off the leaves from the bottom of the plant and work your way towards the top.

## Harvesting (continued)

*Use a sharp knife for harvesting items with large stems such as chard, broccoli, kale, squashes, etc. A small pair of sharp scissors can be used for harvesting items with small tender stems/leaves such as lettuce and spinach.*

**Muskmelons:** For most melons except watermelon, the fruit is ripe when the rind changes from gray-green to yellow-buff. The fruit is still firm, but can be fairly easily separated from the stem with gentle thumb pressure. Watermelons are a bit more difficult though the following 3 methods are pretty popular: the tendril nearest to the fruit turns from green to brown; the underside of the melon where it sits on the ground is yellow; tapping it lightly produces a low-pitched “thump” instead of a high-pitched “ping”.

**Onions:** When about half of the tops of the onions fall over and are turning brown, it's time to harvest. Gently pull them from the soil and leave them to cure for about 1 week in the sun. When the tops and skin are dry and crinkly, clip the tops about 1” from the bulbs and store in a cool dry place.

**Peas:** Pick snow peas when the pod is the mature length (about 2½ inches) but before the seeds inside begin to mature. Sugar peas are best when both pea and pod are plump and the pods snap. Garden peas should be picked when the pods have filled out but aren't overfilled with peas.

**Peppers:** Most sweet and hot peppers are actually completely ripe when they turn from green to red. Picking the peppers when they are green will actually signal to the plant to produce more peppers so you might want to pick and enjoy some green ones and let the new ones turn red.

**Radishes:** Harvest radishes when mature by pulling them out of the soil and storing in the refrigerator. Don't leave in the ground too long after maturity or they will get pithy and bitter.

**Spinach:** Similar to lettuce, harvest spinach by any of these methods: picking individual outer leaves; cutting the entire plant off at soil level when the leaves are large and full; cut the entire plant 1” above the ground to encourage regrowth.

**Summer Squash:** Harvest straight neck yellow squash and zucchini when they are 4-5” in length, harvest crookneck when they are slightly smaller. Harvest patty pan squash when they are about 4” in diameter or less. Harvesting often will encourage more production.

**Winter Squash:** Generally, these are harvestable when the stems begin to shrivel and dry and the skin is hard enough so you can't cut it with your thumbnail (pumpkin skin can remain soft even when ripe, though). But make sure you get them harvested before any frost since that will damage the squash (you can cover them with a sheet if it's not going to be a hard frost). Leave at least 1-2” of stem on the fruit so that they store better. If possible, cure in the sun for about 10 days after picking. If there are any predictions of frost while they are curing, bring the squash inside overnight and put them out again the next day.

**Tomatoes:** Pick tomatoes when the skin yields slightly to finger pressure. Before a hard frost pick any tomatoes that show a light yellowing at the shoulders as these will most likely ripen indoors. As the fall frost date approaches, remove the bottom leaves, flowers and any fruits that are small, solid green and hard as rocks (they will not ripen in time). This will direct the energy of the plant towards ripening the fruit that is left.

# Recipes

*Do you have a favorite recipe for your fresh vegetables? Would you like to share it with Growing Places? We'd love to include it in our newsletter.*

*Consider planting garlic in your garden this fall. It will come up in spring and grow all summer. Then you'll be partway to a tomato sauce garden by next April.*

Remember, cooking your veggies doesn't have to be complicated. Many of your vegetables and greens can be sautéed in oil, maybe with a touch (or more!) of garlic, a touch of salt or seasonings. Or you could steam them, and then add oil and seasonings. The taste is already great because it came from your garden.

## **Kate's Mom's Blender Pesto**

(This is wonderful on cooked pasta or as a base sauce for homemade pizza)

Ingredients:

- 2 cups fresh basil (lightly packed)
- ½ cup olive or vegetable oil
- 2 tablespoons pine nuts or walnut pieces
- 2 cloves garlic (lightly crushed)
- 1 teaspoon salt
- ½ cup parmesan cheese
- 2 tablespoons pecorino cheese (optional)
- 3 tablespoons softened butter

Preparation:

1. Put basil, oil nuts, garlic and salt in blender, blend until smooth; see Note below.
2. When blended, beat in the grated cheese by hand.
3. Beat in the softened butter.
4. Before spooning over pasta, at about 1 tablespoon of the hot water in which the pasta was boiled.

Note: Pesto can be frozen! Just put the blended basil, oil, nuts, garlic and salt into ice cube trays and freeze for about 4 hours. The pesto cubes can be stored in plastic bags and kept until you need a taste of summer. Add the rest of the ingredients after thawing.

## **Peeled Tomatoes – a fast and easy way to prepare fresh tomatoes for pasta sauces, salsas, and other recipes, like the Tabbouleh Salad below.**

You will need:

1. 1 large pot (3-4) qt filled halfway with water. Bring to a simmer on medium low heat on the stove.
2. 1 large bowl filled halfway with ice water
3. As many fresh ripe tomatoes from your garden as you want to use

Preparation:

1. Working in batches of 3 or so tomatoes at a time, gently lower the tomatoes into the simmering water and let them stay there for about 1 minute.

(Technique continued on next page)



## More Recipes

*Squash flowers are delicious when sautéed in butter. Just pick off the male ones in the morning (they don't have any tiny squashes attached to them), refrigerate them and then cook them for lunch or dinner.*

2. Using a slotted spoon, transfer tomatoes into the ice water. You should notice that the skin has begun to split.
3. After about two minutes in the ice water, transfer the tomatoes to a bowl or plate. The tomato skin should peel easily away from the flesh.
4. If you want to remove the seeds. Just split open the tomatoes and scoop the seeds out with a spoon.

### **Tabbouleh Salad with Tomatoes (adapted from the New York Times Cookbook)**

#### Ingredients:

¾ cup med-fine cracked bulgur wheat (available in the rice/ethnic food section of most grocery stores)  
4 tablespoons olive or other oil  
¾ cup chicken or vegetable broth  
3 cups lettuce cut into bite-size pieces  
½ cup peeled tomatoes, seeds removed, cut into small cubes  
1 cup coarsely chopped parsley  
¼ cup finely chopped mint  
¾ cup chopped scallions  
2 tablespoons lemon juice  
Fresh ground pepper to taste

#### Preparation:

1. Put cracked wheat into small sauce pan and add 2 tablespoons of oil; stir to coat grains; set aside and let stand 5-10 minutes.
2. Add broth to cracked wheat and cook over very low heat for about 1 minute, stirring.
3. Remove sauce pan from heat and set aside to cool
4. Put cracked wheat into a 2 quart mixing bowl and, using your fingers, break up the lumps.
5. Add the chopped greens and vegetables and stir to combine thoroughly.
6. Add the lemon juice and pepper and stir to combine.

Serves 6-8 as a side dish.

### **We'd like to acknowledge the following gardening books as sources for the information we share with you:**

Square Foot Gardening by Mel Bartholomew  
The Vegetable Gardener's Bible by Ed Smith  
The Moosewood Restaurant Kitchen Garden by David Hirsch  
Rodale's Garden Problem Solver by Jeff Ball  
The Organic Gardener's Handbook of Natural Insect and Disease Control by Barbara W. Ellis and Fern Marshall Bradley