

Patty's garden notes....

The gardens are growing great even with the heavier rains this spring. I have included some articles about gardening when the rains persist. Also, in this newsletter are tips for gardening in hot weather.

We had many issues of people driving into the gardens when they were wet, even though I stress that issue at every spring meeting. To prevent people from driving on the roads following heavy rains, we have been putting up the chains on the roads. Some people drive around them. Any roads that are heavily rutted will need to be repaired. If this is costly, plot rental fees will be increased. If you see anyone driving on wet roads and/or getting stuck, please let them know.

The garden belongs to all of you. A fellow gardener asked that gardeners do not wash their feet and shoes from the watering buckets at the tank faucets. Making a mud hole by the water

tanks is not considerate of the other gardeners who need to use the water.

There are a couple of gardeners planting beyond the garden plot areas. This is a bad practice...it makes for difficult grass mowing and the plantings will be mowed off or driven over. Also, please place any rocks from your garden in the deeper road ruts. If they are placed next to your plot area, the lawn mower may hit them. We just had to repair the mower.

Please be considerate and cut down weeds immediately next to your garden plot. This is part of your responsibility as the plot owner. The lawn mower cannot cut right to the edges. For the most part, the gardens look exceptional this year.

Summer 2017

Easy Zucchini Lasagna

Ingredients

2 1/2 ounces Mozzarella cheese, low-fat, shredded (2 1/2 oz. equals 1/2 cup plus 2 tablespoons)
1 cup Cottage cheese, fat-free
3 tablespoons Tomato paste, canned, low sodium
1 cup Tomato sauce, canned
1 teaspoon Oregano, dried
1 teaspoon Basil, dried
2 5/8 ounces Onions, fresh, 1/4" diced (2 5/8 oz. equals 1/2 cup plus 1 tablespoon)
2 cloves garlic, fresh, minced (1 clove is about 1/2 teaspoon minced)
1/4 teaspoon Black pepper, ground
1 1/2 cups Zucchini, fresh, thinly sliced
3 3/8 ounces Lasagna noodles, enriched, oven ready (6 sheets)
1 tablespoon Parmesan cheese, fresh, shredded
Nonstick cooking spray

Directions

1. Preheat oven to 350 °F.
2. Reserve 1/3 cup of mozzarella cheese and set aside for later use.
3. Make cheesy tomato sauce: combine remaining mozzarella cheese, cottage cheese, tomato paste, tomato sauce, oregano, basil, onions, garlic, and black pepper in a small bowl.

4. Divide zucchini evenly into two parts, about 3/4 cup.
5. Lightly coat a medium baking dish (about 8" x 8") with nonstick cooking spray.
6. First layer: Spread 3 1/2 cups of cheesy-tomato sauce evenly on the bottom of each steam table pan. Cover sauce with 3 sheets of oven-ready lasagna noodles. Then, cover noodles with 3 1/2 cups of zucchini slices. Second layer: Repeat first layer. Third layer: Top layers 1 and 2 with the remaining cheesy-tomato sauce (about 3 1/2 cups) and then finish by sprinkling on the reserved shredded mozzarella cheese (1 1/3 cups) and the parmesan cheese (1/4 cup).
7. Cover tightly with foil and bake until zucchini is tender, about 30 minutes.
8. Remove from oven.
9. Remove foil and bake uncovered until cheese starts to brown slightly, approximately 15 minutes. Heat to 165 °F for at least 15 seconds.
10. Let lasagna stand 10 minutes before serving.



Garden Design & Management Tips

I'm into 'designing out' problems whenever I can ... so a bit of thought and planning can help reduce the impact of heavy rainfalls. These are some of the strategies I use in my garden to help avoid these issues .

Good Drainage: Elevate your garden by planting in raised beds or mounds that will prevent waterlogged plant roots and anaerobic soil. Grow in containers and use vertical systems such as window boxes, topsy-turvy planters, wall mounted or railing planters, pots on ladders and plant stands which all drain well. Another alternative is to use pots on wheels or castors so you can move them around to a more sheltered position.

Dig a Trench or Swale: Rather than wasting valuable rainwater in heavy downpours and paying for water when it's dry, harvest it by redirecting water to where you need it most. Swales are a useful Permaculture design feature and are especially useful if your garden is on a slope. By building swales on contour, they passively harvest water by slowing it down and allowing it to sit in a shallow trench to soak into the soil. They are also useful for harvesting water for thirsty food plants like bananas and fruit trees which can be planted on top of the mounds.

Add Organic Matter to your Soil: Adequate soil humus holds moisture like a sponge where the plants need it and is a buffer to plants under stress. A good soil structure helps the excess moisture drain away. It's even more important to add organic matter like manures, leaves, grass clippings, compost, and other mulches to heavy clay soils that become waterlogged easily and crack when dry. Adding gypsum to heavy compacted clay soils will help break them up. A soil rich in humus and worms is well aerated, allowing tiny pockets of oxygen around the root zone.

All Tied Up: To reduce the risk of common diseases during wet weather, support plants with stakes and ties or other vertical structures so the foliage is not lying on wet soil. Growing vertically increases air-flow around the plant and avoids overcrowding.

Give Pests a Hard Time: Slugs and snails thrive in wet

weather and I'm not going to make it easy for them to feast on my plants so using tepees and growing vertically makes it an uphill climb deterrent! If slugs and snails have to climb a high rise for breakfast, they're exposed so it's much easier for birds to see their next meal! I also sprinkle crushed eggshells around the base of delicate seedlings– the sharp edges are like a 'bed of nails' for their soft slimy tummies and extremely effective at keeping them away until young plants are established. Baked on a tray in a slow oven for 10 minutes, the eggshells become very hard and crunch perfectly into large shards in your hand .



The Magic of Mulch: A layer of mulch helps you take advantage of free rainwater as it retains vital moisture in the soil. It also reduces splashing which encourages plant diseases and prevents soil erosion by providing a buffer. Mulch slows water down so it can permeate gently through to the root zone and drain more freely throughout the soil.



Slow Release Fertilizer: Feeding your soil with trace rock minerals and slow release granules, pellets, or powdered organic fertilizers will help retain nutrients in your soil and replenish those lost to leaching during heavy rain. The more humus you have in your soil, the less leaching will occur as it helps bind minerals. Plants will quickly become

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nutrient deficient if their food source in the soil is depleted, and you'll often notice a change in their leaf color. If plants look a bit sickly after a week of solid rain, the minerals may have leached out. The leaves will give you a clue when to feed! A foliar spray of liquid kelp/seaweed or fish emulsion is a good standby tonic to help plants bounce back quickly. Plants can 'drink' the trace elements through their leaves much faster than they can suck up nutrients from the soil.

Harvest Your Food Crops Regularly: Pick edible plants promptly in humid wet weather because the

longer produce stays on the vine or stalk, the higher the likelihood of spoilage, pest attack, or disease.

Water Management Practices: As a general rule particularly in humid weather, avoid watering plant leaves. Splashing creates a breeding ground for fungal spores (which cause mildews and mold diseases) and can transfer them from one plant to another.



Source: The Micro Gardener. 'Making it Easy to Grow Good Health' (2017, March 14) Top Tips for Wet Weather Gardening.

How to Help Your Crops Endure Hot Weather

Hot weather is tougher on plants than it is on people. When you consider that our bodies contain about 60 percent water and most plants are 85 to 90 percent water, it is easy to understand. So when temperatures rise, plants get even thirstier and sweatier than we do.

As with people, some plants tolerate heat better than others. Knowing which plants like it hot and which would prefer air conditioning, you can help your vegetables and flowers survive and even thrive in hot weather.

Tomatoes, peppers, eggplant, corn, melons and squash actually need at least a month of 80 to 90 degree weather to develop a flavorful and abundant crop. As long as they don't run out of water, these sun worshippers are well equipped to survive the heat. On hot days they conserve energy and moisture by slowing down. While resting, their foliage may appear to be wilting from lack of water, but as evening approaches they'll perk up again. Heat loving plants are thirsty— the average tomato plant needs more than 30 gallons of water in a sea-



son. Using a combination of mulch and drip or soaker hose will ensure these plants stay healthy and well hydrated.

These following plants don't tolerate hot weather: broccoli, kohlrabi, Chinese cabbage, Brussels sprouts, carrots, radishes, kale, Swiss chard, cauliflower, lettuce and other salad greens.



In the vegetable garden, it's the cool weather crops lettuce, spinach, arugula, broccoli, kale, cauliflower, peas, and cilantro that suffer in hot weather. Even with an abundant and consistent supply of water, when temperatures rise over 80 degrees, these plants tend to stop growing, go to seed, or just give up.

Cool-weather crops should be grown on either side of midsummer heat. The plants will be much healthier and they'll taste better, too. Look for varieties that are well matched to spring or fall production. Plan to sow salad greens every couple weeks to maintain a steady supply of high-quality leaves.

In hot weather, heat-sensitive crops want protection from both heat and sun. Shade netting helps these plants in several ways. Most importantly, it keeps soil

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and air temperatures as much as 10 degrees cooler. Shade netting also protects tender foliage from being scorched by intense sunlight and reduces moisture loss. For best results, suspend the shade netting several inches above your crops, letting it rest on wire or fiberglass hoops, or a wooden frame.

Perennials that bloom in mid and late summer, such as asters, echinacea, rudbeckia, sedum and daylilies, are usually unfazed by heat. They may need extra water when the thermometer hits 90 degrees, but the heat itself doesn't bother them much.



Cool-weather perennials that flower in spring and early summer often have a hard time with heat. These get their blooming work out of the way early so they can kick back when temperatures gets hot. In fact, some cool-weather perennials, such as Oriental poppies and bleeding hearts avoid summer altogether; they die right to the ground after blooming and don't reappear until next spring. But for the most part, these plants just struggle along, looking gangly and unkempt. You can help them out by removing spent blossoms and stems as soon as they've finished flowering. Trim back foliage that's not fresh and healthy. If you haven't done so already, mulch around the plants to keep the soil cool and water as needed during hot weather to keep the soil from drying out. A piece of shade netting, laid right on the foliage, will provide instant relief for plants that have been damaged, transplanted or are otherwise ailing.

Annuals span the full range from heat lovers (gazania and portulaca) to heat haters (pansies and sweet peas), so it's impossible to generalize about their care. With so many annuals to choose from, the best strategy is to match plant to place. If the snapdragons and

petunias along your front walk are struggling in the heat, next year consider plants that have a higher tolerance for heat and drought, such as zinnias or gaillardia.



For annuals grown in pots, hot weather can be deadly. Ignore them for a couple days and they may never revive. When you water, make sure that the entire root ball gets moistened. Daily watering quickly leaches nutrients from the soil, so either use a slow-release fertilizer or apply a water-soluble liquid fertilizer every other week throughout the season. Nip off spent blooms and trim back rangy stems to encourage reblooming.



Many annuals and perennials now have a USDA heat zone rating as well as a hardiness rating. When a plant is not cold hardy, it will simply die, but the signs of heat stress are usually more subtle. Plants that can't tolerate high heat may stop blooming, the leaves may turn pale, and the plants may become more susceptible to pests.

Source: LaLiberte, Kathy. (2017, March 23). *How To Help Your Crops Endure Hot Weather*. Retrived from <http://www.gardeners.com/how-to/help-plants-keep-cool/7367.html>.

More Recipes

Macaroni & Cheese with Broccoli

Ingredients

- 2 cups uncooked elbow macaroni
- 4 tablespoons flour
- 2 cups milk (1%, low fat)
- 2 cups cheddar cheese, low-fat shredded
- 1/2 teaspoon pepper
- 2 cups broccoli (cooked and chopped)

Directions

1. Cook macaroni, following the instructions on the package.
2. Drain the cooked macaroni and return to the pan.
3. While the macaroni is still warm, sprinkle in the flour and stir thoroughly.
4. Over medium heat, slowly stir the milk into the macaroni.
5. Add the cheese and pepper.
6. Stir over medium heat until the milk and cheese thicken into a creamy sauce, approximately 7-10 minutes.
7. Stir in the broccoli; heat thoroughly.
8. Taste; add a small amount of salt, if needed.
9. Refrigerate leftovers.

Swiss Chard Quiche

Ingredients

- 1 teaspoon olive oil
- 1 small red onion
- 6-8 stems of Swiss chard
- ½ cup shredded cheese (Swiss, cheddar, parmesan)
- 4 eggs
- 1 cup skim milk
- Salt
- Pepper

Directions

1. Wash and dry Swiss chard.
2. Cut off the very ends of the stem and roughly chop.
3. Add onion and chard to oil and sauté until stems are tender.
4. Wisk eggs.
5. Add shredded cheese and milk.
6. Fold in the onion/chard mixture.
7. Pour into a sprayed pie dish.
8. Bake at 375 for 35 to 45 minutes until golden brown.
9. Test by sticking a knife into center. There should be no liquids coming out.

Best Broccoli Salad

Ingredients

- 1 large head fresh broccoli
- 1 large head cauliflower
- 2 apples, peeled, cored, and chopped
- 1 (11 ounce) can mandarin oranges, drained
- ½ cup sunflower seeds
- 1 (16 ounce) bottle Catalina salad dressing

Directions

1. Cut broccoli and cauliflower into small to medium florets.
2. Mix with apples and oranges.
3. Pour enough dressing over ingredients to coat.
4. Toss and sprinkle with sunflower seeds.
5. Serve immediately or allow to chill and flavors to blend.



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