

HOUSTON PARKS AND RECREATION DEPARTMENT

Garden Line - Year-round

by Brent Moon - HPARD Urban Garden Manager

January

1. This is a good time to test your lawn and garden soil for its pH level. Soil samples can be sent to Texas A&M for analysis. Go to <http://soiltesting.tamu.edu> for details.
2. Compost piles should be turned at least once during the month. Leaves are abundant and should be shredded before being added to the pile. Add animal manure or clippings from winter rye for a source of nitrogen. The pile should be at least 3 cubic feet in volume to hold in the heat generated by decomposition. Check the pile for moisture level. It should be neither too wet nor too dry. Add water if it is dry; add more coarse, dry matter if it is too wet.
3. Start seeds indoors now for planting in late winter and early spring: broccoli, cabbage, cauliflower, collards, kale, lettuce, parsley, petunias and begonias. Tomato, pepper and eggplant seed should be started in January for transplanting in late February to early March. Use a commercial peat-light soil mix in a clean flat. Place in a warm, bright spot. Cover the tray with a clear piece of glass or plastic or saran wrap until the seeds have sprouted. Then, place in very bright light to keep the seedlings from stretching.
4. January and February are the months to prune fruit trees. Annual pruning keeps the harvest within reach and thins crowded branches, allowing more light to penetrate developing fruit, and stimulates new growth for next year's crop. Peaches, plums and apricots need this annual pruning.
5. The dormant season of winter is also the time to do any needed pruning of shade trees to clean out dead wood, remove lower limbs and crowded branches to allow more light to reach the ground, and remove hazardous branches which threaten property.

February

1. Finish pruning peach and plum trees early this month. These fruit trees are not pruned for looks but for better harvests and easier picking. Pruning regulates tree height and stimulates new growth for next year's crop.
2. Mid to late February is the best time to plant tomatoes in the Houston area.
3. Last freeze dates guide us as to when it should be safe to plant frost-tender vegetables and annuals.
4. Be ready to protect frost-sensitive plants in case of a late freeze. Our last average freeze date for the Houston area is around Feb. 10th.

March

1. Planting of cool season vegetables (transplant broccoli, cabbage, and collards, and seed carrots, collards, mustard greens, lettuce, radish, turnips, Swiss chard and spinach) should be finished early in March, and summer vegetables can begin to be sown and transplanted later in March.

2. Fertilize vegetables about a month after growth starts with nitrogen fertilizer.
3. Fruit and pecan trees should be fertilized this month with nitrogen applied in the area beneath the ends of the branches, never against the trunk. Shrubs and annual flowerbeds can be fertilized with a complete, balanced fertilizer. Slow-release formulations, though slightly more expensive, feed your plants over a longer period of time.
4. Watch out for aphids that rapidly build up on tender new growth. They can be controlled with a sharp stream of water, insecticidal soap or other insecticides (be sure to read the product label to make sure the infested plants are included on the label).
5. Cool season vegetables, like lettuce and spinach, will begin bolting (flowering) if they haven't already and quickly go down in quality once it gets hot. Harvest them soon and replant empty spots with warm-season vegetables like okra, sweet potatoes, pumpkins or watermelons.

April

1. There's still time in early April to plant many vegetables, including bush and pole beans, cucumber, cantaloupe, sweet potatoes, pumpkin, summer & winter squash, and watermelons from seed, and transplants of peppers and eggplants. All these should be seeded or transplanted right away for best results.
2. Often, garden plots become very crowded with rows of vegetable seedlings. Without thinning these seedlings to allow room between each individual plant, the plants will be weak and spindly and the harvest will be disappointing.
3. Follow recommended spacing distances between plants for each crop. For example, green beans should be thinned to a 3 - 4 inch spacing, while lima beans grow larger and need 4 - 6 inches. Pole beans need about 6 inches between plants. If the plantlets are very large, and pulling would disturb their neighbors, thin by clipping the shoots off at ground level.
4. Store left over vegetable seeds in a sealed container in the refrigerator to keep them for next season. A tablespoon of powdered milk wrapped in tissue can help absorb moisture to keep the seeds fresh.
5. For best growth and yield, make additions of nitrogen fertilizer (called side dressing) every couple of weeks, starting about a month after transplanting or seeding. This will keep vegetables growing vigorously to reach their maximum yield potential.
6. Watch new growth for insect pests. Aphids, also sometimes called plant lice, may get on the new growth of any type of plant. While a few aphids can be tolerated, large numbers can distort growth and should be controlled. A strong jet of water to knock them off can provide temporary control, and insecticidal soap products will also help control them.

May

1. As soon as tomatoes and peppers first set fruit, lightly apply nitrogen fertilizer (called side dressing) about 12 to 14 inches from the base of the plants. This supplemental feeding keeps the plants vigorous and growing, allowing them to set and mature the maximum amount of fruit without stunting the growth of the plants. - Aphids, or plant lice, can be found on tender, new growth of all types of plants. Aphids are

small, soft-bodied insects that suck plant sap, often occurring in very large numbers. There are several naturally occurring enemies of aphids that can reduce a small infestation. Usually beneficial insects (lady beetles, lacewings, parasitic wasps) do a good job of keeping aphid populations under control.

2. Look closely to see if plants with aphids have any parasitized aphids. Parasitized aphids appear fat, motionless, and salmon-colored. Very tiny wasps lay eggs in the aphid bodies. The eggs hatch and develop into small larvae which eat the aphid from the inside. A close inspection of parasitized aphids might even reveal a tiny exit hole where the new adult wasp emerged to continue the cycle of destroying more aphids. There is no need to spray if you find insect predators or parasites working over an aphid infestation.
3. Cabbage worms and loopers will be on all cole crops, including broccoli, cabbage, collards, kale and cauliflower. The biological insecticide *Bacillus thuringiensis* (Bt), sold under several brand names like Biological Worm Killer, Thuricide, Dipel, etc, is a specific and very safe product to use to control these and other moth and butterfly caterpillars on vegetables and other plants. Use Bt late in the day and thoroughly cover the leaves with the spray.
4. Not all "critters" are pests, nor are all spots diseases - be sure to get any unknown suspect or problem correctly identified before considering treating with a pesticide. A great guide to beneficial insects can be found at <http://aggie-horticulture.tamu.edu/>.
5. Information given above is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement is implied.

June

1. One of the most common tomato disorders is blossom end rot. This is not a disease but a physiological problem caused by a lack of calcium and fluctuating soil moisture. Keep the soil evenly moist, mulch to conserve moisture and lime the soil before planting the next crop to provide calcium. Blossom end rot usually only affects the first tomatoes to ripen.
2. Spider mites can occur on tomatoes, roses, junipers, marigolds and other ornamentals now that the weather is hot and dry. Look for stippled leaves, and with severe infestations, fine webbing. Spider mites can be detected by taking suspicious leaves and rapping them over a white sheet of paper. Any dots which move are probably mites. Light infestations can be reduced by frequently spraying leaves with a sharp stream of water or using insecticidal soap. For more severe problems, use an approved miticide.

July

1. The transition into summer brings with it a change in garden chores. Gardening activities usually slow down as the temperature climbs into the 90's. July is often a very dry month, and can be very hot, too. So, we usually don't start a lot of new garden projects, but there are always maintenance chores to do. And, we should consider starting the "fall" vegetable garden in July. Harvest vegetables regularly from your garden to keep it productive. Letting squash turn as big as baseball bats

will cause production to go down. Harvest vegetables at their peak of maturity for maximum nutrition and quality.

2. Begin preparing for the fall garden in July. That's right! It may seem odd to start a fall garden in the summertime, but you need to get plants started in time for harvests before first freeze. Set out tomato transplants (if you can find them) right away for a fall harvest. Look for an early maturing variety (65 to 75 days). Remember that our average first freeze is mid-November and that tomato maturity slows down as the days get cool and cloudy.
3. Examine existing plants you might consider carrying through to fall. Tomatoes often are not replanted, but if they are covered up with spider mites (they're often bad by this time of year), seriously consider replanting now. You'll need to pamper new transplants a little to get them started, but they'll be ready for a great harvest in October when quality will be high.
4. Do not plant the same vegetable type in the same spot year after year. Soil-borne diseases will build up and eventually cause major problems. Add compost or other organic matter, and composted manure, cottonseed meal or other fertilizers to the garden spot before tilling. Also, if you thought plant growth was poor this spring, check the pH of your garden soil before adding nutrients, and add lime if needed.
5. Besides transplanting tomatoes in July, other vegetables that can or should be transplanted this month include eggplant (7/15 - 8/1) and peppers (7/1-8/1). Other crops that can be started from seed this month include Lima beans (7/15 - 8/15), cantaloupes (7/15 - 8/1), southern peas (7/1 - 8/1), pumpkin (7/1 - 8/1), summer squash (7/15 - 8/15), winter squash (7/1 - 7/15), and watermelon (7/1 - 8/1) Dates in parentheses indicate optimum planting windows for best results.
6. Here's a tip for getting seeds up in the heat. Make your rows and open up a furrow. Soak the bottom of the furrow with water and then sow the seed, covering it with dry soil to the proper depth. This will help prevent crusting. Then lay boards or wet burlap down the row to give some more protection from the intense heat. Check every day; once germination begins, remove the covers.
7. Drip irrigation combined with mulch is an excellent way to maintain high quality vegetable plants through the summer. Drip systems are easy to install and require less water than sprinkler or furrow irrigation. Usually, drip systems need to be operated frequently (how often depends on soil type and drip system) for an adequate water supply at the plant's root zone. Check emitters frequently to prevent clogging.
8. Proper watering is essential to keep plants healthy. The main rule of thumb is to water deeply and as infrequently as possible, as opposed to frequent, light sprinklings. This will encourage a deeper root system that can take advantage of a larger volume or "bank account" of water stored in the soil. Frequent and light sprinklings tend to keep the majority of plant roots near the surface of the soil. Plants with this type of root system are more susceptible to extreme heat and water shortages and are easily stressed during the summer.

August

1. Starting in mid August, plant broccoli, Brussels sprouts, cabbages, Chinese cabbage, carrots, cauliflower plants, Swiss chard, collards, kale, English peas, Irish potatoes, and summer squash.

2. Peppers and tomatoes planted earlier this year may not set fruit during the heat of summer, even though they may still be flowering. If the plants remain healthy, they will set fruit again once temperatures stay below 90 degrees. Side-dress established healthy plants with fertilizer and keep watered to encourage new growth.
3. Remove old plants that have stopped producing to eliminate shelters for insects and disease organisms.

September

1. Plant beets, broccoli, Brussels sprouts, cabbage, carrots, cauliflower, Swiss chard, collards, kale, garlic, lettuce, mustard, parsley, English peas, radish, spinach and turnips this month. Soak seed furrows with water before sowing seed, and mulch lightly. Water the rows daily in hot weather to promote germination and growth of young seedlings. Treat cabbage, broccoli, and cauliflower with Bt (*Bacillus thuringiensis*) as needed to prevent damage from cabbage loopers.
2. Pine needles will soon be abundant. Collect and use them as a long-lasting mulch around shrubs, young trees, and in vegetable gardens and other places where weed control and water conservation is needed.

October

1. Vegetables that can be transplanted or seeded in early October include beets, Brussels sprouts (plants), Swiss chard, collards, kale, lettuce, mustard, radish, spinach and turnips.
2. Greens, like lettuce, collard and mustards, should be thinned several times until you get the final spacing. You can eat the thinnings.
3. If you have planted any of the cole crops, like cabbage, collards and broccoli, watch out for cabbage loopers or cabbage worms. These are those green worms that riddle leaves like they've been blasted with a shotgun. Apply *Bacillus thuringiensis* (Bt) to control these hungry pests. Bt controls only caterpillars and is very environmentally safe.

November

1. Continue to sow crops such as mustard and turnip greens, lettuce, radish, carrots, Swiss chard, etc.
2. Toward the end of the month, deciduous trees will begin to lose their leaves. Once leaf drop begins in earnest, do not let wet leaves stay on the lawn. Wet leaves block beneficial sunlight and keep grass wet, increasing the chances of disease. Mow the lawn regularly to shred leaves into the turf, or rake them and add them to your compost pile. Leaves and grass clippings combined make some of the best ingredients for building hot compost.
3. Build a compost pile (or 2 or 3) to deal with those leaves. It is not necessary to do all the turning and other things you often read about to get those leaves to decompose. They will eventually rot and turn into rich soil amendment. It will just take longer. But if you are basically lazy or not in a hurry, pile up the leaves in an out of the way spot and forget about them.

4. On the other hand, if you are industrious, or would like a source of excellent organic matter to add to your beds in a few months, shred the leaves and add roughly equal parts nitrogen-rich material, like grass clippings, to the leaves. Moisten the contents as you make the pile, which should be at least 3x3x3 feet. Turn it after each time the pile heats up.

December

1. What does the vegetable patch look like now? Remove dead vegetation and weeds to prevent a build up of diseases, weeds and insects. Order seeds now for spring vegetables so you will have them in plenty of time for starting early transplants or sowing directly into the garden in early spring.
2. Many cool season fall crops, like lettuce and spinach, have shallow root systems. So, be sure to apply water frequently to keep the soil slightly moist and the plants healthy and growing. Between the rows and around the plants in the garden is a good place to use leaves to help conserve soil moisture and control weeds.

Some Fertilization Tips– *Very important!*

- Once vegetables are in the ground or your seeds are coming up well, fertilization becomes very important. An initial fertilization of a good organic fertilizer at planting time is a good idea, followed every other week on a rotating basis with an application of liquid fish emulsion. So, that's week one, granular fertilizer, week three, fish emulsion, week five, back to granular, week seven, fish emulsion, and so on. If you are seeing good growth, you might be able to skip a month. Monitor your plants and if growth seems good, don't be afraid to skip an application.
- For more information check out the Urban Garden web site at <http://www.houstontx.gov/parks/urbanGardener-About.html>

* This guide was adapted from Extension Horticulturist Keith Hansen's monthly gardening guide. Some changes have been made by Brent Moon, HPARD's Urban Garden Program Manager to reflect growing conditions and planting dates here in Houston. Use this guide as a frame of reference; it is not all-inclusive.