

Sustainable Garden

Spring Gardening, It's Hectic

By Don Lambert, Ph.D.

Mar

cold, last frost ?

Work to do:

Till last cover crops under
 Deep mulch pathways
 Protect tender crops with coverings
 After dark slug and worm patrol
 Plant warm season crops
 Plant biodiversity crops
 Work organic fertilizer into each bed before planting

Harvest:

bunching onions, greens, leeks, the lettuce planted last fall

Plant cool crops (early Mar):

lettuce, radish, mustard — tender transplants (after Mar 15): tomato — warm crops (late Mar, maybe): squash, cukes — biodiversity crops: herbs and flowers

Apr

cool to warm

Work to do:

Light mulch all areas
 Continue planting warm season crops
 Plant tropical crops
 Watch are insect damage and use natural control methods
 Check and repair watering system

Harvest:

greens, lettuce, bunch onions, radishes, (when tops yellow) garlic

Plant transplants:

pepper, eggplant, basil warm crops: corn, beans, squash, cucumber, melons — tropical crops: loofah, wax gourd, long bean, water spinach

May

warm to hot

Work to do:

Deep mulch pathways and beds
 Tie and stake climbing plants
 Fertilize all beds before planting
 Patrol for squash bugs
 Hand pollinate squash
 Plant hot season crops

Harvest:

greens, chard, peas, cabbage, radishes, (early morning) lettuce

Plant hot crops: okra,

sweet potato (from slips), southern peas, pepper plants, squash, beans, melons, corn

Spring gardening, and summer gardening as well, is dependent on the soil building which you began last fall and over the winter. Spring is hectic. The struggle to get cover crops turned under, early vegetables planted, find seeds, get seedlings started on time, transplant and protect tender tomatoes and peppers, harvest greens and lettuce, and many other tasks all compete for time, and proper execution of each is critical for a garden to be successful in the months ahead. Rain and cold weather may cause delays or plant loss.

Early spring pests—slugs, cutworms, and cabbage loopers will be active, and require daily monitoring. In a small garden you can use a flashlight at night to find slugs, loopers and cabbage worms. I enjoy smashing them with a stick, but you can drop them in soapy water. Aphid populations can be kept in check by blasting with water. Cutworms are thwarted by collars of paper or foil around the stems of transplants. Be sure to attract beneficial insects by planting alyssum, wildflowers, and herbs such as dill, fennel, and thyme, and some of your insect problems will be taken care of naturally. Use Bt for cabbage worms.

Begin serious mulching by late spring or summer heat will destroy your hard work. Soil between plants should be covered with 2 or more inches of mulch (grass clippings, chopped leaves, compost, but not those bark mulches that break-down slowly) This keeps weeds from growing, protects soil and roots from heat, heavy rains and droughts, and provides nour-

ishment as decomposition occurs.

Many people fail with tomatoes each year, so here are my tips: 1) Planting tomatoes after about the first week of April is a waste of time, as no fruit can set when night temperatures are above about 80 degrees. This means good frost protection like cages wrapped with plastic. 2) Tomatoes are very heavy users of nutrients and water, and require good soil preparation (start with compost in the fall), add a quarter cup of cottonseed meal to the planting hole, and use deep raised beds with soaker hoses to get the best results. 3) Only plant varieties that are adapted to our local climate and pests. All should be fast bearing, medium to small fruited, and nematode resistant (my favorites include: Celebrity, Viva Italia, Sweet Chelsea, Orange Sungold cherry, and Lemon Boy). 4) Deep mulching is essential for keeping moisture and nutrient levels high, and to prevent soil to leaf transmitted diseases. 5) Keep the plant off the ground by growing in cages that are at least 18" in diameter and 4 feet high.

Save the third weekend in April for our annual plant sale at the East Dallas Community Garden, and fill your yard with herbs, flowers, and other great plants. The best gardeners are always learning new things, testing, trying out, and will visit other gardens and talk about gardening with everyone they meet. Plan to visit a GICD community garden this spring and learn about our Sustainable Community and Multicultural Organic Gardening Project.

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Welcome to the gardening hot season. It is hot when night temperatures reach the upper 70's and days are at least in the eighties, from sometimes as early as April or May and lasting until the first frost about the second or third week of November. For this eight or nine month period we have a climate that is much like the humid tropics. In my garden, and those of our Asian community gardeners, many tropical plants thrive in the humidity and heat. If we worked hard last winter and got our gardens in order during the cooler months of spring, we now have gardens filled with crops like long beans, greens, okra, summer peas, squash, corn, sweet potatoes, lemon grass,

water spinach, tropical edible gourds, chili peppers and heat loving herbs. During the hottest days of mid and late summer the yields of many of these crops can be astounding.

My garden calendar is not complete, but includes general reminders which keep a garden sustainable and productive year around. The three columns serve as reminders of work to be done, what I can expect to harvest, and what I should be planting. If I followed earlier reminders there will be much to harvest in mid summer, and if I struggle in the heat to plant, and do the work that must be done, there will be bounty through the rest of the year.

<p>June warm to hot</p>	<p>Work to do: Begin regular deep watering, 1 or 2x/week Hand pollinate squash and corn Patrol for insects, hand kill squash bugs Watch for ripening crops Put up insect and bird barriers if needed Spray organic foliar spray every 2 weeks Monitor spider mites, mist to control</p>	<p>Harvest: tomatoes, greens, squash, beans, long beans, water spinach, Malabar spinach, early peppers</p>	<p>Plant: corn, okra, southern peas, Swiss chard, greens</p>
<p>July hot</p>	<p>Work to do: Deep water once or twice weekly Add more mulch if soil dries out quickly Pick okra and squash daily Clear finished crops and prepare beds for new plantings of cover or fall crops Continue organic foliar spraying Monitor spider mites, mist to control Food storage: can, pickle, freeze, dry, etc.</p>	<p>Harvest: tomatoes, peppers, okra, squash, long beans, s. peas, water spinach, Malabar spinach, greens, edible gourds, pumpkins <i>save seeds</i></p>	<p>Plant: corn Summer cover crops: rape, mustard, buckwheat, southern peas Fall crops: greens Transplant fall tomatoes</p>
<p>August hot hot hot</p>	<p>Work to do: Deep water as necessary Add more mulch if soil dries out quickly Pick okra and squash daily Plant fall crops and summer cover crops Continue organic foliar spraying Monitor spider mites, mist to control Food storage: can, pickle, freeze, dry, etc.</p>	<p>Harvest: peppers, okra, squash, long beans, s. peas, water spinach, Malabar spinach, greens, edible gourds, pumpkins <i>save seeds</i></p>	<p>Plant: Summer cover crops: rape, mustard, sweet potato, buckwheat Fall crops: collards, mustard, turnip, red Russian Kale, beets, squash, beans, green onion</p>

Glossary:

- cover crops:** space fillers that improve soil (when worked in), crowd out weeds, and enhance garden ecology
- deep water:** any method where water is applied to soak in deeply, equivalent to one or two inches of rain
- edible gourds:** loofah (young stages), wax gourd, winter melon, bitter melon, ivy leaf gourd, snake gourd
- greens:** leaf vegetables traditionally including: collards, kale, mustards, leaf beets, and turnips
- hand pollinate:** physically moving pollen from male to female flower parts, i.e. hand stripping pollen from corn tassels and rubbing onto silk, moving pollen with brush from male to female squash blossoms
- mist:** here refers to spraying all leaf surfaces with water. In advanced cases a forceful spray is used to knock mites and their eggs and larva off the leaves
- mulch:** (on garden beds) ground covering of several inches of organic decomposable material such as grass clippings, shredded leaves, compost, sometimes applied over layers of newspaper
- organic foliar spray:** basically a tablespoon each of fish emulsion, liquid sea weed, molasses, and vinegar per gallon of water, sometimes with other additions like garlic and liquid humate

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We are having a pretty horrible garden year. It has been too hot and dry for temperate climate crops, and for people to enjoy working outdoors. My tomatoes quit several weeks early, the peppers are sparse or small, and production of beans, corn, squash, and many other crops is just not up to par. Deep organic soil and mulching have helped, but many gardens are fried.

In GICD's Asian community gardens, production has been extremely good for true heat loving crops like water spinach, ivy gourd, sweet potato greens, and Malabar spinach. Others like edible gourds, cucumber, long beans, and mustards, have not been as good as usual.

It is well worth while to plant fall and winter crops, no matter how hot the weather is right now. Cool weather crops will do fine if you sprinkle seed beds daily until seedlings are established. Wait for cooler temps for leaf lettuce, which will produce through the winter until at least March or April of next year. Plant garlic in October or November, and it will produce large bulbs when harvested next April or May.

Your major task during this season is soil building. Deep mulching, growing cover crops, adding compost, working leaves into the soil, and adding organic amendments now, are the things that make for a superior garden next year. Use the cooler weather of fall and winter to make the best soil ever.

<p>Sept hot</p>	<p>Work to do: Continue deep watering, 1 or 2x/week (for year 2000: until we get rain) Add more mulch if soil dries out quickly Pick okra daily Volunteer at school/community garden Donate extra harvest to food pantry Share gardening skills/knowledge Spray organic foliar spray every 2 weeks</p>	<p>Harvest: water spinach, Malabar spinach, long beans, peppers, okra, corn, herbs, edible gourds, pumpkins</p>	<p>Plant: Cool crops: collards, mustard, turnip, red Russian kale, cabbage, beets, Swiss chard, green beans, lima beans (early Sept.), lettuce, radish, parsley, bunching onion</p>
<p>Oct warm to hot</p>	<p>Work to do: Plant winter and cover crops Keep all beds mulched Save seeds Food storage: dry, can, freeze, make pickles, etc. Begin acquiring materials for winter projects Start a compost pile</p>	<p>Harvest: peppers, okra, squash, long beans, s. peas, water spinach, Malabar spinach, greens, edible gourds, pumpkins, sweet potatoes, corn, squash, b. onion</p>	<p>Plant: Winter crops: lettuce, winter greens, garlic, leeks, bunching onion, red Russian kale, parsley Cover crops: grain rye, wheat, Austrian winter pea, vetch</p>
<p>Nov hot/warm to cool/cold</p>	<p>Work to do: Build new garden beds, clean-up garden Plant winter and cover crops Garden construction projects Deep mulch or plant cover crops on all areas not in winter crops Food storage: can, pickle, freeze, dry, etc. Order seed catalogs. Save seeds Make or repair cold frame & greenhouse Collect fall leaves for mulch and compost Prepare for freezes (bring plants indoors, use row covers, pick all tender crops if freeze is predicted, protect pipes, etc.)</p>	<p>Harvest: peppers, s. peas, spinach, greens, edible gourds, pumpkins, fall tomatoes, winter squash, Swiss chard, lima beans, broccoli, cabbage, bunching onion</p>	<p>Plant: Winter crops: lettuce, winter greens, garlic, leeks, bunching onion Cover crops: grain rye, wheat, Austrian winter pea, vetch, red clover</p>

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- **greens:** leaf vegetables traditionally including: collards, kale, mustards, leaf beets, and turnips
- **mulch:** (on garden beds) ground covering of several inches of organic decomposable material such as grass clippings, shredded leaves, compost, sometimes applied over layers of newspaper
- **organic foliar spray:** basically a tablespoon each of fish emulsion, liquid sea weed, molasses, and vinegar per gallon of water, sometimes with other additions like garlic and liquid humate

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Cold Season Gardening (The Time to Start Your Best Garden Ever)

Your major tasks during winter: — first, build or improve soil, and secondly, grow some winter vegetables. Soil building is accomplished by growing cover crops, deep mulching, and adding organic materials. The best plan is to put about 1/2 of your total garden space into cover crops, 1/4 into deep mulch, and 1/4 into winter crops.

Planting **cover crops** is very easy: roughly till each bed and scatter seed (best planted October through mid-December). These covers are turned under next spring whenever the soil is dry enough to work. A best use for cover cropped areas to use them for warm season crops

like tomatoes, peppers, and squash, starting in March and April.

Deep mulched beds also start with rough tilling, and are completed by covering the soil with six inches to one foot of leaves and/or grass clippings. Mulched spaces are easy to plant anytime. Use them for early spring crops like onions, lettuce, greens and radishes. Simply rake the mulch back and plant with minimal tilling.

To **grow winter vegetables** like leeks, turnip or mustard greens, garlic, and bunching onions, you must work the soil more thoroughly, add compost and/or organic fertilizers, and be prepared to provide cold protection. The use of cold frames and row covers makes it possible to have lettuce and greens all winter long. Once established, onion family plants—leeks, chives, bunching onions, and garlic—do

<p>Dec cold</p>	<p>Work to do: Build new garden beds Protect winter crops with coverings Repair fences, tools, structures, etc. Mail order seed Plan next year's garden Run germination tests on old seed Continue making compost Work weedy areas for cold kill</p>	<p>Harvest: <i>bunching onions, greens</i></p>	<p>Plant: winter crops: <i>bunching onions, garlic, leeks, lettuce, radish, mustards</i> cover crops: <i>grain rye, wheat</i> seed indoors: <i>rosemary, thyme, sage, lavender</i></p>
<p>Jan cold, wet</p>	<p>Work to do: Keep all beds mulched Protect winter crops with coverings Begin sifting compost to use in seed trays Begin tilling cover crops under Plant early crops in mulched beds Apply organic fertilizer to beds Get trays, potting soil, lights, ready for seed starting</p>	<p>Harvest: <i>bunch onions, Jerusalem artichoke, mustard, and lettuce, asparagus</i></p>	<p>Plant: seed indoors: <i>cabbage, broccoli, chard, collards, parsley</i></p>
<p>Feb cool, wet</p>	<p>Work to do: Plant in mulched beds Protect crops with coverings as needed Start seeds indoors Till cover and winter crop beds Fertilize all beds before planting Transplant early vegetables</p>	<p>Harvest: <i>winter greens, bunch onions, lettuce, radishes, mustard, asparagus</i></p>	<p>Plant: seed outdoors: <i>lettuce, radish, peas, greens</i> transplant (late Feb): <i>chard, broccoli, cabbage, bulb onions</i> seed indoors: <i>tomato, pepper, herbs, flowers, (late Feb) eggplant</i></p>

not need covering.

Other objectives during the cold part of the year are to dig out perennial weeds, build new beds and garden structures, carry out major construction projects, and get early spring crops planted.

This is your last chance to do many of the things that will make your spring and the coming year's garden the best ever. Take my advise and mulch all beds, add compost or aged manure, work chopped leaves into the soil, and add organic amendments like a good organic blended fertilizer, or natural nutrient sources like corn, cottonseed or alfalfa meal. Do these things early, several weeks before planting, and your soil will be soft and fertile.

If you **grow your own seedlings** for spring transplanting get ready by mid-January:—seeds, seed starting mix, trays, a

big enough space indoors, and plant lights. Lights are essential, as the short day length of winter does not provide enough sunlight to grow healthy seedlings. Use ordinary four-foot florescent fixtures hung above the seedling trays, adjusting height to lightly brush the leaves, and timed to provide 16 hours of light per day. Most seedlings need to be 6-8 weeks old when transplanted. Plants that thrive in cool weather like broccoli, chard, and cabbage, can be started indoors from about mid January. Warm season crops that can not tolerate freezing, like tomatoes, peppers, and eggplant, can be started indoors the first or second week of February.

I hope you enjoy the cool weather and make the best of this opportunity to have the best gardening year ever.