Jerry Baker
America's Master Gardener®

THE NEW GARDEN LINE SERIES VOL. VII

VEGETABLES

AMAZING TIPS, TRICKS & TONICS!

- Planting by the Stars for Great Results
- Energize Seedlings with Dish Soap & Whiskey
- Supercharge Your Tomatoes and Cukes with Pantyhose!

Plus More
MOUTH WATERING VEGETABLE TIPS!

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Introduction

It's hard to believe, but through the ages, vegetables have had a bad reputation. In Merrie Olde England, James Boswell had this unique recipe for preparing cucumbers: "Slice well, dress with pepper and vinegar, and then throw them out as good for nothing." Mark Twain said, "Cauliflower is nothing but cabbage with a college education." And Ogden Nash, the poet, was even more succinct, "Parsley is ghastly."

Nowadays, of course, we know better. Veggies are an important part of everyone's diet. They provide essential nutrients and can be downright delicious. And the best part of all is that you can grow your own. If you love filet mignon, it's difficult to raise a cow in your backyard. But no matter where you live or how much space you have available, you can still grow a few carrots, or a tomato plant or 2.

And that, my friends, is where this booklet comes in. If you just try a few of my tips, tricks and tonics, I guarantee that you'll have the biggest, juiciest, tastiest vegetables on your block!

If you have a vegetable garden question, why don't you call me **"On the Garden Line"** Saturday mornings from 8:00 a.m. - 10:00 a.m. EST, on your local Mutual Broadcasting Station. The toll-free number is **1-800-634-3881.**

Also, for more comprehensive information, please refer to one of my other full-size books:

Fast, Easy Vegetable Garden
Plants Are Still Like People
The Impatient Gardener

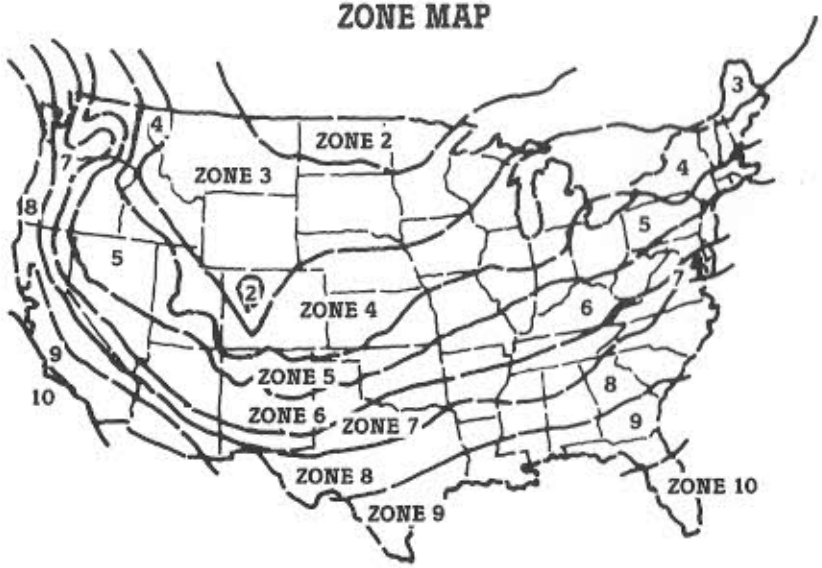
or pick up a copy of **America's Gardening Newsletter, "On The Garden Line®,"** which is also jam-packed with timely tips, tricks and tonics on lawn, garden and house plant care.

AREA Map

First of all, check the map. The country is divided into 10 areas based on climate and length of growing season. In areas 2 through 6, you'll have to work harder if you're going to maximize production from limited space in a relatively short growing season. If you live in areas 7 through 10, you can pretty much count on year-round production by succession planting.

Growing vegetables can be fun, and it's good exercise, but you will have to do a little work. March and April are the months when the gardening bug bites you the hardest. So, we'll treat your spring fever by walking through the basics of a bountiful garden, step by step. You'll need to bring along a few tools—the usual garden implements, plus sawdust and ashes, some old nylon stockings, potato peelings, a few paper matches, and a little chewing tobacco. And, oh yes, keep your kitchen blender handy. Are you ready?

ZONE MAP



ORGANIC
Or Chemical

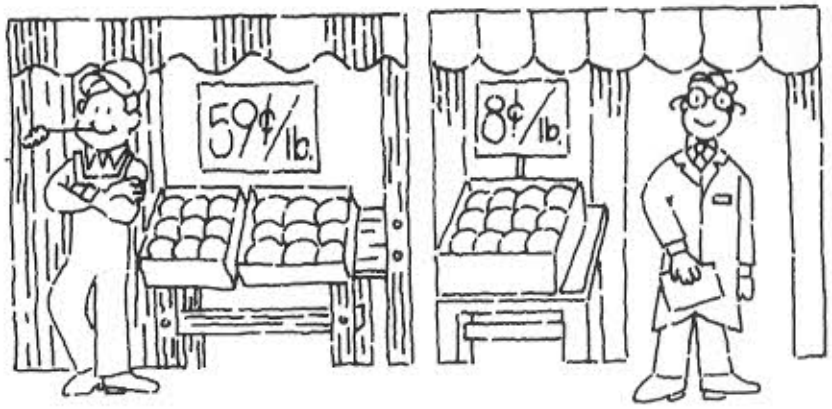
I can remember that not too long ago, gardening was for old folks and women, and lawn mowing taught little boys responsibility. The organic gardener down the block was a nut, anyone who suggested the use of an old wives' tale remedy was likely to get a free trip to Salem for the next witch hunt, and the Farmers' Almanac was read in the privacy of your parlor for fear that you might get fitted for a white suit with arms buckled behind your back. Well, all that has changed.

Today, the Farmers' Almanac is packed full of technical data, old wives' tales are considered scientific breakthroughs, and the organic nut is now a practicing ecologist!

Yet, the public is still divided between the organic way and chemical methods. The sprayers and anti-sprayers constantly lock horns and ask me to mediate. I tell them that the truth is somewhere between them, which they find hard to believe.

Our minds have been exposed to the evils of pesticides to the world population—people, plants, and animals included. It's good that we've been made aware of the problems that pesticides can cause; several chemicals have left harmful residues, and have deservedly been relegated to the waste dump. But what about the hundreds of other chemicals that do their jobs, break down quickly, and leave no toxic residues? Unfortunately, these chemicals are guilty by association. But forget the fads and what's fashionable. Let's look at the facts.

When trying to decide which method is better, the important figure to look at is the total cost per pound of vegetable. Results of recent experiments show that vegetables grown organically could cost the grower 59¢ per pound, while those chemically produced could cost 8¢ per pound. The 59¢ vegetables would have to be marked up at least twice for the wholesalers' and grocers' profits. That might mean that a head of cabbage would sell for $1.50, and a big, juicy tomato for 80¢.



Contrary to popular belief, you really can't taste the difference between chemically treated and organically grown fruits and vegetables. Moreover, organically grown vegetables are probably no more wholesome for your family.

Any plant pathologist in the world will tell you that nitrogen is nitrogen, and potash is potash, when they enter the plant. It makes no difference whether the elements come from rotted manure or right out of the chemical factory. They must break down to exactly the same material before they enter the plant's roots.

So the case for the totally "organic" garden doesn't seem to be so strong. The wise and successful gardener needs to take the old middle-of-the-road approach. Study all the facts.

I have always used the so-called "old fashioned methods" of home gardening until they fail to work. Then I moved on to the safest chemical control in the same way I care for my children, myself, or my pets.

PLANTING
Signs

You still have a tough time convincing most folks that planting by the light of the moon makes much difference. But carrots, potatoes, parsnips, beets, and all root crops should be planted in the dark of the moon. If Jupiter Pluvius (the weather god) covers the moon with clouds, and you're not sure you can fool the potatoes by covering them up with a paper sack at night, a lantern left on all night takes care of the light of the moon.

Your next lesson is a little trickier. There are 12 signs of the zodiac and each 1 is associated with a planet and a part of the body. A different sign and its associates control every day of the month. Make sure you check your calendar before planting the zodiac side of your garden.

When you make something fun, it always seems like less work, so grow to it! Your garden results are now in the hands of the stars. It's too bad that the hard work isn't also.

Here is a simple list to use as a guide:

Aries	Head	Flowers and grain
Taurus	Neck	Root crops
Gemini	Arms	Melons and squash only
Cancer	Breast	Beans, peas, flowers and fruit
Leo	Heart	Time to kill weeds only
Virgo	Bowels	Flowers only
Libra	Kidneys	Bulbous flowers
Scorpio	Loins	Super for corn and sunflowers
Sagittarius	Thighs	Radishes, beets and potatoes
Capricorn	Knees	Other root crops
Aquarius	Legs	Time for odd jobs, but not in the garden
Pisces	Feet	If you miss the others, this is the best

GARDEN
Forms

What it all boils down to is this - what kind of garden do you want or have room for? The 3 most common garden forms are containers, raised, and in-ground.

CONTAINER GARDENS

This can be any type of container that will hold soil including plastic, clay or wood.

Size: The container should be deep and wide enough to adequately support the root structure of the plants or underground crops (i.e., potatoes) that you select. The container also determines the stability of the plant as it grows; i.e., a small container with a heavy top growth plant (such as peas, beans, or tomatoes) will constantly fall over and cause damage. In container gardening, it is better to have too large a container than too small a one.

Soil Support: When using a container, you must supply a more than an adequate amount of soil for root support, root development, and moisture containment. Container-grown vegetables will always need more water, more often, and if there is not enough soil in the container, you've lost the battle before you've even begun.

Soil Quality: Good soil for container growing is a sandy loam mixed with an adequate amount of organic material such as grass, leaves, coffee grounds, egg shells, and peat moss.

Bad Soil: This is soil that either lets water go through too fast (all sand) or too slow (clay). To improve either one, just add some of the other, plus a mixture of the organic material listed above. Better yet, add professional planter mix since the perfect blend is 1/3 sharp sand, 1/3 clay loam, and 1/3 organic matter or 1/3 professional planter mix.

RAISED GARDENS

To describe this method, look at the word "raised"—but raised what? Raised above ground level. If you live on top of solid clay, rock, or even cement, you can have a very productive garden by simply building a grown-up sandbox out of boards. Dig a 3" wide

GARDEN FORMS

by 1" deep groove, if possible, in the existing soil. Cover the bottom with a single layer of newspaper, and fill the box with the previously mixed soil blend. Now you have one super growing box!

Size: The width of raised gardens is your only concern, since you have to be able to harvest the vegetables without tromping through the soil. I find 6' wide to be the best because you can sit, bend, or kneel into the center from both sides. The length will depend on how much space you have or need. Cross-brace or stake-brace every 6' to prevent the side boards from bowing.

IN-GROUND GARDENS

These are the good old-fashioned, spaded-up plots in the back forty. This type of garden needs a lot more thought than the others before you begin to plant.

Location: Any garden must have at least 6 hours of full sun a day.

Drainage: Every seed packet or instruction tag on bedding plants states to plant in well-drained soil. This means that even though you mix existing soil with the recommended ingredients, if your soil is clay, you must have a way for the water to get out of the soil blend you've added. This can be done by digging a 8" to 10" wide trench at one end of the garden to a natural swale or nearby sewer. If sand is the problem, lightly line the bottom of the garden with a layer of clay to slow up the drainage.

Size: The average home gardener bites off a bigger chunk of garden than his family can chew. Stop wasting money, time, and effort! First, decide how much time you are willing to comfortably contribute to your garden before you put the first spade into the ground. Next, plan the garden so that you have several different size patches rather than one big one to tend. This will look better, grow better, and produce better because you do not crowd the plants or yourself.

COMPATIBILITY

Symbiosis, a word unfamiliar to most gardeners, holds the secret to a truly successful and abundant vegetable garden.

Symbiosis means "the ultimate living together of 2 dissimilar organisms in a mutually beneficial relationship." To apply this definition directly to gardening, it means "the growing together of 2 different plant types, one to the benefit of the other." If man would only use "human symbiosis" in his everyday living, this ol' world might just turn out to be the Garden of Eden.

I refer to this as "brotherhood gardening", and it involves interplanting flowers and vegetables. This has a dual purpose—each protects the other from insects and disease, and each adds to or extracts from the soil some beneficial ingredient that the other can use.

For too many years, we have planted the traditional vegetable garden: a row of radishes, corn, carrots, and lettuce, making sure each was kept separated from the other, all in a straight line. We also plant the same vegetable in the same spot, year in and year out, then wonder why production decreases each year.

You must realize that each plant extracts certain elements from the soil to stabilize its internal systems. After a couple of years in the same spot, the plants tend to take all of that element out of the surrounding soil. That's why you should rotate crops each year.

BARNYARD TEA

So the first thing you must do is fortify your vegetable garden each year by mixing up a batch of "Barnyard Tea," and spread it, along with liberal quantities of leaves, over the soil. The "Barnyard Tea" should be spaded into the soil in late fall or early spring, when the soil will still crumble in your hand. This procedure returns the elements that your plants extracted back into the soil.

COMPATIBILITY

BARNYARD TEA

50 lbs. manure
50 lbs. peat moss
25-50 lbs. garden gypsum
25 lbs. garden food

Next, you must get down to the basics of brotherhood gardening: selecting proper neighbors. You should mix flowers, vegetables, and fruits up whenever and wherever they will benefit each other. Break the centuries old habit of straight-line planting; use your imagination to have a very attractive and unusual garden.

Here's the plants that benefit each other:

PLANT VARIETY	GOOD NEIGHBOR
Asparagus	Tomato, Parsley
Beans	Corn, Carrots, Cauliflower, Beets, Cucumbers, Cabbage, Potatoes and Celery
Beets	Onion, Beans, Kohlrabi
Broccoli, Cabbage	Dill, Potatoes, Sage, Rosemary, Mint
Carrots	Lettuce, Chives, Onions
Cauliflower	Dill, Potatoes, Sage, Rosemary, Mint
Celery	Beans
Corn	Potatoes, Beans, Peas, Melons, Squash, Pumpkins, and Cucumbers
Cucumbers	Corn, Potatoes, Cabbage, Radishes
Lettuce	Strawberries, Carrots, Radishes
Onions	Beets, Carrots
Peas	Radishes, Carrots, Cucumbers, Corn, Beans, Turnips, Peas
Potatoes	Beans, Sweet Corn, Cabbage, Peas, Marigold, Horseradish
Pumpkins	Beans, Sweet Corn, Cabbage, Peas, Marigolds, Horseradish
Radishes	Peas, Lettuce, Nasturtiums, Cucumbers
Spinach	Strawberries
Tomatoes	Cabbage, Parsley, Marigolds, Potatoes, Cucumbers,
Fruit Trees	Chives, Nasturtiums, Garlic
Grapes	Mustard Greens
Strawberries	Beans, Lettuce, Spinach
Roses	Garlic, Onions, Chives, Marigolds

STARTING SEEDS
Indoors

Are you kidding? "You want me to wait for seeds to sprout, transplant them, worry that they'll wilt—not me. At my age, I don't even buy green bananas." That's the outburst from a gardener friend of mine when I suggested that he start his own plants from seed. He was dissatisfied with the seedlings he had bought last year, so he agreed to at least consider taking on this homegrown project.

Why should you consider starting seeds from scratch, when seedlings are available almost everywhere? Consider these pluses: when you start your own plants from seed, you know they're healthy, hardy, and disease-free. You'll also save money because seeds cost a fraction of seedlings.

On the other hand, my friend's comments about the extra effort were right. You have to wait for seeds to sprout, and you need to transplant them. The benefits, however, far outweigh the inconveniences. So, for those of you want to grow plants from scratch, here are some helpful hints:

SELECT SEEDS WITH CARE

Don't buy last year's seeds! Start with fresh harvest seed from a reputable firm; each package is stamped with the year for planting. Purchase your seeds directly from seed growers. Write any of these companies for a free catalog:

W. Atlee Burpee Co., 300 Park Ave., Warminister, PA 18974
Johnny's Selected Seeds, 310 Foss Hill Road, Albion, ME 04910
Park Seed Co., P.O. Box 46, Greenwood, SC 29648
Stokes Seeds Inc., Box 548, Buffalo, NY 14240
Thompson & Morgan, Box 1308, Jackson, NJ 08527

When you're selecting seeds, look for "virus free" varieties. These seeds are guaranteed to be from plants that had no viruses. Purchase the smallest amount available for your needs. Assume that each seed will sprout, and unless you have 40 acres to spare, 1 ounce of tomato seeds is a bigger bite than you can chew.

STARTING SEEDS

The day your seeds arrive, put them in the refrigerator until you are ready to plant them indoors. But don't do this any sooner than 6 weeks before the last killing frost in your area.

24 hours before you plan to start sowing, place an ample number of seeds in a piece of lightweight cloth, tie it together, and soak the whole thing in a weak tea water solution. Then refrigerate the solution.

PLANTING UTENSILS

You'll need these items to start your seeds indoors:

Containers—try old pie or cake tins, cottage cheese cartons, plastic butter tubs, or even styrofoam cups.

Tray—use any trays large enough to hold the containers.

Mister—any plastic spray bottle is suitable, but wash the bottle before you use it.

Long sharp pencil

Tweezers

Soil—use any of the professional planter mixes on the market, but not potting soil—it's too heavy.

Soil heat regulator—try a heating pad or warm surface on which to place the containers. The soil must remain at 68° to 72°F for seeds to sprout.

Full spectrum light—a 60-watt gro light will do.

PLANT WITH CARE

The care you take in handling your seeds will determine the quality of seedlings you produce. Plan ahead so you'll have plenty of time to plant carefully.

1. Wash each container with a mild solution of soap and ammonia before planting.

2. Fill each container with professional planter mix after you've added **2 tbsp. Epsom salts** per quart of mix. Dampen the mix (but don't soak it), level it off by gently tamping it down.

3. Use the pencil to make holes in the planter mix 1/4" deep, 2" apart.

4. Remove your seeds from the refrigerator. Spread them on a paper towel to dry so that you can pick them up with tweezers. Insert 1 seed in each hole (the effort is worth it).

5. Using your thumb, cover each seed with planter mix and press down lightly.

6. Put a weak tea solution into your mist bottle, adding **2 drops liquid dish soap, 2 drops ammonia and 1 drop whiskey**. Shake gently, then mist the surface of the newly planted seed containers.

7. Place the containers on a tray and cover them with a towel that has been dampened with the tea solution. Place the tray in a dark, warm location for the next 4 days. If your house is cool, use a heating pad underneath the tray. Each day, raise the towel cover, mist lightly, dampen the towel, and cover the tray again.

8. On the sixth day, place the tray in a southern or eastern window with the 60 watt gro light on from 3 p.m. to 11 p.m. When 2 leaves sprout from each seed, it's time to move them.

9. To transplant your new seedlings, use a small spoon and remove as much of the planter mix as possible. Set the plants into individual 2-1/4" clay pots filled with fresh professional mix.

10. Feed the young plants with **liquid fish fertilizer (at 5% of the recommended rate), 2 drops liquid dish soap and 1 drop whiskey per quart of water.**

11. Treat the new seedlings like your other house plants until it's time to move them to the garden.

Nearly all vegetable seeds can be started indoors. You can transplant many varieties into larger containers and keep them indoors or on your patio if you don't have garden space. In either case, they'll produce vegetables that are worth every moment of the extra effort.

QUANTITY & VARIETY

Don't waste time, space and effort on plants that you don't need. If you're a beginner, it's a good idea to start with 1 upright plant (like tomatoes, pepper, eggplant), 1 vine plant (like melons, cucumbers, or squash), and 3 feet of row crops. For the old timers, experience is the best teacher.

SOIL
Preparation

While the addition of organic materials and combining soil types such as sand, clay, and loam are a form of soil preparation, there is a lot more to it if you want to have an abundant, worry-free garden year. So in addition to the Barnyard Tea, prepare the soil as follows.

CONTAINER SOIL PREPARATION

Per peck of soil, add:

1/2 cup Epsom salts
1/4 cup coffee grounds (rinse them clean)
4 egg shells (dried and crushed to powder)

RAISED BEDS

For each 50 sq. ft. of garden area, use the soil mix described under the container form and add:

10 lbs. lime
2-1/2 lbs. garden food
1/2 lb. Epsom salts

IN-GROUND SOIL PREPARATION

For each 50 sq. ft. of garden space, add:

15 lbs. pelletized lime
15 lbs. pelletized gypsum
5 lbs. garden food
1 lb. Epsom salts

PLANTING

Next to harvesting, planting is the best part of vegetable gardening. It seems so simple—just drop a seed in the ground, or poke a young plant into a freshly-dug hole, and forget it. It's not quite that easy. Each plant needs room to grow and it cannot be planted too deep. So use the handy chart below to determine the proper planting depth and number of days to harvest.

Plant	Planting Depth	From Planting to Harvest
Beans, pole	2"	60 days
Beans, bush	2"	60 days
Beans, lima	2"	60 days
Beans, lima	1"	60 days
Beets	1"	60 days
Broccoli	1/2"	70 days
Brussels Sprouts	1/2"	90 days
Cabbage	1/2"	50-100 days
Cauliflower	1/2"	45-70 days
Celery	1/2"	110 days
Corn	2"	70-100 days
Carrots	1/2"	70 days
Cucumbers	1"	50-57 days
Eggplant	1/2"	60 days
Lettuce	1/2"	45 days
Melons	1"	60-90 days
Mustard Greens	1/2"	30 (root 50) days
Onion sets	2"	30 days
Parsnips	1/2"	90-100 days
Peas	1"	60-90 days
Peppers	1/2"	60-75 days
Radishes	1/2"	25 days
Spinach	1/2"	45 days
Squash	1"	50-100 days
Tomatoes	1/2"	45-70 days
Turnips	1/2"	50 days

INSECT & Disease Control

Insects do not have to be any more of a problem than weeds if you start off on the right foot. If you prepare the soil and mulch properly, then you only need to keep your vegetable garden clean with a mild soap and water bath once every 2 weeks.

So apply this tonic with your 20 gallon hose-end sprayer after 7:00 p.m. every other week.

1 cup liquid dish soap
1 cup antiseptic mouthwash
1 cup chewing tobacco juice*
fill the balance of the sprayer jar with warm water.

Spray your garden to the point of run-off. If insects continue, add liquid Sevin to this tonic at the recommended rate for general insects, and Bacillus thuringiensis (Bt) for caterpillars. You can also mix 6 teaspoons of Tomato/Vegetable Dust (made into a paste first) instead of the Sevin.

*To make chewing tobacco juice, place 3 fingers of chewing tobacco in an old nylon stocking and soak it in a gallon of hot water until the mixture is dark brown.

WEED Control

Whenever anyone with any garden savvy talks about mulch to a garden greenhorn, you get that same look that any 1 of my 5 children got when I told them that they had to eat all of their spinach or liver, followed by, "Do I have to?" To my kids, the answer was positively "yes." To you home gardeners, the answer is the same, if you want to cut down on manual labor, increase your harvest, and hold your own against the bugs. And "no", if you are not serious about growing your own vegetables for any reason other than it's the "in" thing to do.

A great many beginning gardeners think of mulch as a sort of witches' brew that the old organic nut down the street used to pile up in the alley or behind the barn. With bent back at the light of the full moon, he secretly covered his garden for some unknown reason. Well, the organic nut is now known as a practicing ecologist, and mulching is ecological recycling!

MULCHING

Mulch simply is a protective covering of straw or leaves spread upon the ground to reduce evaporation and erosion, control weeds, and improve the soil. Now, what's so spooky about that?

If you want a super abundant garden without a lot of unnecessary physical effort, mulching your garden is right up your alley. If the season is just about to begin in your neck of the woods, then you're in luck. You won't have any weeding to do. Even if your garden is in full swing, you can cut down on a lot of hoeing and weeding by adding a layer of mulch.

In earlier times, straw and leaves were about the only materials that were available for mulching. Today, however, that has changed because you can add ordinary grass clippings, marsh hay, peanut shells, cocoa bean hulls, black plastic, roofing paper, and your daily newspaper—to keep the soil in your garden from drying out on hot summer afternoons or washing away with an unexpected summer thunderstorm.

WEED CONTROL

A good mulch will be more of a load than your local weeds are willing to carry. And any of the rough mulches (grass, straw, hulls, or shells) can be spaded into the soil in fall to improve the structure and natural organic quality of the soil.

I use newsprint (2 layers thick) underneath any of the natural mulches. The zinc in the ink seems to affect some insects and diseases, and can be spaded in as well since it has a wood fiber base. Plastics and roofing papers should be removed after each growing season since they do not break down.

Make sure that you prepare your garden area properly by spading or tilling to a depth of 12" to 15". Turn under last year's mulch and any of the grass and leaves that are raked up when spring cleaning. Then add 15 to 20 pounds of any garden fertilizer per 100 square feet of garden area.

MATCHES

Next is a suggestion that just might spark a comment or 2. If you're like me, and accumulate a few hundred packages of matches in your travels, take a pair of scissors, cut off the match heads and sprinkle them on the soil before you spade or till. Or you can drop 3 or 4 heads in the bottom of each hole while planting. The sulphur:

1. Releases the elements that are locked into the soil.
2. Gives plants the sulphur they need in their diet.
3. Acts as an insect killer.

And it's a great way to get them out of the cupboards. (Your spouse will love it.)

After your garden is planted, simply lay 2 thin layers of newspaper on the soil between rows and around plants, and cover the newspaper with 4" to 6" of any of the natural mulches.

You might call this a "cover-up job with something to match." Now you can tend to your other lawn and garden chores, and leave your garden weed worries behind.

STAKING & Tying

I like to refer to this as "Super-Charging" your garden. This seemingly simple job is really a well-kept secret among professional gardeners. If you want a tastier, healthier, more attractive vegetable garden, then follow these steps when you must tie, stake or raise plants above the ground for support, air circulation, or better irrigation.

I am certain that if a survey was taken about what is the most talked about subject in summer, the weather would win hands down. Everyone is concerned about the weather forecast, and most people would give almost anything if they could control the weather for the benefit of their vacations and crops. Well, to some extent, you can control the benefits of the weather, or at least create the same effects that certain weather conditions contribute to your garden well-being.

A thunder-and-lightning storm has an extremely fertile effect on your lawn and garden. Immediately after 1 of these super-charged storms, your plants seem to green up instantly. The fact of the matter is that they do as a result of the electrically charged oxygen that is turned into 78% nitrogen.

You can create this same condition in your garden simply by practicing a special type of gardening called "electroculture" which uses metal objects, such as copper wire, metal trellises, and tin cans to attract the static electricity in the immediate vicinity. This charges the atmosphere, giving you additional help from Mother Nature in the form of pure, gentle, and free-growing elements. These elements will increase the size, health, and yield of your garden.

STAKING & TYING

They say seeing is believing, so why not try it in your garden? First, stretch a piece of fine copper wire over the top of your vegetables, fastening it to the stakes at each end of the row. Place the wire high enough so that it does not touch the plants. Or you can place tin cans, with the tops and bottoms removed, every 12" to 18" in your rows. Bury the first 2" of the cans in the ground to keep them from falling over. Melon and other vine crops can be grown on metal fences, resulting in some of the most fascinating and extraordinary results. Whenever possible, use copper which gives better results.

Here are a few other ideas you can try: place a peony ring around your roses and see if you don't get larger plants. Do the same for small evergreens and shrubs to give them a better start.

To keep rabbits and other varmints away from your cabbage patch and charge the air at the same time, make a wire hut that fits over these plants. This will keep your furry friends out and the electric energy in.

Tomatoes can be improved by training them to grow on metal poles rather than wooden stakes. Tie them up with nylon strips made from discarded panty hose—which also attract static electricity. Just ask any panty hose wearer about the "static cling."

So, to "Super-Charge" your vegetable garden:

1. Use only metal poles for staking.
2. Tie plants up with nylon panty hose strips.
3. Use chicken wire for growing beans upright.
4. Use rolled up or mounded chicken wire to raise vine and melon crops off the ground.
5. Use worn out metal tomato cages over peppers, eggplants, cauliflower, brussels sprouts, etc.

FEEDING

There is no universally accepted feeding program for vegetables. You will no doubt discover that a certain fertilizer or combination of fertilizers gives you the results you're looking for, but until you do, here are mine. You are welcome to use them.

As you read in the earlier section on soil preparation, I recommend adding dry garden food to the soil before any seeds or plants are put into the ground. It gives the young plants a boost, to really get them up and rarin' to grow. Do not, however, add dry food to container soil because it is too much in too little of an area.

I feed my vegetable garden every 3 weeks in the morning, alternating the diet using the following mixtures which are applied with a 20 gal. hose-end sprayer:*

Number 1:

1 can beer

1 cup ammonia

1 oz. liquid dish soap

3 tbsp. instant tea

Number 2:

2 oz. liquid fish fertilizer

2 oz. whiskey

1 tbsp. instant tea

1 oz. liquid dish soap

Number 3:

15-30-15 liquid fertilizer

2 oz. liquid dish soap

*Fill the balance of the sprayer jar with warm water.

WATERING

Watering your vegetable garden should be a very personal chore, not a job delegated to a small computer attached to your outside faucet. Before I water or feed my garden, I always look at and feel the soil. As a rule, plant foliage will droop down and roll over to indicate that it's thirsty; it will be limp if overwatered. Force a dry stick deep into the soil and let it sit for 15 minutes or so before removing it. Now feel the stick to see how deep the moisture went—this will save many a plant.

To water, I let the water flood over the top of the mulch and fill my jersey wells. A jersey well is a 1 gallon plastic milk carton that has 8 small holes punched in the bottom. It's buried in the ground with only the cap above the mulch between my big plants (tomatoes, peppers, squash, etc.). When I water, I fill these jugs, put the cap on, and let them slowly water—deeply. I also pour the liquid plant food tonics into them (about a cup of the 3 formulas listed in the last section) and fill them with water.

FROST & HEAT Protection

Drive a stake into the ground at each end of your garden, and stretch a rope or wire between them. If frost is forecast, place an old sheet over the wire like a tent to protect your plants. A single sheet of newspaper spread on top will do nicely, too.

For sun protection in the dead of summer, do the same with a piece of shade cloth or plastic mulch cloth (black or white). Stretch it like a tent until the sun starts to go down. Any of the floating row covers will also do nicely.

COMPOSTING

Composting is the natural way to turn grass clippings, leaves and other yarden material into a rich soil additive for use in your garden. Compost piles work by generating intense heat and biological activity.

Start your compost pile with a 4" to 6" layer of organic materials like grass clippings, emulsified table scraps (no meat), leaves, etc. Only use materials that are high in carbon (leaves, sawdust) and nitrogen (grass clippings, vegetable peelings). **Never use grass clippings that have been treated with pesticides.** And don't add meat products—they can attract rodents and cause bad odors. Shred the material into small pieces with your mower or leaf shredder; this will speed up the decomposition process.

After you've got your base layer of organic material down, add a thin layer of materials high in nitrogen, such as cottonseed meal or fertilizer. Follow this with several inches of garden soil and a dusting of ground limestone or wood ashes. Repeat these layers until you've reached a maximum height of 5'.

Your compost pile should begin working within 4 to 5 days after it reaches an internal temperature of 140° to 160° F. Turn the pile every 2 to 7 days to speed up the process and assure even decomposition. If the pile is clumped and gooey, it needs more air and more frequent turnings, along with more carbon materials. Keep the pile damp like a wet sponge. If it's too dry, it won't heat up and decompose; if it's too wet, it will smell. To help the process along, overspray the pile approximately once a month with a mixture of **1 can beer, 1 cup liquid dish soap, and 1 can regular (non-diet) cola** in your 20 gallon hose-end sprayer. This will really get it cooking!

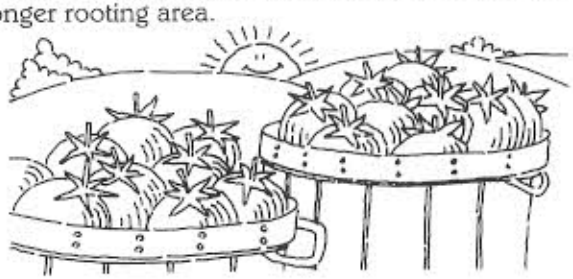
Within 3 to 6 weeks, the cold material at the outside of the pile should be turned into the center and watered if it is dry. After 3 to 4 months, your compost pile will become uniformly dark and crumbly, and it will be ready to use.

SUMMER Care

Although summer is the time when most of us are busy doing other things, don't abandon your vegetable garden if you want your share of the harvest. Remember, we are not the only ones waiting for the radishes to ripen. Wooly Worm and Creepy Crawler are patiently waiting, too. There are more important things to do than be bugged about bugs, if you're going to end up with a bumper crop. So don't stop growing!

Tomatoes are our initial concern because they are America's most popular home garden crop. (Corn, by the way, is second.) Let's get the pest problem out of the way, first. If you are bathing your garden from time to time, you shouldn't have to buy anything. But if the Tomato Horne Borer—that big, fat, ugly green worm—shows up, use a broad-spectrum insecticide. It will handle any insect that is bumming in your garden.

When planting tomatoes, be sure to plant them deep enough so that the bottom row of leaves are flush with the ground, which assures a longer rooting area.

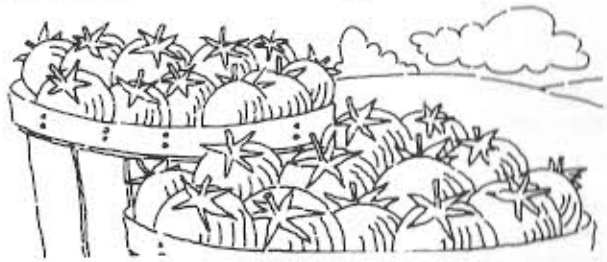


Tomatoes, cucumbers, squash, and the vine crops can't compete with weeds. So, you must keep them happy and weed-free. There are several simple and time-saving ways. One is to apply any of the chemical garden weeders that are available. Another method is to plant through holes in sheets of black plastic or plastic cleaning bags. You can also use newspapers, grass clippings, or wood chips as a mulch. Any one of these will control the weeds; try different methods to see which one you like best.

Feed your tomatoes on a regular basis. I use the "little bit, lots of times" method, as opposed to "lots of food, one time." Use the feeding program that was recommended in the Feeding Section. The same goes for the rest of your vegetable garden.

Keep your eyes open for sick plants. Blossom-end rot will most likely be the big problem. This is when the blossom end of the tomatoes turns gray, then black. This problem is caused by poor distribution of moisture in hot, dry weather. It can be controlled by spraying with a solution of 1 tablespoon of calcium chloride to a gallon of water. If you want to lessen the possibility of rot, plant marglobe tomatoes.

To avoid sick tomatoes, wash your hands well before you work in the garden, particularly if you are a smoker because tomatoes are susceptible to diseases transported through tobacco smoke. If your garden has been bothered in the past with diseases, try a spray made with **1 part skimmed milk to 9 parts water.**



The idea of the tomato game is to get all of the tomatoes you can to grow on each vine. For this, you need lots of blossoms to stick and form fruit. You can do this by spraying the flowers with any one of the tomato-set sprays (such as Blossom Set). Also, spray any of your melon and other vine flowers to insure a higher yield.

Stake your tomatoes, training them to grow up off the ground. This makes caring for them easier, and discourages disease and insect problems. You can use a single pole, tying the plant as it

SUMMER CARE

grows with small strips of panty hose, or you can make a 3 stick tepee over the plant and wind it around.

Other vine crops should be kept up as well. This can be accomplished by placing small twigs underneath the plants as they grow. Try it, and you'll see the difference. While I am on the ADP (Aid to Dependent Plants) subject, bush beans will yield more if a light branch is placed beneath them. Pole beans can be trained to climb a wire or wooden fence, and they look great, too.

Don't water your tomatoes from the top. Water them from below, and water deep.

Now then, let's get to the "key" step in tomato care and culture: **pruning** and **suckering.** Let's tackle **pruning** first. Tomato plants can be pruned by pinching the tops out in late summer. This keeps them short and bushy after they have formed all of their fruit, and the additional, "extra" growth food goes to other areas of the plant.

Now for the **"suckers."** These free-loading rascals are just along for the ride–they eat a lot and don't work. Suckers hide, but here is how you can find them. Put your left hand out in front of your face, extending your thumb out and down as far as it will go. In the pocket of the "vee" your index finger and thumb makes is where the suckers hide. Pinch them off wherever you see them.

That's it for tomatoes. Let's take a quick look at the other vegetables. Check the beets, carrots, parsnips, and other below-the-ground crops for maggots. If they are around, spray the soil with Dursban at the recommended rate. Look over the peppers, tomatoes, and squash for the Tomato Horne Borer (oh yes, he likes these vegetables better than tomatoes), and spray with an all-purpose fruit and vegetable spray.

If you are mulching with newspaper like you should be, you won't have a weed problem. So sit back, relax and enjoy the fruits of your labor.

STORING Veggies

One of the biggest wastes of time, effort, and money is to let your harvest go to waste. Never let that happen in your garden. Be generous with your surplus and offer any food you have too much of to the needy in your community (your minister can give you a list of those in need).

CANNING

Home canning has, over the past few years, lost its popularity because of the time and effort involved, and danger of contamination. This is not to say that it is not still a viable and safe way to store your harvest. However, with nearly all refrigerators coming equipped with a very efficient freezer, home freezing along with drying (commonly known as dehydrating) have come into their own. These latter 2 methods are the most efficient, economical, and easiest for those of you who are storing smaller amounts of food now than you did when all of your children were home.

DEHYDRATING

Dehydrating is practical and easy, and can be done as each crop comes in. Dehydration is the removal of water from vegetables to prevent decay. This is accomplished by forcing heated air over them slow and fast enough in a way to keep any change in cell structure from occurring.

To become an accomplished food dryer, you must practice, practice, and practice some more. There are all sizes, shapes, and prices of food dehydrators, but I have found the round style to be the best. These dehydrators are available in most major retail outlets, and some even let you dehydrate while you sleep.

STORING VEGGIES

Vegetables that can be dehydrated:

• Asparagus • Beans • Beets • Broccoli • Brussels Sprouts • Cabbage • Carrots • Cauliflower/Celery • Corn • Cucumber • Eggplant • Greens • Mushrooms • Okra • Onions • Parsley • Peas • Peppers • Potatoes • Pumpkin • Squash • Tomatoes • Zucchini

(25 pounds of fresh vegetables dry down to between 3 and 8 pounds)

FREEZING

Freezing fresh vegetables is just about as easy as drying them. You must remember that no matter what method you select, make sure that your produce is fresh, clean (wash well), and unbruised. To insure the maximum amount of taste and nutrition, pick your crop as soon as it is ripe, and freeze or dry the same day you pick.

Vegetables recommended for freezing:

• Artichokes • Asparagus • Beans • Beets • Broccoli • Brussels Sprouts • Cabbage • Carrots • Cauliflower • Corn • Endive • Greens (all) • Herbs • Kale • Okra• Onions • Parsnips • Peas • Peppers • Potatoes • Pumpkins • Rutabagas • Squash • Tomatoes • Turnips

Pre-preparations for freezing means blanching a great number of vegetables to lock in the flavor. To properly blanch, you must bring the water to a bubbling boil and keep it there. Change the water for each new variety of vegetable. To properly blanch, simply submerge the produce into the boiling water for the recommended time.

INDOOR Herbs

What's the spice of a winter gardener's life? Fresh grown herbs, right from the kitchen windowsill, of course.

Don't fret if your outdoor herb garden is closed for the season. You can start a whole new crop inside your home. Herbs grown indoors are just as tasty, and they'll rival your house plants as decorative touches.

For years, my Grandma Putt filled her winter window sills with fresh-growing herbs to spice up her cooking, and for potions, salves, and tonics. Today, we are rediscovering natural spices as an attractive alternative to salt, sugar, fat and artificial flavorings.

There is no comparison between fresh herbs picked daily from your garden and the dried herbs found on your local supermarket's shelves. 3 to 4 times as much dried herb is required to get the same amount of seasoning power, and it still won't have that fresh-picked flavor.

If you want to have plenty of fresh herbs handy throughout the year—at little or no cost and without much labor on your part—then it's time to set up your indoor herb garden.

Here are the basic steps for setting up an indoor herb garden:

1. Select a location that provides bright light from 4 to 5 hours a day—preferably sunlight, but any good light will do. Herbs are generally fast growers, so they require an ample quantity of moisture. The logical location is above or near the kitchen sink. If that's not possible, a tray that can hold gravel or stones and water will do nicely. Add enough water to cover the stones, but do not submerge the bottoms of the pots.
2. Start herbs from seed, or transplant them from your outdoor garden into pots. Seeds will grow faster if you tie them together in a piece of nylon cloth, place them in weak tea solution, and refrigerate for about 48 hours.

INDOOR HERBS

3. Plant seeds or seedlings in light, quick-draining soil. Most commercial potting soils work fine. If you mix your own, use **1 part peat moss, 1 part sharp sand, and 2 parts clean garden soil.** Use shallow clay pots, 6" to 8" wide at the top, or plastic cottage cheese containers with 4 to 6 drainage holes in them.
4. Feed your herbs regularly—particularly while they are young. Any of the fish-based plant foods will do. Always mix your plant food at 10% of the recommended rate. Remove the pots from the tray and water thoroughly, letting the extra food and water drain completely off before returning the pots to the tray. Do not water again until the soil half the distance from the top begins to dry out (test it with your finger).
5. Rotate all herbs half a turn every 2 or 3 days to insure attractive, uniform growth. Never permit herbs grown indoors to produce flowers—pinch them off so all the plant's energy will go into producing healthy foliage that you can use.
6. Keep the night temperature above 50°F and the day temperature below 70°F. Herbs prefer a constant 68°F—if it's too warm, they will become dehydrated and shrivel up. If it's too cold, they will go dormant.

I've put together a guide to some of the most popular herbs, with thumbnail descriptions of their special needs and practical uses. A visit to your local garden department will introduce you to the many other herbs that are available year-round in your area.

- **SWEET BASIL**—transplant to 4" or 6" pots after the second pair of leaves appear. Cut off any flower sprouts between the main stem and leaves. Use as tea and in tomato dishes, hot biscuits, vinegars and stew. Garnish soups, salads, and vegetables.
- **CHERVIL**—plants need slight shade. Use in salad, egg and fish dishes, and soups (as for parsley).
- **CHIVES**—after the seeds grow, repot in 9" or 10" bulb pans. Use in salads, cottage cheese, and dips.
- **CORIANDER**—plant whole seed from the grocery spice shelf, as coriander is seldom found in packets. Do not transplant. Keep flowers pinched out. Use leaves to season and garnish foods.
- **DILL**—thin seedlings to a dozen plants in a 9" or 10" pot. Do not transplant. Use in dressings, fish sauces, salads, dips, potato salad, and sprinkled on boiled potatoes.
- **LEMON BALM**—cut back plant to make a tidy shape. Use in tea, egg dishes, or tarragon vinegar, and in cool drinks.
- **MINT**—needs rich moist soil and takes light shade. Trim back to shape up. Use as tea, and in meatballs and cold drinks.
- **PARSLEY**—space seedlings 2" apart in a large pot. Use in salads, garnishes, soups, and hot breads.

- **ROSEMARY**—keep each plant to a 6" pot. Soil must be fast-draining; rosemary likes lime. Use as tea, and in biscuits, stews, tomato sauce, garlic bread, and sprinkled over pork or roast beef.
- **SAGE**—use light, gritty soil. Keep moderately dry. Use as tea and in stuffing with chicken.
- **SUMMER SAVORY**—use singly in 4" or 6" pots, or 3 to 4 plants in an 9" pot. Clip twigs for compactness. Use as tea and in meat loaf, salads, fish, and with green snap beans.
- **TARRAGON (FRENCH)**—plant in a 6" or 8" pot with richer soil. Use in vinegar, salad, and meat and fish sauces.
- **COMMON THYME**—as plants grow, cut back to force branching. Keep soil on the dry side. Use as tea, and in stuffing, soup, meat, and fish sauces.