

Story and photos by Eric Johnson

# Tomato Talk 101

Want a great tomato year?  
Ponder these 10 questions  
for your best harvest ever!

To me, tomatoes are synonymous with summer. The taste of that rare great one in the middle of winter takes me back to August and always renews my verve to make the next summer the greatest tomato-growing year yet.

What gardeners do contributes a lot to how many fruits (yes, they are technically fruits) you will harvest, but the truth is, Mother Nature's mood plays a pretty strong role in your success as well. So, as you sit poised on planting time, here are 10 basic questions to ponder. Touch these bases, make nice with Mother Nature, and you will be set for a bountiful harvest.

# One of my favorites is 'Fantastic'. It grows very large and is quite flavorful.

Carolyn McDonald, Rochester



## Do You Have Enough Sun?

First and foremost, tomatoes need full sun to thrive. Six to eight hours is ideal, but you can get by with a bit less if a couple of those hours are midday sun and you don't mind having fewer fruits. I get by with less sun in a garden bed that lives between my neighbor's house and mine. Both houses are light beige and bounce the light around, creating a pseudo-greenhouse effect. Remember, the more sun, the tastier the tomato. If you haven't got a sunny garden plot, consider a container planting in your sunniest spot. Any well-drained container that is 18 to 24 inches high by 15 to 20 inches wide will do.

## Is Your Soil Right?

Tomatoes thrive in soil that drains well but also retains moisture. (Sandy soil will need amending.) Tomatoes love organic matter, and incorporating a good compost mix—approximately 5 pounds (think the size of a bag of sugar)—into the planting hole will do wonders. Mulching will help the soil retain moisture. Many varieties of composted manure are widely available at nurseries and garden centers.

## Do You Water Consistently?

Consistent watering not only nurtures juicier fruits, it also helps ward off most of the tomato's summer maladies. One to 3 inches of rain per week, ideally in a couple of doses, is what you want. If the rain isn't coming, give each plant about 2 gallons per week, spread throughout the week. Gardeners have reported giving each plant as much as 1 gallon a day, to good effect, as long as your soil is draining well. You cannot neglect watering one week and make up for it the next. You get extra credit if the water is warm. Keeping a 2-gallon jug of water near each plant will help you monitor your watering and will

keep the water tepid. For plant health and watering efficiency, water at the base of the plant.

## Bush or Vining?

All tomatoes fall into one of these two classifications. Determinate (bush) tomatoes grow to a determined size and produce their crop in a single wave, most often over the course of a month. They lend themselves to canning or preserving. Because their size stays in check, they work well in containers or small gardens. Generally, determinates ripen early and their fruits are smaller than those of indeterminate tomatoes.

Indeterminate (vining) tomatoes grow until frost gets them. They begin to produce later in the season and are perfect for home gardeners who want a steady supply of tomatoes throughout the season. Indeterminates need sturdy staking or caging or they can be allowed to bramble in the garden if you have the space and mulch under the vines. Indeterminates offer you a greater selection of varieties. Nearly all heirloom varieties are indeterminate.

## When Do You Want to Pick Your Tomatoes?

When growing tomatoes in the North, it's a bit of a numbers game. Tomato varieties are divided into early, mid and late season. Early-season tomatoes reach maturity in 65 days or less from time of transplant. Late-season varieties mature in 80 days or longer, and mid-season varieties are somewhere in between. About six weeks from the time a tomato blossom is pollinated, you will have a mature fruit.

Mother Nature plays a heavy hand in the maturation of your fruits. An early spring will accelerate the process, and a cool or hot summer will stall the fruits. Tomatoes shut down when daytime temps are over 95 degrees and nighttime temps are over 75 for several days; the pollen is killed and the flowers won't set fruit and will fall off.

## Tomato Favorites

Everyone has a favorite tomato. We asked some experienced northern gardeners which ones they like best. —E.J.

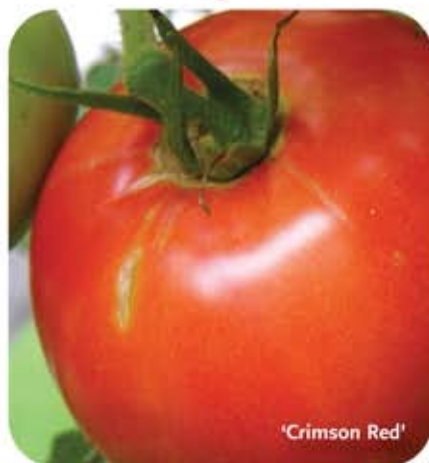
**Mary Maguire Lerman, St. Paul**  
'Striped Calvert'. Shaped like a green pepper and fairly empty inside, with striped flesh. Great to put in chicken or tuna salad.

**Christina Giese and Erica Miller, Robbinsdale**  
'Matt's Wild'. A cherry tomato that produced so many, even in shade under an oak tree!

**Bobby Jensen, KARE 11's "Grow with KARE"** I grow 'Champion', a mid-season tomato, 70 days and pretty tasty. Tomatoes love magnesium, so use Epsom salts (magnesium sulfate). Mix a couple of tablespoons in a quart of water, and as your tomato grows, spray it once a month.

**Jeff Billman, Stewartville**  
My favorite tomato is probably 'Celebrity'. I like it because of its taste and disease resistance. Unfortunately, the deer also like these tomatoes and their leaves!

**Terry Yockey, Red Wing**  
I grew a great heirloom black tomato last summer named 'Nyagous' that I enjoyed immensely.



'Crimson Red'

### Hybrid or Heirloom?

Hybrid tomatoes have been cross-pollinated to create plants with desirable characteristics, such as disease resistance, early ripening, and consistent appearance. 'Better Boy' and 'Early Girl' are examples whose names suggest their hybridizer's desired results.

Heirloom tomatoes are open-pollinated, with the wind and bees doing the work. The definition of heirlooms is uncertain but most growers have settled on calling an heirloom a plant that's been around 50 years and is not a hybrid. A cozier definition is any seed that has been passed from one gardener to another.

The glory of heirloom tomatoes is in their eccentricities of appearance and

their rich flavors. The names alone, such as 'Cream Sausage', 'Amy's Sugar Gem', 'Pineapple', and 'Bloody Butcher', are reason to grow them. I discovered 'Kellogg's Beefsteak' last season and have been singing its praises ever since.

Heirlooms do not generally have the disease resistance that has been bred into many hybrids, but experienced growers

report that a particular variety will acclimate to your garden over several seasons and produce more prolifically and stay healthier each successive year. Worth a try! Hybrids and heirlooms can co-mingle happily in your garden.

### Seeds or Seedlings?

It used to be that you needed to start your tomato plants from seed to get beyond the basic varieties, but nurseries and garden centers have caught heirloom fever and carry starter plants in droves. If you do not use starter plants, you will need to start your seeds about five weeks ahead of planting time. The Internet and gardening books are full of information on indoor seed starting, and the popular winter seed-starting method works well for tomatoes. Watch out for volunteer tomatoes in your garden, too. Cherry tomatoes are a bargain-hunter's dream as they volunteer prolifically.

### Did You Plant Too Soon?

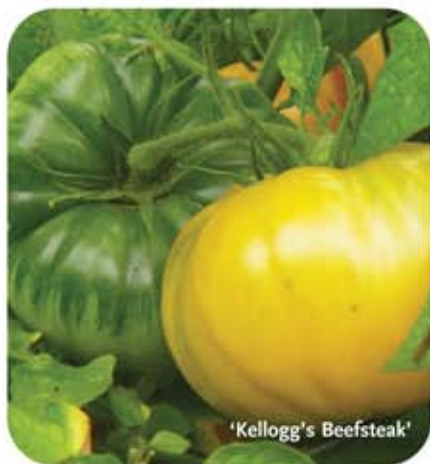
Tomatoes won't take off until the soil is warm and daytime temperatures are consistently reaching at least 70 degrees F, so your plants do not need to go into the garden until Memorial Day at the earliest in USDA Zone 4. Use the extra gardening time to prepare the planting bed. Tomatoes are very sensitive to frost, so keep an eye on that, as well. Cover them if need be.

### How Far Apart? How Deep?

Tomato plants should be spaced from 2 to 3 feet apart to allow for good air circulation and to allow the full sun to reach the plants. Plant your seedlings deep, with only the top few leaves above the soil. The horizontal trench technique, where the stem of the plant lays horizontal in the planting hole, pro-



'Sweet 100'



'Kellogg's Beefsteak'

**Susan Reed, Minneapolis** For a paste/cooking tomato: 'Sarnowski Polish Plum', an heirloom brought from Poland to New York in the 1890s. Large, meaty tomatoes with very few seeds and rich flavor.

**Nancy Jo Hendrickson, Shoreview** Last year, we tried the 'Juliet' hybrid and were impressed with the flavor, decent yield, and, importantly, they don't crack and they cling to the vine.

**Tom McKusick, Minneapolis** My absolute favorite is 'Black Cherry'. Easy to start and grow, fairly prolific for an heirloom, resistant to splitting, and, in my opinion, the best tasting, bar none.

**Nancy Meade Thayer, St. Paul** 'Bloody Butcher' bears a lot of fruit with a strong flavor. 'Yellow Brandywine' is like candy to me. It is dessert!

**Linda Halley, Gardens of Eagan** I have become a huge fan of 'Speckled Roman'. Meaty, flavorful, deep red inside and adorned with golden lightning bolt stripes outside.


**Margaret Haapoja, Bovey** My favorite and most dependable variety in our USDA Zone 3 climate has been the old standby, 'Early Girl'. We grow our tomatoes on black landscape fabric to keep water from splashing soil up on the leaves and spreading early blight, which has been a perennial problem for us.

motes greater root production. The exposed top will straighten within a few days. Deeply water your tomato seedling, with warm water, within 10 minutes of planting. Allow the soil around the plant to warm for about two weeks, then

mulch with compost, straw, grass, or pine needles about an inch deep and a circumference of 12 inches, to help retain moisture and to prevent fungal spores from splashing and infecting lower leaves during watering.

### Should You Prune? Or Stake?

Tomatoes can survive without staking or caging, although most gardeners choose to support their plants for a tidier garden and to protect the fruits and help the sun reach them. Determinate varieties will do fine with a tomato cage; send the cage deep into the soil right after planting. Indeterminate varieties can reach 5 to 6 feet and need tall, sturdy cages or staking with a sturdy wood or metal stake. Secure the plants to the stake as they grow with garden twine, or strips of fabric or pantyhose.

Some judicious pruning will allow sun to reach the developing fruits and promote good air circulation. Also, removing the lowest set of leaves will keep fungal spores from splashing on them and promoting disease. Watch for new shoots that sprout from the V where branches come off the stem, and remove most of them. Excessive pruning limits the photosynthesis that creates the sugar that sweetens the fruit. Many tomato growers prune the tips of the plants and remove flowers starting on Labor Day and going forward, to allow the plant's energies to focus on the developing fruits. 

Minneapolis-based garden writer and designer Eric Johnson blogs at [www.gardendrama.com](http://www.gardendrama.com).



'Cherokee', 'Red Purple', 'Pear'

## Watch Out for Tomato Threats

Early blight and blossom-end rot are the major threats to tomatoes. Early blight—a condition that begins with brown, curling, lower leaves that travel up the plant—is caused by a fungus that often overwinters in the soil. Mulching to avoid fungal spores from splashing up, avoiding overcrowding of the plants, and vigilant fall clean-up (do not put diseased plants in the compost bin) are your best defense.

Blossom-end rot produces brown, watery blisters on the opposite end from the stem. Though a calcium deficiency is the chief cause, the condition is usually a result of inconsistent watering, making the plant unable to take in available calcium. Blossom-end rot usually affects only the first wave of fruits. You can cut off the lesion and use the remainder of the tomato if you are not persnickety.

Cat-facing is an unsightly disfigurement of the fruits that usually occurs as a result of cool temperatures early in the season, but it will not be the demise of the crop. Cracking is a result of inconsistent watering. Overall, heirloom varieties are prone to cracking because they often have thin skins, which are also what make them tasty. Water consistently, and hope for help from Mother Nature.

For more information on tomato diseases, see the Plant Health column (page 24) in this issue.

—E.J.



Inconsistent watering causes cracking.