Corn (Sweet and Field)

**Nutritional Value:**
All corn is a member of the grass family. Sweet corn is rich in carbohydrates, fiber, folate, niacin, thiamin, phosphorus, and phytonutrients. Field corn is rich in protein, carbohydrates, potassium, calcium and the amino acid leucine.

**Challenges / Advantages:**
Corn is one of the heaviest nitrogen feeders in the garden. Some gardeners think it is such a heavy feeder that it’s simply not worth it in small gardens. I like to grow field (flour) corn on occasion just for the simple pleasure of grinding my own corn meal for cornmeal pancakes like you have never tasted. We live in a region where farmers specialize in sweet corn so I don’t bother growing my own.

**Sowing:**
Traditionally corn is direct seeded outdoors 2 weeks after the last frost in spring. When planted in spring it should be direct sown 1” deep. When planted later in summer in warmer soil, you can plant seed up to 4” deep, 15” apart in offset rows that are also 15” apart. Optimal germination temperature is between 60 and 75 degrees. At this temperature, germination takes from 3-5 days.

**Soil prep:**
The soil should be warm enough at 60 degrees for the corn to germinate. If planted too early in cold soil, the kernels can rot. If you want really good corn, and you know where you will be planting it, start amending that bed in the fall with compost or manure. By spring it will be even more fertile to give your corn a head start.

**Growing Conditions:**
Corn does very well in warm weather and can use as much sunlight as you can provide.

**Planting tips:**
Corn is pollinated by wind. It needs to be planted at a block pattern, optimally with at least four rows side by side to ensure proper pollination. Once the plants are about a foot tall, give them a shot of nitrogen in the form of compost tea or fish emulsion poured around the roots. Corns love nitrogen. Consequently after you plant a season of corn, make sure to amend that bed with extra nitrogen for the next few seasons to make up for it. Follow with legumes to they can help fix more nitrogen into the soil.
One way to optimize food production in a bed of corn is to use the “Three Sisters” approach which has been used for hundreds of years. Corn, beans and squash are complementary crops that work well when planted together. Simply plant squash intermittently amongst the corn and they will grow in the low canopy below the corn. Plant the pole variety of beans below each corn stalk so the beans can use the fast growing corn as a trellis. Make sure to plant both the squash and beans a couple weeks after the corn so it has a head start to grow higher than both before they take hold.

**Watering:**
Field corn (dent, flint, and flour corn) uses less water than sweet corn as a rule. But they will both need consistent watering throughout the season to get water to their shallow roots. The process of ‘tasseling’ through the completing of ear formation is the most critical period to provide enough water to the plant. Drip irrigation systems work best with in between corn rows since they won’t wet the tassels and pollen like overhead irrigation can, which can interfere with wind pollination. Place the irrigation line between plants instead of right along the base of the plants, to more effectively reach the roots along the drip line of the plant leaf canopy.

**Harvest:**
Timing the sweet corn harvest is the thing of family lore going back generations on the farm. If harvested at the peak moment, they will have peak sugar content and be like eating candy. Sweet corn is ready to pick when the silk turns brown and the ears feel fat with tight kernels. You can peel back the husk on the top of an ear and pinch a kernel. If it pops or squirts juice out easily, you are good to go. If it is past maturity, the kernels will be tough and starchy.

The timing of field corn harvest is much easier, since you are not growing it for the highest sugar content. Simply leave field corn on the stalk until all the leaves dry up and turn brown. If a heavy rain is expected near harvest, go ahead and harvest it before it gets drenched. Field corn will need to dry, and it will be that much harder after a heavy rain.

Field corn can be dried on the ear in a place protected from rain. You can dry in the sun on a tarp for a day or so, but then keep protected from rain, humidity and rodents. Once dry, the kernels can be removed from the ear by snapping the ear in half and rubbing the two halves together over a container. Let the kernels dry some more before storing in glass jars or plastic buckets. The kernels Must be dry before long term storage to avoid molding. Some people will put the kernels through a dehydrator just to be sure.

**Notes:**
Pollination happens in corn when the male tassels on the top of the plant let go of pollen for a few days and the wind (hopefully) shakes it down to the tassels that each need to catch a pollen grain to grow each kernel. During the period when
pollen is being released and silks are hanging out, if there is not wind, you can improve yield by shaking each stalk to allow the pollen to cascade onto the silks.

**Cooking:**
Sweet corn is best eaten right away. Simply shuck the ear and drop into boiling water for three minutes or so. Butter, salt, and away you go. Field corn is ground into flour (corn meal) for corn bread, or cornmeal pancakes. Many juicers, like the old Champion brands have attachments for grinding corn.

**Storage:**
Sweet corn should be eaten as soon as possible. If you are going to store in the refrigerator for a few days, make sure to leaf the husks on. Field corn, when dried properly can be stored for years in a dry container.

**Good Sweet Corn Varieties:** Country Gentleman (1890), Golden Bantam (1853), Stowell’s Evergreen, Late corn with long harvest, (1840)

**Good Field Corn Varieties:** Taos Pueblo White Flour, pre-Columbian corn that makes very fine white flour, Mandan Bride, multi-colored Indian corn, Painted Mountain. Hopi Blue