

Zilker Botanical Garden

Activity Guide – Planting a Three Sisters Garden



Ages: All ages

Approximate Length: 30 minutes for activity, weeks of growth

Objective: Learn about different ways plants symbiotically grow and support one another while developing a crop of delicious homegrown vegetables for you and your family.

Materials:

1. Corn seeds (we recommend Dia de San Juan or Flor del Rio)
2. Bean seeds (we recommend Tohono O’odham Vayos or Four Corners Gold)
3. Squash seeds (we recommend Dark Star Zucchini or Yellow Crookneck)
4. Mound of soil, about 1’ tall and four feet in diameter

Concept Terms:

1. **Three Sisters** – corn, beans and squash. These three crops thrive when planted together, like three inseparable siblings.
2. **Corn** – a cereal grass plant whose edible grains provide a great of our caloric intake, and is an ingredient in many other products, such as Elmer’s Glue, wax paper, Splenda, and Windex.
3. **Bean** – a seed of one of several times of flowering plants in the Fabaceae family that is used for our food. Beans are a heliotropic plant, which means its leaves tilt throughout the day to face the sun, and at night they go into a folded “sleep” position.
4. **Squash** – a flowering plant in the gourd family whose fruits typically grow on vines and is native to the Western Hemisphere. There are many varieties of squash, including zucchini, pumpkin, and butternut squash.

Background:

1. By the time European settlers arrived in America in the early 1600s, the Haudenosaunee, also known as the Iroquois, had been growing the “three sisters” for over three centuries. They grew them together in the same mound, known to this day as the Haudenosaunee planting method. According to their beliefs, the plants were a gift from the gods, always to be grown together, eaten together, and celebrated together.
2. Corn is the older sister and provides tall stalks for the beans to climb so that they are not smothered by the sprawling squash vines.
3. Beans are the giving sister and provide nitrogen to fertilize the soil while also stabilizing the tall corn during heavy winds.
4. The protective sister, the large leaves of squash plants shade the grown, helping to retain moisture and prevent weeds, and the prickly leaves also keep away raccoons and other pests.
5. A diet of corn, beans and squash is complete and balanced, with corn providing carbohydrates, beans giving us protein, and squash containing different vitamins and minerals than corn and beans.
6. These crops are warm season plants and do not tolerate frost.

Instructions:

1. Start by forming your garden mound.
2. Plant six corn seeds an inch deep and about ten inches apart in a circle about 2 feet in diameter.
3. Once the corn is about five inches tall, plant four bean seeds, evenly spaced, around each stalk of corn. Those beans will then have the chance to grow with the structure of the corn but without the shade of the squash.
4. About a week later, plant six squash seeds, evenly spaced, around the perimeter of the mound.

Additional Resources:

1. [Cornell University’s Guide to Planting the Three Sisters](#)
2. [Old Farmer’s Almanac Video](#)
3. [Native Seeds Guide to Growing the Three Sisters](#)