### Virtual Tour

# Three Sisters Beds

Here in the Discovery Garden we demonstrate companion gardening in our Three Sisters Beds. Companion Gardening refers to planting certain plants close together to benefit each plant individually. Some benefits of companion planting include pest control, pollination, protected soil, and increased crop yield. Because plants vie for resources such as nutrients and space, your garden will grow better when placing plants that support each other near each other.

As explained in *Growveg.com*, three hundred years ago, when early American colonists took a look at the food gardens in Native American villages, they often saw a unique companion planting plan – corn, pole beans and pumpkins or squash being grown together in the same plot. Compared to the neatly plowed rows and fields of Europe, these "corn gardens" looked suspiciously wild, but for the Iroquois, Cherokee, and other Native American tribes who grew Three Sisters Gardens, their success amounted to a minor agricultural revolution. With cleared land at a premium, here was a way to grow three nutritious, easy-to-store crops in one space.

Also referred to as a "stacked garden" three layers of plants are used. Traditionally the upright element is corn. Two or three weeks later beans are planted near the corn and pumpkin or other squash is added to the outer edge of the bed so that it has full sun. The lush leaves of the squash provide a cover crop for the entire planted area. Cover crops help keep the weeds from growing, provide insect habitat, hold in moisture, and strengthen the soil health. The corn stands tall and gives the beans a place to vine. Corn uses a lot of nitrogen to grow, and the beans are a natural nitrogen fixer, so the beans help feed the corn. Traditionally, Three Sisters Beds are planted with crops that are harvested at the same time, at full maturity: dry grain corn, hard storage squash, and beans, but today many gardeners experiment with many varieties of corn, beans, and squash.

Companion gardening has been used for centuries by attentive home gardeners. Today there is a body of research taking place to help growers understand what is taking place under ground and in the plant. Many organic growers choose companion planting as one way to control pests and eliminate the need for pesticides. As an example, planting catnip in and among potato plants will repel the Colorado potato beetle and planting radishes in and around your squash plants will help repel a variety of pests including squash bugs.

There are lots of great resources to help you explore companion planting, including Three Sisters Beds.

#### Website Resources

### How to plant and grow a Three Sisters Bed:

https://www.growveg.com/guides/companion-planting-three-sisters-gardenplans/#:~:text=A%20three%20sisters%20garden%20is,grain%20sorghum%20make%20interesti ng%20alternatives.

http://blogs.cornell.edu/garden/lessons/curricula/the-three-sisters-exploring-an-iroquois-garden/how-to-plant-the-three-sisters/

#### **Video Resources**

How to plant and grow a Three Sisters Bed: https://www.youtube.com/watch?v=sXsdVJVVxFc https://www.youtube.com/watch?v=dnECHJYny\_I

## **Book suggestion from MCPLD collection**

Buffalo Bird Woman's garden: agriculture of the Hidatsa Indians

Carrots love tomatoes: secrets of companion planting for successful gardening

Great garden companions: a companion planting system for a beautiful, chemical-free vegetable garden

Natural companions: the garden lover's guide to plant combinations