

School Gardens: Planning an Edible Garden Community and School Gardens

David Berle and Robert Westerfield University of Georgia Horticulturists

If you are a teacher or parent thinking of starting an edible garden at your school, you may be wondering where to begin. Where should the garden go? What crops should you grow? These are all important questions that need to be answered BEFORE you start digging.

Step 1: Garden Location

Access to water is critical. While a rain barrel might help supplement watering and teach a good lesson, you cannot rely on a rain barrel for continuous water supply. Most schools have spigots built into the sides of buildings. They require a special "key" that can be purchased from a plumbing supply store. It is not practical to drag more than one or two hoses from a spigot to a garden, so the garden should be within 100-150 feet of the building.

All vegetables and fruits require sunlight, so find a location that gets at least six hours of direct sun during the day. Remember that during the winter the sun is at a lower angle, so even a low building can reduce the hours of direct sun. Conversely, for younger children, having some shade near the garden is helpful. Shade can come from a small tree, a building overhang or perhaps a grape arbor.

A school garden should be close enough to access quickly; otherwise, too much time will be spent walking back and forth from the classroom to the garden. Tools should be accessible, so you either will need a storage space in a nearby building or will need to build a toolshed next to the garden.

Step 2: Soil and Terrain

Almost any soil can be tilled and amended to grow fruits and vegetables. It's almost always cheaper to work with what is on hand than to import soil. Soils around school grounds are often heavily compacted and difficult to dig. If a shovel cannot easily penetrate the soil after a good rain, then it may be compacted. If this is the case, consider getting help from someone with equipment that can till, excavate or plow the soil before you start gardening. Raised beds are helpful in defining the growing space, especially for young children, but cost money to build and require imported soil to fill.

The ideal vegetable garden is relatively flat, with just enough slope for water to run off, but not too much to cause erosion problems. If it is uncomfortable to walk across the garden site, the site is probably steep enough for erosion to be a problem. Vegetables can be grown on a slope if the rows are laid out parallel to the slope. Fruit trees and bushes are planted individually, so slope is not as much of an issue.

Step 3: Choosing Crops

Unless your school is on a year-round schedule, you need to select fruit and vegetable crops that will match the school year. For vegetables, this means focusing on cool-season crops such as broccoli, lettuce, kale, collards, beets and carrots. This does not mean you can't have warm-season crops such as tomatoes and peppers, but to

have those crops someone is going to have to plant them BEFORE school begins in order to beat the fall frost. For fruit crops, there are very few choices. It's possible to harvest strawberries in the spring, and muscadine grapes and figs in the fall, depending on the varieties selected and the season. Some apple varieties do not bear a crop until September or October. Most of the other fruits, like blackberries, raspberries, bunch grapes and blueberries, all bear fruit in late June, July or August, when school is out.

Planting Vegetables

Vegetables are grown as annuals and therefore need to be planted from seed or plants every season. A planting guide (UGA Cooperative Extension Circular 963 Vegetable Gardening in Georgia) lists recommended varieties that perform well in Georgia and suggests when to plant them. It is much cheaper to start vegetables from seed, but it is faster and sometimes easier to start with plants. Not all vegetables transplant well. For example, carrots and beets are best sown from seed. Broccoli, cauliflower and cabbage do best with plants, while kale, collards and lettuce can either be sown from seed or transplanted. It is a great experience for children to grow their own plants; however, you need a sunny location and some basic growing supplies. Many people find it easier to buy plants. Plants are available at most garden centers on a seasonal basis; if they are not available, it may be too late or too early to plant.

Vegetables need room to grow, so it is best to follow the spacing recommendations in the planting guide. In a small school garden, every inch of space should be used. A common mistake is to sow seed, but then later, after the seeds have germinated, not properly thin the plants. It is hard to pull up a living plant, but necessary to provide room for plants to grow well. Unless you are very familiar with how a vegetable plant will grow, it is best to plant vegetables in rows or blocks of the same type of vegetable and not mix everything up. Larger plants like collards can easily shade out smaller crops like carrots.

In a school garden, labels are useful to help children remember what is planted where. Ink or pencil on wood stakes tends to fade quickly. Pencil on plastic stakes lasts almost as long as permanent markers.

Planting Fruits

All fruits grown in Georgia require full sun, just like vegetables. The main difference in planting fruits versus vegetables is that fruit plants are perennials so they live from year to year. It also takes several years for most fruit plants to start bearing, so when you plant fruits, you are planting for the future. The varieties most likely to be successful in a school garden (for schools that follow a traditional schedule) are strawberries, muscadine grapes, apples and figs. Even these crops are not guaranteed to have fruit during the school season, but they are more likely to than the others. If you select the right cultivar, it's possible to grow these fruits with minimal or no pesticide spray program; however, no matter which cultivars you pick, there will be some insect and disease problems. Of the fruits listed above, apples are going to be the most difficult to grow without pest control of some form. Consult with your county Extension agent or read through the UGA Cooperative Extension home garden fruit and vegetable publications at www.caes.uga.edu/publications/ to find the best cultivars for your location.

It is best to plant fruit trees and bushes in the fall or late winter. That will give them a chance to develop a root system before it gets too hot and dry. You can purchase fruit plants from local nurseries or order from a catalog. Plants from a catalog will arrive "bare root" and need to be planted immediately upon arrival. They are cheaper this way, but require a little more attention at the start. Plants in containers will be larger and survive better, but will cost considerably more.

Circular 1027-1 February 2013

The University of Georgia and Ft. Valley State University, the U.S. Department of Agriculture and counties of the state cooperating. Cooperative Extension, the University of Georgia College of Agricultural and Environmental Sciences, offers educational programs, assistance and materials to all people without regard to race, color, national origin, age, gender or disability.