

Planning, Planting and Maintaining Your Dane County Community Garden

Good gardening practices increase the likelihood of a successful harvest by minimizing damage due to diseases, insects, weeds, and animals. Dane County community gardens use organic practices that exclude synthetic fertilizers, pesticides, or herbicides. Strategies contained in this document will assist community gardeners in planning, planting, and maintaining productive plots.

Planning

Decide which vegetables to grow by selecting vegetables you like to eat, are easy to grow, and are expensive to buy. Choose disease resistant cultivars but be aware that resistance does not make plants immune to disease. Seed availability may be limited in spring; some gardeners prefer to purchase seeds as early as mid-February.

Vegetables can be planted from transplants or seeds planted directly into the ground. Although not all vegetables are suitable for transplanting, transplants sometimes produce earlier crops or larger harvests. Gardeners who start seeds for transplanting begin with a prepared disease-free growing mixture or mix equal parts potting soil, peat or compost, and perlite or vermiculite. After seeding, plants grow either indoors under grow lights or outdoors in hot beds which are covered structures that have an artificial heat source, or in cold frames which are covered structures without an artificial heat source.

To benefit most from sunlight, plan rows to run north and south and grow taller plants on the north side of the garden to prevent shading smaller plants. Some gardeners use fencing to exclude animal pests but fences take up space, harbor weeds, protect insects, and harbor diseases.

Planting

Results from a soil test will recommend if soil amendments such as fertilizers or lime should be used. Sandy soils are generally low in nutrients and do not hold water well. Heavier soils hold water well but are harder to manage. Organic matter improves drainage and adds nutrients. Work organic matter into the soil before planting when the soil crumbles easily when pressed gently; if the soil clumps into a ball, it is too wet. Gardeners can use compost from leaves, untreated grass clipping, and disease-free plant materials to get organic matter into the soil.

For seed germination and transplant rooting, loosen and level the soil with basic hand tools such as a shovel, garden fork, garden rake, or garden hoe. Remove weeds before planting. Every second season, the soil ought to be tilled or turned over by hand 6"-8" in depth when the soil is dry. On the off year, cultivation can be shallow. Cultivating deeply every year exposes weed seeds to sunlight which promotes their growth and destroys soil structure. Soil is loosened only in areas designated for transplants or in trenches properly dug for seeds. Pat Lanza's book, Lasagna Gardening and Lee Reich's Weedless Gardening are good resources for gardening in no-till plots.

If planting seeds, use fresh seeds for best germination. If seeds are a couple years old, use slightly more seeds than recommended. Follow seed package instructions for planting depth, spacing, timing, and soil temperature. Hoe open trenches, sow seeds at an even depth, cover them, rake soil smooth, and cover seeds with a hoe or trowel, and tamp soil down lightly. In general, large seeds such as beans, can be spaced according to seed packet instructions. Small seeds such as lettuces should be sown in slightly higher numbers and thinned soon after sprouting to seed packet spacing recommendations.

If using transplants, gradually expose the plants to outdoor temperatures, wind, and sunlight before planting. Cool weather vegetables should be planted in April or May; warm weather plants are best planted around Memorial Day. An hour or two before planting, lightly water the area which will be used for transplants. Remove surface soil to expose an open hole, set plants snugly into the ground with firm,

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moist soil around the roots, fill the hole with loose soil leaving a slight hollow around the stem. Transplant on cloudy days or during late afternoons to prevent wilting. Gently water plants at their base after they are in the soil.

Some gardeners put up barriers to exclude pests. Floating row covers are white, porous materials laid over plants; they generally do not have supports. Tunnels are similar but use wires or hoops to support the fabric or plastic. While these tools exclude insect pests, they also prevent pollinators from getting to flowering plant parts. To allow pollination, remove row covers and tunnels when plants flower.

Maintaining

Water plants, especially young seedlings, when needed. The best time of day is morning. Evening watering promotes fungus growth and daytime allows evaporation. Most plants require at least an inch of rain a week. Always water the base of the plants and avoid getting leaves wet. Occasional heavy watering promotes strong root growth as opposed to frequent light watering which keeps roots at the soil surface. Consistent watering for the first six weeks of growth allows adequate calcium uptake which can prevent blossom end rot commonly seen on tomatoes.

Gardeners should take preventive steps and monitor their plots to insure a vigorous crop. Compost helps soil hold water and adds nutrients. If using organic nitrogen fertilizers, slow-release types reduce the number of applications needed. Mulching with straw, hay, plastic, cardboard, or newspapers helps retain water and discourages weed growth. Check your garden's rules prior to using certain mulching materials such as plastic. Small seeds are over-seeded and need to be thinned soon after sprouting so plants are properly spaced for air circulation and strong root development. Tall, vining plants such as tomatoes, cucumbers, and pole beans need support with stakes or trellises for good air circulation.

Weeding is especially important early in the growing season when desired plants are seedlings. Weed as soon as weeds appear and are easily pulled or cut off at the soil line with a hoe. Never allow weeds to flower and go to seed. Watch for possible signs of disease or insect damage such as yellowing leaves, wilting, holes in leaves, and black or brown spots. Remove, bag, and dispose of diseased plant material to prevent spreading diseases. Clean pruning tools by spraying isopropyl alcohol after pruning each plant.

Yellowing, stunted growth, and malformations may indicate diseases which cannot be cured (e.g., Aster yellows); plants should be pulled and trashed. Organic pesticides and fungicides should be used only when a specific problem has been identified; directions on the container must be followed exactly. Organic pesticides are only effective when used at the proper insect life cycle stage and can harm beneficial pollinators. Fall cleanup is recommended, disposing of diseased plants and effectively composting other plant material in a well-maintained compost pile or using other methods such as trench composting. Gardeners sometimes mulch bare soil lightly or plant cover crops. A soil test can be done in the fall to determine if additions to the soil would be beneficial for the next growing season.

Additional Information/Resources

- UW Extension Bulletin [A1989 The Vegetable Garden](#)
- UW Extension [People+Plants: How to Grow a Community Garden](#) multimedia series (link to several useful publications)
- [Gardens Network Grow A Garden](#) web page listing links to dozens of useful publications for Dane County community gardeners
- Dane County UW Extension Horticulture Hotline [608-224-3721](tel:608-224-3721) (M-F, 9 am-12 noon, April 15 – October 31) or horticulture@countyofdane.com