



Organic Lawn and Garden Fact Sheet Series

Healthy Food Gardens

#3

Growing your own food is a great way to save money and the environment. Your ecological footprint (i.e. the impact you have on our planet) is deeply affected by the food you eat. By choosing to consume local food you can reduce your ecological footprint by as much as 40%, and what could be more local than your own backyard? This fact sheet provides tips and tricks to grow your own healthy food garden!

Super Soils

Most food plants are annuals that are harvested or go to seed and die, all within one year. When plants are harvested, the mineral nutrients they have absorbed are removed from the soil so it is necessary to amend food garden soil with mineral nutrients at each planting cycle. Mineral nutrients come in a variety of natural forms:

Compost

Compost improves soil structure, water-holding capacity and the nutrient content of soil. Microbes in the compost increase the availability of mineral nutrients to plant roots and stabilize excess nutrients for future plant growth.

Seaweed

Seaweed provides potassium, a macronutrient essential for cell division.

Cover Crops

Cover crops (aka green manures) provide weed suppression, moisture retention and nutrient regeneration. Green manures are planted in the 'fallow' period between food growing cycles. Nitrogen fixing plant families like peas, beans and clover are excellent choices easily plowed under a month before the planned food crop planting date.

Annual Summer Cover Crops

Buckwheat is a fast growing warm weather plant that pulls phosphorous from the soil and grows a canopy for weed suppression. Plowed under in the fall, buckwheat provides phosphorous for next season's food crop.

Annual Winter Cover Crops

Austrian Field Peas, Cereal Rye and Mustard make excellent cover crops. Mix grains with legumes seed when creating winter cover (85% legumes and 15% grain) for more effective nutrient fixing. (Plant in late summer for best results)

Edible Cover Crops

Cilantro, Arugula and most Oriental Greens are great for winter cover crops as they produce food and help build organic matter and recycle nutrients back into the soil.

Perfect Plantings

Starting Seeds

Timing and temperature are important strategies in seedling production. Most plants germinate at 20°C or more. Good ventilation and an organic, well-draining potting mix are essential for indoor starts. When direct-seeding outdoors, check the soil temperature recommended for the particular variety you are planting.

Choosing What to Grow

Decide the needs of your garden. Do you want a four-season garden? Consider good tasting, vigorous, and disease resistant plants. Local food planning and planting books are an invaluable resource.

Succession Planting

Have seedlings waiting in the wings to plant into areas when earlier crops are harvested. Lettuce is a cooler season plant that can be seeded every two weeks up to the end of August (keep it shaded in summer).

Companion Planting

Plant relationships exist in the food garden;

- ◆ plants assist each other to grow (basil and tomatoes)
- ◆ plants repel insects (rue repels beetles in raspberries)
- ◆ plants repel plants (sunflowers deter grass)
- ◆ combinations that support each other (the Three Sisters - corn, beans and squash)

Crop Rotation

Crop rotation improves soil quality. Avoid pests and diseases and improve your yields by planting different crop families in different areas of your garden using a rotation schedule of four or more years. Each crop family differs in the amount and variety of nutrients taken from the soil and each attracts specific insects and diseases.

Wind and Sun Effects

Windbreaks and shade structures will provide your plants with protection from the stresses of wind and sun. In our maritime climate, wind is a primary culprit, depreciating plant vigor. Plant a native shrub hedgerow or sunflowers,

which will do double-duty as they provide a protective habitat for wildlife.



Raised bed garden

Drainage

Raised beds offer a root-zone heaven. Otherwise, the addition of organic matter can help loosen up your heavy clay soils.

Masterful Maintenance Water Wisely

Soaker hoses deliver the water where it's needed to the roots of your food plants. Early morning watering is most effective. Beware of overhead watering which can cause disease problems such as mildew and does too good a job watering weeds as well as your food plants.

Avoid Stress from Weeds

Weed often. Once every 10 days if possible. What is under the ground is often three times the size as what is above. After creating a new bed wait ten days for weeds to germinate, cultivate these weeds very shallowly, and then plant your seeds or transplants.

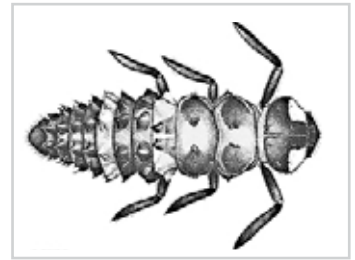
Structure for High Yield Growing

A small greenhouse or 'hoop house' extends your garden's growing season and protects plants from disease. Trellising increases your growing space considerably and provides excellent air circulation, and greater sun exposure for photosynthesis and warmth.

Insect Identification and Control

Most insects are beneficial. Before eradicating any insect from your garden make sure you know what it is. Chances are it could be a ladybug, which looks dramatically

different in the larval stage than it does as an adult! Learn the good from the bad and the life cycles of insects before you take action.



Lady beetle larvae... when good bugs look bad.

Plants like lavender and clover offer flower nectar as a food source for beneficial insects. Good examples of beneficials are the native midge and aphidoletes, whose larva eats aphids. Bees are drawn to the nectar of fruit orchards and unwittingly move pollen from one blossom to another, creating pears and apples in their wake.

Saving Your Own Seed

Plants grown in your own microclimate provide robust acclimatized seeds. Some non-hybrid seeds, such as tomatoes that don't cross-pollinate, are very easy to save and grow. Propagating your crops for next year from seeds saved from your choice plants is a rewarding and resourceful gardening activity.

Observations & Recordkeeping

Be a good steward of your garden by taking a weekly walk to observe your garden beds. Feel the soil. Are your plants receiving proper water? Examine the plant leaves. Are there pests? Is something ready for harvesting? Be sure to read up on the timing of planting and harvesting various food crops for your region.

Keep a journal and learn from your garden's history. Each morning record the weather, the dates of seeding and transplanting, note the plant varieties that seem to work best and add other observations you've made while walking your garden.

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Making a difference...together

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