

## Principles of Organic Growing for the Urban Grower

To most organic growers, growing organically means promoting plant health by developing the health of the soil. Feeding the soil means:

- ✦ constantly renewing the organic material in the soil available to soil life,
- ✦ providing oxygen and water to soil life by promoting good soil aeration
- ✦ monitoring available micro- and macronutrients with an eye to the nutritional demands of the crop being grown

A well-integrated garden should provide much of its own organic material for building humus. Soil development is done without the use of synthetic chemicals, including fertilizers, pesticides and herbicides and with the very judicious use of off-site amendments of any kind.

In addition, the urban grower is concerned with the availability of light and water, air circulation, and the potential impact of toxins in the soil.

Basic Techniques for Growing Healthy Soil in an Urban Setting:

Develop a raised-bed plan:

- ✦ This allows the grower to focus on manageable areas of soil for growing. Place your pathways so as to maximize sun-exposure for the growing beds.

Use a cultivation technique that minimizes disruption of soil life:

- ✦ For the initial preparation of a bed, double-digging may be needed in compacted soils. This technique involves removing and setting aside the top 6" of soil, then spading the soil beneath to a depth of at least 12" -- many gardeners prefer 24". The original top soil is then returned.
- ✦ In subsequent seasons, cultivate using a cultivation fork or harrow (a toothed tool drawn behind a tractor), avoiding compaction of the prepared beds.

Add organic material in a manner that makes nutrients readily available to soil life:

- ✦ In general, all material added to the beds should be well composted. This includes animal manures, leaves, plant clippings and other off-site amendments. A dressing of composted materials can be added heavily in fall after harvest and should be incorporated into spring planting mixes for transplants.
- ✦ Including a cover crop -- a crop grown specifically for incorporation back into the soil -- in the garden plan helps increase organic material, fixes nitrogen (making it available for the succeeding crops) and fosters good soil aeration.

Plan for a diverse garden, including trees and shrubs as well as food and flower crops:

- ✦ Deciduous trees and shrubs provide habitat for birds, aid in soil building by breaking up compacted soils below the depth reached by most annual plants and may provide an additional fruit or nut crop for the garden.
- ✦ Plan the garden plantings to include adjacent crops of differing heights and growing patterns. Low-growing crops minimize wind and water erosion. Taller crops can provide shade for cooler-weather plants below during hot summer months.

Good sources of information on organic growing on urban scales:

- ✦ Coleman, Eliot, Four-Season Harvest, and The New Organic Grower
- ✦ Jeavons, John, How to Grow More Vegetables Than you ever Thought Possible in Less Space than You Can Imagine and Lazy-bed Gardening