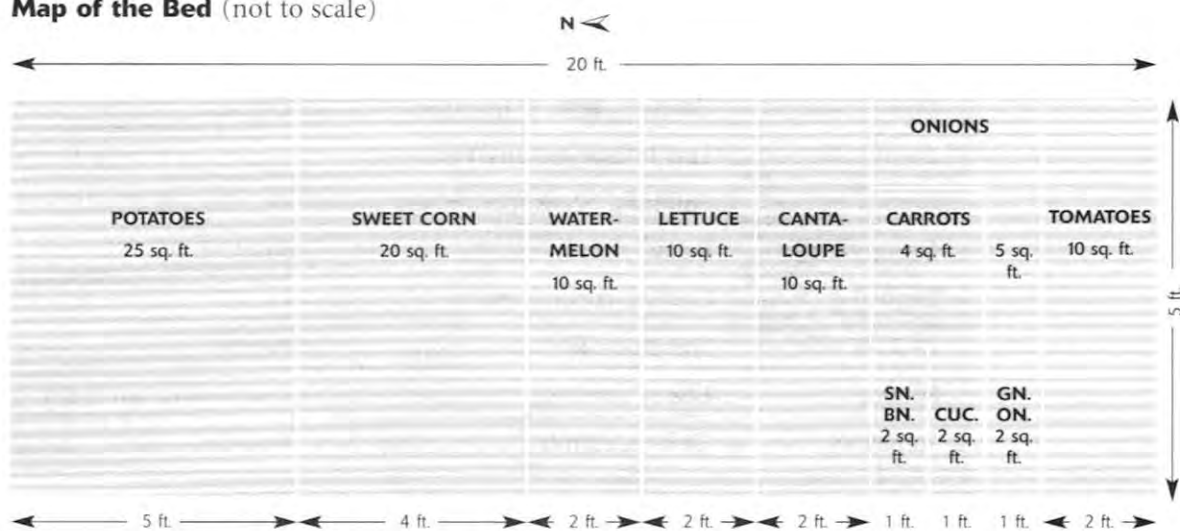


## Chapter 10 Arranging What Goes into a Bed: Companion Planting



Once you have determined the area you want to grow for each crop, you can decide about the placement of the different crops in the bed. You must take into consideration not only such things as sun and shade but also which plants make good neighbors.

### Map of the Bed (not to scale)



A garden mini-ecosystem is part of a larger ecosystem, interacting with sun, shade, warmth, wind, birds, insects, and animals. Nature's ecosystem is varied and balanced, with harmonious, beneficial interrelationships. While our main focus is on growing a healthy soil, an additional goal is to make our garden reflect nature's diversity. Even weeds have a key role to play.

Companion planting involves choosing which crops to put beside each other for the best results, keeping in mind the garden as a whole.



### GOOD NEIGHBORS

Although scientific documentation is scarce, gardeners have observed that some plants do better if they are grown with certain other plants. Since plant roots extend over a much wider area than can be observed with the eye, it is possible that plant roots react to each other underground, stimulating or hindering growth. Experienced gardeners have noticed that the crops proposed here for your first Biointensive bed have the following likes and dislikes when it comes to neighbors. The suggested layout of your Biointensive bed takes these into account (see page 87).

	CLOSE NEIGHBORS	DISTANT NEIGHBORS
Bush Beans	Potatoes, lettuce, tomatoes	Onions
Carrots	Leaf lettuce, onions, tomatoes	-
Corn	Potatoes, beans, cucumbers	-
Cucumbers	Beans, corn	Potatoes
Lettuce	Carrots, cucumbers	-
Onions	Tomatoes, lettuce	Beans
Potatoes	Beans, corn	Cucumbers, tomatoes
Tomatoes	Onions, carrots	Potatoes

### **BENEFICIAL INFLUENCES**

Following are some plants that have been found by experience to be good for the garden in general. They are perennial, so they might be planted at the ends of beds, where they will not get in the way of double-digging. Some of these plants are herbs that can be enjoyed for tea or seasoning; others are weeds that we would do well to encourage in our gardens instead of trying to get rid of:

Lemon balm (tea)	Chamomile (tea)	Oregano (herb)	Marjoram (herb)
Valerian (root is medicinal)		Dandelion	Stinging nettle

### **CROP ROTATION**

For a number of reasons, it is good not to plant the same crop in the same spot year after year. Different plants take different nutrients, and different quantities of nutrients, out of the soil. Planting the same crop in the same place in succession creates soil nutrient deficiencies and also encourages insect and disease problems.

Compost helps replenish soil nutrients, and planting different crops over time will help to maintain the nutrient balance in the soil. Planting a winter compost crop that includes grains, with their extensive root systems, and legumes (beans, vetch, clover, and so on), with their nitrogen-fixing ability, will greatly benefit the soil (see chapter 8).

### **SUN AND SHADE**

It is easy to forget that tiny seedlings can turn into tall plants. A tall plant, such as corn, can be put where it will shade a plant that enjoys less sun, like peas, potatoes, or cucumbers. Sun-loving tomatoes can provide a cooler microclimate for onions or parsley. Notice that the potatoes in the Biointensive bed will be shaded by the corn, and the tomatoes will shade the onions, if the bed is oriented as indicated.



Cool weather crops, like lettuce, carrots, onions, and potatoes, will do well in partial shade in warmer weather.



### **ATTRACTING “GOOD” BUGS**

Bees and butterflies play an important part in the life cycle of plants, so a garden will benefit if it includes their favorite meals. Bees can account for up to one-third of the United States crop yield through the pollination they accomplish. Bees love blue flowers, especially borage and rosemary. Butterflies are attracted to purple, red, yellow, and orange flowers and will beautify your garden along with the flowers you plant to attract them.

Other beneficial insects are attracted to the flowers of parsley, dill, and cilantro/coriander. Try letting a few of those plants go to seed to serve as feeding stations for helpful insects.