Gardens of the Settlers:

An Old-fashioned Garden
Meals of the Settlers

After arriving in North America, the early settlers had to get used to a lot of new foods they had never seen or tasted before. Growing these foods took a lot of practice and effort before they could grow extra food for storage.

Some early settlers brought with them foods like oatmeal, rye, wheat, peas, oil, honey, and vinegar. Some foods available for them to eat were meat, fish, berries, corn, beans, and squash.

Rye and wheat did not grow well in the East coast soil. The settlers substituted flour made from corn in their bread and pudding recipes. Sugar cane did not grow where the settlers lived but the Native Americans taught them to make sugar from Maple tree sap.

When the settlers first moved to North America, they had a difficult time getting used to using different foods. Not everything they brought with them could last or grow there. They were fortunate to have help from the Native Americans.

The following was a typical menu for the settlers:

**Breakfast** (early morning): Cider or beer and cornmeal mush with molasses

**Dinner** (early afternoon): Stew of pork, corn, and cabbage with stale bread

**Supper** (late night): Leftovers from dinner or GRUEL or PORRIDGE

What do you eat for breakfast? _______________________
_______________________________________________
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What plants might the settlers have used to add flavor to their porridge and gruel? Think about what the Native Americans ate.

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The Settlers' Gardens

Some of the early settlers in North America used a gardening method known as a “RAISED garden bed”. Raised beds, as you can imagine, are above ground.

Soil is held in by stones or wooden boards and seeds are planted in the soil the same way they would have been if planted in the ground.

Many people still use this method today. Sometimes they get creative and recycle things like car tires or old bed frames to hold the bed-soil in place.

The early settlers often grew plants like parsnips, collards, carrots, parsley, turnips, spinach, cabbages, sage, thyme, marjoram and onions in their raised garden beds.

1. Think of the objects you have around your house. What could you use as a edge for a raised garden bed?

2. Do raised garden beds have to be in the shape of a rectangle or square? No, they can be just about any shape you like. Be creative and draw your own ideas for shapes:
The benefits of using raised garden beds are:

*Better Soil DRAINAGE - When it rains a lot, the water doesn't flood the garden because it flows down through it into the ground. The plant roots can still get air.

*Less Soil COMPACtion - The garden size can be smaller since there won't be room needed to walk between rows of plants. This helps to keep the soil looser so it doesn't need to be plowed.

*Easier Weed Control - The plants can be grown closer together so there is less room for weeds to grow. This also allows for more produce to grow in that garden.

*Warmer Soil - Raised garden beds warm up sooner in the Spring so the growing season lasts longer, producing more food.

*Less Soil EROSION - The walls around the raised garden bed hold the soil in place so it doesn't wash away when it rains.

IPM, Integrated Pest Management, finds ways to reduce pests, like weeds, that might mean using less pesticides. Look over the benefits of using raised bed in your vegetable garden. Explain how raised beds are good IPM methods.
Raised Bed Gardening

From Cornell Cooperative Extension, Chemung County
More gardening information at www.gardening.cornell.edu

Raised beds aren’t new. They have been used in various forms for many years. Their real value is utilitarian, especially for gardeners with poorly drained soil. But their advantages make them a good choice in many gardening situations.

Anyone who has investigated drainage procedures quickly finds that the amount of effort, time, and expense is substantial. Even you are willing to undertake the task, the most effective drainage path is not always feasible or convenient. Raised beds are often a lower-cost option to provide plants with well-drained soil.

To test a site's drainage, dig a hole 18 inches deep and fill it with water. An hour later there should be little of no water remaining in the test hole. If the water doesn't drain, you have three options: lay drain tile, ameliorate the soil through a process called double-digging, or build raised beds.

Installing drain tile is expensive, time consuming, and not always possible in towns and suburbs. Double-digging is also time-consuming, and digging into heavy soils often results in the "bath tub effect," where water collects in the bed area in even greater amounts than before the digging operation. This can be useful for plants with high moisture requirements (marsh or bog dwellers, for example). But loss of air in the root-zone caused by excess water harmful to most common garden plants. Building beds that raise the level of soil above the surrounding ground helps solve drainage problems.

Gardeners constructing their first raised bed may question any labor-saving claims for this type of gardening. A small, 3-foot by 6-foot raised bed requires a surprising amount of work.

The first step is to decide where the bed will be located. Mark the outer dimensions of the bed with stakes and twine. If you are constructing more than one raised bed, paths between the beds should be large enough to move a wheelbarrow through. Cover bed sites with black plastic or a thick layer of organic mulch for at least a month to smother existing vegetation. If you are in a hurry, you can remove sod by hand or kill it with a herbicide. After killing or removing the vegetation, till or spade soil to a depth of 6 inches.

Raised beds work best when framed. Raised beds without frames tend to require more watering and may erode during periods of heavy rainfall. Framing may be built of stone, brick, rot resistant wood, such as redwood. Do not use wood containing

Advantages of Raised Beds

- Improved soil drainage
- Less soil compaction
- Easier weed control
- Warmer soil temperature in spring
- Ease of access
- Reduced soil erosion
- Beauty

For Teachers and Parents:
creosote or compounds containing pentachlorophenol, which are toxic to plants or humans. 2"x6" or 2"x8" lumber works well, nailed and staked at the corners. Landscape timbers are another good choice. Frames should be at least 6" high and no wider than 4 feet so you can reach the center of the bed from either side. Beds constructed 2 to 3 feet tall can be worked without bending over or while sitting. If the bed is longer than 6 feet, the sides should be staked or fastened together with cable every 4 to 6 feet. Use galvanized nails to prevent rusting.

Once constructed, the frame needs to be filled with soil. Avoid using ordinary garden or topsoil alone as these tend to crust over, settle, and shrink away from the frames. Heavy rainfall may also cause them to compact.

Instead, mix 1 part organic matter (peat moss, compost, etc.) to 1 part sand or perlite to 2 parts soil. Perlite and sand facilitate excess water drainage while organic matter helps keep an even moisture level. Maintaining high levels of organic matter is particularly important in raised beds because they tend to dry out quickly.

As with normal garden soil, raised beds require regular fertilizer and lime application. Conduct a soil test to determine soil needs. Overhead irrigation does not work well on raised beds due to their limited size. For small beds, hand watering works well. Drip irrigation systems work well in larger beds. Mulching raised beds with organic or other mulches helps reduce water loss from the soil.

Give some thought to the paths between beds. A few inches of wood chips can make a luxurious path. However, in a surprisingly short time these paths break down into a wonderful growing media for weeds. While weeds are easily pulled from the loose soil of raised beds, this is usually not the case in compacted pathways. Laying a durable covering on the pathways, such as landscape fabric or even old carpeting, helps control weed growth.

Any plant that is normally planted in the ground can be planted in a raised bed. In addition, raised beds can be used to contain plants that spread aggressively by underground stolons, such as mints. The adaptability of raised beds in terms of size, soil, and location makes them useful for growing a wide array of plants of various cultural needs. It is not advisable to build raised beds around existing trees and shrubs.

If you are willing to invest the time initially required to construct raised beds, the result will be increased control over several important factors essential to good plant growth. These factors include: better drainage, and moisture retention, a loose, open soil which enhances root development, and an area in which to experiment with intensive planting techniques or plants with special requirements. The geometry of grouped raised beds can produce a pleasing, semi-formal effect in the home landscape.

Compiled by Eric de Long
Chemung Co. 11.01, rev. 3.04 C.Mazza

References


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*Easier Weed Control - The plants can be grown closer together so there is less room for weeds to grow. This also allows for more produce to grow in that garden.

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*Less Soil EROSION - The walls around the raised garden bed hold the soil in place so it doesn't wash away when it rains.

Are raised garden beds a form of IPM (Integrated Pest Management)? Explain your answer below.

Yes. By planting the plants closer together, there is less room for weeds to grow. With the plants closer together and raised up, you can garden from the edge, no need to walk through it. Walking through a garden compacts the soil.