



*Agriculture and Life Sciences Institute*

## Home Vegetable Garden Guide

Grow your own vegetables at home!



## The New Victory Garden

Today, our food travels an average of 1,500 miles from farm to table. The process of planting, fertilizing, processing, packaging and transporting our food requires a great deal of energy and contributes to the cause of global warming. Instead of traveling miles from farm to table, imagine if your food only had to travel from your garden to your table. That is one of the many reasons why more people are starting a garden at home.

This brochure was written by Monroe Community College (Rochester, N.Y.) business administration students and made possible from a grant by MCC's Agriculture and Life Sciences Institute. By applying the historical "victory garden" concept to today's urban and suburban settings, this brochure was designed to be a useful resource to the citizens of Monroe County who desire a more sustainable and self-sufficient lifestyle. It also helps to promote GROW Monroe, a local initiative that promotes the benefits of buying local produce and agricultural products grown and harvested in Monroe County.

This work applies the historical Victory Garden idea to today's urban and suburban settings.



The White House Garden, an initiative of First Lady Michelle Obama.

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## The Victory Garden Tradition

The “victory garden” was an idea that sprouted during World War I when food supplies in many countries were running low. During the war, a large amount of food produced by the United States was shipped to feed our soldiers in the field; the amount remaining in the country continued to decrease.

The U.S. government attempted to cut off potential food shortages due to the loss of male farmers and overwhelmed transportation systems. President Woodrow Wilson asked citizens to take up their pitchforks and produce their own food at home in what would be known as “victory gardens.”

The idea spread through the country; an estimated 3 million gardens were started in the early years of the war and more than 5 million were started by 1918.



Even school children joined the effort by enlisting in U.S. School Garden Army. The USSGA did its part, helping supply food to our soldiers and instilling in themselves a sense of duty and patriotism that would stay with them as they grew older. Their efforts helped to win the war, kept our soldiers fed and promoted a sense of patriotism.

By the end of the war it was estimated that victory gardens produced the meat ration for 1 million men for 302 days and the bread ration for 248 days. The net worth of the food produced was valued at close to \$525 million. Victory gardens were reestablished in World War II. Once the wars ended, so did our reliance on victory gardens.



## Today's Garden Movement: Urban Homesteading

Today's garden movement is inspired by the victory or "freedom" gardens of the past. Freedom in terms of patriotic rights as well as freedom from manufactured food and fuel needed to deliver food to consumers' tables.

The most recent, public example of the garden movement is First Lady Michelle Obama's White House Garden. In 2009, First Lady Obama and two dozen students broke ground for a garden on the White House's South Lawn. Vegetables grown in this garden are cooked in the White House kitchen and donated to Miriam's Kitchen to feed the homeless of Washington, D.C.



### USDA People's Garden Initiative

Led by the U.S. Department of Agriculture, the effort to create gardens nationwide, referred to as "Urban Homesteading," helps our country during challenging economic times. It enables citizens to be more self sufficient, save money and resources and experience a sense of empowerment when people control their own food.

### Does Urban Homesteading Really Work?

The answer is YES! A family from Pasadena, California has been on the "path to freedom" through urban homesteading since 1973. For more information about the Dervaes family and how they are leading the urban homesteading movement, visit [homegrownproductions.org](http://homegrownproductions.org).





## Garden Budgeting

A budget is a plan of all expenses and revenues. A budget may be designed for a specific project, like a garden. It is a guide to help plan and save money.

One of the first things to consider are your estimated start-up costs. Determine the size and the tools needed for your garden in order to establish your initial budget. Next, identify what vegetables you would like to grow and seeds you need to plant.

The following is an example:

### 12' x 16' Garden Budget:

Materials Needed	Amount Budgeted
Composter	\$250
Water Barrel	\$100
Weed Barrier	\$25
Tools	\$150
Seeds	\$50
TOTAL	\$575

***Helpful hint:***

**Tools you already own will reduce your start-up costs!**



## Tools\*

**Garden Bedding/Weed Barrier:**  
Prevents weeds from growing.  
*Estimated Price: \$11*



**A Worm Bin or Compost Tumbler:** Help reduce fertilizer costs. *Estimated Price: \$100-\$190*



**Water Barrel: 40 gallon rain barrel.** Cuts down on water.  
*Estimated Price: \$100*



**Drip Hose: Minimizes water waste.** *Estimated Price: \$11*



**Hand Tools: For cultivating the garden.** *Estimated Price: \$14*



**Shovel Set: For preparing garden plot for planting.**  
*Estimated Price: \$100*



**Baskets: For transporting vegetables from garden**  
*Price: \$60*

*\* Prices based on Amazon.com and Home Depot.*



## Seeds

Sample prices from [www.harriseseeds.com](http://www.harriseseeds.com)

Seed	Price	Quantity
<b>Romaine Lettuce</b>	\$2.10	Packet
<b>Cucumber</b>	\$2.90	Packet
<b>Butternut Squash</b>	\$8.75	250 Seeds
<b>Beefsteak Tomato</b>	\$3.40	Packet
<b>Garlic Bulbs</b>	\$8.95	Each

Sample prices from [www.harriseseeds.com](http://www.harriseseeds.com)

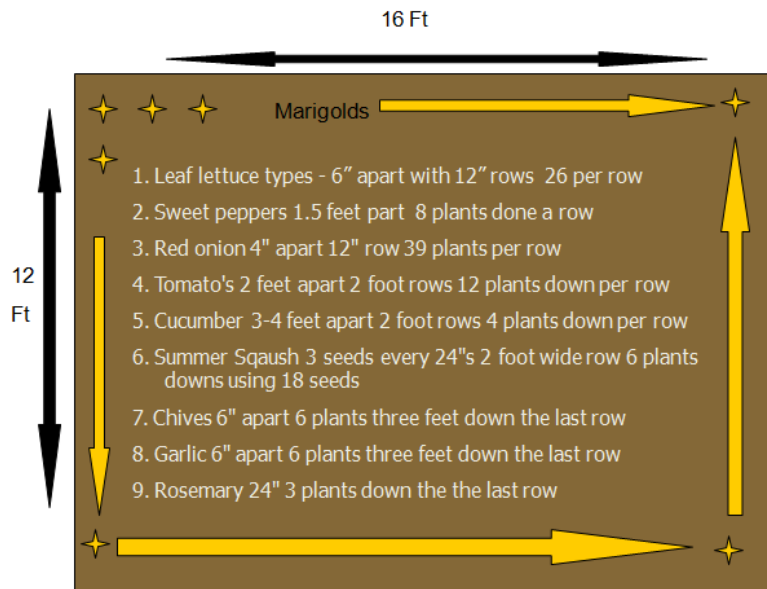
Seed	Price	Quantity
<b>Red Onion</b>	\$2.75	Packet
<b>Chives</b>	\$2.10	Packet
<b>Rosemary</b>	\$4.25	Packet
<b>Marigolds</b>	\$8.75	250 Seeds



### Actual Versus Planned Budget: How Well Did You Do?

Materials	Amount Budgeted	Actual Amount Spent
Composter	\$250	\$189.99
Water Barrel	\$100	\$99.99
Weed Barrier	\$25	\$29.21
Tools	\$150	185.09
Seeds	\$50	\$43.95
<b>TOTAL</b>	<b>\$575</b>	<b>\$548.23</b>

### Garden Layout Example:





## Watch the savings add up!

A family of four spends an average of \$4 per day on vegetables for an entire year. When the family grows and eats vegetables from a home garden, the annual savings can be significant and contribute to the family budget.

### Calculating Projected Annual Cost Savings

\$4 per day spent on vegetables for 365 days = \$1,460

Annual Spending on Vegetables:	\$1,460
Less Gardening Expenses	<u>\$548</u>
<b>Projected Annual Savings</b>	<b>\$ 912</b>

Your annual savings will increase in subsequent years as the cost for tools will not be repeated, therefore, increasing your saving even more!

*Start planning your garden today. It makes sense to harvest homegrown vegetables!*





## Urban Homesteading and Local Laws

### Animal Laws

The basis for most animal laws is for local governments to ensure public safety and welfare of the community regarding domestic and farm animals. Animal laws may restrict or regulate the keeping of animals within a municipality. Regulations are usually contained in animal laws, zoning codes or other statutory provisions which may require permits and/or licensing. Often these regulations set forth conditions for keeping domestic and farm animals.



### Fence Laws

- Vary from municipality to municipality
- Municipalities can and often restrict the placement, height and the type of fence (chain link, electric etc...)
- Fines or lawsuits can be levied if a violation occurs
- Under special circumstances a variance and or permit may be obtained for a fence that exceeds the height limit

**Greenhouses:** Are buildings with polycarbonate or glass walls where plants are grown in controlled conditions. Sizes and permitting vary by municipality and zoning code.

**High Tunnels:** A high tunnel is a temporary structure and characterized as a solar heated greenhouse with no electrical or automated ventilation. The structure helps accelerate growth or extend the crop production season for many horticulture crops. Ideally, the site would have a southern exposure and provide access to water for irrigation. More so, the site should have sufficient area to accommodate the movement of the structure at least once.



**Cold Frames:** Smallest and simplest greenhouse environment, usually made with polycarbonate panels. Cold frames are not intended to grow exotic and delicate plants year around.

**Grow Racks:** Larger than cold frames typically with vinyl covers and zippers or Velcro for air flow adjustment.

**Equipment:** Equipment-related permits are usually not required; however, the time of operation may be restricted.

**Livestock and Poultry:** Check with your municipality for specific regulations regarding the keeping of livestock. Depending on zoning some municipalities may not allow home residents to keep livestock or poultry without a permit.

**A municipality may require:**

- A minimum acreage to keep livestock
- Livestock and poultry be confined within a fenced-in area
- Poultry to be kept in coops
- Livestock sheltered in a building with four walls and a roof
- Buildings or related structures to have a minimum set back from a property line
- A nutrient and/or manure management plan





## Planning Your Garden

Careful planning will save you time, money and frustration in the future. Start by identifying the right location for your garden. Determine the ideal environmental conditions for plants to thrive and estimate planting and harvest dates on a schedule for you to enjoy.

Soil fertility and preparation will be key. Tilling will be necessary to account for weeds, insects and disease concerns and to provide an optimal bed for seeds and transplants. Soil fertility and pH kits are available at garden retail stores and Cooperative Extension. Soil amendments are available to improve soils.

- **Sunlight:** Choose the location of garden based on the sunlight your plants require versus the physical appearance of the garden within your yard. Ideally, your site should receive at least 6 hours of sunlight per day, as it will warm the air and the soil. Remove or trim any trees that block sunlight from your garden.
- **Soil type:** Select a site that is well-drained and rich in organic matter.
- **Water:** Water is essential for plant growth. Locate your garden near a water source.
- **Convenience:** Selecting a convenient location will make it easier for you to maintain and monitor your garden to weed, water, and harvest vegetables.
- **Pest/Disease Control:** Bio-controls are available; including organic sprays and beneficial pests such as lady bugs and predatory wasps.
- **Garden size:** Consider the number of family members to determine the size of your garden. The more appetites to satisfy, the larger the garden!
- **Variety Selection:** Select vegetables that grow well in your area. Check seed packets for preferred growing seasons, days of maturity and planting depth.





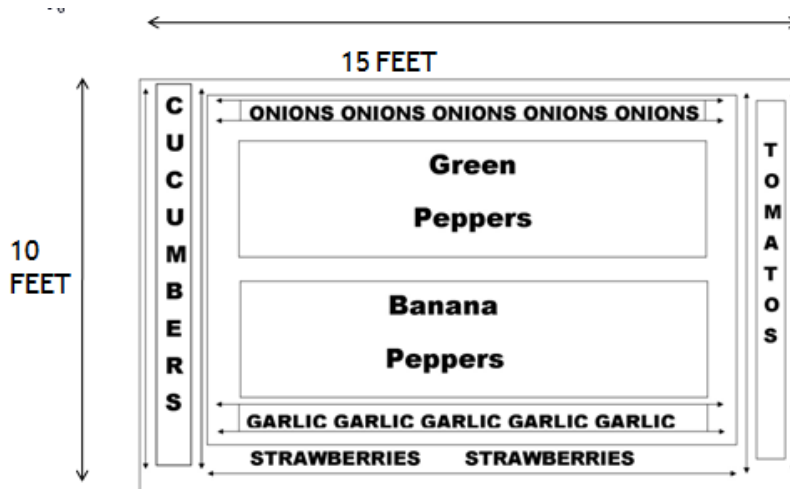
## Planting Seasons for Vegetables and Plants

Vegetables and plants grow in specific planting seasons; not all plants or seeds require planting in the spring. Read seed or plant instructions carefully in order to determine the ideal time and weather in which to plant. For example:

- Strawberries are best planted in the spring as soon as the soil is dry enough, or in late fall.
- Peppers are best started from seeds indoors in late winter and transplanted after the soil and air have warmed.
- Garlic is best planted in the fall.

**Plan your garden on paper.** Make a list of vegetables you want to grow. The list will help outline your garden to scale. Divide and label your garden into sections by plant family.

**Mulching:** In colder climates, mulching over strawberry plants will prevent injury to the crowns when the temperature drops below 20° F. Straw and pine needle coverings work well, too!





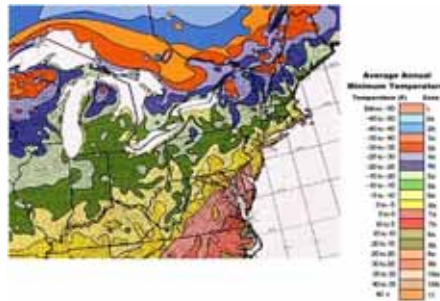
## The Western New York Climate

It is important to understand the difference between climate and weather.

**Climate** looks at the averages of precipitation, temperature, humidity, sunshine, wind, conditions like fog, frost and hail storms, and other measures of the weather that occur over a **long** period in a particular place.

**Weather** is determined by atmospheric conditions over a **short** period of time.

As seasons change, so does the weather. In western New York, temperatures fluctuate from 90° F in the summer to below zero in the winter.



When choosing your vegetables, consider the **Plant Hardiness Zone**. Monroe County falls in **Zone 6a**—average annual minimum temperature –5 to -10° F. Refer to the U.S. National Arboretum site for more information: [www.usna.usda.gov/Hardzone](http://www.usna.usda.gov/Hardzone).

Regardless of dramatic climate changes, you will find a wide variety of fruits and vegetable plants that can be successfully grown in our climate.





## Seed Savings

Seed savings are the primary way to transition plants from generation to generation. Seed saving is not only fun, it is an important way to perpetuate heirloom plants and ensure the genetic diversity of the world's food crops.

Seeds are generally saved from annual, biannual and perennial plants. Plants will need to be grown to maturity, so leave extra room between plants. Saving and growing seeds year after year will result in a cost savings and a way to duplicate the delectable harvest. Visit [www.virtualeeds.com](http://www.virtualeeds.com) for more information.



Gardeners maintain the diversity of the world's herbs and plants—a diversity that also brings abundant photochemical activity to our environment. Photochemical relates to the chemical reaction initiated by the absorption of energy in the form of light.

## Getting Started

Choose your original seeds carefully. Harvest extra plants and vegetables to save seeds. Remove seeds when they are raw and fresh. Wash any flesh off and spread to dry. Make packages with labels to save seeds, so you can identify next year when it is time to plant. Store in a cool, dry place for the winter.

## Support GROW Monroe!

The **GROW Monroe** program promotes the benefits of buying local and the wide variety of fresh produce and other agricultural products that can be found in Monroe County.

### Buying local benefits:

- **Individuals** who choose to buy local produce purchase fresh-from-the field products, grown by people they can get to know and trust.
- Our **environment** because products do not need to be shipped hundreds or even thousands of miles, reducing drastically the products' carbon footprint.
- Our **economy** because our money stays in Monroe County—that is good for all of us!

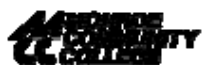


All of this is accomplished while supporting Monroe County farmers and growers who offer highly desirable local products. Each purchase allows them to grow their business and preserve the farming heritage so many of us cherish.

### Careers in Agriculture

The study of agriculture involves a lot more than farming. It includes management, engineering, biology, economics, renewable energy, and food science, to name just a few areas.

**For more information about careers in agriculture, contact MCC's Admissions Office at 585-292-2200 or visit [www.monroecc.edu/go/agriculture](http://www.monroecc.edu/go/agriculture).**



Notes:



**Notes:**

Enjoy the most **delicious** food and  **freshest** products grown and produced right here in **Monroe County**.

**grow**<sup>TM</sup>  
**monroe**  
eat fresh. buy local.



**Sweet Corn**

July 15-October

**Snap Beans**

July-October

**Peaches**

July-September

**Leafy Vegetables**

May-September



Find local produce vendors by visiting:

**growmonroe.org**

For more information call:

**585.292.2065**

Sponsored by Monroe County and the  
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**MONROE  
COMMUNITY  
COLLEGE**

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