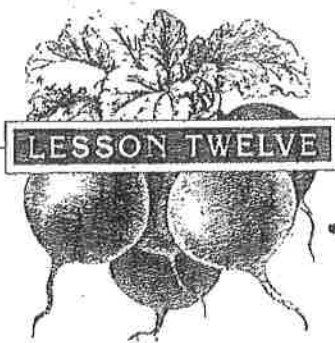


Harvesting Your Garden and Fall Clean-up



What's Ahead

In this lesson, you'll learn:

- when and how to harvest specific crops;
- how to use home storage to get the most from your garden; and
- what to do this fall so your garden is ready next spring.

Gardeners work towards one major goal — harvesting the fruits of their labor. Harvesting vegetables at the right time and in the right way is important for the best flavor and nutrition. The guideline is to harvest early and harvest often.

Harvest Stages

Harvest broccoli, peas and lettuce in their immature stage, when they are small and tender. Tomatoes, peppers and melons need to mature fully on the plant before you pick them. Prompt harvesting will often prolong production; the more you harvest, the more fruit you get. Produce harvested at peak maturity has better flavor and higher nutritional value than supermarket produce.

Timing the Harvest

Here are some tips for a high-quality harvest.

- Pick the produce before the heat of the day.
- Let plants dry before harvesting produce.
- Pick crops on a mild, cloudy day with no exposure to sun.
- Harvest greens (spinach, lettuce, Swiss chard) the same day you plan to use them.
- Refrigerate high moisture vegetables (corn, carrots, beets and leafy greens) immediately.

- Pick potatoes, onions, and winter squash before a hard frost. Their keeping qualities are enhanced with a curing period.

Harvesting Methods

Leafy crops: Harvest lettuce or chard as soon as it's big enough. Young leaves are more tender and tasty. Plants (except Swiss chard) can be pulled, leaving space for the others to grow. Cut chard, and take the whole top. The plant will soon generate a new crop.

Onions can be pulled when young with or without the bulbs. Green onions or scallions are particularly tasty when young; they're good in salads.

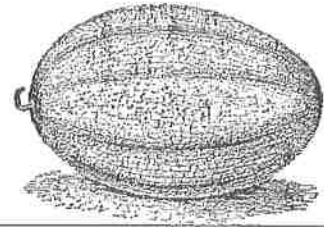
Onion bulbs are harvested after the bases enlarge and the tops start to die back. Pull them and lay them in the sun to dry. When the tops have shriveled back, they can be trimmed off. Never cut off green tops. This may cause disease infections to enter the bulb.

Beets: Trimming tops off of harvested beets with a knife does two things. It gives you some beet greens to cook and makes the beets easier to store. Air dry root crops so surface roots shrivel before storage.

Zucchini, summer squash: Harvest while very young. Keep on picking off the fruits as they ripen so the plants will keep yielding. One plant can supply fruit all summer long.

Butternut and winter squash: Leave them on the vine until skins have hardened. Then cut them off, leaving some stem attached to the squash. This helps prevent rot (disease) and breakdown in storage.

KEY POINT 1:
Consider both the age
of the fruit and the
weather when you
harvest.



Sweet corn: Pick in the cool of the day and rush to the pot. Most sweet corn, like peas, loses its sweet sugar content quickly.

Be a Weather Watcher

Vegetables will produce well into the fall if you care for them. The smart gardener watches the weather and listens to weather reports.

You can increase your garden's yields by simply covering plants on nights when frost is expected. Have a supply of garden covers on hand: old bed sheets, plastic tarps, burlap, cardboard boxes and garbage bags. Frost typically occurs on clear, windless nights.

Storing Your Harvest

Our ancestors stored most fruits and vegetables and used cold weather for refrigeration. Home storage can increase your self-sufficiency beyond the growing season. Storage does not require expensive equipment, but it does require an awareness of food characteristics, some materials and maintenance.

Storage is easy to do, since no processing is involved. However, it is only useful for certain fruits and vegetables for varying lengths of time. Take into account storage life when you plan how much of a crop to store. (See chart on right.)

Storage has few hidden dangers. Since you are dealing with the whole vegetable, you know by look, smell, and feel if the food is spoiled. Molds may be dangerous; don't taste potentially spoiled foods.

You can store produce on a small scale with little investment. Many of the materials used

for packing and insulating produce can be recycled as mulch in next year's garden.

For large-scale storage, you'll need to build a storage room in a basement room or an exterior root cellar. The cost is approximately equivalent to the cost of a freezer. Once it's built, however, the storage room won't cost much and needs little labor.

Crops held in storage are living plant parts that are made nearly dormant by their environment. Stored produce is subject to respiration, breakdown and decay, just as it was before storage.

Crops should be as free as possible from skin breaks, bruises or decay. Bruises and skin

Vegetables: Average Storage Life

Vegetable	Average Storage Life
Beets	1 to 3 months
Brussels sprouts	3 to 5 weeks
Cabbage	3 to 4 months
Carrots	4 to 6 months
Cauliflower	2 to 4 weeks
Chinese cabbage	1 to 2 months
Dry beans	1 year
Garlic	6 to 7 months
Kohlrabi	2 to 4 weeks
Onion	5 to 8 months
Parsnips	2 to 6 months
Peppers	8 to 10 days
Potatoes	5 to 8 months
Pumpkins	2 to 3 months
Rutabaga	2 to 4 months
Tomatoes	2 to 6 weeks
Turnips	4 to 5 months
Winter squash	3 to 6 months

Lesson 12 Harvesting Your Garden and Fall Clean-up

▶ KEY POINT 2:

Produce harvested at peak maturity has better flavor and nutritional value than supermarket produce.

breaks are the main way decay organisms enter the fruit. They also greatly increase moisture loss. One diseased or damaged fruit can start decay that will rapidly spread to other stored food or taint flavors with mustiness. Store only products of excellent quality; then you won't need to remove the "one rotten apple in the barrel."

End of Season Cleanup and Care

Clean your garden. As crops are harvested and plants become unproductive, remove all debris from the garden. This practice not only makes the garden site neater, it removes disease and insect pests that could return to haunt you next year. Compost debris if you have a pile with high heat. The compost process will kill weed seeds and disease organisms. Remove diseased materials from your property.

Plant a winter cover crop when the garden is cleared. Cover crops protect the soil from erosion, add organic matter, use any excess nutrients and return them to the soil when the crop is tilled in in spring.

Two winter cover crops that do well in Maine are winter rye and oats. Sow in mid-September at the rate of 2.5 pounds for every 1,000 square feet. Winter rye will grow in the fall and become green next spring. Some gardeners use a lawn mower in the spring to cut the winter rye before tilling it under. Oats will grow until there's a killing frost. Then it will mat on the ground in a thick brown carpet of dead plant material, which is easily tilled under in the spring.

Add organic matter. Fall is the easiest time to add organic matter to your garden soil. The soil

is generally drier and easier to work. Compost or manure is often used. If you use animal manures, be sure that the material is aged or at least partially decomposed. Fresh manure can cause weed problems. Many gardeners devise a system to compost manure on the site.

Till in organic matter as soon after application as possible. This practice captures nutrients in the soil, especially nitrogen. You can apply manure and sow a winter cover in the same season.

Protect the soil from erosion. Smart gardeners prevent soil erosion because it can compromise soil fertility. A cover crop is your best insurance. If you can't sow a cover crop, at least cover the soil with four to six inches of organic material (straw, shredded leaves). This material can be raked off next year and used for walkways or tilled into the soil for enrichment.

Test your soil. Test soil at least once every three years. These tests will help you monitor nutrient levels and soil acidity. If you test in late summer or fall, you can raise or lower soil pH by adding lime or sulfur (respectively). This will save you time and money. Test kits are available from your county Extension office.

Take notes. Record your garden successes and failures. What worked? What didn't grow well? What pests were a problem? Make notes of what you want to try next year, and list the problems that need solving. Talk with other gardeners regarding your garden's performance. Every gardener has problems. Learn from each other. Set gardening goals for next year, and start working toward them. (See page 69.)



Garden Pest Records

Season:

One of the best ways to learn from your garden is to keep records each year.

What went right this year? Consider vegetable crops, pest control, weed measures, etc.

What went wrong this year? Consider crop failures, problem pests, weeds, etc.

Use a chart like this to record your pests that you encountered and to track your success.

Insect	Date	Crops affected	Control measures, results

Disease	Date	Crops affected	Control measures, results

Animal Pest	Date	Crops affected	Control measures, results

Weeds	Date	Crops affected	Control measures, results

Lesson 12

Harvesting Your Garden and Fall Clean-up

Store tools, equipment and seeds. A key year-end task is cleaning and repairing garden tools and equipment. Clean and sharpen small tools before storing them. A light layer of oil on trowels, shovels, hoes and other tools will provide rust protection. Winterize engines on power equipment as suggested by the manufacturer. Clean and dry sprayers and dusters so water does not stand in them over the winter. *Lock up pesticides in a dry place where they won't freeze.*

Store extra seeds in a cool, dry location. A glass jar makes an excellent storage container for seed packages.

Summary

Now that you've learned some harvest, storage and clean-up techniques, answer the **Study Questions**. Try a **Study Activity** to further your knowledge. In the back of this booklet, you'll find the **Smart Gardener Review**. If you complete this review and return it, we'll send you a Smart Gardener completion certificate.

Study Questions

1. List the activities the smart gardener needs to do at the end of the growing season.
2. What harvesting methods would you use for

onion bulbs, sweet corn, summer squash and Swiss chard?

3. What factors should you consider when harvesting vegetables?

(See answers on the bottom of this page.)

Study Activities

Store It List

Request a copy of "Home Storage of Fruits and Vegetables," Bulletin #1058, from your county Extension office. Make a list of ways to store the crops you plan to keep.

Root Cellar Know-How

Design a root cellar that meets your needs. First decide the kinds and amount of vegetables you'll be storing. The temperature the vegetables need to be stored at will determine the type of storage you make.

Seed Savers

Use the Saving Seeds fact sheet (on next page) to collect and store seeds for next year's garden.

Other Resources

Check with your county Extension office for more information on freezing, canning and storing your crop.

Study Question Answers

1. Clean the garden; add organic matter; protect the soil from erosion; test the soil; take notes; store tools, equipment and seeds.
2. Onion bulbs: Harvest when bulbs enlarge and tops die back. Lay them in sun to dry. Trim tops when they have shiveled back. Sweet corn: Pick in cool weather and cook as soon as possible. Summer Squash: Harvest young and often. Swiss Chard: Cut and take the whole top. Harvest young.
3. Age of fruit, weather.

SMART GARDENER

SAVING SEEDS FACT SHEET

Home gardeners can successfully save many seeds from their flower and vegetable plants. Save seed only from open-pollinated varieties. Seed from hybrid varieties will not produce flowers or vegetables that are true to their parents.

Seeds collected from mature plants should be cleaned if from fleshy fruits (i.e., tomatoes, cucumbers, etc.) and dried properly before storing. Be sure to label seeds by variety and date that they were collected.

The length of time seeds remain viable depends on the variety, but mostly on conditions under which the seed was grown, and under which it is stored. Store seeds in a cool, dry place in air-tight containers.

Many annual flower seeds keep their viability two-three years if stored under normal conditions. Many vegetable seeds can be kept up to 10 years (beets, cucumber, radish).

Flower and vegetable seeds that have been packaged by reliable firms, have the percent germination and year stamped on the outside of the package.

Compiled by: Donna Lamb, Extension Educator

How Long Will Seeds Last?

Kind of Vegetable	Years	Kind of Vegetable	Years
Beans	3	Onion	1
Beet	4	Parsley	2
Brussels sprouts	4	Parsnip	1
Cabbage	4	Peas	3
Carrot	3	Pepper	3
Cauliflower	4	Pumpkin	4
Celery	5	Radish	4
Cucumber	5	Rutabaga	4
Eggplant	5	Spinach	4
Endive	5	Squash	4
Kale	4	Sweet corn	1
Lettuce	5	Tomato	3
Muskmelon	5	Turnip	4
		Watermelon	5

* When stored under favorable conditions, seed of the age indicated (from harvest, not from time of purchase) should be viable. Seed is often good much longer, but specific lots may not survive as long.

Smart Gardener Notes

