Lesson Nine: Let’s Celebrate Our Garden Harvest!
For May/June

“Harvest Celebration” from EATING FROM THE GARDEN, University of Missouri Extension. How do you know when a crop is ready to harvest? What are the consequences of harvesting too early or too late? Where should picked vegetables be stored to retain their freshness? Students will learn about harvesting vegetables from the garden. Did students start Action projects? They can finish them up and report on the projects after the garden is harvested.

Content objectives: Describe the importance of eating fruits and vegetables; Review where the fruits and vegetables are grown the plant and which season to plant them; Recognize when plants are ready for harvest.

Life Skill objectives: Healthy lifestyle choices, Critical thinking, Communication, Citizenship, Leadership, Decision making, Problem solving

Core and STEM concepts and skills:
Science Science as inquiry, Earth and space, Life science
Math Operations and algebraic thinking, Numbers, Measurement and data, Geometry, Mathematical practices
Language Arts Reading for information, Vocabulary, Speaking, Listening, Viewing

Healthy snack: Select recipes from past lessons that contain the vegetables you harvest from the garden.

Additional and supporting resources: Cooperative Extension Master Gardener’s Program can be a resource for garden information.
LESSON PLANS FOR 2012-13 SCHOOL YEAR, GRADE 5-6

May/June: Let’s celebrate our garden harvest!

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<td>Garden Journal: See the Before section of the Lesson Plan</td>
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<td>Recipe: Choose from previous recipes</td>
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BEFORE THE LESSON

1. Grade 5-6, May/June: Let’s Celebrate Our Garden Harvest! 2012-13 School Year
This document contains the lesson plans and resources for this lesson. There are two additional files, Jeopardy Set Up (pdf) and Jeopardy (powerpoint) for this lesson. All lesson downloads are located on the www.peoplesgarden.wsu.edu Educational Toolkit. Please read through everything well in advance of delivering this lesson.

2. Harvesting Resources
Food Safety Tips for School Gardens, excerpted from United States Department of Agriculture
Harvesting and Storing Vegetables, Iowa State University Extension and Outreach
Please read and use these resources as guides to tell you when and how to harvest the crops from your school garden. If the students and their families have a garden or would like to start a garden, you may copy these resources to send home with the students. Please continue with your gardening through the end of the school year. Work with your Extension Educator to finalize plans for the garden during the summer, and make plans for next year.

3. Garden Journal
Have students complete any items for their garden journal.

4. Recipe: Select a recipe based on the items available to harvest. Refer to recipes from precious lessons. Gather everything you need for the selected recipe.

THE LESSON
You may want to spread your Harvest Celebration over several days.
Overview:
1. Eating from the Harvest Jeopardy: This is an opportunity to review both nutrition and gardening concepts in a fun session.
2. Harvest vegetables from the garden.
3. Prepare the garden vegetables to sample in class.
4. Getting the garden ready for the summer. This can include putting the garden to bed if there will not be any summer gardening.
5. Optional: Harvest Party. Consider inviting guests to your Harvest Celebration. Have students brainstorm who to invite, and what to show them. If parents or other school administrators are attending, they can participate in the lesson by joining in the song, helping students prepare the salad, and tasting the recipe. Consider offering a garden tour.

AFTER THE LESSON
If the garden will not be tended over the summer, make plans to put the garden to bed before the end of the school year.
Harvesting is one of the nicest chores of the season. If you follow a few important, but easy tips, you will get the most of your crops. Some crops (e.g. carrots) only provide one harvest, while other crops (e.g. lettuce) can provide multiple harvests. If possible, harvest early in the morning, after the dew dries, but before the heat of the day.

LEAFY GREENS – Lettuce & the Brassica Family (including Spinach, Kale, Chard, Collards, Asian Greens, Mustards)
To harvest at peak flavor and freshness, harvest young greens when they are just a few inches long. At this stage all greens are tender and delicious eaten raw in a salad. These are called “baby greens”. Pick the largest, outside, leaves first while leaving the smaller and younger inside leaves for harvesting in a week or two. If possible, eat your greens the same day you pick them. Larger leaves, 6-12” long, are less tender and are best for cooking. Remember that greens cook down; plan about 6 cups of greens for 4 usual servings. Always wash garden greens carefully before eating or cooking to remove dirt and small insects.

Tip: Snip (with scissors or skilled fingers) the greens about ½-1” above the base of the plant to encourage new growth. Harvesting this way will allow you to get 3-5 cuttings of lettuce and spinach and even more from kale, chard and other hardier greens.

Note on Lettuce: If you planted head lettuce and prefer to harvest an entire head, wait until the entire lettuce plant is about softball - melon size and looks like the shape of head lettuce, as you know it. Don’t wait too long though - Growing head lettuce rather than harvesting baby greens often allows more time for pests and diseases to attack the crop.

Simple Greens Recipe
- Wash and dry greens and cut larger leaves into pieces about 3 inches long.
- Heat a bit of olive oil in pan with a clove of chopped garlic or a few tablespoons of chopped onion. Cook 2-3 minutes.
- Add greens and a dash of water. You may keep the greens plain or drizzle with a dash of soy sauce or balsamic vinegar. Cook 3-4 minutes until softened.
- Remove from heat, place into bowl. Sprinkle with slivered almonds, sunflowers seeds and dried cranberries, or chives chopped chives from your garden. Serve cold or warm.

LEGUMES – Peas, Snow Peas, Beans
Harvest peas with 2 hands, holding the vine with one hand while snipping the entire pod off the vine with your other hand. Harvest when fully mature, about2” long for peas and 4” long for beans, depending on the variety planted. Harvesting encourages new growth, so be sure to pick off over-ripe pods you may have missed earlier on. Continue to harvest from the same vines as the legume ripens.
Peas and young beans can be eaten raw, added to salads, or lightly steamed or sautéed.

**CUCUMBERS & SQUASH (CUCURBIT FAMILY)**

Harvest cucumbers as they ripen to the desired size. For pickling, fruits should be 4 to 5 inches long, for eating fresh; most varieties grow to 7-8 inches long. Cucumbers will develop a bitter taste if they are allowed to over-ripen. (Note: Some varieties such as European or Dutch cucumbers can grow much longer. This is another reason why clear labeling of the plants in the ground is useful.)

To ensure cucumber vines continue to produce heavily all season long, it’s best to harvest daily to prevent them from becoming overgrown.

Even though huge zucchini squash are impressive, they will be more flavorful if they are picked when they are smaller.

*Tip:* Use a sharp knife or pair of scissors when harvesting, and leave a short length of stem on each fruit.

**ROOTS—Carrot, Beets, Radish, Potato**

It can be difficult to determine if root crops are full grown and ready to harvest because they grow underneath the soil. You may recall, most seed packets will tell you how many “Days to Harvest.” This is the number of days it takes from planting to harvesting. If you can keep track of when you planted the seeds (maybe you wrote it down in the garden journal or it’s listed on the label that next to the plant in the ground), you’ll know about when they are ready. That said visual clues are always helpful. Roots start to lift themselves up out of the ground a bit as they develop. You’ll see radishes, beets and carrots creep a bit (< 1/4 inch) above the soil giving you a clue about how wide they are getting.

*Tip:* Radishes and beets are easy to pull out of the ground whole. Carrots often break off, leaving half of that sweet orange snack for the worms. To harvest them whole, use a digging fork to loosen the soil around the root and pull it out at the base of the greens. For radishes and beets, grab the plant right at the base of the stem, loosen the root a bit by rocking it back and forth, and then pull. If the whole thing does not come up, gently use a digging fork as you would for carrots.

For potatoes, you can start gently digging for new potatoes once the plants start to bloom. Wash and cook new potatoes immediately, as they do not store well at all. If you are planning to harvest potatoes to store for a while, wait until the tops of the plants start to yellow and die back. Then gently dig around the perimeter of the plant and dig up the tubers. If you are
planning on storing them, don’t wash them! Let them sit out in a cool place for a few days to cure, then gently rub off any dirt, and store in a cool, dark place.

**FRUITS – Strawberries, Tomatoes, Peppers, Eggplant**
Similar to cucurbits, fruits like to be harvested when ripe and harvesting regularly encourages new production. Use a scissors or be very careful to snip eggplant and peppers from the stem without damaging the fruit. Leaving a small stem on the harvested fruit will help keep it ripe and ensure you don’t bruise it when harvested. Carefully pick tomatoes from the plant. For strawberries, grasp the stem just above the berry between the forefinger and the thumbnail and pull with a slight twisting motion. Carefully place the fruit into your containers.

**HERBS – Basil, parsley, mint, cilantro, oregano, rosemary, tarragon, sage, chives, lavender, thyme & more.**
Herbs are grown for their leaves, flower, roots or seed. Most commonly, culinary herbs are grown for their leaves and should be harvested before they flower. Flowering can cause the foliage to develop a bitter flavor. For example, while chives are quite attractive in bloom – and their flowers are edible and delicious – the stems tend to become tough and woody after bloom. Some general guidelines for harvesting herbs:

- Begin harvesting the herb when the plant has steadily been producing new growth. Harvesting generates the plant to continue to produce. Just be sure to leave enough leaves so the plant can continue to photosynthesize. Don’t be afraid to harvest. Up to 75% of the current season’s growth can be harvested at one time!
- Harvest herbs before flowering, otherwise, leaf production declines because the plant will put its energy towards flowering and producing seed to reproduce. *Tip:* Pick off flowers buds as you notice them develop.
- ‘Annual’ herbs (basil, cilantro, chives) will have to be planted each year. They have soft stems and can be harvested until frost. Perennial herbs (rosemary, lavender) have somewhat woody stems and can be clipped until about one month before the frost date.
“Healthy Gardens, Healthy Youth”
People’s Garden School Pilot Project

The Extension Partnership including:
Washington State University Extension
Cornell University Cooperative Extension
Iowa State University Extension and Outreach
University of Arkansas Extension

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Growing and Harvesting Produce

A school garden provides an opportunity for children and volunteers to learn about how to handle food safely. The following are some food safety tips to follow when growing and harvesting produce.

- Ensure that all persons, including staff, students, and volunteers receive basic food and gardening safety training instructions according to local health regulations. The following topics are recommended:
  - Handwashing and personal hygiene
  - Cleaning and sanitizing garden equipment and containers used to hold produce
  - Handling produce during harvest, washing, and transportation
  - Glove use

- Ensure that volunteers are covered by the school district insurance policy in the event of accident or injury.

- Require signed permission slips for all student gardeners. Permission slips should list potential hazards of working in a school garden and identify any allergies the child may have.

- Do not allow anyone to work in the garden while sick, or until 24 hours after symptoms, such as vomiting or diarrhea, have subsided.

- Ensure that all harvesters wash hands thoroughly in warm, soapy water for at least 10 to 15 seconds, and then rinse with potable water. Ensure that all open cuts or wounds on hands, arms, or legs are properly covered prior to participating in the harvest.

- Require harvesters to wear closed-toed shoes to prevent cuts, stings, or other injuries.

- Consider using single-use disposable gloves when harvesting, or handling, fresh produce as an extra precaution.

- Harvest the garden regularly and remove any rotten produce.
Food Safety Tips for School Gardens, continued

• Use cleaned and sanitized food grade containers, such as plastic bins or buckets, to hold harvested produce. Do not use garbage bags, garbage cans, and any container that originally held chemicals. These types of containers are made from materials that are not intended for food use.
• Clean harvesting tools, such as knives, scissors, etc., with soap and potable water immediately before and after each gardening session.

Using School Garden Produce in your School Meal Program
• Check with your local health department to ensure that local regulations permit food from gardens to be served as part of school meals.
• If the harvest from the school garden will be used in the school meals program, the school garden coordinator should work cooperatively with the school nutrition director to plan and implement the garden.
• Discuss food safety practices in the garden with school garden coordinators. Consider asking gardeners to document their practices. Use the information in this document as a guide to identify appropriate practices.
• Accept produce harvested from school gardens only when school nutrition staff is present to receive it. All produce dropped off or left when staff is not present should not be used in the school meal programs.
• See Best Practices: Handling Fresh Produce in Schools for guidelines on receiving, storage, preparation, and service of fresh produce in schools.
• Reject produce that does not meet school nutrition program standards.
• Receive and inspect produce harvested from school gardens according to the same procedures used to inspect produce from the district’s distributors.
• Do not use any produce that has been noticeably contaminated by animals or insects.
• Refrigerate garden produce immediately, unless the particular item is normally held at room temperature.
• Store, prepare, and serve school garden produce separately from other sources of produce to maintain traceability.
• Document service of school garden produce on the menu management/food production record. See Ensuring Traceability of Fresh Produce for more information.
• Ensure that liability for a potential foodborne illness caused by produce grown in school gardens is covered by your school district.
How do you harvest garden produce?

How do you know when a crop is ready to harvest? What are the consequences of harvesting too early or too late? Where should picked vegetables be stored to retain their freshness? These questions and others will be answered in the lessons in this unit. Here are some guiding tips.

WHEN AND HOW TO HARVEST

There is a difference between “mature” and “ripe” garden produce that determines when to harvest them. A mature fruit or vegetable is one that has reached a sufficient stage of development that, after harvesting, is or will be at the best stage to eat. A vegetable or fruit is ripe when it is at its prime edible state. For example, pears, bananas, and sometimes tomatoes are harvested when they are mature, yet they may still be green in color. A few days after harvest, they “ripen” to the stage at which we like to eat them.

Beginning gardeners and children often pick vegetables, such as peppers, eggplant, carrots, cucumbers and potatoes, before they have reached the best stage for harvest. At a small stage, these crops are technically mature, but harvesting them too early results in low yields and less to eat. There are some exceptions and it depends on how you are going to use them.

Early harvested, small potatoes – called “new potatoes” – are a tasty treat in early summer. Cucumbers are sometimes harvested early at a small size and used for pickles.

If you want a bell pepper for slicing or stuffing, it is best to wait to harvest it when it has reached its full size. A full-sized green tomato will ripen to red, orange, or yellow; and, if left on the plant, a full-sized green bell pepper will ripen into red, yellow, or even purple, depending on the variety.

Crops that are harvested and eaten at their peak ripeness are typically tastier and have a better texture than those eaten before they are ripe or when they are over ripe. As much as you don’t want to harvest crops too early, you don’t want to let them become over ripe in the garden. Crops that are left in the garden too long may become soft or even begin to rot. They are wasted and no longer edible.

General Information continued on the next page.
Crops that continue to produce for several weeks in the summer, such as green beans, zucchini, cucumbers, peppers, and tomatoes, need to be harvested regularly to keep them producing and setting on more fruits. The plant will set fewer fruit if they are left on the plant too long and become large and over ripe.

Some leafy crops, such as spinach, leaf lettuce, and chard can be cut about an inch and a half to two inches above the ground and they will grow back. This can be done two or three times in the spring. These plants cannot withstand the heat and long days of the summer. At that time remove the plants entirely from the garden and plant another crop, such as green beans, for a fall harvest. Make sure there are enough days remaining in the growing season (before the first average fall frost in your area) for that crop to mature.

Seed packages, plant labels, and garden catalogs often give the “approximate” number of days for a crop to mature. Growing conditions, such as weather, moisture, and weed competition affect this number. So it should only be used as a guide. Work with the youth to figure this out together.

To help you to be watchful of the best stage for harvest, you may want to use the Approximate Harvest Dates chart found towards the end of this lesson.

**HARVEST TOOLS**

- Scissors are best for the students to cut leaf lettuce and spinach
- Pruning shears may work better for harvesting zucchini, squash, pumpkins, peppers and eggplant
- Buckets and/or bags for harvest
- Garden fork for carrots, potatoes and sweet potatoes
- Trowel for loosening soil around root crops and onions

**FOOD SAFETY AND CLEANING**

At harvest time, make sure everyone practices good food safety. Wash hands thoroughly before and after picking vegetables. The harvest containers should be clean and free from soil and old plant residue. Gallon-sized bucket can be lined with plastic grocery bags which will make hauling and clean up easier and insure clean harvest containers.

Clean your vegetables before you put them in the refrigerator. Rinse leafy vegetables (lettuce, spinach, chard, cabbage and kale) in clean cold water, preferably in a strainer to drain the excess moisture. Then store in airtight bags. Tomatoes, peppers, melons, squash, and cucumbers, can be rinsed off and air dried. Rinse and rub (not scrub) the soil from root crops such as carrots and beets. Soil residue on onions, garlic, potatoes and sweet potatoes should be rubbed off after they are cured (see Storing Vegetables). Never wash or soak them in water.

**STORING VEGETABLES**

Different crops have different storage needs. Some, such as potatoes and onions, need to be “cured” before they are stored. Curing is a treatment that increases their storage life. Once crops are harvested their quality starts to deteriorate. To slow that process, most vegetables need to be refrigerated almost immediately. If that is not possible, put them in a cool, shady location. Do not leave them sitting in bags in the hot sun.
**APPROXIMATE HARVEST DATES**

Please record the harvest information about the crops you are planting in your garden. You may find this information on the seed packet, the tag for the transplant, in garden catalogues, on the Internet, or at your local extension office. Besides using visual clues, this will help you to determine when the crops may be at the best stage to harvest.

<table>
<thead>
<tr>
<th>CROP</th>
<th>DAYS TO MATURITY</th>
<th>PLANTING DATE</th>
<th>ESTIMATED FIRST HARVEST DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: radishes</td>
<td>28</td>
<td>April 20</td>
<td>May 18</td>
</tr>
<tr>
<td>Example: zucchini</td>
<td>48</td>
<td>June 15</td>
<td>August 3</td>
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### Harvesting and Storing Vegetables

(Adapted from ISU Extension Publication, PM 731 Harvesting and Storing Vegetables)

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<th>Harvest Times</th>
<th>Optimum Storage Conditions, °F</th>
<th>Approx. Storage Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Snap Beans</strong> (bush or pole)</td>
<td>Pick often to keep plants producing more beans.</td>
<td>Cool</td>
<td>7 – 10 days</td>
</tr>
<tr>
<td><strong>Beets</strong></td>
<td>One time harvest. Clean garden area after all beets are harvested.</td>
<td>Cold</td>
<td>4 months</td>
</tr>
<tr>
<td><strong>Broccoli</strong></td>
<td>Tender side shoots, 1 to 3 inches across, will develop after the central head is removed. After those are harvested, remove the plants from the garden.</td>
<td>Cold</td>
<td>10 – 14 days</td>
</tr>
<tr>
<td><strong>Cabbage</strong></td>
<td>One time harvest. Clean garden area after harvest.</td>
<td>Cold</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td><strong>Cantaloupe (Muskmelon)</strong></td>
<td>One plant can produce 2 to 5 fruit, not all at once. Check often once they start to mature.</td>
<td>Cool</td>
<td>1 to 2 weeks</td>
</tr>
<tr>
<td><strong>Carrots</strong></td>
<td>One time harvest. Clean garden area after harvest.</td>
<td>Cold</td>
<td>3 or more months</td>
</tr>
</tbody>
</table>

**Cool** Refrigerate: 40 - 45°

**Cold** Refrigerate: 32 - 40°

**Approx. Storage Period**
- In raw or fresh state.
- 7 – 10 days
- 4 months
- 10 – 14 days
- 1 to 2 months
- 1 to 2 weeks
- 3 or more months
## CROP HARVEST GUIDE

<table>
<thead>
<tr>
<th>CROP NAME</th>
<th>HARVEST TIMES</th>
<th>OPTIMUM STORAGE CONDITIONS, °F</th>
<th>APPROX. STORAGE PERIOD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cucumbers</strong></td>
<td>Pick slicing cucumbers when they are 6 inches long and while they are still bright green and firm. Cut fruit from the vine with pruning shears. Leave about ½ inch of stem attached to the fruit.</td>
<td>Check plants often once they start bearing. Keep fruit harvested for continuous production.</td>
<td>Moderate Refrigerate: 45 - 55°</td>
</tr>
<tr>
<td><strong>Eggplant</strong></td>
<td>Harvest anytime after the fruits are 2 inches across until they are 4 to 6 inches in diameter (depends on the variety). Light thumb pressure will leave a dent at the proper harvest stage. Cut from plant with pruning shears. Leave about 1 inch of stem on the fruit.</td>
<td>Check plants often once they start bearing. Keep fruit harvested for continuous production.</td>
<td>Moderate Refrigerate: 45 - 55°</td>
</tr>
<tr>
<td><strong>Garlic</strong></td>
<td>Pull in mid-summer when bottom leaves begin to dry. Cure the bulbs in a warm ventilated area in single layers for 10 days. Remove the tops about 1 inch above the bulb.</td>
<td>One time harvest. Clean garden area after harvest.</td>
<td>Cold Refrigerate: 32 - 40°</td>
</tr>
<tr>
<td><strong>Kohlrabi</strong></td>
<td>Pull plants when stems are swollen to 2 to 3 inches in diameter. Remove leaves and roots.</td>
<td>One time harvest. Clean garden area after harvest.</td>
<td>Cold Refrigerate: 32 - 40°</td>
</tr>
<tr>
<td><strong>Lettuce</strong></td>
<td>Leaf lettuce should be cut when the leaves are 4 to 6 inches long. Cut about 1 ½ inches above the ground for re-growth to occur.</td>
<td>Cut and it will come back for one or two more harvests, then remove spent plants.</td>
<td>Cold Refrigerate: 32 - 40°</td>
</tr>
<tr>
<td><strong>Onions (green)</strong></td>
<td>Any standard onion can be used as a green onion and harvested young. Harvest when 6 to 8 inches tall.</td>
<td>One time harvest. Clean garden area after harvest.</td>
<td>Cold Refrigerate: 32 - 40°</td>
</tr>
</tbody>
</table>
### GENERAL INFORMATION CONTINUED

**HARVESTING AND STORING VEGETABLES. CONTINUED**

(Adapted from ISU Extension Publication, PM 731 Harvesting and Storing Vegetables)

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<thead>
<tr>
<th>CROP HARVEST GUIDE</th>
<th>HARVEST TIMES</th>
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</thead>
<tbody>
<tr>
<td><strong>ONIONS (dry)</strong></td>
<td>One time harvest. Clean garden area after harvest.</td>
<td>Cold (after curing) Refrigerate: 32 - 40°</td>
<td>3 months (use before they sprout)</td>
</tr>
<tr>
<td>Harvest when the tops fall over and begin to dry. Pull with tops on and dry them in a protected place for 3 to 4 days. Cut tops to 1 inch above the bulb and store in shady area in mesh bags or single layers for further curing until stems tighten up and outer scales are dry.</td>
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<tr>
<td><strong>PEAS</strong></td>
<td>Check plants often once they start producing seed pods. Keep pods harvested for extended production.</td>
<td>Cold Refrigerate: 32 - 40°</td>
<td>1 to 2 weeks</td>
</tr>
<tr>
<td>Pick peas with edible pods such as snow peas when pods are just filled, but before the seeds become hard and starchy. Store peas in the pod. Harvest snap peas when the pods are beginning to plump and while the pods are still glossy and smooth.</td>
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</tr>
<tr>
<td><strong>PEPPERS</strong></td>
<td>Check plants often once they start bearing. Keep fruit harvested for continuous production.</td>
<td>Moderate Refrigerate: 45 - 55°</td>
<td>2 to 3 weeks</td>
</tr>
<tr>
<td>Harvest when the pepper is large, firm, and crisp. Fully ripe peppers are slightly sweeter and may be red, orange, yellow or other colors.</td>
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</tr>
<tr>
<td><strong>POTATOES</strong></td>
<td>One time harvest. Cure potatoes in a cool shady location for two weeks. Clean garden area after harvest.</td>
<td>Cool Refrigerate: 40 - 45°</td>
<td>New potatoes only store for a few weeks. Large, cured potatoes can be stored in a dark location for 3 or more months</td>
</tr>
<tr>
<td>New (small) potatoes can be dug in early summer when the vines are lush and green. Large potatoes are dug as soon as the plants die. Be careful not to cut the potatoes when digging by placing the fork at least 8 inches from the stem of the plant.</td>
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<tr>
<td><strong>RADISHES</strong></td>
<td>One time harvest. Clean garden area after harvest.</td>
<td>Cold Refrigerate: 32 - 40°</td>
<td>3 weeks</td>
</tr>
<tr>
<td>Pull when the roots are 1 to 1½ inches in diameter, remove tops about ½ inch above the root.</td>
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## CROP HARVEST GUIDE

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<tbody>
<tr>
<td><strong>Spinach</strong></td>
<td>Cut and it will come back for one or two more harvests, then remove spent plants</td>
<td>Cold Refrigerate: 32 - 40°</td>
<td>1 to 2 weeks</td>
<td></td>
</tr>
<tr>
<td>Harvest when leaves are 2 to 6 inches long. Cut about 1½ inches above the ground for re-growth to occur.</td>
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<tr>
<td><strong>Summer Squash (Zucchini)</strong></td>
<td>Check plants often once they start bearing. Keep fruit harvested for continuous production.</td>
<td>Cool Refrigerate: 40 - 45°</td>
<td>1 to 2 weeks</td>
<td></td>
</tr>
<tr>
<td>Cut squash from plant when they are 6 to 12 inches long. The rind is very tender and scrapes easily. Scallop type (‘Patty Pan’) are harvested when 3 to 5 inches in diameter. Leave ½ inch stem on the fruit.</td>
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<tr>
<td><strong>Sweet Corn</strong></td>
<td>Check frequently when they reach maturity. Harvest all at once or within a few days.</td>
<td>Cold Refrigerate: 32 - 40°</td>
<td>1 week</td>
<td></td>
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<tr>
<td>Harvest by grasping the ear at its base and then twisting downward. It is ready as soon as the silks are brown and dry at the ear tip.</td>
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<tr>
<td><strong>Sweet Potatoes</strong></td>
<td>Harvest all at once. Cure for 1 week in a warm, shady location.</td>
<td>Moderate Refrigerate: 45 - 55°</td>
<td>3 or more months</td>
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</tr>
<tr>
<td>Harvest in late fall, just before frost, by digging with a garden fork. Be careful not to stab a tuberous root.</td>
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</tr>
<tr>
<td><strong>Tomatoes</strong></td>
<td>Check plants often once they start bearing.</td>
<td>Cool room 55 - 65°</td>
<td>4 to 7 days</td>
<td></td>
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<tr>
<td>Pick any time from pink to fully red stage. Pick and remove stem from the fruit.</td>
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<tr>
<td><strong>Watermelon</strong></td>
<td>Check plants often once they start bearing.</td>
<td>Moderate to cool room 45 - 65°</td>
<td>2 to 3 weeks</td>
<td></td>
</tr>
<tr>
<td>Harvest when fruits are full sized, rind is dull in appearance, and the bottom part touching the ground turns from greenish white to creamy yellow. Leave 2-inch long stem attached to fruit.</td>
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</tbody>
</table>
Collecting and Storing Seeds from Your Garden

D. Hatch

One of the first requirements for growing a successful garden is finding good seed from plant varieties that have been adapted to your area. Many companies provide such seed. When you calculate the value of the food you grow, you will find that high-quality seed is a bargain.

At some time, though, you may want to collect, store, and plant seed from your own garden rather than buy the seed. This fact sheet describes how to save seeds from a variety of plants.

Collecting seeds

Don’t save seeds from vegetables or flowers labeled “hybrid.” Seeds from hybrid varieties produce a mixture of plant types, most of which are inferior to the parent. Many varieties could be hybrids but may not be designated as such.

Seeds easily saved

**Tomato**

1. Save seed from the fully ripe fruit of the desired tomato plant.
2. Squeeze the seeds onto a paper towel or a piece of screen.
3. Leave the seeds at room temperature until they are thoroughly dry.

**Pepper**

Select a mature pepper, preferably one turning red, and allow it to turn completely red before extracting the seeds. Place seeds on a towel or a piece of screen until they are thoroughly dry.

**Eggplant, husk tomato (groundcherry), garden huckleberry**

Separate seeds from the mature fruit and dry thoroughly at room temperature.

**Beans, peas, soybeans**

1. Leave pods on the plant until they are “rattle dry.”
2. Watch the pods carefully because some varieties split and scatter the seeds when they are dry.
3. Pick dried pods and place them in a well-ventilated area at room temperature. When the pods are completely dry, remove the seeds.
4. To control possible weevil infestation, place seeds in a freezer for 24 to 30 hours.

**Lettuce**

Lettuce seeds are more difficult to collect, but you can save them.

1. Leave a plant or two to produce a seed stalk.
2. After the plant blooms and the flower forms a miniature “dandelion head,” gather the seeds.
3. Separate the seeds from the chaff by rubbing them with your fingers.

Seeds difficult to save

**Vine crops: cucumber, melons, squash, and pumpkins**

It usually doesn’t pay to save these seeds. Without controlled pollination, these crops cross with other varieties and sometimes other types. Muskmelons do not cross with cucumbers, however.

You can control pollination in your garden, but it requires careful attention. First, you need to distinguish between male and female flowers. Male blossoms are on a longer stalk and do not have a miniature fruit at the base as do female blossoms.

1. With careful observation, note the blossoms that will open the following day. They have a light yellow color and a distinct pointed tip.
2. In the evening, select male and female flowers on the same plant. With a paper clip for small flowers or a rubber band for larger flowers, prevent the flower from opening. Flowers open only early in the day.
3. In the morning, pluck the male blossom and touch the cluster of pollen (called anthers) to the center of the female flower (called the stigma).
4. Close the female flower again so bees can’t get in.
5. Tag the blossom.
6. Grow the fruit to maturity for the desired seed.

The fruit must be very ripe for seeds to germinate correctly. Cucumbers must be entirely yellow, and squash and pumpkin must be thoroughly mature. Separate the seeds from the fruit flesh and dry them at room temperature.

**Biennials: carrot, beet, onion, and cabbage family**

Biennials are questionable for seed collection. It may take considerable effort to carry over the plant root from the first season to the second year when seed stalks form. Many members of the

Originally written by Duane Hatch, former Extension agent, Lane County, Oregon State University. Revised by N.S. Mansour, Extension horticulture specialist emeritus, Oregon State University.
Storing seeds
Keep seeds in a labeled container or envelope in a cool, dry place where they are protected from insects. Storage life of seeds varies widely. Here is a guide:

- **Short-lived seeds** (1–2 years): corn, onion, parsley, parsnip, pepper
- **Intermediate seeds** (3–4 years): asparagus, bean, broccoli, carrot, celery, leek, pea, spinach
- **Long-lived seeds** (4–5 years): beet, chard, cabbage family (Brussels sprouts, cauliflower), turnip, radish, cucumber, eggplant, lettuce, muskmelon, pumpkin–squash group, tomato, watermelon

An ideal way to prepare seed for long-term storage is to place seed packets in a jar, seal the jar tightly and place it in a refrigerator or freezer. To help absorb moisture, place a small, cloth bag filled with dry, powdered milk beneath the seed packets in the bottom of the jar. Use about ½ cup of dry milk from a recently opened package.

Test germination
To test seeds for germination before planting:
1. Moisten two or three layers of paper towels.
2. Place 25 to 50 seeds on the towels and roll the towels loosely. Place them in a plastic bag.
3. Keep the towels in a warm place such as on a kitchen counter or on top of a water heater.
4. Some seed, such as radish, germinates in 2 or 3 days. Peppers can take 10 to 14 days. Observe the seed at 2-day intervals to determine the degree of germination.

For more information
Many OSU Extension Service publications may be viewed or downloaded from the Web. Visit the online Publications and Videos catalog at http://eesc.oregonstate.edu.

Copies of our publications and videos also are available from OSU Extension and Experiment Station Communications. For prices and ordering information, visit our online catalog or contact us by fax (541-737-0817), e-mail (puborders@oregonstate.edu), or phone (541-737-2513).

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**Eating from the Garden**

*Grade 5-6 May–June Lesson People’s Garden School Garden Pilot
Adapted with Permission from University of Missouri Extension*

**Garden Celebration**

**Knowledge Objectives:**
- Students will review the importance of eating fruits and vegetables.
- They will review where the fruits and vegetables are grown, the plant and which season to plant them.
- They will recognize when plants are ready for harvest.

**Behavioral Objectives:**
- Students will choose a wider variety of fruits and vegetables.
- They will harvest ripe fresh fruits and vegetables.
- They will prepare the garden for fall planting.

**Doing the lesson:**

**Nutrition Activities:**

- **NOTE:** You may want to do gardening activities first and do nutrition activities while vegetables are cooking.

1. Explain that today we are going to harvest our garden since we are near the end of school. We will be preparing some of the foods for tasting. Have the students share some of the things they learned this past year about nutrition and gardening.

2. **Core Activity: Eating from the Garden Jeopardy**
   - Divide the students into two groups for a classroom of less than 20 students. Bigger classrooms can have more than two teams. Give each team a bell and instruct them to ring the bell if they know the answer. Each group should work together to come up with a category that they would like to start with. Remind your students that each answer must be given in the form of a question.

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**Supplies needed:**
- To Pick or Not to Pick (4-4)
- Eating from the Garden Jeopardy game (13-2 or computer version) – *SEPARATE FILE*
- Examples of produce from garden to show maturity
- Gardening equipment
- Ingredients and equipment for recipe preparation

**Core activities:**
- Eating from the Garden Jeopardy (13-2)
- Harvesting
- Preparation of garden vegetables

**Student handouts:**
- To Pick or Not to Pick (6-2)

**Teacher references:**
- Vegetable Harvest and Storage- MU Guide
- *Putting Garden to Bed* tip sheet
- Eating from the Garden Jeopardy (13-2)

**Advance Preparation:**
- Prepare cards and board for Jeopardy game and download electronic version from Peoples Garden website.
- Gather materials and garden supplies.
• Have teams roll dice to see which one goes first. The first team chooses a category, and if applicable, an amount. Read the question that they have chosen. Allow them 30 seconds to consult for an answer. They should guess the answer in terms of a question. If they get it correct, they get the points, and if not, the other team gets a chance to "steal" the same amount of points if it guesses the right answer. Keep a tally on the chalkboard of team points.

• If desired, place the “Double Jeopardy” card behind one of the questions and let the team discuss their wager before reading the question to them.

• Allow each team a few minutes to discuss their wagers for "Final Jeopardy." Have them hand in their wagers so that no one can change it later. Give each team a few minutes to discuss their answers to the "Final Jeopardy" question and instruct them to write their answers down. When the time is up, the students share their answers and a winner is determined.

Gardening Activities:

Core Activity: Harvesting

1. **Discussion:** Do you remember why it is important to know when to harvest produce? We like to grow the biggest sized vegetables but don't want to sacrifice the taste. The quality of vegetables deteriorates when they are left in the garden too long. Vegetables picked too late can be tough, mushy, rotten, or lack taste. Garden produce picked too early lacks flavor or tastes "green" or unripe.

2. What are three important things to remember during harvest to ensure you have great tasting vegetables?
   a. Harvest your produce at the right stage of maturity.
   b. Handle vegetables gently.
   c. Store your vegetables in a cool place soon after harvest.

3. The time for harvesting depends on the climate, the variety, and the vegetable involved. For instance, tomatoes can be left on the vine until fully ripened or harvested when partially mature. They will continue to change color. Other crops such as winter squash and watermelon are not ready for harvest until after they are fully developed on the vine in the garden.

4. What does the phrase "days to maturity" mean and where can you find this for the vegetables you are growing? "Days to maturity" tells how many days it will take from planting the seed until harvest. This number can be found on the back of seed packets, in our *Vegetable Planting Guide*, in gardening books, and seed catalogs. But these numbers should be used only as an estimate of when to harvest because of varying weather conditions. (Show examples)

5. Determining when vegetables have reached peak quality is not easy.
   a. Keep a record of the varieties used and when they were planted.
   b. Know what your fruits and vegetables should look like when they mature. Review *To Pick or Not to Pick* (handout 4-4) and use reference *Vegetable Harvest and Storage-MU Guide*
c. Look for damage. Some vegetables are more susceptible to damage during harvesting than others, but avoiding bruises and cuts in handling is important with all your vegetables. Never eat any portion of a vegetable that is decayed or rotted.

d. Check your garden frequently during harvest time, for ripe produce. When harvesting, be very gentle with the produce to avoid bruising or damaging it. Many vegetables are very perishable and have a short storage life once they are harvested.

6. Use vegetables harvested from the garden to show examples of ripe, under-ripe and over-ripe vegetables or too large vegetables. Discuss different ways they could prepare the vegetables they grew.

7. There is something else we did after we harvested our vegetables last fall. Do you remember what we did? “Put our garden to bed”. You would not normally put a garden to bed this time of year because most people grow their garden all summer. But school is ending and no one will be tending the garden during the summer, what will happen to it? It will dry out, weeds will grow, insects will attack, produce will grow and no one will pick it. So we need to put our garden to bed this spring so that it will be ready for the new school year. We need to pull out all the plants and weeds. We need to rake up any fallen fruits or vegetables. We can add all these materials to our compost pile (if you have one.) Spread fallen leaves over the garden to a depth of 2 to 3 inches. Turn the leaves into the soil with a spading fork, and smooth the soil out some. Then we have put our “garden to bed.” for the summer and we will ready for next fall’s garden.

8. Core Activity: Preparation of garden vegetables

Go out to garden and harvest enough vegetables that were grown for preparation and point out signs the vegetables are ready to pick. Prepare salad, Skillet Pizzas, Veggie Pillows, or lettuce wraps using julienned or finely chopped fresh vegetables from the garden and others if needed. Eat.

9. Getting the Garden Ready for the Summer

   a. Discuss with teacher what to do with additional produce grown. Options would be, prepare them a different way another day, give to cafeteria to use in lunch program, donate to a food bank, etc.

   b. Note: If garden will not be tended over the summer, the teacher should take lead in disposing of rest of produce and cleaning out garden area and “putting to bed” until fall. (Use Putting Garden to Bed tip sheet). Pull out the rest of the plants and weeds. Cover with leaves and turn into the soil. Divide the class into groups. Have groups assigned to the different jobs (soil prep, spreading compost, incorporating compost, weeding, harvesting, washing). Rotate students into different jobs.
Timely harvest and proper storage help maintain the quality and freshness of garden vegetables. This publication gives information on how and when to harvest vegetables, special harvest preparations, storage requirements, and appropriate length and kinds of storage.

The following terms are used in this publication:

- Light freeze: 28 to 32 degrees F
- Moderate freeze: 24 to 28 degrees F
- Severe freeze: Less than 24 degrees F

You should recognize that ideal storage conditions for many vegetables are not attainable around the average home or farm. It is important, therefore, to recognize the limitations of the best storage available.

Refrigerators can be used for storage. If two refrigerators are available, one can be kept at a cold temperature (32 to 40 degrees) and the other at a cool temperature (45 to 50 degrees). If there is only one refrigerator with the control set for normal operation, the temperature in the center storage section is usually between 38 and 42 degrees. Check the setting of the temperature control by placing a thermometer in different places in the refrigerator. Remember: Opening the refrigerator door frequently raises the temperature inside.

Basements are also possible storage places. Temperatures in most heated or air-conditioned basements will usually be 65 degrees or warmer in summer and 60 degrees or cooler in winter. Separate sections can be partitioned to vary the temperature and humidity. You can use outdoor air, dirt floors or wetted sacks to vary the temperature and humidity needs. Unheated basements, if well ventilated, can provide good storage conditions for some vegetables.

Different vegetables require different temperature and humidity levels for proper storage.

### Root crops

- **Beets**
  Begin harvest when beet is 1 inch in diameter or smaller for baby beets. Main harvest is when beets are 2 to 3 inches. Tender tops make excellent greens regardless of the size of the root ball. Harvest spring-planted beets before hot weather. Harvest fall beets before the first moderate freeze. For storage, wash roots, trim tops to 1/2 inch, place in perforated plastic bags and store in refrigerator, cold moist cellar or pit. Storage life is two to four months.

- **Carrots**
  Harvest spring carrots before hot weather. Baby carrots may be harvested when roots are 3 inches long. Fall-planted carrots should be harvested before the first moderate freeze. For storage, wash roots, trim tops to 1/2 inch, place in perforated plastic bags and store in refrigerator, cold moist cellar or pit. Storage life is two to four months. With a heavy layer of mulch, carrots may also be overwintered outdoors in the ground.

- **Horseradish**
  Harvest after several severe freezes. Store in the ground all winter. Mulch with straw or leaves and dig, when needed.

- **Parsnips**
  Harvest in late fall after several moderate freezes. Exposure to cold develops the sweet flavor. For storage requirements, see carrots.

- **Potato, Irish**
  Harvest in July when the tops have yellowed or died. Do not leave in ground exposed to high
soil temperatures from sun. Wash potatoes and remove the diseased or damaged ones. Cure for about a week in a shaded, well-ventilated place (open barn, shed, garage). Avoid exposing tubers to light. Store in as cool a place as possible at this time of year. You are not likely to find ideal storage conditions (40 degrees, 85 to 90 percent relative humidity) at this time of year other than commercial cold storage. Cool basements are probably the best storage available. Keep humidity high and provide good ventilation. Storage time is two to four months.

• **Radish**
  Harvest when \( \frac{1}{2} \) to 1 inch in diameter. Wash roots, trim both taproot, and tops and store in plastic bags in a refrigerator for up to a month. Winter or black radishes are stored the same as carrots.

• **Salsify**
  See parsnips for harvest and storage.

• **Turnip**
  Turnips can be harvested from the time they are 1 inch in diameter. They are best as a fall crop and can withstand several light freezes. Store the same as carrots. Turnip greens may be harvested and used the same as beet greens.

**Cole crops (cabbage group)**

• **Broccoli**
  Harvest terminal head while florets are still tight and have a good green color. Smaller side heads will develop. Store in perforated plastic bags for up to one week in the refrigerator. Freeze any surplus. Best quality will be found in shoots that are harvested during cool weather.

• **Brussels sprouts**
  Harvest the sprouts (small heads) when they are firm — begin from the bottom of the plant. Sprouts can stand several moderate freezes. Harvest all sprouts before the first severe freeze and store in the refrigerator in perforated bags for up to three weeks. Freeze any surplus.

• **Cabbage**
  Harvest when heads are solid. Remove loose outer leaves. Store cabbage in refrigerator, cold cellar or outdoor pit in plastic bags for up to two months.

• **Cauliflower**
  Tie outer leaves above the head when curds are about 1 to 2 inches in diameter (except colored types). Heads will be ready for harvest in about two weeks. Cauliflower may be stored in perforated plastic bags in the refrigerator for up to two weeks. Freeze any surplus.

• **Chinese cabbage**
  Grows best in the fall, although varieties that mature in less than 55 days can be planted in early spring. Harvest head after the first moderate frost in the fall and store in perforated plastic bags in the refrigerator, cold cellar or outdoor pit. Chinese cabbage will keep for up to two months. Harvest spring cabbage when heads solidify, but before a seed stalk forms.

• **Kohlrabi**
  For standard types, harvest when the swollen stems are 2 to 3 inches in diameter. Stems become woody if left too long before harvest or if grown under poor conditions. Giant, heirloom types may reach 1 foot in diameter and still retain high quality. Cut off root and leaf stems, and store in plastic bags as indicated for carrots. Storage life is two to four weeks.

**Greens**

• **Swiss chard**
  This is a summer green that is harvested continuously. Merely break off the outer leaves. Swiss chard is a beet relative developed for its top. A spring planting will provide greens from early summer to the first moderate freeze. Store in plastic bags up to two weeks in the refrigerator.

• **Collards (kale, mustard, spinach)**
  Harvest the leaves and leaf stems of greens when they reach suitable size. Either harvest the whole plant or the outer, larger leaves. Greens do not store well, but may be kept in plastic bags in the refrigerator for up to two weeks. Freeze any surplus.

**Salads**

• **Endive (Escarole)**
  Harvest whole plant. Wash thoroughly to remove soil and sand. Gather leaves together and tie with rubber band. Store in plastic bags in refrigerator for up to three weeks.
• Lettuce
   Head, semi-head and leaf lettuce can be stored for up to two weeks in perforated plastic bags in the refrigerator. Individual leaves may be harvested at any stage of development before the plants bolt (go to seed). For best quality, successive plantings at two-week intervals are suggested.

• Parsley
   Parsley will overwinter if planted in a protected place like a cold frame. If planted in the open, it can be carefully lifted with a ball of soil just before the soil freezes, potted and taken into the house in a cool, sunny room and harvested for several weeks. Parsley leaves will keep in plastic bags in the refrigerator for about one week.

Legumes

• Lima beans
   Harvest when pods have filled. Harvest tender limas when a bit immature and harvest meaty limas when mature. Shelled limas can be stored in perforated plastic bags in the refrigerator for about a week. Surplus limas can be canned or frozen.

• Garden peas
   Harvest when pods have filled. Harvest tender peas when a bit immature and harvest meaty peas when mature. Unshelled peas can be kept in a perforated plastic bag in the refrigerator for about a week. Surplus peas can be kept in the refrigerator for several days.

• Southern peas (Crowder, Purple Hull, etc.)
   For fresh use, freezing or canning, harvest when seeds are large and plump, but moist. Either shelled or unshelled peas may be stored in the refrigerator for several days.

Other vegetables

• Asparagus
   Harvest by snapping 6- to 12-inch spears off at ground level, but before the top begins to fern out. Store in plastic bag in refrigerator for up to one week. Freeze or can any surplus.

• Onions, green
   Harvest green onions when they attain sufficient size. Cut off roots and remove top, leaving 1 inch of green. Place in plastic bag and store in refrigerator for up to two weeks.

• Rhubarb
   Harvest leaf stalks when ½ to 1 inch in diameter. Do not use leaves. Rhubarb can be stored in perforated plastic bags for up to three weeks in the refrigerator. Surplus rhubarb can be frozen.

• Sweet corn
   Harvest sweet corn when kernels are plump and tender. Silks will be dry and kernels filled. To check a few ears for maturity: Open top of ear and press a few kernels with thumbnail. If milky juice exudes, it is ready for harvest. Harvest at peak of quality, husk to conserve space and store in plastic bags for no more than two days in the refrigerator. The new super sweet varieties will store for a week or more. Freeze or can surplus corn. Baby corn may be harvested just as silks emerge, before the ear is 3 inches long.

Cool, moist storage
45 to 50 degrees F
80 to 90 percent relative humidity

Vine crops

• Cantaloupe (muskmelon)
   Harvest when the stem slips easily from the fruit. Lift the melon — if ripe it should separate easily from the vine. Store ripe melons in the refrigerator in a plastic bag for up to 10 days. Try a few boxes of frozen melon balls.

• Squash, summer
   Harvest when fruit is young and tender. Skin should be easily penetrated with the thumbnail. Store for up to a week in a perforated plastic bag in the refrigerator.

• Cucumber
   Harvest cucumbers before seeds become half-size. This will vary with variety. Most varieties will be 1½ to 2½ inches in diameter and 5 to 8 inches long. Pickling cucumbers will be a bit more blocky and not as long as slicers. Store slicing cucumbers in the warmest part of the refrigerator (45 to 50 degrees). Place in plastic bag. Storage life is about one week. Pickling cucumbers should be cooled.
quickly in ice water and can be kept up to two days in a plastic bag in the refrigerator.

- **Watermelon**
  Harvest when underside of fruit turns from whitish to yellowish. The tendril at the juncture of the fruit stem and the vine usually dies when the fruit is mature. Thumping an immature melon gives a ringing metallic sound, while a mature melon gives a dull thud. Watermelons will store at room temperature for about a week and at a temperature of 45 to 50 degrees for two or three weeks.

**Other vegetables**

- **Eggplant**
  Harvest when fruits are nearly full grown, but color is still bright. Eggplants are not adapted to long storage. Keep in warmest part of refrigerator (45 to 50 degrees) for about a week.

- **Beans, green**
  Bean pods will be most tender when the small seed inside is one-fourth normal size. The pods become more fibrous as the beans mature. Harvest before pods begin to swell because of the developing bean seeds inside. Store green beans up to one week in perforated plastic bags in the warmest part of the refrigerator. Can or freeze surplus.

- **Okra**
  Harvest okra pods when they are 2 to 3 inches long. Over-mature pods are woody. Store in plastic bags in the warmest part of the refrigerator for about one week. Freeze surplus.

- **Peppers, sweet**
  Harvest when fruits are firm and full size. If red, yellow or other colored fruits are desired, leave on plant until mature color develops. Sweet peppers can be stored for two to three weeks in the warmest part of the refrigerator in plastic bags.

  **Cool, dry storage**  
  32 to 55 degrees F  
  50 to 60 percent relative humidity

- **Onions, dry**
  Harvest onions when the tops have fallen over and the necks have shriveled. Remove tops, place in shallow boxes or mesh bags and cure in open garage or barn for three to four weeks. Store in mesh bags in as cool a place as can be found in midsummer (32 to 35 degrees). During humid (muggy) weather, keep ventilated.

- **Peppers, hot**
  Pull plants late in the season and hang to dry in sun or a warm place. Store in a dry, cool place (usually a basement).

  **Warm, dry storage**  
  55 to 60 degrees F  
  60 to 70 percent relative humidity

- **Pumpkins, winter squash**
  Harvest pumpkins and winter squash when the skin is hard and the colors darken. Both should be harvested before frost. Remove the fruit from the vine with a portion of the stem attached. Store on shelves in a single layer, so air can circulate around them.

  **Warm, moist storage**  
  55 to 60 degrees F  
  80 to 85 percent relative humidity

- **Sweet potatoes**
  Harvest in fall before frosts and freezing temperature. Handle carefully in the digging process. Cure for one week at temperature of 80 to 85 degrees. Ideal storage is at 55 degrees and 85 percent relative humidity. (This might be accomplished in a basement with ventilated boxes covered with periodically moistened burlap sacks.)

  **Warm, dry storage**  
  55 to 60 degrees F  
  60 to 70 percent relative humidity

- **Tomato**
  Ripe tomatoes will keep for a week at 55 to 60 degrees. Green, mature tomatoes, harvested before frost, should be kept at a temperature between 55 and 70 degrees. For faster ripening, raise temperature to 65 to 70 degrees. Mature green tomatoes should approach normal size and have a whitish, green skin color. Keep mature green tomatoes for three to five weeks by wrapping each tomato in newspaper and inspecting for ripeness each week. Do not store tomatoes in the refrigerator.

This handout is an adapted version of University of Missouri Horticulture Guide G6226.
Eating From the Garden
A nutrition and gardening program for fourth/fifth grade

To Pick or Not to Pick

<table>
<thead>
<tr>
<th>Crop</th>
<th>Harvest these crops when:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Beans</strong></td>
<td>• Pods are firm, crisp and not wrinkled.</td>
</tr>
<tr>
<td></td>
<td>• Seeds are not bulging.</td>
</tr>
<tr>
<td></td>
<td>• Snaps when you break the pod in half.</td>
</tr>
<tr>
<td><strong>Beets and turnips</strong></td>
<td>• Roots are at least 1 inch in diameter – up to 2 to 4 inches.</td>
</tr>
<tr>
<td></td>
<td>• Trim tops to $\frac{1}{2}$ inch.</td>
</tr>
<tr>
<td></td>
<td>• Greens may also be harvested while tender.</td>
</tr>
<tr>
<td><strong>Corn</strong></td>
<td>• Ears of corn are well-filled with dark green husks and brown silks.</td>
</tr>
<tr>
<td></td>
<td>• Kernels have milky fluid when punctured with a fingernail.</td>
</tr>
<tr>
<td><strong>Cucumbers</strong></td>
<td>• Any stage before they turn yellow.</td>
</tr>
<tr>
<td></td>
<td>• Small cucumbers are generally used for pickles.</td>
</tr>
<tr>
<td></td>
<td>• Larger ones (less than 8 inches) are for slicing.</td>
</tr>
<tr>
<td><strong>Honeydew/ Cantaloupe</strong></td>
<td>• Shake the honeydew — you should hear the seeds rattle.</td>
</tr>
<tr>
<td></td>
<td>• Strong cantaloupe smell.</td>
</tr>
<tr>
<td><strong>Lettuce</strong></td>
<td>• Choose leaves at desired size any time before it goes to seed.</td>
</tr>
<tr>
<td></td>
<td>• Snap or cut leaves or harvest whole heads.</td>
</tr>
<tr>
<td></td>
<td>• Leave 2 inches for plant to reproduce.</td>
</tr>
<tr>
<td><strong>Okra</strong></td>
<td>• Pods are 2 to 3 inches long.</td>
</tr>
<tr>
<td></td>
<td>• Okra gets tough and woody quickly.</td>
</tr>
<tr>
<td></td>
<td>• Short hairs on the pods can irritate bare skin.</td>
</tr>
<tr>
<td></td>
<td>• A knife is useful to cut the pods off the plant.</td>
</tr>
<tr>
<td><strong>Onions</strong></td>
<td>• Green onions are ready for harvest at any size.</td>
</tr>
<tr>
<td></td>
<td>• Bulb onions are harvested when the tops fall over and are yellowish.</td>
</tr>
<tr>
<td></td>
<td>• After digging bulb onions, leave them out in the sun to dry for a few days to toughen the skin.</td>
</tr>
<tr>
<td><strong>Peppers</strong></td>
<td>• Any size while they are firm, crisp and unwrinkled.</td>
</tr>
<tr>
<td></td>
<td>• Leave them on the plant to mature and develop a color.</td>
</tr>
<tr>
<td></td>
<td>• Use rubber gloves when harvesting hot peppers to protect skin from irritation.</td>
</tr>
<tr>
<td><strong>Radishes</strong></td>
<td>• Select $\frac{1}{2}$ to 1 inch in diameter.</td>
</tr>
<tr>
<td></td>
<td>• Trim taproot and tops.</td>
</tr>
<tr>
<td><strong>Snap peas</strong></td>
<td>• Pods are full-size, but peas inside have not swollen.</td>
</tr>
</tbody>
</table>
To Pick or Not to Pick *(continued)*

<table>
<thead>
<tr>
<th>Crop</th>
<th>Harvest these crops when:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer squash</strong></td>
<td>• Squash is 6 to 8 inches long.</td>
</tr>
<tr>
<td></td>
<td>• Pick often, as they grow quickly in hot weather.</td>
</tr>
<tr>
<td></td>
<td>• If squash gets too big, it will be tough and seedy, but can be grated for baked breads.</td>
</tr>
<tr>
<td><strong>Tomatoes</strong></td>
<td>• Fruit are firm with some color.</td>
</tr>
<tr>
<td></td>
<td>• They have the best flavor when they fully develop color on the plant.</td>
</tr>
<tr>
<td><strong>Watermelon</strong></td>
<td>• Makes a thud sound when you thump it.</td>
</tr>
</tbody>
</table>
Putting the Garden to Bed

- After harvesting, remove debris from garden.
- Remember to remove the entire root so plants do not grow back.
- Incorporate compost (if available).