# Harvesting and Storing Fall Fruit

To enjoy apples and pears through the winter months, it is important to choose the right varieties to grow, and to harvest them with storage in mind.

### Harvesting Apples

Frequently asked question: "When are my (Honeycrisp, Gravenstein, Melrose, fill in the blank) apples ripe?"

One way to tell if an apple is ripe, of course, it to taste it. For early ripening varieties that won't store well, that is a fine way to test for ripeness. Background skin color can be another good indicator. On many apples, the background skin color will change from green to cream or light yellow when the fruit is close to ripe.

Experience will help you determine when to pick later ripening varieties for storage. Checking for brown seed is one way to see if an apple is close to ripe. Another tool that can help you is a starch test. As the fruit ripens, the starch slowly converts to sugar. If all of the starch in the apple has been converted to sugar, the apple is fully ripe, or even overripe, and will not store. You can check to see how much starch is left by testing it with iodine. Iodine reacts with starch, turning it blue-black. This test doesn't work for all varieties, or every year, as weather can affect how fast the starch

changes to sugar. But, along with tasting and background color, it can be a valuable tool.

To do the test, buy tincture of iodine at the drugstore, and dilute it with water at a ratio of 1 part iodine to 10 parts water. Store this solution in a spray bottle. Take the apple you want to test and cut it across the core. Spray it with the iodine solution. The reaction happens within a few minutes. Apples that are to be stored long term should have at least 1/3 to 1/2 of their starch left.

#### Harvesting Pears

Harvesting European Pears at the right time can be tricky. So many people tell us, "Our pears always rot



Bottom left is unripe, top left is too ripe to store.

at the core, it must be a poor variety." More likely, they are picking their pears too late.

European Pears ripen from the inside out. If the flesh under the skin is ripe, the flesh near the core will be very overripe. Left too long on the tree, they will begin to rot at the core. Picked too green and they don't develop their full flavor. There is an easy way to tell when they are ripe: when they pick easily! By that, we mean that when you lift a pear, and it breaks cleanly at the stem, it is ripe, and **the whole tree should be picked**. If you find a fallen pear, that is a good signal to check for ripeness. Even though the pear is hard, if you taste it, it will be sweet.

Unlike European Pears, Asian Pears are ripened on the tree. They will not continue to ripen off the tree! Pick your Asian Pears when the taste and texture are what you like. The most important issue with Asian Pears is that they have thin, tender skins, and any bruising will shorten their storage



capability. Handle the ones you want to store very carefully. This is why you see them in the markets in little foam nets.

## **Storing Apples**

The optimal temperature for long term storage of apples is 38°F. This is a refrigerator. If you cannot store apples in a refrigerator, the next best site will have steady temperatures below 40°F. The warmer your storage area, the shorter length of time your apples will store. For every 2° warmer, the fruit ripens 8 times faster. If you have too many apples to store in a refrigerator, put your best fruit, picked at the correct ripeness for storage, in the refrigerator, and use the other fruit first. Interestingly, Honeycrisp apples benefit from sitting outside for 2-3 days before refrigerating. Most others should go into cold storage immediately.

Modern refrigerators are a dry environment for storing fruit. Your fruit should be stored in perforated plastic bags, and you should have an open pan of water in there to add humidity. Open the door regularly to let ethylene gas escape. Apples that are to be stored should be the nicest ones; fruit with bruises or broken skins will not store.

What if you don't have refrigerator space? Some other possible options:

- Unheated sheds or garages that are shaded often will stay cool enough for short term fruit storage. You will have to secure places like this against rodents or raccoons. This type of storage is best later in the fall when outside temperatures are already low. Very late ripening fruit is more forgiving of this type of storage as well. Your apples may not remain crisp past January, but will still be usable for cooking.
- Small quantities can be stored in coolers, layered with paper or cardboard. The cooler insulation can help keep the temperature from fluctuating too much.
- Root cellar- in our climate, a true root cellar with stable year round temperatures is not really viable, as our soil temperatures are too warm and our seasonal water table too high. However, a root cellar, or a highly insulated room on the north side of a building, or a buried chest freezer, can be used to store food in winter. These storage rooms can be kept at fairly stable temperatures, usually in the mid-40's. Be sure to open or ventilate the room to prevent ethylene gas buildup.



#### Storing Pears

Like apples, you should choose your best fruit for storage. A damaged pear could rot in storage and spoil the whole box. Pears like a little warmer than apples, and store best at 38°-40°F. Late ripening European pears such as Bosc and Comice will ripen only slowly in cold storage, and should be brought to room temperature a few days or even a week ahead of use.

Asian pears that have no nicks or bruising can be stored in refrigeration for up to 6 weeks. Check them frequently for spoilage.



### What else can you do to save your fruit for winter use?

**Canning.** Apples and pears (both Asian and European) can be sliced and canned, either in a light syrup, in water, or in diluted apple or grape juice. Asian pears must have acid added to make them safe for water bath canning; add ½ tsp citric acid or 1 Tbsp lemon juice to each pint jar (double for quarts). Slice the fruit, and add 1 pint of syrup, water or juice per 5 pounds of fruit and bring to a boil. Simmer 5 minutes, then pack the hot slices and liquid into pint or quart jars. Process 20 minutes in a boiling water bath, or 8 minutes at 6 pounds pressure in a pressure canner. Add spices if you like to each jar. Cinnamon sticks are nice with apples, and cardamom or ginger is great with pears. Both apples and pears can also be pickled, usually in a solution of vinegar, sugar and water, with spices added, then canned for storage.

**Drying.** Both apples and pears are wonderful dried. Peel (optional) and slice into even slices. To prevent darkening, you can dip the fruit into water containing lemon juice or citric or ascorbic acid (optional). Dry until the fruit is leathery. Store in a dark place in sealed bags or containers.

**Sauce**. This is a classic way to store apples, and also works with pears. The easiest apple sauce is cooked in a small amount of water and sugar, until the apples are soft, then put through a food mill to make a smooth apple sauce. This can be canned in a boiling water bath for 15 minutes (pints) to 20 minutes (quarts) or in a pressure canner at 6 pounds for 8 minutes (pints) or 10 minutes (quarts). I like a chunky applesauce, with no added refined sugar, so my method is a little different:

First peel and slice your apples. I use a mechanical peeler, then cut the slices into chunks. Half the apples go into my kettle with a small amount of reduced apple cider (boiled until the volume is reduced by half). I will sometimes add cinnamon or ginger to spice up the mix.

When this mixture has softened and can be stirred into an almost smooth sauce, I add the rest of the apple chunks, and heat it up to just below a boil. I then pack it into my jars, and process as above. The processing cooks the rest of the apple chunks, but not so much that the sauce is smooth when the jar is opened.

Butter or Jam. Apple or pear butter start the same way as smooth apple or pear sauce, but you continue to cook it down until it is thick enough to spread. Two easy jams to try:

#### **Ginger-Pear Preserves**

- 9 cups peeled, cubed pears (about 2 ½ lbs)
- 2 thinly sliced, seeded lemons
- 6 cups sugar
- 1/3 cup chopped fresh ginger

Combine pears, lemons, ginger and sugar and let stand in refrigerator at least 12 hours or overnight. The next day, bring the mixture to a boil, uncovered, over high heat. Reduce heat and simmer until thick (1 to 1 ½ hours), stirring occasionally. Ladle into sterilized jars, seal, and process 10 minutes in a boiling water bath. Makes 6-8 8 oz. jars.



#### Caramelized Apple Marmalade with Thyme

About 4 pounds tart apples

- 5 Tbsp fresh lemon juice
- 2 cups sugar
- 2 cups fresh apple cider
- 1 vanilla bean, split, scraped, and cut into thirds
- 1 tsp cinnamon

2 tsp finely chopped fresh thyme or 1 tsp dried thyme

Peel, core, and cut the apples into 1" pieces. Toss immediately with lemon juice and set aside. Stir together the sugar, ½ cup apple cider, and the vanilla bean in a large shallow pan. Place over high heat and bring to a boil. Cook, without stirring, until



the mixture caramelizes to a medium amber color. Add the apple slices, the remaining apple juice, cinnamon, and thyme. The caramel will clump together but will eventually re-melt. Continue cooking on moderately high heat, watching carefully that it doesn't boil over. Turn the apples over in the syrup until the pieces are completely glazed and translucent and there is little liquid left in the pan (20-30 minutes). Remove from heat; ladle into hot, sterilized jars and seal. Process in a boiling water bath 10 minutes.



