

Be bear aware

Your local Bear Aware Program wants to remind you that it is the community's responsibility to ensure that we do not bait bears into our neighborhoods. Many people wonder why bears shouldn't feed on fruit trees in their backyard, but the answer is that it should not matter if a bear passes through their back yard, as long as it is not rewarded with food. When a bear is rewarded with an easy food source it will prolong its stay and may return the next year. It also learns that a residential area and the smell of humans can mean food.

If you have apple or other fruit trees in your yard, pick the fruit as it ripens or consider replacing the tree if you do not use the fruit.

Please contact your local Bear Aware Program for more details on community awareness events and to get tips on keeping your property bear safe or visit www.bearaware.com. Conservation Officer Service at 1-800-663-WILD (9453)

The Fernie apple exchange

Resources

- USDA Complete Guide to Home Canning: http://www.uga.edu/nchfp/publications/publications_usda.html
- <http://www.appleluscious.com/>
- Steam Juicing: <http://www.seedforsecurity.com/article.php?articleid=23>
- Hardy apples for sale <http://www.dnagardens.com/Apple%20page.htm>
- <http://www.allaboutapples.com/health/>
- [The Apple Grower – A Guide for the Organic Orchardist](#) by Michael Phillips ISBN 1931498911
- [The Great American Apple Wizard – The Life and Times of Peter M. Gideon](#) by James R. Curran ISBN 1887650423
- [Apples, Apples Everywhere – Favorite Recipes from America's Orchards](#) by Lee Jackson ISBN: 0930643-11-9

Notes:



Fernie Community EcoGarden
Workshop Series 2008 - Keeping Food Real

For more information:
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The Amazing Apple

Here in British Columbia, *Malus domestica* certainly needs no introduction. In fact, mature apple trees flourish in many Fernie backyards and most of us grew up with apple trees in our neighbourhoods. Apples originated in Central Asia, and *Malus sieversii*, called *alma* in Kazakhstan, still grows wild there. Humans have been breeding cultivars of these first wild stocks for many thousands of years, and there are more than 7,500 known cultivars worldwide. Today, China is by far the leading producer of apples at 25 million tonnes annually. Fortunately, we can enjoy our own BC apples year-round. BC produces up to 195,000 tonnes annually, about 30% of Canada's total production. About 25% of BC-grown apples are consumed within the province.

Apples have played significant and varied roles in world religions and mythologies. In many cultures, the word for apple is the generic term for fruit. Apples clean the digestive system. Eating an apple cleans the teeth and massages the gums, removing more bacteria than two three-minute brushings followed by a gargle. Scientists have proven that apple eaters have fewer headaches, intestinal disorders, colds, respiratory problems and illnesses associated with the nervous system. Furthermore, apples have been recognized as a healing food, providing bone protection, lowering cholesterol, managing diabetes and weight loss, and preventing cancer.

*Apple arithmetic:
One bushel of apples
weighs 48 pounds and
will make 32 to 40
pints of canned or
frozen apple slices or
30 to 36 pints of
applesauce.*

These are our seven ways of dealing with quantities of apples:

1. **drying** apples – apple rings, apple leather
2. **freezing** apples – pies (pastry and filling or just filling), apple sauce, juice
3. **juicing** apples – with cider mills and steam juicers
4. **puréeing** apples – for perfect apple sauce, apple butter, preserving
5. **baking** apples – apple pie, strudel, breads, cookies, crisps, etc.
6. **canning** apples – clear apple jelly, using apple juice for pectin, condiments
7. **storing** apples – cold storage and root cellars for your fresh apples

Uses for familiar cultivars

Braeburn	all-purpose. Firm and juicy, it has a pleasant, sweet tart flavor. Stores well. Season: late October
Cortland	all-purpose. White flesh is slow to turn brown, so is good for salads. Season: September-October
Empire	super-crisp eating apple that tastes similar to a McIntosh. Season: September
Fuji	sweet, juicy, excellent eaten fresh. Stores extremely well if refrigerated. Season: October-December
Gala	medium size apple with a unique yellow, orange, and red striped skin. Good fresh or cooked
Golden Delicious	all-purpose, juicy, cooks firm. The yellower the fruit, the sweeter and softer it is. Season: Sept - April
Granny Smith	a good, tart, cooking and baking apple. Paler green fruit is usually riper and sweeter. Season: October
Jonagold	all-purpose, crisp, juicy, sweet, but tart enough for cooking. Best fresh-picked. Season: late Sept
McIntosh	all-purpose, tangy flavor, firm, crisp pulp cooks smooth. Not a good keeper. Season: Sept-March
Macoun	deeper red relative of the McIntosh, more versatile in the kitchen. Season: late September-October
Newton	all-purpose, rich tangy flavor, cooks firm, good keeper. Season: November - April
Red Delicious	sweet dessert apple with slight tartness, best eaten raw, good keeper. Season: October
Red Rome	fine for baking & cooking, slightly sweet, very firm pulp, good keeper. Season: October - February
Royal Gala	superior eating apple. Season: September - April
Spartan	all-purpose, snowy flesh, small core, sweet, cooks soft and smooth. Season: October - April

1. drying

The quality of dried apples is excellent. Firm-textured, tart apples like Jonathans or Rome Beauties are preferred. Dried apple slices or rings are a naturally sweet snack and can be used in homemade granola or muesli. Dried apple slices can be rehydrated for use in crisps, cobblers and pies. Slice apples to ¼” thickness and dry in a dehydrator. To make apple rings, core whole apple before slicing and arrange slices on a ½” wooden dowel or string and hang out of the sunlight in a warm place so the slices do not touch one another. To prevent browning, spray slices with lemon juice or ascorbic acid solution before hanging.

2. freezing

For use in uncooked desserts and fruit cocktail, pack apple chunks or slices in syrup. If apples are to be used in pies and cobblers, use a dry pack, sweetened or unsweetened. A mixture of tart-and sweet-flavored apples are best for sauce. No sweetening is necessary. Remember to label and date all packages before freezing.

3. juicing

Apple Cider – Apple cider is essentially apple juice that has not undergone a filtration process that removes coarse pulp or sediment. Cider may or may not be heat pasteurized.

Apple Juice – Apple juice has been filtered, pasteurized and vacuum sealed to give a longer lasting, clearer looking product. Most juices have additional water and other ingredients to maintain flavor and clarity. Outside the U.S., the term “Apple Cider” typically means “Hard Cider” while “Apple Juice” usually will get you a sweet cider.

Sweet Cider – When you press apples into a liquid form for immediate bottling and consumption you get sweet cider. This cider may or may not be pasteurized. The styles of sweet cider vary based on the types of apples used: neutral, aromatic, astringent and acid-tart.

Hard Cider – Allowing the liquid to ferment, either naturally or with controlled active ingredients like yeasts produces hard cider. There is a wide variety of procedures used to develop fermentation in hard ciders.

Pressing – The amount of cider you get from your apples depends on many factors such as the variety of apples, stage of ripeness, how finely they are chopped before pressing, and how much they are pressed. The more you grind the apples the darker the color of the cider will be and the more sediment will be present in the juice itself.

Fresh cider should be stored at temperatures just above freezing to slow the fermentation process as much as possible. Fresh apple cider will last 5 to 10 days before it begins to ferment and should be used within this time period. If you want your cider to last longer it is a good idea to pasteurize it by heating to 160° F but no higher than 185°. Properly refrigerated pasteurized cider will last up to 3 weeks. Frozen cider will last up to one year.

Steam Juicing – Apple juice made in a steam extractor is fairly thick and very rich in flavor. For drinking, it can be diluted with an equal amount of water. It is bottled hot. About 30 pounds of apples will make 6 quarts of juice.

Food safety – Fresh (unpasteurized) apple cider may contain bacteria that can result in illness. The only way to assure that bacteria in fresh cider are killed is to pasteurize it by heating. Pasteurization is particularly important when using apples that have dropped from the trees. Almost all apple cider sold in grocery stores is pasteurized, but cider sold in fruit stands is frequently unpasteurized. If you purchase refrigerated apple cider, check the label to see if the cider is pasteurized. If it is not pasteurized, follow the guidelines for heating cider before drinking. Cider that does not need refrigeration has been heated sufficiently to kill pathogens. **Caution:** Young children, elderly and immuno-compromised should never drink fresh apple cider unless it has been heated to at least 160°F.

4. puréeing

For applesauce, a soft apple like the McIntosh is a natural. Softer apples make smooth, creamy applesauce, whereas harder types give you a chunkier sauce. Leaving the skin on gives the applesauce a reddish pink tint. Processing cooked apples in a manual food mill will result in a very smooth sauce as the mill strains out skin and carpels. Cooked apples can also be processed in a blender or food processor. Usually, no sweetener is needed for applesauce, although spices may be desired if the sauce lacks flavour. Freshly made applesauce will keep in the frig for a short time, or it can be frozen or hot-packed and processed in a boiling water bath. If canning, follow specific recipe instructions closely for safety.

5. baking

Cooking apples should be flavorful and firm. Heat breaks down an apple’s structure quickly and reduces its flavor. Hard, full flavored varieties such as Gala, Braeburn, Rome, and Granny Smith can take the heat and still retain their taste and shape. Apples that have begun to shrivel in storage can be baked successfully. Applesauce can be used as a liquid replacement in bread and cake recipes calling for oil.

6. canning

Use apples without any sign of decay for canning as slices, sauce and sweet spreads. Do not can windfall apples because they are much more likely to contain mold spores, which can result in spoilage of the canned products.

Pectin for making jams and jellies can be made at home from apples. Under-ripe apples have the highest pectin content and are processed by cooking the apples, then straining the juice from the pulp.

Apples can be pickled as chutney to serve with meat or vegetable curries. Apple butter is a spiced applesauce which has had a great deal of its moisture cooked out. The best way to prepare butter is to pour apple pulp mixture into a large roasting pan and bake at 300°F in the oven, stirring only occasionally. The butter thickens as it bakes.

For safety and best quality, hot pack all home-canned apple products, including butter and chutney, and process in a boiling-water bath for the specified times. Open kettle canning of any product is not safe!

7. storing

• Pick only mature fall apples – when harvested green they tend to shrivel in storage and seem to be more likely to be affected by disease. Summer apples are relatively fragile, and should be canned, frozen or dried for long-term keeping. Avoid the ‘king’ apple (usually the largest center one in the group) as it will have a thick stem, and a shorter storage life.

• Leave the stems on. Pulling them off could break the skin and invite spoilage.

• After picking leave them outdoors overnight and store in the early morning while they’re still cool. Folklore has it that apples are less likely to rot or bruise in storage if picked in the dark of the moon.

• Inspect the apples before placing in storage. Remove any bruised apples. Store apples in relatively shallow layers.

• Maintain a root cellar temperature of 32° F with relative humidity around 80%. You can store apples at higher temperatures, but you should increase the relative humidity to 90 percent. Also, higher temperatures will decrease the storage life. Kept in ideal conditions, apples should last until spring.

• Apples that keep well include: Jonagold, Rome Beauty, and McIntosh. Many heirloom varieties are especially good keepers. In the old days, apples were often wrapped in paper, then packed in barrels that were covered with straw and kept in a warm part of the barn.

• Apples are one of several fruits that release ethylene gas as a routine life cycle function. Ethylene gas can hasten spoilage in other fruits and vegetables stored near apples.

• Add humidity to your root cellar by placing a bucket of wet sand in the cellar. If your root cellar is actually the cement steps in your bulkhead, spraying the walls with water using a mister will do the trick, but you’ll have to do it often.

• As you use the apples in your root cellar, first use those showing early signs of spoilage.

• A battery operated temperature and humidity gauge can help monitor conditions in your root cellar.

apple storage issues

Scald – scalded apples usually have a browned or burned discoloration on the skin, often appearing first on the green side of the apple. The scalded spot turns mushy. Ventilation should help to control scald.

Blue Mold, Brown Rot and other microbial invasions – overripe apples sometimes succumb. Just weed them out and spread out the good ones.

Internal Breakdown – due to bruising

Shrivelling – caused by dryness or high temperature. An apple that’s 85% water will shrivel when it’s lost 5 % of its moisture content. Shrivelled apples are fine for cooking, but tend to spoil sooner.

The amazing apple is the queen of storage fruits!