

# FOOD STORAGE AND PRESERVATION

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Living Green is making choices in our day-to-day lives that reduce our impact on the environment and move us in the direction of a sustainable lifestyle – one that is healthy, ecologically sound, economically viable and socially just.

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Top: Traditional underground root cellar.
Bottom: Preserves from home canning.

As summer winds down and fall swiftly approaches, many of our gardens are in the middle of abundant production. When your refrigerator fills up with your homegrown fruits and veggies, it might be time to think about different food storage opportunities- ones that will give you access to your goodies throughout the year. Canning and root cellars are two great options for your consideration.

#### **ROOT CELLARS:**

In a nutshell, a root cellar is any sort of storage that uses the natural earth processes of cooling, insulating and humidifying. They essentially served as the first refrigerators and have the ability to keep food 40 degrees cooler than summertime temperatures. Root cellars can be created in a variety of ways.

Many times, root cellars are attached to houses for easy access. One method is to use the foundation walls on the northeast corner of a basement for two sides of the cellar. In constructing the other two walls and ceiling, it is essential to insulate to ensure that the heat stays out.

Another option is to put the cellar outside of the house by digging into the ground or horizontally into the north side or shady part of a hillside. Digging only one foot underground reduces the outside temperature by up to 20 degrees. Ten full feet of soil above and alongside the root cellar will insure maximum insulation and temperature stability.

To be effective, the cellar must be able to maintain a temperature between 32-40 degrees and a humidity level of 85%-95%. This cool, moist environment slows the decomposition process of fruits and vegetables. Also, it is important to have a good ventilation system that allows cool air in and stale air out.

Temperatures inside a root cellar will vary, with the ceiling area being about 10 degrees warmer than everywhere else. This temperature change dictates the construction of shelving and food placement. Produce that can tolerate warm temperatures, like onions and garlic, should be placed higher. Ethylene producers, like apples, peaches, tomatoes and cabbage should be placed next to the ventilation system, as their emissions can influence and impact other produce like root crops.

The possibilities for root cellars are endless and can be conformed to a variety of locations.



#### INTRO TO HOME CANNING

In the world of home canning, foods are divided into two groups, acid and low-acid foods. Fruits, tomatoes, jams and jellies, butter, and pickled preserves are considered acidic and only need a hot water bath method to keep. All vegetables, meat, and soups are low-acid and will require a pressure canner. The water bath method is easier and is usually learned first.

Typically a newcomer will have heard about the dangers of the pressure canner and tends to avoid it. But canners built in the last couple of decades have several safety features and are not known to cause serious iniuries or home disasters. Since the science behind canning is a matter of sanitation - boiling food to kill bacteria and using an acid environment where bacteria cannot thrive, pressure canning makes for the most sterile type of preservation.

The steam pressure built up inside a canner heats food above the temperature of boil-



Other than the canner, here are some helpful tools: Non-metallic spatula, Magnetic lid wand, Jar lifter, and a Canning funnel.

ing water to kill the bacteria in will easily attract mold and low-acid foods. bacteria and contaminate t

However, it should be noted that bacteria aren't the enemy. Many beneficial bacteria live in our food too, but the types targeted in canning are those that cause severe and sometimes fatal poisoning.

Here are some basic tips to help familiarize you with home canning. There are also abundant resources online, in the library, local book stores, and the classic text, *The Ball Blue Book Guide to Preserving*, is often also available with canning supplies in stores.

Processing Time This refers to the cook time in the enamelware or pressure canner. Each recipe has the tried and true times listed; always follow the recipe for processing times. In water bath canning, the time begins when the water boils rapidly after the jars are in place. In pressure canning it starts when the proper pressure is achieved after jars are in and the lid is locked down.

Head Space This is the space left between the liquid and the top of the jar. If there's too much, food will discolor and lack flavor, if there is too little space, the mixture can boil over. In both cases it may prevent the lids from sealing successfully and cause spoilage.

The Perfect Seal After pouring the mixture into each jar, wipe the rim with a clean damp cloth and place the heated lid evenly on top. If any food sticks through the seal it

will easily attract mold and bacteria and contaminate the batch within. At the end of the process, hot jars should be allowed to cool slowly and naturally (about 8-12 hours, covered under a towel). When they are cool, the lids should be vacuum sealed and the button should not pop when pressed down. If the seal was not successful, the jar is not necessarily wasted. It can still be consumed or frozen in 1-3 days.

The Water Bath Method If you would like to start right away, you will simply need an enamelware pot with a lid and a rack. The most important part is the function of the rack, but you can use anything to prevent the jars from sitting on the bottom and from touching each other. If they do, they may crack from being knocked around in the boiling water. Follow the recipe for cooking time and allow to cool for 8-12 hours

The Pressure Canning Method You may have a dial gauge or a weighted valve version, but both will have 2 pressure relief mechanisms that will blow if pressure exceeds the canner's ability to contain it. After filling and sealing the jars, pack in as many as will fit, it's okay if the jars touch. Then follow the manufacturer's instructions for how much water to add to the bottom of the canner (usually 2-3 inches). Cook the canner on the stovetop with the pressure control weight off. Allow the canner to

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#### **GROCERY STORES COMPOST**

Local grocery stores made a significant step earlier this summer in lightening their environmental impact by making the decision to compost their food waste.

Yoke's Fresh Market and Rosauers Supermarkets are the two companies leading the way in separating their food waste from store garbage and sending it to regional composting facilities in Fishtrap and Royal City. Yoke's began their composting projects in late May and have reduced their load to the incinerator by 70 tons over the last three months. They have estimated that they've saved an additional \$7,000 a week by doing so.

Rosauers stores only recently began sending food to composting facilities and they eagerly await similar reductions and savings.



A municipal composting facility.

If you haven't started already, composting at home is a great way to take sustainable steps in waste reduction. Visit The Green Zone's Home Composting site at www.thegreenzone.org/outdoor/composting.asp for information on how to get started.

#### **OPERATION HARVEST**



During Sustainable September, the Main Market Co-op will accept donations from your garden to be given to the *Plant a Row for the Hungry* program. All donations will be distributed through 2nd Harvest to people in need.

Drop off your garden bounty at 24 W Main.

9/7, 12-7pm 9/11, 10am-4pm 9/17, 9am-4pm 9/25, 10am-4pm

#### SUSTAINABLE SEPTEMBER SPOKANE

Sustainable September is an annual month-long series of events dedicated to promoting sustainability in the Spokane community. The

whole month will focus on many events, activities, discussions, and tours designed to build community and increase participation to becoming more environmentally and economically resilient.

The month's events are organized around eight track topics that highlight local food, youth participation, economic sustainability, energy security, active environmental efforts, and more. Among these topics, there are multiple dates for Operation Harvest where gar-



deners can drop off their extra bounty of vegetables to be donated to 2<sup>nd</sup> Harvest for the Plant a Row donation program.

On Saturday 11<sup>th</sup>, the Main Street Fair

will take over between Browne and Division starting at 10, and in the evening the Youth Sustainability Council will take over with Sustainable Uprising. This event is four hours under the stars full of community art projects, music, vendors, and a fashion show, especially geared for Spokane's young adults.

Keep updated on the calendar of events for Sustainable September at

www.SustainableSeptemberSp okane.org.

## OUR FAREWELL: Jim Blake

This summer the Living Green staff said farewells to SNAP's Conservation Education



Coordinator, Jim Blake. Jim is no doubt enjoying camping, hiking, and rowing for the remaining summer season.

Best Wishes, from Living Green.

### **UPCOMING EVENTS**

Tuesdays in September Film Festival All month long at the Garland Theater, 7pm. GarlandTheater.com.

**9/8 Local Living Economy Series, Pt 1** Lectures by Judy Wicks and Van Jones are hosted by Project HOPE at the Farm-Eco House, 2605 W Boone. 7-8:30pm.

**9/11 Fall Harvest Festival** begins at Greenbluff. For more info: <u>GreenBluffGrowers.com</u>.

**9/11 Main Street Fair,** highlighting the best Spokane has to offer with information, events, food and fun. Main Street between Browne and Division, 1pm-7pm.

9/11 Meet Me at the Spokane River Kayak Expedition From Plese Flats to Nine Mile Dam, 6-8pm. Register at spokaneriver.net or call: 535-7084.

9/12 Spokefest Begins in

Riverfront Park, with a 21 or 1 mile loop. Ends on Post Street Bridge for celebration. Register at <a href="mailto:spokefest.org">spokefest.org</a>.

**9/12 Green and Solar Home Tour** A self guided tour from 11am-4pm, with an info fair at the EcoDepot from 2-6pm, 1326 E Sprague. More info email:

greenhomestour@gmail.com.

**9/12 Picnic with Beavers**Bring a sack lunch and the family for a hike, native history, and beaver acitivities with the Lands Council at Liberty Lake County Park. RSVP at 209-2407.

**9/14 Green Drinks** Featuring Down To Earth NW at the Swamp Tavern; 5-8pm.

**9/15 Local Living Economy Series, Pt 2** Lecture by Michelle Long hosted by Project HOPE at the Farm-Eco House. 7-8:30pm. Call

**9/18-19**, **Tour Des Lacs**: Two-day journey from Spo-

kane to Coeur d'Alene (and back) via whatever route you like, from easy to difficult. www.roundandround.com.

**9/24-26 Valleyfest** Festival, music, and food at Mirabeau Park from 9:00-5:00.

**9/25 Spokane River Clean Up** at High Bridge Park 9am3pm. Register at <u>friendsofthe-falls.org</u>.

9/25 Run For Hunger Part of Valley Fest 2010, this fun run is for the Spokane Valley Partners Food Bank, on the Centennial Trail at Mirabeau Park. 9am. Call 922-3299.

**10/16 Compost Fair** 11-2pm at the Finch Arboretum.

#### Home Canning, cont'd

cook while releasing steam (usually 5-10 minutes). Then cover the valve with the weight or close the petcock valve. After a few minutes, when the recommended pressure has been reached (either on the dial or the weighted gauge starts to jiggle), the

processing time begins. Maintain pressure by the heat of your stovetop. Allow the canner to cool naturally. Only after pressure reaches zero is it safe to open the canner (or the weighted gauge stops jiggling and hissing).



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Living Green is making choices in our day-to-day lives that reduce our impact on the environment and move us in the direction of a sustainable lifestyle – one that is healthy, ecologically sound, economically viable and socially just.



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