



Project Noah - Month 5

Billie Nicholson



Project Noah is a yearlong food storage and emergency preparedness program designed to help you set and obtain goals in the area of family preparedness. The program is divided into twelve monthly assignments touching on lots of short and long term preparedness subjects including a preparing, a reporting and a sharing segment each month. These lessons are designed to be used in church or community groups focused on preparedness. Start your own group and use these newsletters as a reference resource. Many articles will link to previous articles on SunOven.com or other sources. Click for additional information.

Our FIFTH month's lesson includes making an evacuation plan, starting with two ways to get out of your home and determining where to meet once out. We are continuing to add items to our 72 hour kits - including a family photo with complete descriptions of each family member, toiletry items and a whistle.

Our non-food items this month are dish soap and bleach. In addition to searching for the best buys on what you like to use, we have included some alternative recipes to store-bought products.

First Aid lessons this month cover blood - basics of blood, stopping bleeding and personal protection from the blood of others.

The long term storage items this month are Flour & Wheat. We've included information about gluten sensitivity, tips on storing, cooking and other uses for wheat besides bread, plus a variety of recipes.

Are you exhausted from all the work of a summer garden? Don't stop yet. There are a variety of plants you can grow from now to freezing weather and beyond. Garden fresh does not have to be limited to the summer months. What will your fall garden include?

Assignments on Page 10



Order Your Sun Oven® Today

Ask Billie

Q. Can I use the Sun Oven® to decrystallize honey or jam?

A. Yes, a SUN OVEN® makes a great tool to use to decrystallize honey or jam. Set up the sun oven facing South and add the jar that needs to be decrystallized. Loosen the top and check back in a couple of hours. The slow even heat inside the Sun Oven® will dissolve the sugar crystals and your honey should be all liquid again. Stir jam to redistribute the sweetness.

What is your Most Burning Question about Food Storage or Emergency Preparedness? Send your questions to editor@sunoven.com

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Emergency Escape Plan



September is National Preparedness Month, promoted by the US government (DHS and FEMA). Fortunately, we're several months ahead in our planning, so we're already putting together our 72 hour kits. The next step is to have a family council and discuss emergency escape plans.

Emergency escape plans start at home. It is critical that every family member know how to get out of their home in case of an emergency, especially fire. Do you have two ways to get out of each room in your home? How about two ways to exit your house?

Unless a small fire can be easily controlled, fire fighting should be left to professional firefighters. Family members should concentrate on escaping to safety. To make sure this happens, make a home emergency escape plan and practice it so often that even youngsters in your family know it by heart. Since kitchens are the leading area of origin, make your exit plan away from the kitchen. **Make your plan.** This link includes a graph for you to use to draw your floor plan and mark exits, courtesy of the [National Fire Prevention Association](#).

Deaths from home fires occur most frequently between midnight and 4 AM, when most people are asleep. More than 6,500 people die each year from fire – more than half are children and senior citizens.

Smoke filling the home is a dangerous situation. Family members may not be able to see very well, get dizzy and disoriented and become trapped. Smoke alarms can save lives.



Important rule: get out quickly. Practice, Practice, Practice your plan until every family member understands what to do and how to get out of your home in the dark. Play a game to determine how quickly you can all get together.

Pick a meeting place a safe distance from the house. This should be something that is stationary and will not be moved. Everyone should meet there in the event of a fire. This will prevent family members from wandering around the neighborhood looking for one another or being tempted to go back into the house. Once there, one person can go to a neighbor's to call 9-1-1, if you didn't grab your cell phone on the way out. If anyone is missing, give that information to the fire department immediately and tell them the probable location of the missing person. **Do not re-enter the burning building.**

Make special provisions for infants, young children, disabled or the elderly who may need additional help when escaping. These should be included in the emergency escape plan and discussed. Children often hide in a closet or under the bed when frightened. Encourage them to exit outside. Do not allow them to hide. Make sure they practice opening the window, descending a ladder or lowering themselves to the ground through a window. Teach sliding out feet first, holding on with two hands and bending the knees when landing on the ground. If you take a child with you, lower them first before you exit. They may panic and not follow. Every family member should practice speaking the fire department phone number, the family name and street address into the telephone. Pick a place your family can meet if a disaster occurs and you are not at home. Select one in your neighborhood and one outside the neighborhood. Add the name of an out of area family member to your [Family Preparedness Card](#). When separated, family can call this number to confirm their location and condition

The [National Child Traumatic Stress Network](#) has an app to help adults [Help Kids Cope](#) with these traumas. **Next Month** -What do you do if your home is destroyed?

Blood - We Can't Live Without It!

Blood is the fluid that travels throughout our bodies in tubes called veins. This fluid is essential for life because it carries oxygen and essential chemicals to where they are needed in the body. In its travels it also picks up waste from different body parts and carries that to the places where it can be eliminated. Blood helps fight infections and it carries heat around our bodies to keep some parts warm (like our fingers and toes) and helps remove heat from other parts to keep them cool.

More than half of blood is plasma, a clear pale yellow liquid, where all the blood cells, platelets and chemicals, like hormones and glucose, float. There are red and white blood cells. Red blood cells carry a red colored chemical called hemoglobin, which carries oxygen, breathed into the lungs, around the body and exchanges it in cells for carbon dioxide and takes that back to the lungs, where it can be breathed out. There are many, many red blood cells in a drop of blood. Red blood cells are being made all the time in the bone marrow of bones like the thighs and pelvis. They only live about four months and then they are recycled to make new red blood cells.

White blood cells are the body's soldiers, made to defend it against germs or foreign things like splinters or chiggers. The number of white blood cells goes way up when you are sick. They work with special proteins called antibodies which also travel in the plasma to protect your from diseases. Antibodies recognize germs and call out the "troops" to surround and destroy them. Antibodies develop when you have had an infection or have been immunized with a "vaccine."

Platelets are sticky little cells that move around in the blood until a blood vessel is punctured in some way. When bleeding starts the platelets join together with a protein called fibrinogen to make a clot which stops bleeding. In addition, the energy-giving materials coming from food and hormones are carried by the blood where they are needed. Waste products are carried places where they can be sent out of the body, too. ¹

Dealing with Bleeding - D.R.S.A.B.C.D.

If you need to give first aid to someone who is bleeding, check through these letters in your head first. They stand for

D= Danger R= Response S= Send for help A= Airway B= Breathing C= Compression D= Defibrillate

If you are in a safe place and the person is breathing then the next thing you look for is bleeding.

Blood can carry diseases in it so be careful.

- Wash your hands before and after helping someone
- Use plastic gloves if you have them
- Help the person who is bleeding to deal with it himself

The first step is to stop the bleeding -

- Apply hard pressure with a clean pad on the bleeding spot
- Raising the body part that is bleeding will slow down the bleeding²
- Add an additional pad on top of the first one if blood continues to come through; if severe, use pressure point (femoral or brachial artery)
- Get help by sending someone around you or using your cell phone
- Continue talking to the victim telling him what you are doing; keep him warm and calm; watch for signs of shock³
- If a large object is in the wound, DO NOT pull it out. Seek help
- Tourniquets are only recommended if the situation is life threatening.²



Photo: WikiHow

References



Preventing the Spread of Bloodborne Pathogens

American Red Cross

Bloodborne pathogens, such as bacteria and viruses, are present in blood and body fluids and can cause disease in humans. The bloodborne pathogens of primary concern are hepatitis B, hepatitis C and HIV. These and other bloodborne pathogens are spread primarily through:

- *Direct contact.* Infected blood or body fluid from one person enters another person's body at a correct entry site, such as infected blood splashing in the eye.
- *Indirect contact.* A person's skin touches an object that contains the blood or body fluid of an infected person, such as picking up soiled dressings contaminated with an infected person's blood or body fluid.
- *Respiratory droplet transmission.* A person inhales droplets from an infected person, such as through a cough or sneeze.
- *Vector-borne transmission.* A person's skin is penetrated by an infectious source, such as an insect bite.

TO PREVENT INFECTION, FOLLOW THESE GUIDELINES:

- Avoid contact with blood and other body fluids.
- Use CPR breathing barriers, such as resuscitation masks, when giving ventilations (rescue breaths).
- Wear disposable gloves whenever providing care, particularly if you may come into contact with blood or body fluids. Also wear protective coverings, such as a mask, eyewear and a gown, if blood or other body fluids can splash.
- Cover any cuts, scrapes or sores and remove jewelry, including rings, before wearing disposable gloves.
- Change gloves before providing care to a different victim.
- Remove disposable gloves without contacting the soiled part of the gloves and dispose of them in a proper container.
- Thoroughly wash your hands and other areas immediately after providing care. Use alcohol-based hand sanitizer where hand-washing facilities are not available if your hands are not visibly soiled. When practical, wash your hands before providing care.

TO REDUCE THE RISK OF EXPOSURE, FOLLOW THESE ENGINEERING AND WORK PRACTICE CONTROLS:

- Use biohazard bags to dispose of contaminated materials, such as used gloves and bandages. Place all soiled clothing in marked plastic bags for disposal or cleaning. Biohazard warning labels are required on any container holding contaminated materials.
- Use sharps disposal containers to place sharps items, such as needles.
- Clean and disinfect all equipment and work surfaces soiled by blood or body fluids.
 - Use a fresh disinfectant solution of approximately 1 1/2 cups of liquid chlorine bleach to 1 gallon of water (1 part bleach per 9 parts water, or about a 10% solution) and allow it to stand for at least 10 minutes.
 - Scrub soiled boots, leather shoes and other leather goods, such as belts, with soap, a brush and hot water. If worn, wash and dry uniforms according to the manufacturer's instructions.

IF YOU ARE EXPOSED, TAKE THE FOLLOWING STEPS IMMEDIATELY:

- Wash needlestick injuries, cuts and exposed skin thoroughly with soap and water.
- If splashed with blood or potentially infectious material around the mouth or nose, flush the area with water.
- If splashed in or around the eyes, irrigate with clean water, saline or sterile irrigants for 20 minutes.
- Report the incident to the appropriate person identified in your employer's exposure control plan immediately. Additionally, report the incident to emergency medical services (EMS) personnel who take over care.

[Download Full Fact Sheet](#)

What Will Your Fall Garden Grow?

Most of us are sick and tired of working our gardens at just about the time we could get a second wind and start our fall gardens. Many veggies, particularly root crops and leafy green will make great eating into the winter. There is nothing more satisfying than stepping out into the brisk morning air to harvest fresh food from your fall garden. There are a couple of things to do first.

Each region has an ideal planting time for fall crops. First, they need enough growing time (with temperature and sunlight) to get to nearly mature. Just as you refer to a planning chart for the last frost in spring, you should refer to a chart that gives the average first frost dates in the fall. Check those dates on [Daves Garden look up](#) by zip codes.

Then check the seed packet and determine how many “days to maturity.” Do the calendar math. Will that variety be ready to eat before the frost date? If you have a short window between too hot to grow (cool weather crops like daytime temperatures in the 70’s to low 80’s), you may need to start these seedlings in partially shaded trays. Adding a canopy of shade cloth over a bed will allow you to plant them where they will grow. Make sure the beds remain evenly moist so seeds will sprout.

Another option is to plant small seedlings at the base of taller summer crops that may still be bearing. The seedlings benefit from the shade in hotter weather. Cut out the summer plants once the temperatures start to fall. There is no need to till the bed, just use a trowel and loosen the soil where you place the seedlings to a depth of 4 or 5 inches. You can spread a layer of compost on top of the soil to give them a little boost.

Green leafy vegetables and many root crops taste better in the fall and don’t have the tendency to “bolt” (go to bloom) in the fall like they do in the spring. Some plants in southern states will continue to grow most of the winter. When the temperatures get below freezing, most growth will stop. Crops can be harvested until temperatures dip into the teens. Then you must [protect them](#) or they will die.

What greens do you like? They are the ones to plant. Here are some suggestions:

1. Lettuce - there are many varieties of leaf lettuce that will grow large enough to pick leaves from in about 45-60 days. So plant them 4-8 weeks before your first estimated frost. Lettuce can grow through the winter in a cold frame or row cover.
2. Beets - are either loved or not by most folks. Their leaves can be trimmed all fall to add color and variety to salads. If they’re protected during the coldests times, they’ll grow all winter and make great tasting spring beet roots. They are nutritious and can be ready for picking in 2-3 weeks.
3. Field cress - also known as creasy salad, is edible either raw in salads or steamed. This plant grows wild across the Southeastern United States. Seeds are available but this is one you may want to “forage” for.
4. Kale - is a member of the cabbage family that is cold hardy. Leaves can be picked and eaten as you thin the bed for an extra shot of vitamins and minerals. Soak these seeds overnight before planting and then place them in full sunlight areas. Can tolerate freezing weather.
5. Radishes - are fast growing and provide a tangy crisp flavor as a green and if you can be patient for the root to form. They mature in four to six weeks.
6. Turnips - have one of the greatest germination rates of any green I’ve planted. Plus you can just toss them into a scratched up bed and walk away. The greens are ready for picking in a few weeks. They will grow til the first hard freeze or longer if protected.
7. Arugula - another peppery flavored green ready in three to four weeks after planting.
8. Broccoli - prefers temperatures below 70° F. You can eat these greens in salads as you thin the bed.
9. Swiss Chard - a member of the beet family, they are mild flavored and can be eaten raw or cooked.
10. Onions - grown from sets can provide green tops all winter. Can also be grown in your window.

What grows in your fall garden? We would love to get your suggestions.

Fall Flavored Soup from our Solar Chef



This soup is so creamy and velvety that you'll be surprised to learn it's made with just a touch of olive oil and no cream or cheese at all.

Sun Roasted Sweet Potato Soup with Cranberry Relish

INGREDIENTS

Relish:

1/2 cup fresh cranberries, coarsely chopped

3 tablespoons orange juice

1 tablespoon chopped shallots

1/2 teaspoon sugar

Soup:

2 large carrots, peeled and cut into 2-inch pieces

1 onion, cut into wedges

1 large sweet potato, peeled and cut into 2-inch chunks

1 tablespoon olive oil

1/2 teaspoon kosher salt

1 carton (32-ounces) vegetables broth

1 teaspoon fresh ginger, finely grated

salt and pepper to taste

2 tablespoons flat-leaf parsley, chopped

PREPARATIONS

Set *Sun Oven*® out to preheat

In a large bowl, toss the carrots, onion, and sweet potato with the oil. Spread the vegetables out in a baking pan and season with the kosher salt.

Cover and roast in the Sun Oven until soft, but still firm, about 45 minutes. Prepare the relish while the vegetables are roasting.

In a small bowl, combine the cranberries, orange juice, shallots, and sugar; set aside.

Transfer the cooked vegetables to a large pot. Add the broth and ginger. Return the pot to the Sun Oven and cook until vegetables are very soft, about 1 hour. Use an immersion blender to puree the soup until smooth. Season to taste with salt and pepper. Ladle into bowls and top each serving with chopped parsley and cranberry relish.

Makes 4 servings

Storing Dish Washing Soap and Alternatives

Our non-food items to store this month are dish washing soap and bleach. In 2005 dishwashing detergent retails totaled nearly \$10 billion USD worldwide.¹ How much do you use in a year? Do you wash your dishes by hand or in a dishwasher? Probably some of both, right. If we ever get to the power grid down scenario, we'll all be washing dishes by hand, if at all. We keep three 24 oz. containers of dishwashing liquid in storage and add this to our shopping list when we open one. If you would like to make your own, there are recipes available which will clean effectively, have no harsh chemicals and will save you money.²

Dish Soap Alternatives

Simple Recipe - Use liquid castile soap (name used in English-speaking countries for olive oil based soap made in a style similar to that originating in the Castile region of Spain. It is made with olive oil, not animal fat). Mix four parts of liquid castille soap to one part of water. Stir to combine and store in a labeled squeeze bottle. Shake before use to make sure everything is combined. Add a few drops of lavender or lemon essential oil for a slight fragrance. Use tea tree oil to add an antimicrobial function.

Basic Recipe - For a more complex dish soap, mix 1 teaspoon of borax and a grated bar of castile soap; cover with 1 3/4 cup of boiling water. Stir until dissolved. Allow to cool, stirring occasionally. Add a few drops of essential oil for scent. Store in a squirt bottle.

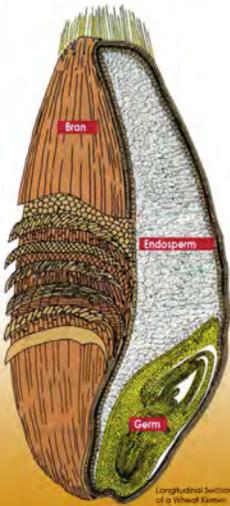
Stronger Recipe - If you need something stronger to cut that bear fat, combine 1 Tbs. each of borax, and washing soda with 2 Tbs white vinegar and 1/4 cup liquid castile soap. Bring 2 1/2 cups water to a boil and pour over the mixture. Stir gently until everything is dissolved and combined. Let cool, add a few drops of essential oil and bottle. Shake well before using.

Note: Homemade dish soap will not bubble like store bought (it doesn't have sodium laurel sulfate), it will look cloudy.

Tips on Hand Washing Dishes

There are two ways to wash dishes by hand. One is by filling a container with diluted soapy water. The other is by applying soap to a sponge or wash cloth and rubbing it directly on the dishes. Either way, don't run water continuously. Your grandmother had a water saving technique of preparing a pan of hot soapy water and starting to wash the least dirty items first. We always washed the glasses first. Then pile in the silverware while you scrape off the food left on plates and in bowls. Our raw food waste goes into the compost pile; cooked food goes into the trash. By this time, the eating utensils are nearly clean and can be rubbed with a cloth or sponge and stacked in a pile. When they're all done, rinse them with some warm water and stack them in a draining rack. Next, wash the bowls and plates. Stack them until the sink is full or you have finished washing them. Now rinse and stack in a draining rack to air dry. (Air drying has been found to be better than drying with a dish towel - one less thing to wash.) Your grandma probably put some of that hot soapy water and maybe a dash of baking soda, too, into the dirty pots and pans and let them soak while she washed everything else. Always wash the less greasy items first. Do not leave them to sit all night, you'll have a yucky mess come morning. Wash all then rinse and turn up to drain and dry.

Now, after all of that, manufacturers claim that most dishwashers only use 4 gallons of water. How much water do you use? Also, did you know most dishwashing detergent bottles can be recycled when empty?

Wheat
Growers
Corner

Facts on Flour and Wheat

Wheat Foods Council

Like all grains, wheat began as a wild grass, and may in fact have been the very first crop in history. Historians believe the wheat kernel originated in the “cradle of civilization,” the Tigris and Euphrates river valley, near present day Iraq. In their natural state growing in the fields, whole grains begin as a dry, one-kernel seeded fruit. Also known as the “caryopsis” or wheat berry, the kernel is the seed from which a new wheat plant grows. It is also the part we grind to produce flour or semolina. Each kernel contains three distinct, edible parts that are separated during the milling process. The germ, or baby plant, grows into a new wheat plant; bran is the multi-layered outer covering (contains antioxidants, B vitamins and fiber); and the endosperm, the germ’s food supply - and also the source of white flour - is high in carbohydrates and protein. These parts are protected by an outer covering or husk. Wheat kernels vary in texture and color, from white to red and sometimes purple.¹

WheatFoods.org

More than 17,000 years ago, humans gathered the seeds of wheat as an important food source. After rubbing off the husk, the kernels were consumed raw, parched or simmered. Today whole grain products still contain the entire kernel of grain. That means they contain all three parts of the seed in the same proportion found in the original kernel. White bread is made from the endosperm. When the other parts are milled out, some nutrients are removed. Modern products have some of these nutrients replaced through enrichment. Enriched white bread has iron, B vitamins and folic acid added.

Grown in 42 states in the US, wheat makes up 75% of all grain products produced in the US. One bushel of wheat weighs about 60 pounds and makes about 42 pounds of white flour or 60 pounds of whole wheat flour. 150 pounds will supply an adult for one year. The thousands of varieties of wheat are organized into six classes: Hard Red Winter, Hard Red Spring, Soft Red Winter, Durum, Hard White and Soft White. Bread flour is a blend of hard red wheat and has a higher gluten protein content. Cake flour is milled from soft wheats and has a higher carbohydrate content and less protein, which keeps cakes and pastries tender and delicate. All purpose flour is white flour milled from hard wheat or a blend of hard and soft wheat. It is usually enriched and can be bleached or unbleached. Bleaching will affect nutrient value. Self-rising flour has leavening and salt added.

Flour should be stored in a cool, dry place (less than 60% humidity). All purpose, bread and cake flour can be stored for 6 months to a year at 70°F and 2 years at 40°F. Whole wheat flour should be stored refrigerated or frozen to slow the oil breakdown. Wheat grains can be stored in air tight containers for up to 30 years as long as the storage location is cool. Removing air with oxygen absorbers will keep insect eggs from hatching and eating the grain. Stored grain can be ground for flour, popped like popcorn, steamed or cracked and cooked. Wheat grains can also be sprouted for wheat grass, used in specialty breads and juicing.²

Recently, wheat, and the proteins it contains especially gluten, have received intense attention from the media and consumers. There are several reasons for this. First, the incidence of celiac disease (less than 1% of US population) and awareness of it are increasing. Second, gluten sensitivity has been newly identified as a concern affecting a small percentage of people (6% of Americans). Third, a rise in the incidence of asthma and all allergies, including those to wheat, has been suggested. The reasons for the changes in incidence are not clear, but they have become the subject of much research and many theories. It appears that a complex interaction of genetic, gastrointestinal, environmental and dietary issues may be contributing to the observed increases. As a result gluten-free foods and beverage sales are projected to reach \$6.6 billion by 2017. If you suspect you may have gluten sensitivity seek guidance from your health care provider.³

[References](#)

[Don't Miss These Recipes](#)

Project Noah - Fifth Month Assignments



[Project Noah](#)

1. Pre-Disaster Preparation:
 - a. Evacuation plan - make an escape plan to get out of your home; include two routes out of each floor; practice it
 - b. Determine where to go; what family member to notify
 - c. Include a family photo with descriptions in your 72 hr kits
2. Pre-Disaster Preparation:
 - a. Learn basic First Aid
 - b. Make sure to add disposable gloves and absorbent pads to your first aid kits
 - c. Complete adding toiletries (toothpaste & brush, hand sanitizer, wet wipes, soap, mirror, comb/brush, razor, lip balm, toilet paper, deodorant, feminine needs, baby needs, and a whistle) to your 72 hour kit
3. Non-Food Items: Dishwashing Soap & Bleach- Goals:
 - a. Determine how much your family will need for 90 days and for a year - is this doable?
 - b. Shop for the best prices and buy what you can afford
 - c. Explore alternatives, make your own
4. Short Term: Plant a fall garden
 - a. Decide what leafy greens and root plants you like to eat
 - b. Plant early enough to beat the frost
5. Long Term Storage Item: Flour and Wheat
 - a. Store some in bulk cans or jars
 - b. Experiment with recipes

Next Month's topics will be: First aid tips on broken bones, sanitation and continuing to add items to 72 hr. kit.

Non-food item: Laundry Detergent

Long Term Storage: Rice

Gardening: Preserving herbs for winter