



Project Noah - Month II

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 self reliance and 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 ELEVENTH month's lesson focuses on pre-disaster preparations with an emergency car kit. Hiking can be good exercise as well as an opportunity to get away from it all. Do you have a hiking check-list? A college student shares her experiences getting stranded.

What options do you have for communications during an emergency? Money matters are a big part of self reliance. What plan do you have for saving for a "rainy day?"

Our first aid topic asks the question: What natural items can you use as anti-biotics?

The non- food items to acquire are Matches and Batteries.

What are your thoughts on preparedness? Reader Lynda Eggimann, from Idaho, shares hers.

We are continuing to collect recipes to prepare using food storage items. What are some of your favorites? You can send your recipes to editor@sunoven.com

How secure are you? Take our quiz.

Assignments on Page 10



Order Your Sun Oven® Today

Ask Billie

Q. How do I measure the inside temperature of a roast or turkey?

A. We offer a Programmable In-Oven Thermometer with Ultra Probe that allows you to check the temperature of food and know when it is done without opening the **SUN OVEN®** door. The thermometer with an easy to read digital screen can be placed on or next to your **SUN OVEN®**. A probe is inserted into the food, and a high-heat silicone cord connects it to the thermometer. Eliminates the guesswork and bakes roasts to your liking for meat types and doneness.

Find it on our website [here](#).



What is your Most Burning Question about Food Storage or Emergency Preparedness?



Send your questions to editor@sunoven.com

Billie Nicholson

[Car Emergency Kit - A Life Saver](#)

Whenever you travel, you are at risk of a car breakdown that will leave you stranded. During winter, when more foul weather is expected, a car emergency kit could save your life. In an earlier article, [Winterize Your Car Emergency Kit](#), we listed an expanded list of items to be sure to include.

Many of us have some form of GPS locating system either in our vehicles, on our phones or as a hand held device. We put the addresses of our family and close friends into our system and saved them for future reference. The system has failed on occasion leaving us thankful that we had printed maps with us as well. It is a good idea to get proficient with a map and compass. USGS has [maps](#) you can order or download for free. Don't leave home without them.

Food and water caches in your car will need to be rotated every six months if you keep them stored in your vehicle most of the time. Car interior temperatures in the summer can degrade water and it's containers as well as energy bars. Check the contents of the first aid kit, too.

Keeping your vehicle in good repair is critical. Never leave home, especially on a long trip without first having your vehicle checked over. Fill the windshield washer and never let the gas tank get below half full.

Did you read about the Texas college student who got lost near the Grand Canyon while heading to hike at the Havasu Falls Trail? She had quite an experience when she took a wrong turn, thanks to Google Maps. Fortunately she had supplies in her vehicle that helped her survive. She recalls:

I was on my way from the southern rim of the Grand canyon. I put Havasu Falls Trail Head into Google maps. I had 70 miles to empty not including reserves. I go down the highway leading from the rim and it says turn right before I thought it was the right road. I decided to trust Google and turn onto this ratchet dirt road. Google said I'd only be on it 40 miles before the next highway where I figured I could get gas well before the danger zone. Anywho. 35 miles in, it says to turn on a road that doesn't exist. I figured it may have washed a bit of the road away since they were primitive dirt roads. So. I turned anyway and figured I'd see the road momentarily. It was getting dark. I came up to a fence with no roads in sight. Panicked since gps stopped working, too. So I Panicked and tried to find the road again. Finally found it but was at 0 to empty. Parked by the first man made structure I found and decided to wait til daylight. Turns out my reserve was exhausted, too.

So I spent five days constructing various signs to help someone find me. Including an SOS sign out of rocks about four feet by ten feet. That wasn't working so I made a "HELP" sign on the third day that I got to about 20-30 feet tall for the letters. I also tried a signal fire but since everything was so dry, it burned too clean. I also made a road barricade after a truck driver drove past me without noticing. I had a flashing headlamp that I turned on every night. I rationed my food and water and when they found me I still had 16-18 days left. However, I got tired of waiting to be rescued.

I had no signal and no gps. So I pulled myself up by my bootstraps and hiked a total of 21-22 miles. I had to hike 11 miles east from my car just to get signal to call 911. Even then, the call dropped after 49 seconds and I had to pray they got enough info to find me. The helicopter found me about two hills away from my car on my hike back. I don't know if it was a mile. Maybe less. [Reference](#)

If you hike, be sure to include [these items](#).



Alternative Ways to Communicate During a Disaster



Communication during and after a disaster is an important part of response and recovery. It connects family members, communities and first-responders with support structures. Reliable communication systems are critical for a community's rescue and recovery.

During a disaster, for most people being out of touch with family is terrifying. We have become so accustomed to being in contact, often with the push of just a few buttons on our cell phones. It doesn't take much of an emergency to disrupt cell phones. If family members are separated by some distance, in-person communication might not be feasible. How else can you keep in touch?

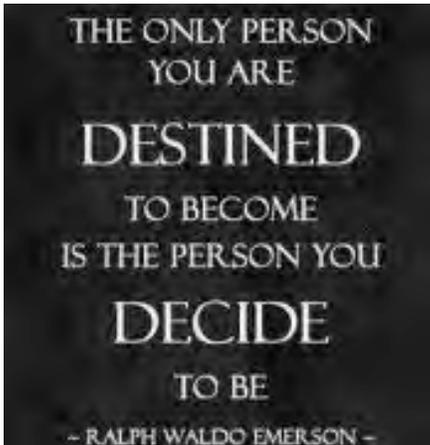
- Text messaging operates on a parallel network to cell phones and uses less bandwidth. Texts will go through when telephone call may not.
- Emailing is another alternative. Email servers are located globally, so it is unlikely that they will go dead all at the same time. The cables used for hard wired internet work on different networks than cell phones, so WI-Fi service may still be up and running. An uninterruptible power source (UPS battery) may extend your communication time as well.
- Social Media is similar to email in that it is hosted on a network of global servers, providing redundancy. It is easy to post Facebook or Twitter messages to family and friends as a back up in case of an emergency.
- Phone Booths are on land lines and are quite reliable. Do you remember where there might be a phone booth near you? Something to make note of next time you're out. If you need to use one, don't forget to take some change.
- Walkie-Talkie radios can have a range of up to 10 miles. Keep a set with batteries stored separately to use in your community.
- Should the situation get really bad, you may need to resort to HAM radio. HAM Radios can reach halfway across the country. These do require an FCC license.
- CB Radio reports from truckers may be the best news in a nation-wide situation. They will be burning up the airways with information on fires, road blockages, cities to avoid. etc. [1]

During recent disasters in the US it became apparent that social media played a large part in communications in the wake of these situations. A study funded by the Rockefeller Foundation surveyed over 2,000 individuals affected by Superstorm Sandy. It revealed that people relied on whatever was available. 77% used cell phones, 73% used in-person communications and 41% used land telephone lines. 33% of residents in the affected area used email, 31% used Facebook and 7% used Twitter. But, the hardest hit areas relied on in-person communications. Many people in the hardest hit areas had to reach out and ask for help. These same people also reported positive social interactions during and after the storm, such as taking in neighbors whose homes were damaged or destroyed, sharing food and even sharing generators. [2]

Do you know Morse Code? [Read More](#)

[References](#)

What is Self-Reliance?



The first hint of the philosophy that would become "Self-Reliance" was presented by [Ralph Waldo Emerson](#) as part of a sermon in September 1830 a month after his first marriage. Emerson wrote on "individualism, personal responsibility, and nonconformity.[1]

The concept that a person could have control of his future was totally new. "Self-reliance is the ability, commitment, and effort to provide the spiritual and temporal necessities of life for self and family." [2] Self-reliance embodies temporal well-being through: education, health, employment, family home production and storage, and family finances. Meeting the needs of a family is a joint project shared by all family members. The Church of Jesus Christ of Latter-day

Saints established a welfare plan in 1936. The purpose was designed "to do away with the curse of idleness and abolish the evils of dole." Independence, industry, thrift and self respect are emphasized with the goal to help people help themselves. Over the years, this initiative has been developed to encourage people to be responsible for themselves, both temporally and spiritually. As people become self reliant they are better able to serve and care for others.

The Religious Freedom & Business Foundation has been licensed to create an interfaith version of the Self-Reliance Curriculum developed by The Church of Jesus Christ of Latter-Day Saints (LDS Church) in order to pilot the [Empowerment+ initiative](#) in London to counter extremist radicalization. The initiative will be carried out at St. Mary's University. The curriculum is intended to be inter-faith and will provide theological background for other religious traditions as well.[3]

Church doctrine teaches that each person has the privilege and duty to set their own course, solve problems and work to be self-reliant. They have an element of control that can be achieved through inspiration and laboring with their own hands.

As a part of self-reliance, the responsibility to manage family finances should be shared between spouses with an attitude of trust and openness. Careful financial management will provide security and promote family well being. The financial stewardship success map includes five steps based on personal faith, unity with spouse and a commitment to self-reliance as a foundation.

The steps include paying tithes and offerings, protecting your family from hardship by establishing a growing emergency fund, eliminating debt, saving and investing for the future and continuing to give and bless others in need.[4] As an individual gains fulfillment, he develops the motivation to share talents and gifts in service for a neighbor. The neighbor in turn is also equipped to reach their own fulfillment resulting in the betterment of a community.

Learning to live within your means and avoid debt is one of the best gifts you can give yourself. In order to do this, the first step is developing a budget and sticking to it. Budgeting requires you to distinguish between wants and needs. It requires discipline and patience. [Record Keeping Forms](#)

What do you do when expenses exceed money? Cut back on optional items like convenience foods; eat at home more; rent a DVD instead of going to the movies or stay home and play an old fashioned board or card game for entertainment. Shop thrift stores for clothes; check out books from the library instead of buying them; organize your trips carefully to cut down on driving expenses.

Set aside some money each month in saving. Save your change to begin building an emergency fund. Add to it each month with a goal of one month's income first. Once that is accomplished, work on additional savings to accumulate 6 months income saved. [Continued](#)



Thoughts on Preparedness

Lynda Eggimann

When I began to think how life could change, everything changed. Imagine your world with a bad toothache, a blister, poison oak, a burn, bed bugs or a howling baby and NO Walmart. In a world where a small scratch could be life threatening the person with a tube of disinfectant is a hero.

Whether disaster is eminent or not, I don't know. But I do know I sleep better when I'm prepared. So I prepare.

WE MAY NOT BE THINKING CORRECTLY

At one time I stored boxes of product from the dollar store and ingredients to make my own laundry detergent and deodorant ... but not anymore.

I started preparing before preparing was cool... If I found a sale, I stocked up. I shopped and picked-up extra for storage. I counted and inventoried cans of beans and stacked, labeled and planned meals. But I seldom got around to toothpaste and dish soap.

My thinking has evolved. I remember tuna cans with rolled cardboard and paraffin for candles, saving lint to make fire starters and filling film canisters with safety pins and matches. Things have changed since then ... Our needs, our family size, our abilities and especially new items available to us.

Here are some of the thoughts that changed my storeroom, maybe they'll change yours, too.

Food is important, but if you have no way to wash dishes or clothes you will be miserable. If you can't brush your teeth or wash your hair, your poor hygiene will soon alter your health.

I recall a time when making homemade soap seemed a little romantic. But today it seems crazy. I'm not interested in wringing and rinsing laundry all day or packing water a mile. Today, if I have to use my preps, I want them compact, safe and easy to use.

IN AN EMERGENCY, ANYONE'S PROBLEM IS EVERYONE'S PROBLEM

It's impractical to have a product for every issue. I won't be able to return products that don't work, buy ones I've forgotten, buy more if I run out or call the Nurse Hotline. I will have no phone, limited water, disposal and dirty water. Those issues made me think.

I don't want to ENDURE... I want to live well with less stuff. I no longer think how to do without, but how to HAVE all I need.

I take brands, quantity, quality and price seriously because I don't want an emergency to be miserable. I want to be the calm in the storm, I want to be of service to others, I want to be clean and healthy and help others be the same.

I'm not thinking "how to cure a rash," I'm thinking "how to prevent the rash." I won't be the one with drugs for a crying baby. I'm thinking how to prevent diaper rash in the first place. I don't want to know how to make my own soap with Lye and ash. I want to know how to NOT make my own soap.

I believe the Lord can only help us if we do all we can.

I don't know if I'll ever need my preps. But I know if collectively, we one day find our lives dramatically changed, I want to maintain civility. I'm not interested in returning to the dark ages. I want to be among those with light going forward and I want my preps to reflect that.

Lynda Eggimann is the creator of The 90 Day Shoebox. She twitters as Be PreparedU and guest authors as Be Prepared University. Lynda lives in Idaho with her husband on a small homestead with chickens, rabbits, a wild mustang and Bees. She is passionate about preparedness and loves to share.

Natural Antibiotics

Since the beginning of the 1900's scientists have worked diligently to find chemicals that would fight microbes attacking the human body and not hurt the human. Some of the earliest research was on a treatment for syphilis, an endemic and almost incurable disease. The successful discovery of penicillin by Alexander Fleming in 1928 stimulated drug research up until the 1970s. As good as it was, Fleming cautioned about the potential resistance to penicillin if used in too low a concentration or for too short a time during treatment. Today the problems of microbe resistance to antibiotics have multiplied. [1]

These resistances have sent researchers back to the history books to come up with some ideas of how humans survived before antibiotics. It seems that over the centuries, traditional medicine shared by herbalists and shaman, revealed that some plants possess antimicrobial components. There are about 50,000 medicinal plants used around the world, but only a few have actually been studied.[2]

Nature provides some powerful alternatives for everyday, non-life threatening infections.

We have many natural antibiotic alternatives right in our kitchens. Here are just a few of our favorites:

1. Garlic - one of our favorites, garlic has antibacterial, anti-fungal and anti-viral qualities, kills parasites and even cancer cells. It has a rich history of uses, including being used in paste form as a World War I battlefield wound dressing. Eat it raw for the best results and more than just one. It's our go-to at the first sign of a cold or flu.
2. Ginger - I learned about the use of ginger from a friend experiencing nausea while undergoing chemotherapy for cancer. Sliced and boiled and mixed with honey, it settles an upset stomach. Ginger has anti-bacterial and anti-viral effects on respiratory and periodontal infections.
3. Apple Cider Vinegar - has antibiotic, anti-fungal, and antiseptic properties that can naturally alkalize your body. Drink it with hot water, lemon and honey to break up mucus and sinus infection and relieve a sore throat. [3]
4. Raw Honey - breaks up bacteria as it kills them, stopping the evolution to resistant strains. Romans used it as a battlefield dressing. Manuka honey from New Zealand is the best for resolving infections [4]
5. Cayenne Pepper - use this with crushed garlic and honey for a holistic strep throat treatment. [5]
6. Cinnamon - is a great antibiotic to deal with bacterial infections, especially while traveling. Cinnamon has also shown to help stabilize blood sugar for diabetics. [6]
7. Coconut Oil - is a common ingredient in homemade toothpaste, lotion, and shampoo. Pull coconut oil in your mouth for 5 minutes or more to help heal mouth sores. [7]
8. Aloe Vera - every household should have an aloe vera plant. It soothes burns and repairs dry, cracked skin. [8]
9. Tea Tree Oil - in Australia, it's recommended for whatever ails you. It treats skin infections, relieves itchiness from rash, soothes sun burns and insect bites and much more. [9]
10. Onion - has been scientifically proven to hold antibacterial properties. It has been shown to draw sickness and toxins out of the body. [10]

Consider this list when planning your garden. This way you can use the food in your kitchen for more than seasonings.

References

Disclaimer: This newsletter does not give medical advice. The information, including but not limited to, text, graphics, images and other material contained in this newsletter are for informational purposes only. Always seek the advice of your physician or other qualified health care provider in situations of serious medical concern.

Sun Oven Baked Bean from Our Solar Chef



Buying beans in bulk saves money, but, it also means you might wind up with small amounts of various types in your pantry. This recipe is a tasty way to use them up.

Ingredients

2 cups mixed dried beans, picked over, rinsed, soaked overnight, and drained

2 onions, finely chopped

2 stalks celery, thinly sliced

2 carrots, peeled and thinly sliced

2 parsnips, peeled and thinly sliced

2 cloves garlic, minced

2 teaspoons chili powder

1 teaspoon salt

1 teaspoon cracked black peppercorns

2 whole cloves

1 stick (about 2-inches) cinnamon

1 cup apple cider or juice

1 cup water

1/2 cup real maple syrup

2 tablespoons cornstarch

Directions

Preheat Sun Oven®

In a large pot, combine the beans, onions, celery, carrots, parsnips, garlic, chili powder, salt, peppercorns, cloves, cinnamon, apple cider (or juice), water, and maple syrup. Cover and transfer to the Sun Oven. Cook until the largest beans are soft, 2 to 3 hours. Remove and discard the cinnamon stick (and the cloves if you can find them). In a small bowl, gradually whisk up to 1/4 cup of the bean cooking liquid into the cornstarch until smooth. Stir the cornstarch mixture into the beans in the pot.

Makes 8 servings.

Food Storage Rotation

from “Preparedness Principles” Barbara Salisbury

How old is too old?

Keeping food dry, cool, and protected from light is the key to proper storage. The less light, heat and moisture food is exposed to, the longer its shelf life will be. The optimal canned and dry food storage conditions are: Cool - between 35 and 70 degrees. Dry - at 50 - 70% humidity. If you store food in less than these optimum conditions, it must be used sooner.

Checklist for Food Safety

If any of these signs of spoilage are present, throw the food out without tasting it!

1. Bulging can or lid - in older bottled food, the lid will be concave and the seal cannot be lifted with fingers. Cans purchased in stores will bulge on the ends. If food explodes when opened, discard.
2. A milky appearance to the liquid - in older foods the food may begin to deteriorate, forming a residue in the bottom of the jar or can. This is not an indication the food is bad, just old. The liquid may appear cloudy due to the sloughed off food, but the appearance should not be milky.
3. Corrosion on the outside or inside of the can, especially along the seam.
4. Rust, especially along the seam or seal of a can; dents compromise seal integrity.
5. Slimy appearance or texture; rising bubbles or unnatural color.
6. Rancid odor, especially in foods which contain any amount of fat; or hisses loudly when opened.
7. Mold growth on the food or inside the container.
8. Frozen can or bottle - freezing produces hairline fractures in the seal and allows spoilage to begin.
9. Off smell - food generally changes in odor as it ages. If the smell has developed to point where it is unpleasant, discard the food.
10. Home canned food processed improperly - if improper processing times, methods and/or recipes were used for home canned vegetables and meats, the jar may be sealed but the product inside may be deadly. Do not taste! Throw it out!

“Contact with botulinum toxin can be fatal whether it is ingested or enters through the skin. Avoid contact with suspect foods or liquids.”

Storage Rotation Methods

Using and replenishing your storage should become a commonplace, everyday activity. Whenever you are ready to plan a meal, you pull food from your pantry (also known as your three month supply).

With the exception of canned milk - food doesn't need to be rotated (turned over to rotate food inside). Canned milk condenses on bottom and becomes thick. You should turn it over. It has a shelf life of a year, so don't buy more than you will use in that time. And shake it from time to time.

Use the oldest food first. When you buy new food, it goes behind what is already on the shelf. Use a marker and date everything you put on the shelf.

Options:

1. Use slanted shelves that automatically roll the food to the front and load from the back.
2. Use a 3x5 card box - list on a 3x5 card each item in your food storage. Place all the cards in the box alphabetically and place it in your food storage area. Each time you take an item out of storage, take the card and place it into an envelope taped to the inside of your kitchen pantry. Once a month, take out the cards in the envelope and add them to your grocery list. After you have purchased the items, replace the cards in the box in food storage area.

[**Read More**](#)

Tips on Storing Batteries and Matches



Photo: [Commons.WikiMedia](#)

Batteries come in a variety of sizes, shapes and uses. Review the types of batteries you need for the types of devices you have. Store extras of the types and sizes you need. Proper storage extends battery lives and prevents them from becoming a safety hazard. Here are some storage tips:

- Store batteries in their original package if possible. This will protect them from humidity. Date the package with purchase date. Use oldest ones first.
- Keep partially used batteries separate from new ones. Store each type in its own container or plastic bag. Keep batteries from different manufacturers separate.
- Store batteries at room temperature or below but not necessarily in the refrigerator or freezer.
- Do not store near other metals, they may start conducting electricity, which will drain your batteries quickly and create heat. Align batteries so the positive terminals cannot contact the negative terminals of other batteries. Cover the terminals with masking tape or plastic caps (especially 9 volts)
- Rechargeable batteries will be permanently damaged if kept in a discharged state. Recharge them periodically. Recharge lead acid batteries every six months; Lithium ion batteries should be recharged to 30-50% capacity every few months. Pay attention to apply voltage with the correct polarity.
- Keep batteries, especially small and coin lithium batteries and their devices out of the reach of children. If swallowed, they can get stuck in a child's esophagus and cause serious damage in less than two hours. If suspected, take child to an emergency room immediately. Take battery identification number with you and do not let child eat or drink until an x-ray determines if battery is present. Don't induce vomiting.

There are two kinds of matches, safety matches and strike anywhere matches. Safety matches can only produce fire when struck against a strip on the packaging that is chemically compatible to the matchstick head. Strike anywhere matches were difficult to find for a while, but seem now to be making a comeback. They can be struck against any dry or grainy surface. All matches can create a fire hazard and must be stored safely.

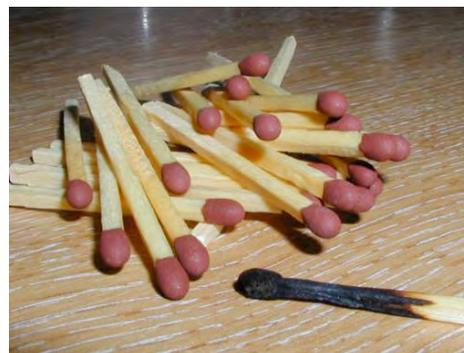


Photo: [Commons.WikiMedia](#)

- Keep matches dry to ensure they'll strike when needed. If you want dry matches, keep them in a waterproof container. There is no such thing as a waterproof match.
- For long term storage, use a Food Saver and seal them inside plastic.
- If you store them in a glass jar, don't put the jar high on a shelf where it can get knocked off and broken.
- BIC lighters make a good alternative.

Project Noah - Eleventh Month Assignments



[Project Noah](#)

1. Pre-Disaster Preparation:
 - a. Build a car emergency kit
 - b. Rotate the items in your kit that can expire
 - c. If you are a hiker, don't leave home without essentials
 - d. Review options for communication during emergencies
 - e. Have an alternate plan to the telephone
2. Non-Food:
 - a. How many devices that require batteries do you use?
 - b. Purchase extra batteries for them
 - c. Select a single place to keep them
 - d. How will you make fire without electricity?
 - e. Get some matches and store them safely
3. Long Term: Rotating food storage
 - a. Make an inventory
 - b. Review and remove questionable items
4. First Aid
 - a. Learn about the antibiotic properties of herbs and spices
 - b. Try an essential oil
5. Self Reliance - Money Matters
 - a. Begin keeping a weekly record of income and expenses
 - b. If you are spending more than making, it's time to review expenses - wants vs. needs
 - c. Set up a plan to pay off debt - more on this next month
6. How secure are you? Take this [QUIZ](#) and rate yourself
7. [Salad dressing recipes](#)

Next Month's topics will be:

More details on Self Reliance and dealing with debt
Essential Oils for healing
EMP s and you
Fixing a Flat
Making Jerky
Survival Breads and more