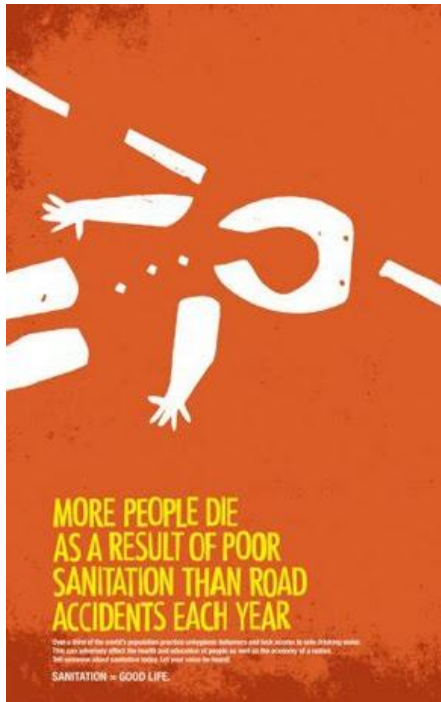


Cheryl and Greg's Blog for April 22, 2013

Emergency Sanitation: Whatever the Situation

No one really wants to discuss sanitation because it's an unpleasant and dirty subject; however, it is one of the most important areas to focus on when preparing for a disaster. More people die after a disaster than during a disaster.



Picture courtesy of www.wildernesstoilet.com

So whether it is by choice that you are living off the grid or through a disaster that you need to live without the conveniences that we consider normal, sanitation is vital. If there is a disaster one of the first things you need to do is to clip your fingernails short, which helps prevent the spread of disease. Hand washing has also been proven to cut to occurrence of diarrhea by 50% in a disaster scenario.

This sanitation information is taken from the experiences of Mike and Leslie who lived for 6 months, two different times...in the summer...in the desert, with their trailer, storage trailers, powerful solar panel and batteries and a well that ran off of a 110 generator.

Mike and Leslie felt pretty self-sufficient but asked themselves the question..."what will we do with toilet matter?"

Here are some great ideas about what to do if you don't have a toilet or toilet paper.

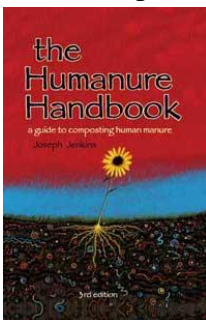


How can you heat water without power? What to do for feminine supplies, taking a shower, doing laundry and rodent and pest control?

What do you do with the toilet matter that will be produced in an “Off the Grid” situation?

Your choices are to burn it, bag it, bury it, or compost it.

1. **Burning:** You can add a little diesel full and your toilet matter will burn, but it will cause a large column of black smoke and if privacy is an issue and you don't want people to know where you are, they will.
2. **Bagging:** Bags can be purchased at the RV store. Bags must be biodegradable. They may be very thin and mice, critters or a sharp stick might damage them. Bags **don't** keep odors in.
3. **Burying:** You will need a shovel for this one. You can make a latrine by digging a long trench approximately one foot wide and 12 to 18 inches deep and cover with 1/4" layer of material as you go. **No pun intended.** Digging too deep can retard the bacterial breakdown process. The long latrine approach is appropriate for large groups camping in one spot for a long period and you can build a movable seat. Make sure not to place the trench too close to water sources.
4. **Composting:** We recommend reading the book *Humanure* by Joseph Jenkins to learn about this process.



You will need to have a bin or an area with leaves, grass clippings, organic waste, make a hole in the center and dump in your toilet matter then cover it up. Wash out the bucket at

the compost site. The purpose of the composting is to kill the pathogens so you don't get sick and the pathogens are killed when the temperature in the compost pile reaches 157 degrees and above. You can buy a compost thermometer to stick in the middle of your compost pile to check the temperature. You can compost in all seasons including winter. Humanure composting has been done for a long time and on a large scale. After the earthquake in Haiti a camp Joseph Jenkins supervised the process, the people at that camp didn't get sick. Mike and Leslie did it and it works! The book Humanure is available to read free in a pdf on the Humanure site.

Humanure Handbook pdf

<http://humanurehandbook.com/contents.html>

Humanure You Tube Chanel

<http://www.youtube.com/playlist?list=PLFD5D0CE103FD3A56&feature=viewall>

Putting Together Your Toilet Kit:

Because it is similar to the height of a standard toilet we recommend a six gallon bucket for adults and a three and a half gallon bucket for children.



A toilet seat can be purchased at camping stores and at Food 2 Store. You may want to take off the lid for safety reasons...you and the lid might not fit on the bucket at the same time and if the lid starts to shut while you are sitting down it may throw you off balance. Keep the lid as a cover.

After using the toilet you will need to have something selected to cover the toilet matter. Peat moss works the best! Have a bucket with peat moss and a scoop in it, sitting next to your toilet. Sprinkle enough peat moss on to barely cover the toilet matter. Mike and Leslie lived in the hot desert in the summer and **never** had a problem with smell or insect problems using this method. You **do not** need a thick covering! A gallon bag of peat moss should last for the use of an entire bucket. One bale of peat moss should last 2 people about a year. Peat moss works the best, fine

sawdust doesn't work and treated sawdust won't be good in a compost pile. Untreated sawdust is O.K to use.

What if you don't have toilet paper and need to get clean?

Two thirds of the world's population doesn't use toilet paper.

Take a look at this clever video.

Paper still has a future.



<http://www.youtube.com/watch?v=ksO35s3Bffc&feature=youtu.be>

Many survival films show using a Bandana to clean yourself after using the toilet, Use it, wash it off and lay in the sun to dry and be sanitized.

Make a mini bidet.

Use a soft sided squirt bottle since it is more durable. Do not a disposable water bottle. Be sure to check the top as you want water coming out in one direction only. You can clean up this way using as little as 4 oz. of water including water to clean off your hands. Use the one glove method and keep the other hand with the water bottle sterile. You can also use newspaper or phone books which you can rub between your hands to soften to wipe with.

What would you do if you don't have feminine napkins?

Not to be crude but in the old days they would say that she was on the rag. The women could not throw cloth away as it was hard to come by, so they would...and we can clean what we use and lay them in the sun to dry and use the sun's power for sanitation.

There is a company called Glad Rags that has washable feminine pads in different colors and sizes.



They also have Diva and Moon cups that you insert and capture the flow. Here is a link to their site.



Glad Rags-Menstrual Cloth Pads, Cups and Kits

<http://gladrags.com/>

Putting together a “Bug OutBag” sanitation kit.

This is just the common sense selection of the things you use every day for sanitation and hygiene. Don't forget the fingernail clippers.

If you are storing baby wipes make sure that they are stored in zip lock bags to stay moist.

I have included a link to a recipe to make dry shampoo.

Dry Shampoo recipe

<http://blog.modcloth.com/2012/06/22/guest-dry-shampoo-beauty-diy-by-shana-of-fox-doll/>

You can also use clean dry sand for cleaning your hair if you have a lot of water to rinse off with.

Baking Soda can be used for cleaning your hair and teeth.

Oral Hygiene is veryimportant!

In a survival situation for an extended period of time gums and teeth need to stay healthy. Everyone needs their own tooth brush and personal hygiene kit.

How can you heat water without a heat source?

Use the Sun! This works great in the summer but in the winter you can usually only get the water to be less cold.

Remember that anything black is going to heat when the sun hits it. Here are a few options.

- 1. Solar Shower** – Holds 5 gallons. Can be purchased at camping stores or it is part of April's Group Buy.



2. **5 Gallon Bucket painted black.** If you have a lid that has a pour spout you can place a meat thermometer in to it. In the summer it will heat to 100-120 degrees in 3 hours.
3. In the winter put water in small containers and place inside of a window.
4. **2 gallon garden sprayer.** Needs to be new, clean and should be used for water only. Add a longer hose to the spray nozzle. Spray the garden sprayer black, before you paint place a strip of tape over a section and leave the side clear so you can see the water level. When you fill it up leave space at the top so you can pump it and build up pressure. This works great for showers or washing the dishes. Be sure to conserve water and use only a few ounces at a time to get wet, lather up and rinse off. I love this idea!



5. **Black garden hose.** When Mike and Leslie were living in the desert in the summer they had a 30 gallon water container up a slight slope. They ran a garden hose with a garden sprayer attached down the hill to a private area on the property for showers. The water in the hose would be scalding hot and they would have to drain it before using it. **Do not drink out of the black hose as the chemicals in the hose can leach into the water.**
6. **White RV hose.** Add a garden sprayer to use for a shower or you can drink out of this one. You can buy these at RV stores.
7. **Sprinkler hose or plumber hose.** This is **not** flexible. You can drink out of this one. You will need to warm this hose up in the sun and coil it around on a piece of plywood that has been painted black or covered in black roofing paper. You will want to expose as much surface area of the hose as possible to the sun so leave space in between the hose as you coil. You can elevate it and attach it to the white or black hose (remember don't drink out of the black garden hose) and use it for your needs.
8. **Black garbage can.** Leave in the sun to heat. Install a spigot at the bottom or just dip out of the container.

Because we want our water to be warm and not “less cold” we have opted for the StoveTecStove and All American Sun Oven to heat water in cold winter weather.



The family bath.

In the olden days when there was only an occasional bath using common water Dad bathed first, then mom and then the kids got the dirtiest water...and there came the phrase...don't throw the baby out with the bath water. By the time the baby got a bath the water was so dirty you might not be able to see him/her and might toss them out with the dirty water.

Now days you would want to take wipes or a wash cloth and wash the oily or dirty areas of your body first. These would be the parts that can get odors and where bacteria may build up. Start with the head, neck, under the arms and finish with the crotch. Then if you have a family bath you are not spreading oils and things that could cause disease. In a time of emergency we may get a little bit dirty.

Laundry



Here are some ways to take the hard work out of doing laundry.

- A. 5 Gallon Bucket method –Drill a hole in the lid and insert a new toilet plunger with handle sticking up through the hole. You can makethis yourself by drilling some holes in a toilet plunger or buy the newfangled Mobile washer from Food 2 Store.



- B. Soap – Use Naphtha soap and grate a small amount into your wash container. It doesn't use very much and last a long time.
- C. Gamma lids are water proof. Fill the bucket partially full with water leaving room for agitation. Have the kids roll it around.
- D. Commercial mop bucket and ringer.
- E. Galvanized wash tub and scrub board. You can also make a game of walking around in the tub with your bare feet and can include a child and make this a fun activity.
- F. A broom or plunger handle works great for wringing out heavy duty jeans or large items by wrapping the item around a broom handle and then having someone else twist the handle while you hold the clothing. This really works!

Vermin

If you are in survival mode you may be doing everything to keep your place sanitary but perhaps your neighbor isn't, the flies and mice that come from your neighbors could be full of diseases. You need a way to control them!

Flies

There are many different ways to catch flies.

Fly paper and strips...stock up on these!

Fly catching bags work great. You do need to continually add water. You will start accumulating dead flies and maggots and it **really** starts to stink.

The best way to get rid of flies is granular bait called Golden Malrin that you can get at Farm and Ranch stores.



It is **very poisonous** and must be kept away from animals and people. Take an empty tuna can with 1 T. of Malronin it. Put the cans under and behind things but out of the reach of pets and

children. Wash your hands after use. These traps should last for 3 months. When the flies come in contact with the crystals they go off and die and don't stay around and stink up the area.

Golden Malrin House Fly Cage Test



Scientific experiment demonstrates the effects of house fly bait Golden Malrin.

<http://www.youtube.com/watch?v=ANLmwG8HHbo>

Plastic Dish Covers with elastic.

Buy these at the discount store or use the free shower caps you get when you stay at a hotel.

If flies are a problem cover your plates and bowls with these. You can also use dish towels.

[You don't want flies on or in your food.](#)

Mice and Rats

Sticky traps, glue strips. These work great for mice and also spiders like the hobo spider, a cousin to the Brown Recluse, which is more commonly found in our area. Place these near doors and along walls. These traps stay sticky for a long time so keep these away from children and pets.

Mouse traps. Work great. Be sure to wear gloves when removing mice from the traps as they can carry fleas and ticks that can harm you.

Rat Traps.

These can be used to catch small gamesuch as squirrels, rats and some rabbits as an alternate food source for survival use.

Mouse and Rat Catcher Bucket.

A picture is worth a thousand words. So from Mary Ann's Cupboards You tube Channel here is Mike, of Mike and Leslie, demonstrating how to make what he calls the "most effective rodent catcher we have ever seen".

Mouse and Rat Catcher Bucket.



<https://www.youtube.com/watch?v=OijRH-lduq4>

You will need enough water in the bucket so the rats can't jump out. In the winter use RV antifreeze which is nontoxic to humans and pets. Mike said that the first day they put it out by their trailer they caught 12 mice, 8 the next day and 1 or 2 mice or rats per day after that.

The StoveTec and All American and Global Sun Oven Products can be purchased through PreparedNest. The April PreparedNest Group Buy features many of the sanitation items mentioned and the All American Sun Oven (Global Sun Oven's newest model) Contact Cheryl and Greg at hello@PreparedNest.com for more information.

Picture courtesy of www.wildernesstoilet.com