THE COMPLETE PREPPERS GUIDE TO SURVIVAL

HOW TO PREPARE FOR AND SURVIVE THROUGH A SHORT-TERM OR LONG-TERM DISASTER



COVID-19

EDITION



PRACTICAL TIPS FOR SURVIVING WHEN IT ALL FALLS APART



THE COMPLETE PREPPER'S GUIDE TO SURVIVAL

HOW TO PREPARE FOR AND SURVIVE THROUGH A SHORT-TERM OR LONG-TERM DISASTER - THE PANDEMIC EDITION

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Table of Contents

Preface

THE COMPLETE PREPPER'S GUIDE TO SURVIVAL

Chapter 1 – Making Preparations

<u>EDC – Every Day Carry bag</u>

Here is a suggested content for an EDC bag

The BOB (Bug Out Bag)

Suggested Contents of a Bug Out Bag

1. Water & Hydration, Food & Cooking

2. Clothes

3. Shelter

4. Heat Source

5. Hygiene

6 First Aid & Tools

7. Communications

8. Lighting

9. Other items

Guns & Self Defense

Chapter 2 - Make a Plan

Your family should discuss the following items:

Emergency Alerts

Wireless Emergency Alerts

Emergency Alert System

NOAA Weather Radio

Shelter Plan

Shelter at Home

Mass Care Center

Sheltering in Place

Evacuation During an Evacuation After an Evacuation Family Communication Plan Create an emergency contact list **Emergency Meeting Places** Indoors Neighborhood In Town Out of Town Documents You Need to Take with You **Financial Documents Identification** records Home inventory and insurance records **Recent financial statements** Tax Records Legal Records **Chapter 3 – Earthquakes** Preparing for an Earthquake Surviving an Earthquake After the Earthquake **Chapter 4 - Typhoon & Hurricanes Preparing for Typhoons** Staying Safe During the Typhoon **COVID-19** and Evacuation **Returning Home After the Typhoon** The Future **Chapter 5 – Wildfires** What to do if you become trapped by wildfire If in your car

If on foot If trapped in your home **Preparing Now for Wildfires** After the Wildfire **Chapter 6 – Floods** If You are Under a Flood Warning **Preparing for a Flood** Surviving During a Flood **Chapter 7 – A New Way of Living Chapter 8 - Low Key Preparation** You Cannot Save Everyone **Chapter 9 – Building a Survival Store** Chapter 10 - Set a Food Goal **Buy Foods that are Nutritious** Make a Food Plan **Chapter 11 – The Hidden Food Store Chapter 12 - Cooking Food** Petchka **Rocket Stove** Solar Cookers **Panel Cookers Box Oven Solar Cookers** Parabolic Solar Cooker **Evacuated Tube Cookers Chapter 13 – Growing Food** Kale Carrots Tomatoes **Peppers** Corn

Potatoes Stevia Fruit Trees Fig Tree Pear Tree Pecan Trees Mulberry Trees

Chapter 14 - Hydroponics

Choosing the Right Hydroponic System

Vertical Hydroponic Systems

Passive Hydroponic Systems

Advantages of Hydroponics

Food for Hydroponic Mixes

Giraffe-X Hydroponic Grow Kit

Chapter 15 - Self Defense

Situational Awareness

Self Defense Weapons

Stun Gun and Taser

Pepper Spray

Basic Self-Defense Moves

<u>Method 1 – Aggressive attack</u>

Method 2 – Attack, Attack, Attack!

<u>Eyes</u>

<u>Nose</u>

<u>Neck</u>

<u>Knee</u>

<u>Groin</u>

<u>Do Not Hold Back</u>

The Law on Self Defense

Protecting Your Home

Chapter 16 - Home Security

What You Can Do to Protect Your Home

Security of Doors

<u>Smart Locks</u>

Deadbolts

The Strike Plate

The Door Frame

Door Barricades and Security Bars

Security of Windows

Window locks

Tempered Glass

Plexiglass or Polycarbonate Windows

Window Bars

The Safe Room

Your Safe Room Should Feature

Chapter 17 Evacuation

Evacuating the House

<u>Chapter 18 – Water</u>

How Much Water Does a Person Need?

How Much Water is Enough During a Disaster?

Signs of Dehydration

Signs of Severe Dehydration

- Severe diarrhea or moderate diarrhea for 24 hours or more
- Bloody or black stool
- Inability to keep fluids down
- Appears disoriented, is irritable or has extreme fatigue
- Little to no urination
- Very dry mouth, skin, and mucous membranes
- Rapid breathing or heart rate

Storing Water

Commercially Bottled Water Non-Store-Bought Water **Storing Water Using Stored Water Purifying Water Boiling Water** Water disinfection Tablets Water Filter Straws **Salt Water Testing Water Purity Chapter 19 – Health** Herbal medicine in Disasters **Emergency Situations Recognizing Medicinal Herbs Shepherd's Purse leaves** To help stop bleeding Shepherd's Purse Flowers How to make shepherd's purse tincture Oak Bark Wild Geranium Root **Bilberry** Yarrow Leaf & Flower **Raspberry Leaf Blackberry Leaf Chaparral leaf** Willow Meadowsweet Aloa Lobelia Self-Heal **Comfrey**

Devils Claw Birch Alder <u>Aspen</u> **Poplar** Plantain Calendula Horsetail Acacia Raw Honey **Chronic Diseases** Cardiovascular Disease **Insulin Resistance Cancer Prevention Hypertension** Diabetes **Kidney Disease Osteoporosis Chapter 20 - First Aid** What is the aim of First Aid? Preserve Life **Prevent Further Harm Promote Recovery** <u>Airways</u> **Chapter 21 – Power** Solar Power Installation Definitions Solar Cell An Inverter Off Grid or On Grid

Residential Wind Turbine Installation

Hybrid Installation

Water Power Installation

Scott Hydroelectric Turbine Generator

Fuel Conservation

How Much Electricity do Appliances Use?

Chapter 22 – Heating

Heating Installations

Chapter 23 – Lighting

Blackout Curtains

Outdoor Solar Lights

LED Lanterns

<u>Candles</u>

<u>Oil Lamps</u>

Glow Sticks

Natural Light

Chapter 24 – Sanitation

Off Grid Latrines

Bathing

Washing Hands

Washing Your Body

<u>Laundry</u>

Dishwashing

• Clean off any food waste with a damp cloth after use

Chapter 25 – Building a Place of Escape

Chapter 26 – Conclusion

An Alternative View

Appendix 1 – Emergency Resources USA

Alert Systems Active Shooter

Avalanche Bioterrorism **Chemical Emergencies Cyber Security Drought Earthquakes Explosions Extreme Heat** Floods Hazardous Materials Incident Home Fires Household Chemical Emergencies Hurricanes Landslide & Debris Flow **Nuclear Explosion Nuclear Power Plants** Pandemic **Power Outages** Radiological Dispersion Device (Dirty Bomb) Severe Weather Snowstorms & Extreme Cold **Space Weather Thunderstorms & Lightening Tornadoes** Tsunamis Volcanoes Wildfires **Recovering from Disaster Appendix 2 - Essential Books**

The Survival Medicine Handbook: A Guide for When Help is Not on the

<u>Way</u>

Edible Wild Plants: A North American Field Guide to Over 200 Natural Foods

Building Green, New Edition: A Complete How-To Guide to Alternative Building Methods Earth Plaster * Straw Bale * Cordwood * Cob * Living Roofs

Mini Farming: Self-Sufficiency on 1/4 Acre

INDEX

[RB1]

Preface



World War 3 is on the horizon and there are three potential places it can start. The first is between Europe and Russia as two power blocs border each other. This would also involve the USA. The second most likely starting place for World War 3 is the Middle East, with Iran and Israel both having nuclear capacity. The third is a clash between the older superpower and the new rising superpower (America and China). Any one of these hotspots could be where World War 3 is triggered.

As if the threat of impending nuclear war was not enough, we have the prospect of severe climate change swamping the coastlines, increasingly violent storms, and huge droughts. Changes so severe they will cause massive population movements and consequent conflict. Finally, it is predicted that there will be more worldwide pandemics like COVID-19, and we have all seen the impact of this pandemic that is not even over yet.

There has never been a time when PREPPING has ever been so important as it is today. This book in designed to be a thought provoking guide to the subject of Prepping for both large and small disasters.

THE COMPLETE PREPPER'S GUIDE TO SURVIVAL



Chapter 1 – Making Preparations

In this chapter we are going to look at making preparations now, long before any disasters begin.

Natural disasters cause billions of dollars' worth of damage every year and can be fatal for those caught up in them. Over the last five years over \$525 billion worth of damage has been caused by natural disasters in the USA alone.

Preparing in advance can reduce the damage to your property and the personal risks you face, *making your survival more certain*.

We usually have no warning that a disaster is going to hit and they can happen at any time of day or night. The chances of us being at home when something happens are not very high, so we must be prepared, wherever we are.

So that we can react immediately when something happens, we should always have two bags prepared in advance. The first one is an EDC bag (Every Day Carry). The second, much larger bag, is our BOB (Bug Out Bag). We will be covering preparations for our home later in the book.

EDC – Every Day Carry bag

This small bag is a bag that we will carry everywhere with us. Many women already carry a purse (called a handbag in the UK) and so this will not be a great change for them. Even some men have begun to carry "Man bags" around as they have found that pockets cannot contain everything, they need to have with them. An EDC bag will contain a small selection of immediate survival tools as well as the everyday objects you already carry around.

Here is a suggested content for an EDC bag





As you can see, these are all small items and you will not need a large EDC

bag. If you choose one that is too big, you will start to leave it places instead of carrying it with you. You need to carry this bag at all time.

The purpose of the EDC is so that you always have some useful survival tools with you, even if you are far away from your home supplies or BOB (Bug Out Bag).

The BOB (Bug Out Bag)



The Bug Out Bag is the key to *short*

term survival. This bag is designed to provide all our needs for a period of *at least* 72 hours. It contains quite a lot of gear and it needs to we packed in a bag that you can carry on foot for a couple of hours walk. Choosing light weight equipment is very important.

Some people leave this at home so it can be collected quickly. Others prefer to keep the BOB in the their vehicle, so that it is always near them, but not with them all the time like the EDC bag.

Even if you have a BOB in your vehicle you should still carry the EDC with you as you never know what might prevent you reaching your car. Do not

pack so much in the BOB that you are unable to carry it, or that kind of defeats the purpose.

Suggested Contents of a Bug Out Bag

1. Water & Hydration, Food & Cooking





Fuel Tablets



3 Emergency Food Packs

2. Clothes



2 Lightweight long sleeve shirt



3 Wool Hiking Socks



1 Work Gloves



2 Convertible zip-off pants



Medium Weight Fleece



1 Rain Poncho



2 Underwear



1 Hat



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3. Shelter



Bivvy Bag One-man Bivvy Tent/Sleeping bag

4. Heat Source





Emergency Sleeping Bag/blanket



1 Lighter

1 Waterproof Matches

1 Survival Tinder-Quik Fire Tab 20 Pack

5. Hygiene

COMBAT WIPES ACTIVE OUTDOOR CLEANSING DUE HODEGADABLE DETA THICK WIPS I REVIEW I DE 3 T	SOMO Ministration Marrier Mari	
Wet Wipes	Hand Sanitizer	Medicated Soap

	A Preciant	
Travel Mirror	Two Micro Towels	2 Travel Toilet Paper
	Concentration and a second and	Articulty Contractor
Travel Toothbrush	Toothpaste	

6 First Aid & Tools



Adventure Medical kit

Insect Repellent



Survival Knife with sheath

7. Communications



Cell Phone



Multi tool



Hand Crank Charger/Radio/Light

8. Lighting



LED Headlamp Rechargeable



Mini Keychain LED light



Glowsticks – Military Grade



Small LED Light

4 Candles

9. Other items



The items shown are just examples, you may prefer other products. I found all these on Amazon. You will notice that some items are contained in both the BOB and EDC bag, there is no need to buy twice, just move to the BOB if you need to evacuate.

Guns & Self Defense



Some readers may well live in countries where guns are not freely available and others may have a dislike of guns. Whatever your view or situation, you have to realize that if ever you need your Bug Out Bag, you are in a situation of potentially life or death.

I am British and not so used to the concept of personal firearms as our American Readers. I just need to say that if you are using your bug out bag then this is REAL. You need to be comfortable with your own security.

In those situations, law and Order soon breaks down, and there may not be a law officer to call. You have to choose some method of protection. This may be a gun (if allowed), a knife, Taser, or Pepper Spray.

See Our Main Self Defense Section here

This is an issue that you must think carefully about. There is little point in preparing all this kit for your survival if on the second day someone comes along and relieves you of it.

Chapter 2 - Make a Plan



It is quite possible that your family will not be together when a disaster hits. Making a plan-is really important so that your whole family knows what to do.

First of all you have to establish a place where the family can meet up if not together when it all starts. This should be a place that is both easy to access, and somewhere the whole family knows.

Your family should discuss the following items:

Emergency Alerts

Every country has its own systems and it would be impossible for me to cover them all so I will discuss the USA and readers from other countries should research what their local equivalents are.

Wireless Emergency Alerts

Using WEAs, the authorities can send out a rapid warning. They may be one of five categories:

- Imminent threat
- Public safety
- AMBER alert,
- [°] Presidential
- [~] Test messages.



Emergency Alert System

This is a national warning system that allows the President to broadcast to the American people within 100 minutes.

The alerts are sent through broadcasters, satellite digital audio services, direct broadcast satellite providers, cable television systems and wireless cable systems.

The EAS can be used for weather information, imminent threats, AMBER alerts and local incident information targeted to specific areas.

NOAA Weather Radio

NOAA Weather Radio All Hazards (NWR) is a network stretching across the USA that broadcasts continuous weather information from the nearest National Weather Service Office. Warnings are broadcast 24/7 and this is why you need to have a radio in your BOB so you can get updates this way.

Shelter Plan

You may need to shelter for various reasons, such as during a tornado, chemical hazard and so on. In all cases it is important to follow the

instructions given by the authorities.

Shelter at Home

Remain indoors as much as you can, only leaving home when absolutely necessary. If instructed to shelter because of a pandemic it is essential to follow instructions given by the authorities. If sheltering is 72 hours of less, you should already have your BOB to fall back on, however, if you have made preparations for Long Term Disasters and stockpiled supplies in your home, you should use that and leave the BOB packed.

With COVID-19 and similar outbreaks you should stay in as much as possible, maintain social distancing, wear a mask (and a face shield if you have one) when you go out. When outside do not touch surfaces and when you get home immediately remove your clothes, shower, and wash clothes before anything else.

Mass Care Center

If you are forced from home by the disaster and need to take shelter in a public shelter, locate a shelter by texting 43362 and entering the word SHELTER and your current ZIP CODE. You will receive a message back telling you where the nearest open shelter is located.

Take your **BOB** for each person. The BOB is designed to keep one person supplied for up to 72 hours. Plans may have altered because of the CORONA Virus. In any case if CORONA virus is still a problem, maintain social distancing from everyone not in your immediate family. Keep six foot away. Wear your masks when in crowds or as otherwise instructed.

Shelters will typically supply food and medical requirements but you should still take your BOB as there may be shortages or disruptions and you will have a buffer.

Sheltering in Place

There may be situations where you are instructed to shelter wherever you are (e.g. at work). Follow these instructions. There could be chemical hazards outside or hazards you are unaware of. Get your BOB from your car if close by, and you have time.

[~] Local authorities may not immediately be able to provide information

on what is happening and what you should do.

- Watch TV and listen to the radio or check the Internet often for official news and instructions as they become available.
- [°] Bring your family and pets inside.
- [°] Lock doors, close windows, air vents and fireplace dampers.
- [~] Turn off fans, air conditioning and forced air heating systems.
- [~] Take your emergency supply kit unless you have reason to believe it has been contaminated.
- [∼] Go into an interior room with few windows if possible.
- Seal all windows, doors and air vents with thick plastic sheeting and duct tape. Consider measuring and cutting the sheeting in advance to save time.
- └ Cut the plastic sheeting several inches wider than the openings and label each sheet.
- [~] Duct tape plastic at corners first and then tape down all edges.
- Be prepared to improvise and use what you have on hand to seal gaps so that you create a barrier between yourself and any contamination.

Evacuation

There are many kinds of emergencies that might require you to evacuate at some point. This evacuation might be immediate or you may have a couple of days warning.

Making an evacuation plan is essential to ensure you can safely get away. Identify possible places you can evacuate to. This may include friends and relatives' homes or a community shelter. *If this evacuation takes place during COVID-19 restrictions, you must observe social distancing and wear face masks (and ideally face protectors). Identify potential routes to escape the area and transport methods that are available. Remember whole communities will be trying evacuate and there may be congestion and confusion. Follow any instructions from the authorities during this evacuation process.*



If you plan to evacuate by car, Gas stations may be closed during an emergency so make sure you always keep your car topped up with fuel. Only take one car per family to avoid getting separated and also to reduce congestion, which <u>WILL</u> be a problem.

During an Evacuation

Leave your planned destination with an out of state family member or friend, secure your home by locking all doors and windows. Unplug all appliances except freezers and fridges, unless you expect flooding.

Leave a note in the house (prominently) stating where you are heading.

Follow evacuation routes and do not take short cuts, as they make be blocked. Your local authority will have planned the best evacuation routes and signposted them.

After an Evacuation

When the time comes to return home, notify your out of state contact when you are leaving and your expected arrival time. Notify them when you arrive. Keep your car topped up with petrol, charge all electrical devices. Repack you BOB if supplies are available.

Avoid downed power or utility poles. They may be alive.

Family Communication Plan

Communication networks may be unreliable during a crisis and electricity outages could occur. Note: a text message may well get though when a call cannot. Reply to texts so that the sender knows you received it.

First off you should decide on a contact out of state to act as coordinator for communications. Someone who will be kept up to date by family members if

they are separated.

Create an emergency contact list

Create a contact list for family members, relatives, the out of state contact, schools, places of work, medical facilities and service providers.

Make sure everyone has a copy of this printed list in their EDC bag. Everyone should also have a printed copy of the Family Emergency Contact Plan in the EDC bag as well.

Regularly review the plan.

Discuss with schools, what their emergency plans are and make sure the family plan is compatible.

Emergency Meeting Places

You need FOUR prearranged meeting places for different circumstances.

Indoors

This is the room where everyone should go for safety in case of a typhoon.

Neighborhood

If you are forced to leave the house, this is somewhere nearby where you can all meet up. A neighbor's house, or something like near the big tree.

In Town

This is where everyone will meet if you are away from home and cannot get back to the home (Library, Church, Family friends' home).

Out of Town

You may be away from home and authorities begin immediate evacuation and you cannot get home. It could be a home of a relative or a public evacuation center.

All of these locations and contact details for them should be on the printed evacuation plan.

Documents You Need to Take with You

Financial Documents

driver's license, bank and credit cards, health insurance identification and **<u>some cash</u>** (Remember ATMs may not be working)

Identification records

These will include birth certificate, passport and Social Security card. You should also take your health insurance or Medicare cards.

Home inventory and insurance records

You should have photos of all your rooms, showing contents of your house, closets and drawers. Receipts or appraisals for valuable items or major purchases

Recent financial statements

Credit card companies, banks, brokerage firm, retirement accounts, car loan, student loans, mortgage company and utilities.

Tax Records

You should take the tax records for at least the past three years.

Legal Records

Car registration and title. property deed and mortgage papers, as well as your will, health-care proxy, power of attorney, living will.

This is a lot of documentation to carry in an emergency and apart from the stuff you usually keep in your wallet, it may be better to scan and turn all these documents into PDFs, which can be displayed on your phone or printed out again.



Place the originals in a safe, a bank, or other secure place.

Chapter 3 – Earthquakes

Earthquakes could fall into either short-term crisis or long-term crisis, depending on the severity. An earthquake will typically take place in a relatively small geographic area, and it would be expected that surrounding areas would be sending in aid if local resources were overwhelmed. In this chapter we will be looking at a scenario where it is fairly localized and aid will be mobilized in a matter of days.



How an earthquake feels will depend on how far away you are from the epicenter and how strong it is. A large earthquake that takes place nearby is going to feel like a sudden jolt. This will be followed by strong shaking that goes on for up to a couple of minutes. It is really strong the floor will shake and you will have difficulty standing up. While all this is going on, your household items will be falling off shelves and worksurface, bookshelves may well fall and parts of your house might start to fall apart. Maybe the house will be completely destroyed.

An earthquake that is further away or not so strong will be much less violent. I remember an earthquake once when I was living on the Island of Mindanao.

I was sitting in a single floor structure, well actually I was sitting on the porch. The earthquake started and I could feel the floor moving and shaking but not very strongly, what really caught my eye was the road which was rippling like water with waves going up the road.

I still live in the Philippines, on another island further away from the majority of earthquakes, and I still feel the movement of distant earthquakes when laying in my bed sometimes.

Preparing for an Earthquake

Generally speaking, an Earthquake is going to happen without warning, so you cannot wait until the last morning to prepare. Useful preparation should include:

- Securing heavy items to the walls of your house, to stop them falling over and causing injury during an earthquake.
- Store objects that are heavy and breakable on lower shelfs.
- See section on <u>emergency planning</u>
- See section on <u>BOB</u> and <u>EDC</u> bags
- Fix any outstanding structural issues

Surviving an Earthquake

If you are unfortunate enough to be close enough to an active earthquake and your house starts to violently shake then you need to drop to the floor, and get under a table of other strong piece of furniture, to protect your head from falling bricks. You should hold onto the table leg to stop the table moving and sit out the quake. Your main job is to protect your head and vital organs. If there is no table to hide under, get close up to an interior wall and crouch down with one arm covering your head.

If an earthquake of this strength happens there is the possibility of damage to gas lines, water pipes, and electricity cabling. All very hazardous. As soon as the shaking stops get everyone out of the house, taking your <u>BOB bags</u> with you, to check the overall state of the building. If the building is damaged, get everyone clear as soon as possible. Do not enter a severely damaged building.

<u>Remember there could quite possibly be aftershocks which may cause an</u> <u>already damaged building to collapse.</u>

The other possibility if you live in a coastal area is that there could also be a Tsunami following the quake. You may be best heading out for higher ground before they announce a Tsunami if your area is particularly at risk. You can always return later. But if you do go, take your BOB with you.

Using the radio in your <u>BOB</u>, listen to official announcements and advice, particularly if a possibility of a <u>Tsunami</u> exists. Check on your neighbors to see if they are ok, and this is when you should implement the family communication plan, and get in contact with all family members in your household. Each family member should attempt to get back to the meeting place outside the house where the plan said they should go. Register on the American Red Cross "<u>Safe and Well</u>" website Should I Stay or Should I Go?

Is your house habitable? If so, and no Tsunami warnings are issued, listen to the announcements on the radio. If there is no advice to evacuate you will probably be best staying in your house, as long as you are sure it is stable. If you have followed our advice for long term preparedness (see later in the book), then you will have built up a stockpile of supplies, will have off grid, cooking, lighting, and sanitation arrangements, and should be self-sufficient, even if services are no longer functioning. Generally speaking, this is your best option for now.



If your house is not habitable and/or advice has been given to evacuate then

this is where the BOB will come into their own. *Each family member* will have their own BOB that will supply a minimum of three days survival needs. See the previous chapter guide to <u>evacuation</u>.

After the Earthquake

Depending on the strength of the Earthquake and how near to the epicenter you community is, there may be substantial damage to the infrastructure, which could take weeks or months to repair. If not so serious then the PowerGrid, water, and gas may be still working or repairable quite quickly. *In Puerto Rico it took 11 months to get the electricity fully running* after the system went down.

How long it takes for aid to arrive will depend on the severity of the situation and how wide a geographic area is damaged. While at home use your household stores, not the BOB supplies as you need to make sure the packs are still ready for action if the situation changes.
Chapter 4 - Typhoon & Hurricanes

Typhoons and Hurricanes are really just the same thing. They have different names in different places. So, for this chapter we will just call them all typhoons for simplicity.



Typhoons, also called Hurricanes and Cyclones, are especially damaging in that they carry with them three threats: High winds, Floods, and Possible Tornadoes. They are getting stronger, affecting larger stretches of coastline, and more people are moving into areas threatened by tycoons. Worldwide somewhere around 40 - 50 storms will develop into Typhoons (hurricanes and cyclones). Winds of up to 185 mph are just the first problem, add to this heavy rain that causes floods, with storm surges rushing over low lying areas.

Because of climate change, storms are increasing in intensity. Since the 1970s the Intensity of storms has risen by 70-80% while the length of storms has increased by 30%. This will only increase as seas become warmer. Every two degrees of temperate will bring a 10% increase in wind speed.

Preparing for Typhoons

There is more warning for Typhoons than there is for Earthquakes so there is usually time for some level of last-minute preparation, but it is better to start preparations now.

- ^o Make an <u>emergency plan</u> and make sure your family knows it
- Follow advice from authorities
- Because of COVID-19, evacuation centers are possibly not the safest place to stay and unless the authorities advise against it, sheltering in place may be better.
- Listen to <u>alerts and news</u> from the authorities as the Typhoon approaches
- Declutter drains and gutters to help water run-away.
- [°] Bring in outside furniture and bins
- [~] Make sure your<u>BOB</u> is ready and accessible
- Secure <u>documents</u>

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- Consider Hurricane Shutters
- [°] Check with neighbors and seniors that they are ok
- ^o Follow our advice later in the book on stockpiling essential items over a period of time, do not empty the supermarkets just prior to the hit.

Staying Safe During the Typhoon

- Keep well informed about the progress of the Typhoon by listening to alerts
- If you live in a mandatory evacuation zone and you are told to evacuate, do so quickly, taking your BOB.
- If you are not in a mandatory evacuation zone then make an informed decision on the safest option (go or stay).
- [°] If you choose to go to a shelter, do so in good time
- ^o If you choose to stay go to a secure interior room after preparing your house. Take your BOB into that room.
- If trapped in a building by rising flood waters, go to the highest level of the building, but DO NOT go into a closed attic where you may become trapped.
 - Do not walk, swim, or drive through flood waters. You may not realize that just six inches of moving water can knock you over, and just one foot could sweep your car away.

Stay off bridges that span fast moving water

COVID-19 and Evacuation

Going to an overcrowded evacuation center could put you at risk from COVID. If you have to evacuate, try to go to family or friends and avoid the center. Use all protection for COVID including masks and if you have them face shields. Keep hand sanitizer with you and avoid touching surfaces.



Returning Home After the Typhoon

When cleaning up your home, always wear boots and workwear, and wear heavy work gloves. You do not know what may have been brought into your home by the flooding. It may include dangerous creatures. Be aware of infectious diseases that may be carried by the water, which could include sewerage. Do not touch electrical equipment if it is wet or damp. Do not touch electrical equipment if you are standing in water. If safe, turn off the electricity at the mains.

Be aware of power cables that have fallen and laying on the ground, especially near water, they may still be live.

Document all damage and take photographs of everything. Contact your

insurance company. *Be aware, however, that standard household insurance may not cover you*.

The Future

Depending on how much of the area infrastructure has been damaged, it may take some time to restore power and other services, For information on living without power and the other public services longer term, check out later in this book.



Chapter 5 – Wildfires

Wildfires can destroy homes and communities, and can be fatal for humans and animals alike. These wildfires are unplanned fires that burn natural areas of forest, grasslands, and prairies.



Up until September 2020, there have been 2.2 million acres of land burned in California, a record-breaking total, and there are still four months left of the annual wildfire season.

Wildfires are often caused by humans acting carelessly, and can have heartbreaking consequences for individuals and communities. They can happen anytime but risk is compounded by periods of low rainfall and high winds.

If you are under a wildfire warning listen to alerts on the radio. Be sure you have your BOB ready at all times in case you need to evacuate. If you have any doubts about the fire reaching you *leave immediately*.

If trapped call 911 and use the N95 mask that you used for the COVID-19 epidemic to filter the air you are breathing.

What to do if you become trapped by wildfire

Getting trapped is *nearly always because residents took too long in getting*

out of the area. They chatted with neighbors about what to do, they tried to pack stuff and then found it was too late. If you think there is fire nearby, get out of there as soon as possible.

If in your car

Getting trapped in a vehicle is one of the leading causes of deaths in a wildfire, because people wait too long before leaving their home, when the fire is already all around them.

Stay calm and park your vehicle in an area that is free of vegetation. Close all the windows and vents. Cover yourself with a wool blanket of jacket then lie on the floor of the vehicle. Call 911 to alert the emergency services. People think that their car will outrun the fire, this is not correct and roads that were clear a minute-or-so earlier can swiftly be engulfed in flames.

If on foot

First of all, it is important to keep well away from wildfires. If you are aware of one get away as fast as you can because if trapped you have very little chance of survival. Try to keep upwind of the fire. If in a forest try and climb a tree so you can see where the fire is.

If trapped, stay calm, go to an area clear of vegetation, in a ditch or depression if possible (on level ground). Lie face down and cover up your body then use your cell phone to alert the emergency services.



If trapped in your home

Stay calm and keep your family together. Call 911 and tell the authorities where you are. Fill sinks and tubs with water. Keep all doors and windows closed (but do not lock them). Stay inside your house and stay away from outside walls and windows.

Preparing Now for Wildfires

There is not very much you can do to protect your home from wildfires but you can ensure that you know the escape routes in all directions in case of wildfire. Make sure that you are receiving <u>alerts</u> that will warn you of any wildfire heading your way. Have a BOB prepared and located where you can access it quickly.

Take COVID-19 precautions into consideration while evacuating if this becomes necessary. You are often better going to friends and family rather than an official evacuation center where you may be at risk of COVID.

Take photographs of all rooms in your house and in cupboards and drawers to assist with any insurance claims. Keep important documents in a safe

fireproof container, backed up online (securely).



After the Wildfire

Do not return until the authorities say it is safe to do so. Avoid any hot ash, standing on it may burn your foot or send up sparks which might start another fire. Smoky conditions can be dangerous for people with Asthma. Use appropriate masks and/or respirators. Children should not be helping with the clean-up. Take photographs of each room, cupboard and draw so you have before and after pictures for insurance claims.

Be aware that the loss of vegetation can increase the risk of flash flooding and landslides.

Chapter 6 – Floods

Flooding, the temporary overflow of water onto land that is normally dry, is one of the 4 most common disasters that strikes the USA. Floods can happen very quickly, without prior warning and can be very devastating, damaging property and causing fatalities.



Floods may be the result of rain, snow, coastal storms, storm surges, and overflow from dams. They can either build up slowly or appear very quickly They can cause outages, disrupt travel, destroy homes, and create landslides.

If You are Under a Flood Warning

If your area is under a flood warning you should not delay in finding safe shelter from the flood. Do not walk, swim, or drive through flood waters.

You may not realize that just six inches of fast-moving water is enough to cause you to be knocked down, where you could then be carried away by the flow. Just one foot of water can sweep your car away, just do not take chances! Avoid bridges over fast-flowing flood water.

You may need to take different actions depending on the kind of flooding. If the authorities tell you to evacuate, do so straight away.

You may have to move to higher ground or a higher floor. You may be told to stay where you are. The authorities have access to the bigger picture so do as they say.



Preparing for a Flood

Make an <u>emergency plan</u> for your household. Pack a <u>BOB</u> for everyone. Sign up to the <u>warning system</u>. If flooding is a known problem at your property, monitor rainfall and the level of local rivers. Learn about the local evacuation routes and what shelter plans there are.

If you live in a storm surge flood zone you should arrange with family and friends that you can evacuate to their home if necessary. With COVID-19 it is safer to shelter with friends than in public shelters, where social distancing may not be possible. Remember, most shelters do not accept pets.

If you are going to sit out a flood move all your supplies to a higher floor. If you have followed the advice in this book then you should have adequate reserves you have built-up over time. If you are going to evacuate you will have your <u>BOB</u> ready to go.

Remember to check that you have flood coverage on your insurance and it is up-to-date.

Protect your property by moving valuables to higher levels. Declutter your drains and gutters to assist water flow.

Surviving During a Flood

If you have the time make your way to friends or family to shelter, rather than going to the evacuation center. If told to evacuate, do so immediately without driving-around barricades. Use the evacuation route planned by the authorities. Listen to EAS, NOAA Weather Radio or local <u>alerting systems</u>. Do not walk or swim through flood water. Stay off bridges over rapidly moving flood water, you are at risk because the water can sweep away the bridge without warning.

If trapped in your car, stay inside. If the water level rises, climb onto the roof and call for help.

Beware of electrical equipment or power lines that have fallen into the water.

Do not go up into attics, if the water rises further you may be trapped. Only go onto roofs if you have to.

After a flood you should beware of snakes and other animals which may have entered your home. Do not touch electrical equipment that is damp, if safe, turn off the electricity. Damp and mold can be dangerous for Asthma sufferers.

Chapter 7 – A New Way of Living

Now we come to the part of the book where we have the meaty information about how to sustain life by living totally off the grid, in a world that is falling apart. This could have happened for a variety of reasons, possibly an extension of some of the ones I mentioned in the previous chapter, or maybe something completely different.

Whatever the cause, you now find yourself in a situation where the utilities that once you took for granted, and the rules of society have changed completely.



Society has broken down and utility supplies, food distribution systems, and law and order have broken down to some extent. You can no longer just pick up a phone and call for police, ambulance, or fire trucks. Hospitals are barely working and what police there are left, are busy controlling riots.

You are responsible for your family's security, health, water, power, heating, light, and food. You have no idea if this will be for weeks or forever.

Chapter 8 - Low Key Preparation

Some people will have prepared, like you have, but many other will be reeling from the shock of the collapse and have no idea how they will survive, previously law-abiding citizens will now be desperate and looking to ensure their own, and their family's survival.

Friends, wider family, colleagues will all be struggling and wondering if they are going to survive.

You Cannot Save Everyone

You have prepared and you are confident that you have stockpiles that will support your immediate family. What you cannot do is share that provision with the world. All you will succeed in doing is letting maybe a hundred people live for one extra day. Your provisions were worked out specifically to support a limited number of people. By acting on charity, you will be condemning your family to die.



Those other people had the same opportunity to prepare for an emergency as

you did. They chose to spend their money on more immediate things, instead of putting together a stockpile of their own.

I know that if I had a lot of people begging at my doorstep, I would find it very hard to refuse them, my emotional response would be to share, but my brain would stop me, reminding me that it would ultimately do no good.

Remember also, that if word got out that you had supplies, the crowds would start to gather, initially just asking for help, but ultimately trying to take your reserves by force.

A better solution is to remain very low key about your preparations and not tell anyone, that you are preparing for a situation like this. Then when the SHTF do not display your resources to others, just keep a very low profile.

I must stress the importance of keeping your preparations low key. Do not go talking about it to your neighbors, work colleagues or even family. When the Shit Hits the Fan, everybody is going to be concerned about one thing, their own survival and survival of their loved ones.

When things start becoming difficult and essentials become impossible to get, at some stage they are going to remember you telling them about all your stockpiling and preparations. They are going to be knocking at your door asking them to feed their family and they are not going to take no for an answer. They will tell their friends and before you know it you have a mob breaking into your house to take their share of your food and equipment.

Desperate people are not often rational and before you know it you will be fighting and people will get hurt or killed. OK, you may not feel you can sit at home with supplies while your neighbors starve, but how many people can you feed before you are in the same position as them? Either way, just keep your preparations secret.

Chapter 9 – Building a Survival Store

Building a survival food store is not something you should leave until later. You should start buying now. Just a bit at a time, discreetly adding to your stockpile. Do not tell anyone that you are building a stock, that's why it's great to do it a little at a time.

Your household may never need to have access to a storeroom full of food, but if you manage the storeroom well, the food will all be rotated and used. Build a store and then when you go shopping place the new goods into storage and take out an equivalent amount of older stock to use. If an emergency ever arrives, that way you will have a fresh supply of stock that is not nearing its use-by date.

Chapter 10 - Set a Food Goal



Start by creating a stockpile large enough to support your entire household for 72 Hours. This is the minimum store recommended by the American Red Cross. And Department of Homeland Security.

Once you have reached that goal, set a new goal (say a month) and add to your store until you reach that milestone.

This gives you far more security that just the three days you started with.

What if the crisis is such that things will never go back to where you were? How far is a month going to go? Can you plant crops and find new sources of food in just a month? Your crops are going to take time to grow. In reality, if you want to be fully secure, you need 12 months of supplies in store.

You also need water. The CDC recommends you have 1 gallon for each individual per day.

I know that I have said you should be discrete when buying your stock. However, you should try to buy in bulk whenever you can, or buy through Amazon. This will reduce costs.

Buy Foods that are Nutritious

Here are some examples of nutritious foods.

- Peanut butter
- [°] Whole wheat crackers (consider vacuum packing to prolong freshness)
- \checkmark Nuts and trail mix
- Cereal (individually packaged to prolong freshness)
- Power bars and granola bars
- Dried fruit
- [~] Canned meat such as tuna, salmon, chicken and turkey
- [~] Canned vegetables such as beans, carrots and peas
- Canned soups and chili
- Sports drinks (avoid ones laden with sugar and artificial color)
- Sugar, salt and pepper
- Powdered milk
- [∨] Oats
- [∨] White Rice
- [~] Popcorn
- [∼] Honey
- Powdered Milk
- [°] Dried Beans
- Low moisture Hard Cheeses

You should make sure that you have foods that will last a long time. Canned foods, are very good as are dried foods. However, here are some foods that have an extra-long lifespan.



Make a Food Plan

When planning your food store, you need to carefully work out how much

food will be required for one month. Then you can simply multiply that amount by 12 to get an idea of how much you will need for a ONE YEAR food store.

If you have time to spare, work out a number of daily menus and then convert that into a monthly total. If you are going to serve the same menu 6 times in a month, then you multiply the amount of food by 5 to calculate the total requirements got that menu for one month. Then do the same with the other daily menus until you have a composite monthly food requirement.

Find a way of rotating stocks so that you use the older stored food as you buy more. That can be used to work out how much of everything to buy.

Chapter 11 – The Hidden Food Store



is a possibility that if law and order break down that some people may break into your house looking for food supplies. I suggest that you keep one week of supplies where you would normally keep it, but the rest of your food and water supplies should be hidden.

I would seriously suggest working on placing a partition across the end of one of your rooms with a hidden door, and creating a store room that intruders will not find with a cursory search of the premises. Better to lose one week of your supplies than all of it.

Cellars with hidden trapdoors are also a good solution. I know this adds to the expense but losing your stores could be a total disaster if this go bad.

See Main Section

Chapter 12 - Cooking Food

Having an off-grid cooking facility can save you a lot of electricity in normal times, and when there is a power outage it can make a huge difference to your lifestyle. While others are struggling to get a hot meal, you can carry on cooking as normal.

Petchka

When I lived for a year off grid in Bulgaria the only source of heating and cooking, I had was an old iron Petchka.



The Petchka sat in the corner of the room and

had a tin chimney that took the smoke out of the cabin. The chimney would get very hot and also served as a radiator, increasing the temperature. The Petchka ran on wood and in the icy cold Bulgarian winter months would run 24 hours a day.

Every morning I would dig myself out of the cabin, through the snow that had blown up against the cabin door every night, and go and collect enough wood for the next 24 hours.

It was not during a crisis and since everyone in the villages used Petchkas there was an organized system of buying wood. We would buy enough wood from a merchant who would deliver it by truck and dump it as close to the house as he could. Some of the villagers would slice up the wood themselves and then stack it in a wood shed. Others, like me, would pay someone to come with a chain saw and an axe and chop it up into Petchka sized blocks. There was a wood store near the road and it was stacked there for me.

Every day I grabbed a wheelbarrow and collected the wood for the next 24 hours using a wheelbarrow that I pushed up a track I had cleared from the unmade road up through the trees to the cabin. I stacked this on the stone floor of the cabin next to the Petchka.

Whilst I was able to make use of a supplier and have my wood delivered, it would be possible in exceptional services to forage for wood.

In addition to keeping the cabin warm, the Petchka was used for cooking. On the top of the Petchka were two thin metal plates that became even hotter than the rest of the Petchka, and on which I would place a kettle or cooking pots, when I prepared my food. The Petchka also allowed me to warm water for bathing.

The Petchka had a drawer underneath that collected the ash, and a glass fronted door which allowed me to see the wood burning inside the Petchka. Some older models did not have the glass and just were a metal box with a door in the front into which the wood was fed.

At night I would have to wake at about 2 am to top up the wood or risk the Petchka going out overnight, and the consequent efforts to relight it.

Cooking on my Petchka simply revolved around anything I could put in a pot. Towards the end of my time I did also start to experiment with wrapping food in foil and placing it on the top of the Petchka. I know that there are also metal boxes that function something like an oven that can be placed on top of the Petchka, so they are quite versatile.

In the summer months of course, there was no need to heat the cabin and I did not want to have a Petchka running 24/7. For those months I used a simple bar-b-cue outside under the trees. This was also lit to boil hot water for washing, as lighting the Petchka was too long a process.

Rocket Stove

Another type of stove I saw in Bulgaria was at the home of a British lady who had lived in the country a long time. She used a rocket stove as her main form of cooking facility, saving substantially on her electricity bill.

The name Rocket Stove sounds very space-age but they are anything but. A Rocket Stove is an extremely clean form of cooking and does not produce harmful fumes. It also increases the efficiency of the fuel



because of the way it is designed. They consume nearly 100% of the fuel instead of letting it escape in smoke.

The picture show above is of just one variation of Rocket Stove design. You just need 16 bricks, or blocks, for this design. Rocket Stoves are thousands of years old; they are not a new concept.

You can, of course, make them as complex, or simple, as you like. All you need is a firebox, a chimney, and a place on the side where you can feed the fuel, once the fire is going.

The cost of the model we have shown you costs around \$6 to make. People also make them out of old metal cans, and a variety of other materials.

You start by feeding in something like straw into the top, drop a bit of lighted paper into the top and then some very small twigs, keep the fire going by adding increasingly large twigs. Once the fire is well alight, you place a metal grid over the top of the chimney, where you can put your pot. You then switch to pushing twigs into the side hole to keep the fire going.

Air also is sucked into this side whole and this oxygen increases the ferocity of the fire, and generates a lot of heat at the top of the chimney.



The rocket stove does not need large blocks of

wood like the Petchka and works great with twigs and small branches. It does not consume vast amounts of wood and takes just a few minutes to get going.

If you do not want to make one, there are several versions for sale on Amazon. This version, made from stainless steel and is fully collapsible.

Should disaster strike and we are left without electricity than these simple stoves could mean the difference between surviving and not surviving.

Understanding the principles is quite important, even if you do not make or buy one now. The beauty of this kind of stove is that it does not require that you have access to bottled gas supplies or any other commercial fuels. It just requires a few twigs which can be found anywhere.

Solar Cookers

There are four types of Solar Cookers and they each work very differently. The one thing they have in common though, is that they use the power of the sun to cook food.



Not all locations are right for solar cookers, but if you live where there is a lot of sunshine hours every day and temperatures are high, then this may be a good option. Personally, I would place it in third position behind Petchkas and Rocket Stoves as a long -term cooking solution. They may be useful for shorter periods.

Panel Cookers

Panel cookers look like a three-sided box covered in shiny material (foil for example). The rays of the sun hit these shiny walls and reflect back into the centre of the box

In the middle of the box is a heat trap. This is made of anything that is clear and will let the rays of the sun through. Two large glass bowls with one turned upside down on the other are perfect.



The dark colored cooking container is placed inside the large bowls and the food placed inside the container. Temperatures can reach between 250° F (121° C) – 300°F (149°C).

Panel cookers are suitable for cooking meats vegetables, soups, and pretty well anything.

Box Oven Solar Cookers

The Box Oven is the most well-known type of solar cooker. You can either make them or buy them commercially on Amazon.

There is an outer box and an inner box with insulation in between. This holds the heat inside the oven. The inside of the box is also painted black, thus creating a heat sink.

On top of the box is a shiny panel which is used to reflect UV rays down into the box. Across the top of the box is a layer of plexiglass which allows light into the box and creates an air tight heat trap keeping the heat in the box.

This type of cooker has a greater cooking capacity than the panel cooker and can contain a larger cooking pot. The insulation also allows the cooker to reach higher temperatures than the panel cooker (250° F (121° C) – 400° F(204° C).



If you think of the

types of food that you can cook in a normal domestic slow cooker, then these are the kinds of foods that can be cooked in panel and box ovens. Pretty well everything except for frying can be managed with this type of cooker.

If you live in areas where the sun shines for several hours each day and the climate is hotter, then these solar cookers may have a place in a longer-term solution for off-grid cooking.

Parabolic Solar Cooker

Parabolic Solar cookers are shaped very much like a satellite dish and the dish reflects the sun's rays towards a pot sat in the center of the dish. Very much like the receiver in a satellite dish. The pot is dark colored to absorb the



heat. The concentrated UV rays can get to very high temperatures, in the region of 500°F (260°C) – 700°F (371°C) and the system can also be used for frying and grilling.

Evacuated Tube Cookers

This style of solar oven is a fairly new development and is not really the kind of device that the average person can easily make themselves. However, they are very quickly becoming a popular solution for off-the-grid cooking.



These cookers can work even under fairly cloudy skies. The cooker becomes hot enough to cook meat, bread, vegetables, and desserts. It can reach temperatures of over 550°F (290°C). the cooker is made from a large evacuated glass tube surrounded by shiny reflector panels.

Chapter 13 – Growing Food

The seeds you should concentrate on storing in any case of long-term survival are ones that could provide a large amount of food and calories. They should also be seeds that are pretty easy to grow.

Stocking up on the following varieties of seeds would be a wise move for any prepper.

Kale

This is a hardy plant that is fairly easy to grow. Kale is a relative of cabbage. It has a whole bunch of nutrients. Seeds can either be planted straight into the garden, or you can start them indoors and then transplant them.



Kale is also good in Hydroponic gardens, which we will talk about later. **Carrots**

Carrots can be grown around other food crops. They can stay in the ground a long time and be picked when you need them. To grow carrots, you don't have to go dig in the dirt. You can easily grow hydroponic carrots. Planting instructions for carrot seeds will be found on the packet if you prefer traditional growing methods.



Tomatoes

One tomato plant can grow a lot of fruit. For long term storage, carrots can be dehydrated. They can also be turned into sauces and bottled. They can also thrive in a hydroponic setup.

Peppers



Peppers prefer warm weather but will thrive in a hydroponics set up and produce food full of nutrients quite easy, whichever way you grow them. For traditional growing methods, see the seed packet or for hydroponics, see our hydroponics section.

Corn



Corn can be eaten, dried and turned into cornmeal. A decent sized crop would take a lot of space. You can, however grow a small crop in a small garden. Corn is pollinated by the wind so you need to keep your corn close together.

Potatoes



You grow potatoes from seed potatoes which

can be kept for up to a year in a dry, dark, cool cellar. You need to start with organic seed potatoes, and each year you will get a new supply of seed potatoes for the following year's crop.

You may find it easier to grow potatoes hydroponically as there are many diseases and ways that your crop can be ruined outside.

Stevia



When the sugar in your store runs out, Stevia

can come into its own. The leaves can be ground and used as a great sweetener. A small Hydroponic garden as shown is ideal for raising your crop. Next we will look at fruit trees in your garden.

Fruit Trees

If you have a garden, you may consider planting some fruit trees as soon as possible so they are mature when the SHTF.

The following trees can be planted at your urban house, or bug out location. Trees do not have to be replanted like vegetables and are not so picky about types of soil or climate. The fruit can also be dried or canned for storage.

If you think carefully you can fit a lot of trees in your plot.

The best time of the year to plant fruit trees is the fall (autumn). The hot weather is over and the cold weather has yet to arrive making it the perfect time for fragile trees to be planted. You can also plant in early spring after the frosts have gone.

It is also in tune with the natural cycle of the tree, since trees fall into a state of being dormant during the late Fall and Winter.

Sweet apples, plums, pears and other fruits typically come from grafted trees so that they will produce the best fruit. You can plant seeds but it is better to plant young trees.

You need to plant the tree in a sunny spot in the garden. Fruit trees typically need about six hours of sunshine. When choosing a location imagine it full sized and allow room for it to grow.

The soil should be well drained as you do not want a lot of water retained around the tree.

Do not dig the hole too deep as the point where the tree is grafted should remain above the surface.

Fig Tree



The fig tree has been around for many years

(estimated 9,000 years). Figs can be dried of bottled. You can either grow them in the ground or in a container. There are also hydroponic systems that work for figs.

Pear Tree

You need to plant two pear trees of the same variety near each other so they can cross pollinate. Make sure you grow a fruit tree not a flowering pear tree

like the Bradford or Cleveland pear tree as they only produce flowers.

Pecan Trees

Pecan trees are a valuable tree that will produce Pecans in the late fall. If you keep the pecans dry they can be stored for months and they do not need coking. Just crack them open and enjoy. They are a source of magnesium, fiber, iron, and Vitamin B-6.





You can also grow Pecan trees Hydroponically if you are short of space. Check out our section on growing Hydroponic crops later in the book.

Mulberry Trees

Mulberry trees are related to the fig. They are grown worldwide. They can grow very big and produce a lot of berries. The berries can be made into jelly.

You may be wondering why no citrus trees or peach, plums, and cherries. Citrus trees are very sensitive to cold weather and you can easily lose your entire crop because of a frost. Fruits with stones are also not a good choice and can be unpredictable.



Chapter 14 - Hydroponics

Hydroponics is, is quite simply, growing plants without soil. It is a much more efficient method of growing plants and can also be done indoors. Plants don't actually use soil to grow, they use the nutrients and water contained in the soil. With hydroponics we simply find a better way to provide those two items.



In a hydroponic garden food is mixed in with water and because the food is so easily available to the plants the plants grow faster and are ready for harvesting much sooner than they would with traditional gardening.

There is also less chance for the plants to become diseased or get eaten by pests. It is a much cleaner environment. You can also grow many more plants in the same space which is important in an urban garden.

Choosing the Right Hydroponic System

Choosing a system is the most import decision you will have to make when setting up your hydroponic garden. Consider what available space you have,
which will lead you to choose either a surface system or a vertical system. Think about lighting, your budget, and how much time can be spared on the garden.



Vertical Hydroponic Systems

As you can see from the previous illustration, you can fit a lot of plants into a vertical hydroponic garden. A vertical garden, however, is more technically involved to create. You will need a pump to circulate the water and provide aeration, which is going to depend on having a supply of electricity (see electricity supply).



Passive Hydroponic Systems

A passive system where the plants hang in the air with their root tips in the water. The main part of the root ball is just hanging and only the tips are submerged in a water/food solution. Passive systems cost very little to build and are not technically challenging.

This photograph shows a passive system. If space is an issue, which it will be, you can make the holes for the plants much close together to fit more plants in. By adding artificial lighting, it is possible to fit these unit on shelves and triple the crop per sq. ft.

With plants that grow quite heavy on top with fruit (like tomatoes) it is necessary to have a way of anchoring the plant so it does not topple over. Tying plants to a trellis is the easiest way.

Advantages of Hydroponics

Commercial growers have been making use of hydroponics for many years. There is no weeding required, no pests, and diseases. You are going to produce much healthier plants, in a controlled environment.

Food for Hydroponic Mixes

You can purchase nutrients for your hydroponic garden at many stores. You can also find a variety of products at <u>Amazon.com</u>.

Giraffe-X Hydroponic Grow Kit

The Giraffe kit Ebb and flow deep water balcony gardening system has 108 spots to insert plants. It consists of 12 pipes over 3 layers. This complete hydroponic system is ideal for beginners.



This is just an example of one Hydroponic system that you can <u>buy on</u> <u>Amazon</u>. If you look at it I am sure the more practical among you can see how easily this can be made using ordinary pipes and connectors.

Chapter 15 - Self Defense

Even in our everyday life now, violence can happen in any neighborhood. In the event of a total breakdown of our society there will be an increased chance of violence as scared people try to provide for their families after a disaster has occurred.

In this chapter we are going to look at self defense as a whole, something that is an essential skill for any Prepper. Remember, although we can rely on police at the moment, there could be a time when they are no longer available or overwhelmed by a wave of lawlessness.

Before we look at weapons, we will take a look at some more general points that have to be considered.

Situational Awareness

In any situation it is important that an individual is aware of their surroundings and the possibility of threats being present. Everyone should be looking out for their own safety and the safety of their family.

Always be aware of your surroundings and consider what dangers might be present. Some people walk along in a dream, rarely looking up and completely unaware of what is around them.



Is there

a large van parked alongside the driver's side of your car in a parking lot? Who is hanging around the parking lot? Someone sitting in their car with the engine running and the doors unlocked is potentially at risk, better to lock the doors.

Be aware of that gang of youths standing chatting and watching you. Keep your distance and be ready in case they suddenly run towards you as you pass on the other side of the road. They may just be a group of teenagers chatting quite harmlessly, but just be aware of their presence.

Self Defense Weapons

Before you consider carrying a lethal weapon. You have to be sure that you could actually kill someone. Could you pull the trigger? Some people have belief systems that would make killing someone, even in self defense almost impossible to do. Carrying a gun in those circumstances is a bad move.



You don't have time to weigh up whether or not to use the weapon in an emergency and delay could result in the assailant grabbing your gun and using it on you. If you have doubts about whether you could use a gun, then don't take a gun as your self defense weapon.

There are alternatives that are non-lethal that you should choose instead. Here are a few of the alternatives:

Stun Gun and Taser

Stun guns and tasers are legal in most states in the USA. Check the situation in your state. A taser shoots a projectile over some distance. A stun gun requires contact and is typically used in close quarters.

A Taser used by law enforcement will typically give a five second burst to control the suspect. Most civilian Tasers are designed so that you shoot, drop the Taser and use the longer thirty-seconds cycle to get to safety.

Pepper Spray



Pepper Spray is an excellent self defense weapon. It can disable an assailant or even two assailants by inflaming your assailant's mucous membranes and burning their eyes and face. Although effective it is a short-range weapon. It has the advantage of being light and compact so you can carry a couple of sprays with you so you have better chance in a dangerous situation where there may be several assailants in the vicinity.

Basic Self-Defense Moves

Could you defend yourself and your loved ones if you were attacked? We may dislike violence but it is very common and in a SHTF situation you may well need to defend yourself.

There are certain self defense techniques that anyone can learn and use, no matter what strength or size they are.

It is important to remember that self defense is something you should avoid. Far better to be aware of situations and get well clear before it comes to a showdown, or just avoiding dangerous situations.

You can also try talking someone down, diffusing the situation. If we are

talking about a mugging, I always carry a second wallet with a small amount of money and an out of date card in it. I Hand that over and the mugger will normally run to escape the scene.

But if you do find you have no choice, using these moves you will have an improved chance of winning any fight.

Method 1 – Aggressive attack

As soon as the assailant touches you then shout very loudly "Back Off!" as you push back at the guy. The combination of the aggressive pushing and the volume of the shouting will alert the attacker that you are not an easy target. The noise may also attract help, or at least witnesses, neither of which the attacker wants.

Method 2 – Attack, Attack, Attack!

You are not going to have very long before you are overpowered if you are passive. Far better to go straight for the attack and hit where you will do the most damage. Do you remember the line in Karate Kid where the instructor says "If he can't stand, he can't fight?"

Well, it may not be very sporting but if he chose to attack you, he lost any rights. So, attack the following places: eyes, nose, ears, neck, groin, knee, and legs. Attack hard, doing it half-heartedly will make things worse.

Eyes

Gouge, scratch or hit his eyeball with your knuckle. It's going to hurt and may well stop him seeing while you escape. You have a much better chance fighting a half blind attacker.

Nose

Using the palm of your hand hit the underside of his nose with as much force as you can muster, pushing his nose upwards. This should break some bones and cause a great deal of pain. If the attacker is behind you then strike the nose hard from the side and this will also break the nose.

Remember, your attacker does not want to sustain injury themselves, they want a nice easy target that won't fight back. By taking an immediate aggressive stance and attacking rather than defending he may well decide it just not worth it especially if you have got a head start running away.

Neck

Your first option is to shape your hand into a knife with all fingers stretched out and close together and the thumb folded tight. Then chop (as hard as you can) into the side of the neck where the two big arteries are. This may well stun your attacker momentarily. An even more powerful attack is to throw your whole body forward and at the same time thrusting your elbow hard into his throat.

Knee

The knee can be attacked from all sides and is very vulnerable. Kicking either the sides of the knee or the front of the knee will cause imbalance and give you moments to run. I stress it must be hard. Remember, this is not a game, you are out to *cause maximum injury* to the attacker.

Groin

The final hotspot is the groin. A hard, upward kick between the legs can cause enough pain to throw the attacker off guard and possible result in them falling to the ground.

Do Not Hold Back

The next method is one which potentially is lethal and will certainly cause the assailant to fall and be in some distress. Imagine if you were to REALLY throw all your weight at someone's body, they would be knocked back. But not too much damage is done because you have spread your weight across a wide area of the attacker's body.

Instead of doing that you rush at the attacker placing one foot between their legs and throw your whole weight just on the front of the neck, using your shoulder to hit that point. You will certainly do damage and you may even crush their airways, which is potentially lethal. Remember you have got to be running forward to reach a point that is behind the attacker, this will ensure that they are hit by your whole weight, and that weight must land from one point in your body, your shoulder and hit the front of the throat.

Remember, you were attacked by him. You have no idea of the attacker's intentions. You are fully justified in using lethal force to ensure your

survival.

The Law on Self Defense

In a prepper situation, the law may well be pretty irrelevant as the law and order system may have collapsed, but if you are concerned about the law on self defense, here is is:

Self-defense law requires the response to match the level of the threat in question. In other words, a person can only employ as much force as required to remove the threat. If the threat involves deadly force, the person defending themselves can use deadly force to counteract the threat.

Once the threat has passed (the assailant is walking away) then lethal force on your part is no longer justified.

So, if someone attacks you, you have no idea what their intentions are. If you *believe* that your life is in danger, that is all you need. You can respond with lethal force as described above.

Protecting Your Home



The "Castle Doctrine" states that a person can use lethal force against someone who enters their home (or car) as the legal occupant of these places has immunities against certain laws. If someone enters your home and you have reasonable fear of imminent peril or death then you can use lethal force. However, If you shout out a challenge to someone and they try to escape or run and you kill them at that point you have no right to use lethal force. It has to be while you feel threatened.

This leads us on to home security.

Chapter 16 - Home Security

Nobody is really sure what would happen after a cataclysmic event such a nuclear war, but most people feel that in what would become a survival situation that law and order would break down fairly quickly, as desperate people tried to provide for their families.

It therefore makes sense to consider how you are going to protect your home and family if this were to happen. It will be too late to consider this once the disaster has happened. Now is the time to start thinking about this issue, and preparing your home.

When there is total darkness all around you because of a power outage, don't have bright lights shining through your windows advertising that you have power. *You are asking for problems*. Invest in good blackout curtains so you can keep your position secret.

It is not such an issue in a rural setting but where you have large numbers of homes around you in a city or town, law and order can quickly breakdown and if people want what you have, they will just steal it.



Just realize when all the utilities fail and food starts to become short that the rules have changed. With no telephones you can't just call for the police, who

will have their own problems anyway, you have to look after yourself.

It is not cold or lack of food or water that will be your primary danger, it will be other people who have not made any preparations trying to take everything away from you that is your biggest threat.

What You Can Do to Protect Your Home

In normal times having lots of light around your property is a great way of scaring away intruders, encouraging them to try somewhere less well lit. However, in a power outage, even if you have the ability to light the surroundings to your home, showing that you have electricity is a sure way to attract potential intruders.

Dogs barking are also traditionally a good disincentive to intruders but in a prolonged power outage where food, water, and the necessities of life are becoming scarce, it takes more than a barking dog to secure your home.

The best way of securing your home is by creating physical barriers to entry. A well-planned garden can add security features to your home. An excellent way of improving home security is to plant very thorny shrubs around and under windows. Big rose bushes that have large thorns on the branches make it very painful and unappealing for someone to try and access your home through the window. They also add a lot of color to your home.

The best security is to build high fences around your garden, with heavy duty gates that are always kept locked. Planting rose bushes behind the fence is an additional level of security and does much to beautify it as well.

By planting the thorny varieties of some plants like boysenberries, raspberries, goji berries, gooseberries. In addition to adding to security they also provide extra food resources.

Security of Doors

Doors are the primary points of entry to your house and must be secured. Exterior doors should always be constructed of solid wood, fiberglass, steel, or aluminum to give the most protection.

The builder who constructed the house was almost certainly more interested in appearance than security when he mounted the doors. Generally speaking, a standard door fixed by a builder can be kicked in quite easily with just a few swift kicks. In this section we are going to look at ways you can strengthen your external doors.

Then you come to the frames, strike plate and hinges, which all need to be modified to add security.

Most strike plates have very short screw and these should be replaced with three-inch screws that go through the frame and into the wall. These will be more resistant to someone trying to kick in the door.

Do the same thing with the doors in the hinges as well to add strength to both sides of the door.



First off, and I am not joking, you will be amazed at how many people leave their doors unlocked. If you don't lock your door then everything else in this section is pointless.

Smart Locks

If you are the kind of person that

(a) keeps locking themselves out, or

(b) Forgets to lock the door,

Then smart locks are perfect for you. Many smart locks allow you to unlock the door with a code number, so even if you lock yourself out without the key, you can enter the code and get access. Many Smart Locks will also be preprogrammed so that even if you forget to lock the door, it will wait a set period then automatically lock it.

Deadbolts

The strongest lock on your front door is achieved by paying out for a Grade 1 Lock (or if money is tight, Grade 2).

The Strike Plate

The deadbolt strike plate is the metal plate that fits into the door frame. Earlier we suggested that you replace the screws with three-inch screws and that is a big improvement, however an even stronger solution is to replace the strike plate that is normally two or three inches long with a *much longer one*, which can be over a foot in length. This spreads the force over a much greater area when someone tries to kick in the door and is secured by more (and longer) screws.

The Door Frame

Working on the Strike plate and fitting a longer and makes a big difference, but a determined intruder may well eventually split or rip off the door frame itself. There are companies that add a layer of steel to the door frame with just a few screws and you have a much stronger door.

Door Barricades and Security Bars

For the ultimate door security, you should consider installing Door Barricades and Bars. A Barricade is fitted to the floor near the door. The barricade slides closed and makes it impossible to open the door. These are really tough devices and quite often remain secure even after a door lock has been smashed. Door bars fix across the door on the inside and stop the door being opened even if the lock has been bust. When it is combined with a Barricade, they make a door virtually impenetrable.

Security of Windows

The second most common way of intruders entering the home is through the windows. Intruders can easily crack your windows and enter the house, without a lot of trouble unless you take some extra precautions.

We have already looked at planting thorny bushes around the windows, to give intruders a nasty surprise, but now we will look at the security of the windows more.

Window locks

Even if your windows already have the standard locks that come with many houses, it is a good idea to fit extra locks to secure your home.

<u>Pin Locks</u>: these locks are particularly useful for ground floor windows.

Keyed locks: To open these locks will require a key. However, it can be a little confusing knowing which keys fit which window.

<u>Hinged Wedge Locks</u>: These locks are ideal for securing windows that can be opened from the top or bottom.

Sash Locks: For double hung windows – allow the window to be locked or held in place.

Tempered Glass

By using tempered glass, your windows will be four times stronger than regular glass. These are referred to as Safety Windows. Burglars will find it much harder to get into your home with this type of glass, and the last thing that burglars want is to make a noise.

Plexiglass or Polycarbonate Windows

It is going to cost more but plexiglass is impact resistant and is ten times stronger than regular window panes. Polycarbonate windows are even stronger than plexiglass and if extra security is needed for a window then this may be worth considering.



Window Bars

Window bars add even more security for windows, and even if the glass is smashed the intruder will not be able to squeeze between the bars. Window bars are available in more decorative designs so your house feels less like a prison.

The Safe Room

A safe room will serve three purposes. First of all, the safe room is reinforced so that it is safer in the event of a major storm or other event that threatens you. Secondly it is a place where you and your family can flee if your house is threatened by intruders. Finally, it is a safe place where you can store your supplies that you have put together in case of a disaster.

Your safe room access should be hidden. Hide it behind a bookcase, for example, so that intruders will not find the access. That way if protecting your supplies and someone comes in before you have a chance to hide, they will not be able to find or steal your hidden supplies. Just leave a few things out so it looks like that is all you have. Chances are the intruder will take those items and then go.

Your safe room should also have weapons so that if you are discovered or the intruders do not leave you can wait until they are off guard and attack them.

You can build a safe room by walling off the end of a room or creating a cellar with a hidden entrance.

The safe room is where you will store all the supplies that you built up prior to the disaster. Most people will have made no preparations and will be desperate. Do not tell anyone about the safe room, even your most respectable neighbor may be desperate enough to try and take what you have in order to protect their own.

The size and design of your safe room depends very much on whether it is just you or your whole family that may need to enter. It also depends a lot on the design of your house. Does it have a cellar, is the shape more complex so that it will be confusing when you enter the house?

Think carefully how you can hide the safe room and disguise the fact that a room may be shorter than expected when looking from the outside.

Make sure that all your family understand what the safe room is for and know how to use it, just in case you are outside when the threat occurs. It is best to have a hidden keypad lock so that whoever gets to the room first can lock themselves in. If others arrive, they can then just use the keypad as well.

Ideally if you have a safe room you should have outdoor sensors that sound an alarm if someone enters your yard, giving the occupants time to get to the safe room before the intruder enters the house.

Your Safe Room Should Feature

- ✓ Absence of windows
- [~] Hidden ventilation
- Thick reinforced walls
- [∼] Water and bathroom
- Enough space for storeroom and people
- [~] Easily accessible from anywhere in the house

Yes, it is unlikely that you are going to have all these features waiting for you and you may have to compromise on the design of the safe room.

The best solution for designing a safe room, and a secure house perfectly designed for Preppers, is to build a purpose-made house out in a rural area. You do not have to connect it to services as it is designed for a time when services are no functioning. This will reduce the cost substantially.

See our chapter on building a cob and straw house

Chapter 17 Evacuation

Depending on circumstances there may come a time when you have to consider the idea of evacuating your home. There may be a local danger or your house may have been overrun by intruders, who have beaten your defenses.

Each family member should collect their BOB before evacuating and take it along. This will be their support for the next few days.

All members of your family should know the evacuation plan and know designated meeting points in case you are separated. There should be a local meet-up point, but if that is unsafe then family members should move on to one further away.

Only if the family has not reunited within a set period of time, and cannot contact each other, should family members start to follow the evacuation route independently.

As discussed earlier in the book there should be an out of state contact and you can try leaving messages there, so that the family can meet-up, if indeed that is still possible. If not then leave large prominent notes at the prearranged meeting points so that you can all track the progress of each other.

Evacuating the House

The most immediate issue will be getting clear of the house if it is overrun. The first meetup point should be a couple of streets away from the house, far away so as to be safe, but near enough that meeting up is easy.

The family should discuss and all know the best way to SAFELY get to that meet-up point. It should be rehearsed if possible.

Chapter 18 – Water

How Much Water Does a Person Need?

Commonly it is suggested that everybody need a daily water intake of eight x 80oz glasses of water a day. A recent study by the University of Wisconsin states that in the case of elderly people that this might not be true. There is, in fact, a risk of elderly people becoming overhydrated if they stick to that guide.

Water is the most important nutrient. In the study people in the age range 40 to 79 were monitored for water intake and it was discovered that people took in between 1.2 liters and 7.7 liters a day.

In general, older people took in less water than the younger ones, yet showed no signs of dehydration. Urine accounts for 66% of water output not 50% as previously thought.

A suggested 6 to 8 glasses per day would include water, low fat milk, sugar-free drinks, which include tea and coffee.

How Much Water is Enough During a Disaster?

Authorities suggest that you allow one gallon per day per person. That includes half a gallon to drink, and half a gallon for cooking and sanitation.

The CDC suggests that you should drink your half gallon even if you are not thirsty. In fact, for cases of pregnancy or illness the CDC suggest drinking a gallon a day.

In fact, this information is not well enough explained. The half-gallon actually includes water from all sources, including in the food we eat. Do not be afraid to drink water during an emergency but only if you are thirsty or becoming dehydrated. Do not drink it just for the sake of it. Allowing a gallon-a-day should be more than you need and your gallon should last over a day.

Signs of Dehydration

Dehydration is something you can deal with yourself.

- Dry lips and tongue
- Dry, sticky mouth

- Headache
- Weakness, dizziness, or extreme fatigue
- Concentrated urine that appears darker than normal
- Nausea

Signs of Severe Dehydration

Severe Dehydration requires medical help if available

- Severe diarrhea or moderate diarrhea for 24 hours or more
- Bloody or black stool
- Inability to keep fluids down
- Appears disoriented, is irritable or has extreme fatigue
- Little to no urination
- Very dry mouth, skin, and mucous membranes
- Rapid breathing or heart rate
- Sunken eyes

Storing Water

Following a disaster, clean drinking water may not be available. Your normal source of water may be shut off or contaminated. Prepare yourself for an emergency by building a store of fresh water.

You can either purchase commercially bottled water or store tap water in secure containers.

Commercially Bottled Water

Observe the expiration date of bottled water and rotate stocks, so that you always have fresh water available.

Non-Store-Bought Water

Make sure you thoroughly clean the containers you use to store the water. It is best to use food grade containers which do not transfer toxic materials into the water. If you cannot find food grade containers make sure that the top seals securely, is made of durable



materials, (not glass). Do not use containers that have been previously used to store chemical-based products.

- Wash and rinse the container using water
- Wash the storage container using a solution made from one teaspoonful of unscented household liquid chloring bleach, in one quart of water.
- Cover the container entry and shake the container well with the chlorine mix inside so that the mix touches every part of the container.
- Wait for at least thirty seconds
- Let the container dry OR rinse the container with safe water
- Pour safe water into the container and seal

Storing Water

- Label the container as "Drinking Water"
- Change the water every six months of storage
- Keep in constant cool temperature (50–70°F)
- Do not store your water in direct sunlight
- Do not store near toxins of gasoline

Using Stored Water

When removing water from the store, either pour or use a clean scoop every time. Never use your hand to scoop water.

Purifying Water

If you eventually run out of clean water it will be necessary to purify more water.

Boiling Water

In an emergency situation where water services are no available it may be necessary to boil water to make it safe.

In an emergency situation you should always use boiled water for drinking, cooking, preparing drinks, washing dishes and cleaning teeth.

If your stored supplies have run out, use the bottle cleaning procedure we just covered and clean the bottles again, then fill them with boiled water.

When water is boiled if it is still cloudy let it settle and then filter through a coffee filter or clean cloth. Bring water to boil for at least one minute at regular altitudes or three minutes at higher altitudes.

Boiled water has a flat flavor. To overcome this, add one pinch of salt to each liter of water or pour back and forth between two clean containers several times, to aerate it.

The other method of making water safe is to use chlorine bleach. Use an unscented chlorine bleach and add a few drops to the water, see the following table for amounts.

Amount of Water	6% Bleach to Add*	8.25% Bleach to Add*
1 quart/liter	2 drops	2 drops
1 gallon	8 drops	6 drops
2 gallons	16 drops (1/4 tsp)	12 drops (1/8 teaspoon)
4 gallons	1/3 teaspoon	1/4 teaspoon
8 gallons	2/3 teaspoon	1/2 teaspoon

If the taste of chlorine is too strong pour the water to another clean container

and let it stand for a few hours.

Water disinfection Tablets

You can purchase water disinfection tablets online or at pharmacies. These tablets contain chlorine, iodine, chlorine dioxide, or other disinfecting agents. Follow the instructions on the packet as strengths may vary.

Water Filter Straws

The original straw, the LifeStraw, filters down to 0.2 microns. That is small enough to remove virtually all bacteria and protozoa. That is a good start, but the straw will not filter out heavy metals or desalinate water. Nor does it filter out any viruses, although it is fair to say in rural USA there are very few water borne viruses.

Salt Water

Drinking seawater is not a good idea as the body has to urinate more sea water than you actually drink to clear the salt, leading to a water loss in your body.

If the only water is available you should boil the seawater and turn it into steam. Collect the steam and let it condense back into pure water. This is a safe way of collecting small amounts of pure water if all you have is sea water.

Testing Water Purity

Clean drinking water is one of the most important resources in the world. You can purchase water testing kits that will check water purity. Different strips are used to check various qualities of the water including bacteria, pesticides, lead, nitrates, and so on. You can purchase these kits online.



Chapter 19 – Health

Herbal medicine in Disasters

Herbal medicine is a useful adjunct to your post disaster health plan. In order to be comfortable using herbs you should start to use them now.

Emergency Situations

When dealing with an acute trauma there are factors to consider:

- What type of injury?
- Is the skin broken?
- Is there bleeding?
- Has the bleeding stopped?
- Is there possible infection?
- What does the injury look like?
- tendon, nerve, bone or vascular damage?

Here are some solutions

Acute Trauma Stage	Herbs You Can Use
Coagulation	Shepherd's Purse leaves and
Stopping the bleeding	flowers, Oak bark, Wild Geranium
	root, Bilberry, Yarrow leaf and
	flower, Raspberry/Blackberry leaf,
	Chaparral leaf
Inflammation	Willow, Meadowsweet, Chaparral,
Help Recover from swelling and	Aloe, Lobelia, Self-heal, Comfrey,
inflammation, and pain.	Devil's Claw, Birch, Alder, Aspen,
	Poplar, Plantain
Proliferative	Chaparral, Comfrey, Horsetail
Helps tissue regrow, but ensure	(connective tissue and bone),
there is no infection first	Plantain, Calendula, Aloe Vera
Remodeling	Comfrey, Vitamin E, Horsetail,
Help reduce appearance of scar	Calendula, Aloe Vera
Anti-Pathogenic	Chaparral, Acacia, Raw Honey,
Help fight wound infection	Aloe Vera, Echinacea, Baptisia,
	Goldenseal, Sida
Lymph & Immunity	Poke root, Blue Flag, Echinacea,

Shepherd's Purse leaves To help stop bleeding How to make shepherd's purse tincture What you need: fresh shepherd's purse herb vodka a lidded mason jar a coffee filter a blue or brown glass storage jar Shepherd's Purse Flowers How to make shepherd's purse tincture What you need: fresh shepherd's purse herb vodka a lidded mason jar a coffee filter a blue or brown glass storage jar Oak Bark How to make oak bark tea Oak bark tea is available in loose leaf or tea bag form. To make it, steep a tea bag in 1 cup (250 mL) of hot water. You can also boil up to 3 grams (3/4 teaspoon) of dried oak bark in a few cups of water, strain, and drink. Wild Geranium Root Wild Geranium is considered an astringent, a substance that causes contraction of the tissues and stops bleeding. The Mesquakie Indians brewed a root tea for toothache and for painful nerves and mashed the roots for treating hemorrhoids. For dried leaves use 2 teaspoons, for fresh leaves use one teaspoon per cup

Recognizing Medicinal Herbs

Bilberry Promoted most commonly for improving vision, it has been reported to lower blood glucose, to have anti-inflammatory and lipid- lowering effects, and to promote antioxidant defense and lower oxidative stress. Therefore, bilberry is of potential value in the treatment or prevention of conditions associated with inflammation
Yarrow Leaf & Flower To use yarrow powder to stop bleeding, sprinkle the wound with yarrow powder or wet, fresh yarrow leaves and flowers, and then apply pressure and elevate the wound above your heart.
Raspberry Leaf It can help women with menstrual issues, fertility issues, pregnancy, preparing the body for labor and yes – postpartum recovery. Red Raspberry Leaf Tea not only helps stop postpartum bleeding by increasing uterine tone but can also increase milk supply.
Blackberry Leaf Blackberry leaves have been traditionally used in herbal medicine as an application on burns to heal the injury and on cuts to stop bleeding.

Chaparral leaf contains saponins and medicinal qualities that are especially beneficial to the skin. Applied to the skin, chaparral can have a remarkable healing effect on dandruff, eczema, herpes, cold sores, psoriasis, and contact dermatitis.
Willow bark is used to ease pain and reduce inflammation Headache can also be helped but if prone to stomach upsets avoid. Willow bark appears to be effective for back pain. In a well-designed study of nearly 200 people with low back pain, those who received willow bark experienced a significant improvement.
Meadowsweet is reputed to break fevers and to promote sweating during a cold or flu. It also has a mild anti-inflammatory effect and a pain- relieving effect. Meadowsweet has been used historically for a wide variety of conditions.

Uncary

North Contraction of the second secon	Aloa Its anti-inflammatory effects can be accounted for by the fact that all parts of the plant contain several salicylate compounds
	Lobelia Anti-inflammatory properties of the herb have been demonstrated, which may be useful, since bronchitis is associated with inflammation in the bronchi. Lobelia should be used cautiously, as it may cause nausea and vomiting. Less. Lobelia is used traditionally to promote mucus discharge.
	Self-Heal Selfheal has been used as a medicinal plant for centuries, often as the ancient Greek physician, to cure inflammation of the throat and tonsils. anti-mutagenic properties, indicating a possible treatment for certain cancers.
	Comfrey

	Comfrey has a centuries-old tradition as a medicinal plant. Today, multiple randomized controlled trials have demonstrated the efficacy and safety of comfrey preparations for the topical treatment of pain, inflammation and swelling of muscles and joints in degenerative arthritis, acute myalgia in the back, sprains, contusions
A COMPOSE	Devils Claw may relieve pain caused by inflammatory conditions like arthritis and may suppress hunger hormones. Daily dosages of 600–2,610 mg appear to be safe, but no official recommendation exists. Side effects are generally mild,
	Birch Birch is a tree. The leaves of the tree, which contain lots of vitamin C, are used to make medicine. Birch is used for infections of the urinary tract that affect the kidney, bladder, ureters, and urethra. It is also used as a diuretic to increase urine output.
	Alder In human medicine Alder-bark teas are used as a gargle to treat inflammation of the mouth and throat, tooth and throat pain, and bleeding gums; Alder bark is used to make a lotion or poultice, and the leaves to treat all sorts of skin conditions, eczema, infected wounds, burns, and hemorrhoids.
	Aspen Aspen is a tree. The bark and leaf of the tree are used to make medicine. Aspen is used in combination with other herbs for treating joint

pain
Poplar The dried, unopened leaf buds are used to make medicine. Poplar is used as an ingredient in herbal cough medicines. It is also used to loosen chest congestion and as a stimulant. Some people apply poplar directly to the skin for sores, bruises, cuts, pimples, external hemorrhoids, frostbite, and sunburn
Plantain Plantain has long been considered by herbalists to be a useful remedy for cough , wounds , inflamed skin or dermatitis, and insect bites. Bruised or crushed leaves have been applied topically to treat insect bites and stings, eczema , and small wounds or cuts.
Calendula Calendula is a plant. The flower is used to make medicine. Calendula flower is used to prevent muscle spasms, start menstrual periods, and reduce fever. It is also used for treating sore throat and mouth, menstrual cramps, cancer, and stomach and duodenal ulcers.
Horsetail The above ground parts are used to make medicine. Horsetail is used for "fluid retention" (edema), kidney and bladder stones, urinary tract infections, the inability to control urination (incontinence), and general

	disturbances of the kidney and bladder.
NAME OF THE COM	Acacia As a medicine, acacia is taken by mouth to reduce cholesterol levels and to help increase weight loss. In manufacturing, acacia is used as a pharmaceutical ingredient in medications for throat or stomach inflammation and as a film-forming agent in peel-off skin masks
HONEY	Raw Honey A good source of antioxidants. Raw honey contains an array of plant chemicals that act as antioxidants. Antibacterial and antifungal properties. Heal wounds. Phytonutrient powerhouse. Help for digestive issues. Soothe a sore throat.

Chronic Diseases

In the case of a long-term breakdown in society, those people taking medication on a long-term basis will struggle to find medication after their supplies run out. The best thing to do is to ensure that you eat foods that naturally counter these diseases.

I am not a doctor and I am not advising anyone to voluntarily replace medication with food, but in a situation where medication is not available this is the best you can do.

Of the ten leading causes of death in the USA, at least seven of them are directly related to diet.

Cardiovascular Disease

- Avoid red and Processed Meat.
- Avoid Sugars and refined grains
- Eat fruit and Vegetables

Insulin Resistance

- Avoid Processed Meat
- Eat Whole Grains and Fruit
- Do not replace Carbohydrates with Protein

Cancer Prevention

- Avoid Red Meat
- Eat lots of fruit
- Eat Wholegrains

Hypertension

- Avoid Baked foods, canned foods, soy sauce, processed food items
- Eat apricots, apples, grapes, bananas, dates, mangoes, melons, oranges, peaches, strawberries, pineapples, raisins, broccoli, green beans, carrots, green peas, kale, spinach, tomatoes, lima beans, squash, potatoes, sweet potatoes etc.
- Eat whole wheat bread, whole wheat pasta, brown rice, pita bread, oatmeal, unsalted popcorn
- Drink Low-fat milk and milk products

Diabetes

- Avoid Refined carbohydrates food items and highly processed carbohydrate-containing foods
- Eat whole grain cereals and vegetables; less glucose containing fruits
- Avoid All saturated and trans-fat-containing food
- Eat monounsaturated and polyunsaturated fat

Kidney Disease

- Avoid Higher intake of minerals like sodium, potassium, phosphorus and protein and fat-containing foods
- Eat Low salt and sodium-containing foods
- Eat Corn, and rice
- Avoid phosphorus-containing foods, like oatmeal, bran cereals, meat,

canned foods

Osteoporosis

- Drink Fortified beverages like soy milk, and rice milk
- Eat Low fat milk, cheese and yoghurt
- Eat Tuna, salmon, sardines, and mackerel fishes
- Eat spinach, beet, raisins, artichokes broccoli

This is just intended to be a simple guide of what foods to eat or avoid if you have a chronic disease and no medication.

Mental health is not something you should ignore after a disaster. There will be an increase in cases of PTSD, and other anxiety disorders.

Chapter 20 - First Aid

In the case of any disaster you should have a first aid kit in your BOB. If you get the opportunity to train for CPR and other basic first aid skills before the disaster you should endeavor to do so. I have another book coming out soon where I look at skills you should try to learn in advance of any disaster.

What is the aim of First Aid?

The three key aims of first aid are

Preserve Life

The primary purpose of all medical care including first aid is to preserve life

Prevent Further Harm

As a first aider you do not want the condition to get worse, This is achieved by either moving the victim away from the source of harm or applying first aid techniques (e.g. pressure application).

Promote Recovery

First aid also involves kickstarting the recovery process or even completing a simple treatment like applying a plaster.

Airways

In order to preserve life the victim has to have an open AIRWAY so that air can proceed through the mouth or nose through the pharynx and down into the lungs. Conscious people will maintain their own airway, but someone who is unconscious will be unable to.

If a victim is lying on their back the tongue may fall backwards and obstruct the airway. This is fixed by tipping the head backwards which automatically lifts the tongue clear. If the patient is breathing the first aider would normally tip them onto their side into the recovery position which serves to stop the tongue falling back into the airway, and should they vomit it allows the vomit to clear the mouth. The airway can also get blocked because the victim has swallowed an object which becomes lodged in the pharynx or larynx (choking). This is resolved with a combination of back slaps and abdominal thrusts.

If the victim is not breathing then the first aider would carry out CPR.
This chapter is not intended to serve as a first aid manual. As part of your BOB you should have packed a first aid manual. This manual can only serve to point you in the right direction as most first aid guides are designed to allow temporary measures until medical professionals arrive. In a major disaster this may take a long time or indeed may never come.



Chapter 21 – Power

Solar Power Installation

Solar panels take the energy from the sun, in the form of light, and convert that energy into electricity.

When I say solar panels you no doubt think of arrays like shown on the image at the top of this page, however, solar panels can take several guises. This may include powering a single device, a gadget, or charging a car battery.

Definitions

Solar Cell

The smallest unit of a solar panel is a solar cell. This is also known as a photovoltaic, or PV, cell. The cell is the unit that turns sunlight into electricity. These cells are typically gathered together to form a panel or module. When two or more panels are placed together, we call this an array. The typical domestic solar panel contains around 40 - 60 cells, and the average domestic installation will consist of between 10 and 20 panels.

An Inverter

To convert the direct current generated by the panels into alternating current (which is required to run devices), the current must be passed through an inverter. Once the current has been converted into alternating current by the inverter it then passes through a circuit breaker and into the house.

Off Grid or On Grid

An off-grid system will direct any excess electricity produced into a battery bank. An on-grid system will connect to an electricity providers local system and excess electricity will make the meter run backwards and thus reduces electricity bills from the company. Since we are considering situations where there is a long-term power outage, we will look at off-grid systems in this description.

How Many Watts Will a Solar Panel produce?

The standard sized six-foot x 39 inches panel has become much more productive since they were introduced in 1954.

60 Solar Cell	1954	2012	2020	
Panels				
EFFICIENCY	6% Efficient	15% Efficient	18.7% Efficient	
WATTS	20 Watts	200 Watts	320 Watts	
PRODUCED				
ENOUGH TO	0.33 60-Watt-	3.33 60-Watt-	5.33 60-Watt-	
POWER	Bulbs	Bulbs	Bulbs	
Source: American Physics Society				

The more cells that work in tandem, the more power they will produce. Typical panels consist of 60 solar cells, although you will also find them with 72 solar cells.

This has been a fairly standard size for many years, but modern panels are much more efficient than those from the past.

Power Ratings for Solar Panels

In 2020 the average solar panel will produce 320 watts of power. Some will produce more and some less. The top-rated panels are more expensive, but are useful if you have limited space on the roof. The figure you should be most concerned with is the amount of power the whole array will produce.

How Many Panels are Needed to Power an Average house?

The average house in the USA gets about 4 hours of good sun each day.

If your panels are producing 250 watts an hour that makes 1 kWh (1,000 watts) in a day. So that is roughly 30 kWh per panel per month.

The average homeowner in the USA uses around 900 kWh a month on average. Your electricity provider will normally provide your usage figures for the last few months. So, the average house will need 30 panels to provide all its needs at current usage.

Later on, I will take a look at how much electricity various devices use.



Of course, this is a system that is designed to replace your current electricity supplier. It might be that you are looking to purchase a smaller solar panel system, that is designed to simply power emergency equipment or supply enough power to recharge battery powered devices.

It is possible to buy portable solar panel kits for this purpose for substantially less money in places like Amazon or eBay. Throughout the course of this book we will be balancing the ideal system with what it is possible to afford.

Solar power is obviously the most well-known alternative power systems available, but it may be that you have particular circumstances that will make an alternative system more practical.

Residential Wind Turbine Installation



Residential wind turbine systems are more complicated to install and calculate output than solar systems. Unless you are particularly skilled you will probably want to consult with an expert if you are considering installing a full-size system to power a house.

Before considering installing a full-size wind electric system at your home is worthwhile, there are things you should consider:

- 1. The amount of wind at your property
- 2. If any zoning or covenants stop you from installing a system
- 3. If it is going to be economic to do so.

Having checked all of the above and you still want to go ahead then it is time to look at any issues connected with the installation:

- Where is the best location for my system?
- What size turbine do I need to meet my needs?
- Do I have access to the equipment needed to erect the tower?
- Do I understand the difference between AC and DC current?
- Am I skilled enough to handle all the wiring?

Positioning the installation where there are the best wind resources is very important. If you are on top of a hill or on the windward side it is better than

being on the leeward side of the hill. Obstacles such as trees and houses should be taken into account.

Your installation needs to be 30 feet above anything that is within 300 feet of the installation.

You need to plan your installation so that occasionally the tower can be lowered for maintenance. Do you have enough room for this?

Finally, you need to consider the length of cable between the installation and the house. You can lose a lot of electricity due to the resistance in the wires.

Remember this is a long-term installation and should be envisaged to last at least 20 years.

The size of turbines used in residential situations will vary considerably, depending on how much of your electricity you want to generate. This might range from 400 watts to 20 kilowatts.

If your home uses 10,932 kilowatt hours per year that works out at 911 kilowatt hours per month. You would need a turbine in the range of 5-15 kw to make an impact on that demand. Do not forget that the height of the tower will also have an impact on how much electricity is generated.

Hybrid Installation

A solution chosen by an increasing number of people is to combine the wind and solar systems and feed electricity from the turbine and the solar panels into the invertor. The advantage is that it provides increased system efficiency and balance of energy supply.

Water Power Installation

This is only an option for a very small number of people as it requires a moving stream running through the property. A micro hydroelectricity system can produce enough electricity to power the average house from the flow of a small stream or larger river. Water flow is usually consistent and does not have the vagaries of solar or wind power.

Water power is one of the oldest forms of power for powering machinery. Think of the many mills that are placed on the banks of small streams and power mills for grinding corn, or simple machinery. The following company has brought all this up to date with their powerful water powered generator.

Scott Hydroelectric Turbine Generator

This water generator is designed for people looking to go entirely off grid and will power a complete home. Our recommended domestic, water generator is the Scott Hydroelectric Turbine Generator. If you are looking for reliability, clean, and high-volume power then the system is the one to pick. The units are rated 1500 watts but in the right conditions will produce 200 Watts which is enough to power the average home.

The generator makes use of a cross head turbine. This type of turbine is particularly good for situations where there are low amounts of water. There are only two moving parts in the generator and they run very quietly compared to other systems.

The main disadvantage of this system is that it needs a head height of 25 feet. Or a pressure of 9PSI. This might make it unsuitable for some home owners.

More information from: <u>http://www.scotthydroelectric.com/</u>

Fuel Conservation

It is far easier to reduce electricity usage than to generate more electricity. On the following page we have a chart showing what percentage of the average home's electricity is consumed by various appliances.



ELECTRIC OVEN 3- 4%	REFRIGERATOR 4%	WASHER DRYER 13%	
	Factoria		
LIGHTING 12%	WATER HEATER 14%	AIR CON/HEAT 47%	
	Source: viewal capitalist		

Chapter 22 – Heating

Depending on the climatic conditions there may be a need to keep warm or keep cool. In most cases, keeping warm will be by utilizing the cooking equipment you have set up. This could be a Petchka or other form of stove.

It is essential to avoid your body temperature dropping too much, and an external heat source will be needed and the cons food and drink.

Heating Installations

Petchkas are the most efficient device to have as they serve to both provide heat and a cooking facility. Ensure you have a stock of wood and kindling to get a fire started.

There are also emergency stoves like the one shown in this photograph which can also serve to provide heat.



Propane heaters can also serve for short term solutions but eventually the propane will run out and it is unlikely that you will be able to access more. Other forms of heater/cooking are the rocket stoves

Chapter 23 – Lighting

When I first went to live on the island of Mindanao at the southern end of the Philippines, I had inadvertently chosen an island that suffered rolling brownouts, because they could not generate enough electricity for the needs of the island, so every day we would have no power of several hours. Sometimes in the morning, and sometimes later in the day.



It taught me to appreciate having light at the touch of my fingers. It also taught me the value of living more in tune with nature, going to sleep when it got dark and waking with the dawn.

Prior to this change in lifestyle I wanted every room to be bright as could be, even if the only light I needed was to shine on a book. I was so used to not thinking about light and the electricity it took to power it, that I just wasted it.

The island also had frequent earthquakes and I got used to sitting on my porch watching the concrete road rippling as the ground beneath moved. Sometimes these earthquakes would damage the grid and we would be without electricity for a couple of days. When we lost power, it was the custom for everyone to come out into the street and chat to their neighbors or watch the stunning night sky filled with stars that was a backdrop to the dark silhouettes of the coconut trees swaying in the breeze.



Living in the west we rarely see night skies with such a vivid display of stars because of light pollution. Even here on another island in the Philippines, nearer to Manila the skies are nowhere near as good and in any case, we rarely get power cuts here.

Sorry, I have digressed from my intended topic of this chapter which is to review the different lighting options that exist when you are no longer relying on the grid for your power.

Blackout Curtains

In a situation where the infrastructure has collapsed, the very last thing you want is to have the only house that has internal lights in a sea of other houses

in blackness. You are just advertising to the general population that you have resources that they might want to steal. Good quality blackout curtains that do not let any chinks of light escape the house are a wise investment if you do not want to make yourself a target.

Outdoor Solar Lights



Outdoor solar lights add some security allowing you to see who is around the house, but I suspect that unless you also have secured your garden, they will quickly be taken by people to light their houses at night. They, once again, are an advert that you may have resources to steal.



A rechargeable LED lantern like this one from Amazon will light up a room for 12 hours and then can be recharged using a USB cable from whatever source of power you have, whether that be solar, water, wind, and so on. The lamp is best hung upside down from the ceiling to provide the most-light. Several of these to light more than one room or to act as spares are a useful addition to your kit.

Candles

A rather more traditional approach is the humble candle. You can stock up on these for your storeroom, but they eventually will run out so they are not really a long-term solution.

Oil Lamps

Traditional farmers oil lamps will burn for up to 15 hours using 5 oz of fuel. For short term emergencies they are excellent and as long as you have fuel left, they will provide you with light. But what happens when the oil is gone and there is no local store to buy more.

Glow Sticks

Military grade snap sticks will provide up to 12 hours light but they are a once only solution. Fast to deploy in an emergency but not a great investment for long term lighting.

Natural Light

Of course, the most economic light to use is natural light. When I first went to the Philippines to live on an island with unreliable electricity, I soon learned to wake when it got light and sleep when it got dark. Why try to continue living by your own clock in a no power situation?

Chapter 24 – Sanitation



Off Grid Latrines

Once the water is shutoff, the wasteful practice of using gallons of clean water to flush away human waste also comes to an end. However, there is no reason to resort to squatting in a bush. Using a portable latrine like the one in the photo, you can place the chair over a bucket and then just dispose of the contents in a hole somewhere, well away from the house. It still provides at least an outward comfort for then the SHTF.

Bathing

Once the water supplies end, water becomes a very valuable asset that is required for your survival. However, there are ways of cutting back on the water when washing.

In the aftermath of a disaster people may no longer have the same access as now to water but especially of living in an evacuation center with large numbers of people, hygiene is of the utmost importance.

Washing Hands

- Wet your hands, do not leave water running
- apply soap
- Lather your hands by rubbing together
- Don't forget between fingers and under nails
- Rinse your hand under clean water.



Washing Your Body

Use a bowl of water to wet your body then soap, as above, use a second bowl of water to rinse your body. Try not to waste valuable drinking water, use clean, non-drinkable water if available for washing but do not splash any in your mouth.

Remember that rivers, lakes and other sources of water may be contaminated.

Only brush teeth in a small amount of drinking quality water.

Laundry

You will probably have to accept that you do not change your clothes as frequently as you did before the disaster. If you do wash clothes use minimal amounts of soap and wash by hand in small mounts of water. As an alternative for outerwear, hang out to blow in the wind to freshen clothes up. Use what water you have for the clothes that have direct contact with your skin.

Dishwashing

• Clean off any food waste with a damp cloth after use

- Using a *small* bowl of water wash the cleanest dishes first
- Use small amount of soap
- Use a second *small* bowl to rinse dishes
- Leave to dry in rack

Chapter 25 – Building a Place of Escape

If you are **<u>really serious</u>** about becoming totally off grid so that when the SHTF you have the best possible place to retreat to, you may consider finding some land in a rural area and building your own purpose built off-grid house. This would incorporate things like the safe room and alternative power in the design and result in a better solution.

The design of this house could take many forms but one of the cheapest types of construction (that is legal in several states) is the Straw and Cob Design.



In rural Bulgaria, where I lived for a while, many houses are built with the lower floor 75% below the surface which is extremely efficient in the very cold winters. The upper floor, is built on top, so overall the house is not as tall as a traditional house that is 100% above ground.

A building method I saw there used straw bales to make the exterior walls. They were pinned in place by wooden shafts that pierced the bales and gave them mor stability. These walls were then covered in mud (or mud and lime) to create a waterproof layer, which was then painted.

Interior walls (unless loadbearing) were made of wood. Because these hay walls were so thick, they were excellent for insulation and kept both the extreme heat and extreme cold out of the house.

I saw one that relied on a giant rocket stove covered in cob (mud) and painted, which served to both heat the house and provide cooking at the same time. If I were to build a house like this in preparation for any future cataclysmic event I would add an escape tunnel leading from the basement which would serve as an escape route if the house were attacked, and also lead to an underground storeroom/saferoom, some way from the house.



This would both allow escape and hide the stores from intruders. The entrance to the steps down into the bricked tunnel would be hidden from view (say a bookcase that slid out of the way, thus protecting the occupants and stored food and goods. The store room would have its own exit through a locked steel hatch, hidden from view in bushes, that would facilitate escape.





A house like this with solar power, wind power, possibly water power, off the grid cooking, and efficient lighting could be used as an off the grid home,

built long before any cataclysm.

The doors and windows would have all the security features described in the <u>home security chapter</u>. Because the house was purpose built for off the grid/security needs it would save the cost of exchanging doors and windows for a more secure variety.

What a relief it would be living in comfort in a home that was totally selfsufficient, knowing that the lifestyle could continue no matter what happened to the infrastructure of the country.

If you want to learn about Cob Building Techniques and would like to learn from an expert. Susan Hagan, a British lady in Hotnitsa, Bulgaria, has run courses in various Cob building methods at her Cob home in Bulgaria. She also does professional consultations. She lived in the same village as I used to in Bulgaria.

Her Facebook page is: <u>https://www.facebook.com/cobinbulgaria</u> Susan 4th from left with some of her students



Chapter 26 – Conclusion

In this book I have attempted to cover as wide a range of topics as I can. Since my audience will include experienced Preppers and newbies alike it was not easy to pitch the level just right. I have done my best, but the real purpose of this book was not to be the ultimate source for every topic at its most complex level. The aim is to make the reader think and consider each challenge.

To make it easier for the reader to continue their studies at deeper levels if they wish I have included links to books that concentrate on just one aspect of what this book covers. Boks that will take the reader deeper than has been possible in this volume.

Personally, I do not believe there is any point in prescribing actions in great detail as everyone's circumstances are different. I think that my method of introducing topics and provoking the reader into considering their own solutions is far more effective.

I suppose I could write a step by step set of instructions for any given situation and give precise instructions but how would it be possible to offer the same instructions to an urban prepper as a rural one while still making sense?

Finally, in the next section – The Appendix, I have produced links to very specific website and PDFs for you to download, which deal with every conceivable type of disaster.

An Alternative View

One aspect of Prepping that is very obvious is how each prepper is working for their own survival (or their immediate family). I wonder if an alternative would be better. What if people worked with their community to ensure the survival of the whole community rather than just one or two families?

With a communal store and greater numbers who would be stronger in the face of any breakdown of law and order, would the chance of survival be increased or decreased?

Alternatively, what if a small community of Preppers could be created in some rural location. With many people working from home these days or

working in the Gig Economy, this would be much easier than it used to be. Maybe I will write about this one day.

Appendix 1 – Emergency Resources USA

Information in this Appendix is courtesy of FEMA

Alert Systems

- <u>Wireless Emergency Alerts Fact Sheet</u> (PDF)
- Know Your Alerts and Warnings (PDF)
- Emergency Alert System Fact Sheet (PDF)
- Kids: Wireless Emergency Alerts (WEA) and Word Search <u>Puzzle</u> (PDF)
- Educators: Wireless Emergency Alerts Instructional Materials (PDF)
- Integrated Public Alert and Warning System (IPAWS) (Link)
- Emergency Alert System (Link)
- NOAA Weather Radio All Hazards (NWR) (Link)

Active Shooter

- <u>RUN. HIDE. FIGHT.® Surviving an Active Shooter Event -</u> <u>English</u> (Video)
- Active Shooter Information Sheet (PDF)
- <u>Department of Homeland Security (DHS) Active Shooter Preparedness</u> <u>Resources</u> (Training, videos, brochures and more for individualized audiences link)
- Department of Homeland Security (DHS) Active Shooter Preparedness Resources Translated (Link)
- <u>Conducting Security Assessments: A Guide for Schools and Houses of</u> <u>Worship Webinar</u> (Link)

Avalanche

- Avalanche Information Sheet (PDF)
- <u>The National Avalanche Center</u> (Link)

Bioterrorism

- <u>Biological Attack Fact Sheet: Human Pathogens, Biotoxins, and</u> <u>Agricultural Threat</u> (PDF)
- <u>Centers for Disease Control and Prevention Bioterrorism</u> (Link)

Chemical Emergencies

- <u>Chemical Attack Fact Sheet: Warfare Agents, Industrial Chemicals,</u> <u>and Toxins</u> (PDF)
- Centers for Disease Control and Prevention Chemical Emergencies (Link)

Cyber Security

- Department of Homeland Security (DHS) (Link)
- Cyberattack Information Sheet (PDF)
- <u>DHS United States Computer Emergency Readiness Team (US-</u> <u>CERT</u>) (Link)
- <u>DHS Stop.Think.Connect.TM Campaign</u> (Link)
- <u>United States Secret Service Electronic Crimes Task Force</u> (Link)
- <u>Federal Bureau of Investigation</u> (Link)
- Department of Justice (Link)
- Federal Communications Commission (Link)
- Internet Crime Complaint Center (Link)
- <u>Federal Trade Commission</u> (Link)
- National Cyber Security Alliance (Link)
- <u>National Center for Missing & Exploited Children's</u> <u>CyberTipline</u> (Link)
- Internet Crimes Against Children Taskforce (Link)
- <u>NetSmartz</u> (Link)
- <u>iKeepSafe</u> (Link)
- <u>iSafe</u> (Link)

Drought

- American Red Cross (Link)
- National Integrated Drought Information System (NIDIS) (Link)
- <u>US Drought Monitor</u> (Link)
- <u>US Economic Costs of Drought</u> (Link)
- <u>National Drought Mitigation Center</u> (Link)

• <u>US Environmental Protection Agency</u> (Link)

Earthquakes

- Earthquake Informational Poster (PDF)
- <u>How to Prepare for an Earthquake (PDF)</u>
- <u>How to Prepare Your Organization for an Earthquake</u> (PDF)
- Earthquake Preparedness: What Every Childcare Provider Should Know (PDF)
- <u>When the Earth Shakes</u> (Video)
- <u>The Great ShakeOut: Earthquake Drills</u> (Link)
- <u>U.S. Geological Survey Earthquake Hazards Program (Link)</u>
- <u>American Red Cross</u> (Link)
- Earthquake Country Alliance (Link)
- <u>National Science Foundation</u> (Link)
- National Institute of Standards and Technology (Link)

Explosions

- American Red Cross Terrorism Preparedness (Link)
- Explosions and Blast Injuries (PDF)
- IED Attack Fact Sheet: Improvised Explosive Devices (PDF)

Extreme Heat

- Extreme Heat Information Sheet (PDF)
- Extreme Heat Safety Social Media Toolkit (Link)
- National Weather Service Heat Safety Tips and Resources (Link)
- National Weather Service Dangers of Heat (Link)
- National Weather Service Safety During Heat Wave (Link)
- National Weather Service Summer Safety Weather Ready Nation
 Outreach Materials (Link)
- <u>Centers for Disease Control and Prevention</u> (Link)
- National Integrated Drought Information System (Link)
- National Integrated Heat Health Information System (Link)

Floods

- <u>Coronavirus</u> (Federal Government Response) (Link)
- <u>Flood Information Sheet</u> (PDF)

- <u>National Flood Insurance Program (NFIP)</u> (Link)
- Flood Safety Social Media Toolkit (Link)
- <u>National Weather Service Weather Ready Nation Spring Safety</u> <u>Outreach Materials</u> (Link)
- Flood Insurance Facts (Link)
- <u>Six Things to Know Before a Disaster</u> (Video)
- <u>When the Cloud Forms</u> (Video)
- <u>How to Prepare for a Flood</u> (Link)
- File A Flood Insurance Claim (Link)
- Your Homeowners Insurance Does Not Cover Flood (PDF)
- American Red Cross (Link)

Hazardous Materials Incident

• Department of Transportation Pipeline and Hazardous Materials Safety Administration

Home Fires

- <u>U.S. Fire Administration (USFA)</u> (Link)
- American Red Cross (Link)
- <u>Sparky the Fire Dog</u> (Link)

Household Chemical Emergencies

- <u>Chemical Attack: Warfare Agents, Industrial Chemicals and</u> <u>Toxins</u> (Link)
- American Red Cross (Link)
- Environmental Protection Agency (Link)
- <u>Centers for Disease Control and Prevention</u> (Link)

Hurricanes

Videos

- Ready Campaign Public Service Announcements COVID-19
- <u>Storm Surge Public Service Announcements</u> (FEMA) (Video)
- <u>FEMA Accessible:Hurricane Safety Messages</u> (FEMA) (Video)
- Important Things to Know Before a Disaster(FEMA) (Video)
- <u>When the Waves Swell Hurricane Animated</u> (FEMA) (Video)

Graphics

• <u>Hurricane Preparedness Graphics</u> (Link)

Tip Sheets

• <u>Hurricane Preparedness Documents</u> (Link)

More Information

- <u>National Weather Service 2020 Hurricane Preparedness Week</u> (NWS) (Link)
- <u>Coronavirus</u> (Federal Government Response) (Link)
- Ad Council Coronavirus Response Toolkit (Link)
- <u>Flood Map Service Center</u> (FEMA) (Link)
- <u>Floodsmart.gov</u> (FEMA) (Link)
- <u>National Flood Insurance Program</u> (FEMA) (Link)
- National Storm Surge Hazard Maps (NOAA) (Link)

Landslide & Debris Flow

Tip Sheets

• Landslide Information Sheet (PDF)

More Information

- <u>U.S. Geological Survey Landslide Hazard Program (Link)</u>
- American Red Cross (Link)

Nuclear Explosion

- Nuclear Detonation Safety: Food, Drinking Water and Medicine (PDF)
- Nuclear Explosion Information Sheet (PDF)
- Download the FEMA app (Link)
- <u>Centers for Disease Control</u> (Link)
- <u>Health and Human Service</u> (Link)
- Get inside, Stay inside, Stay Tuned Video (English) (Link)
- <u>Get inside, Stay inside, Stay Tuned Video (Spanish)</u> (Link)
- <u>U.S. Environmental Protection Agency</u> (Link)

Nuclear Power Plants

• <u>Planning Guidance for Response to a Nuclear Detonation</u> (PDF)

- <u>American Red Cross</u> (Link)
- Nuclear Regulatory Commission (Link)
- Department of Energy National Nuclear Security Administration (Link)
- Environmental Protection Agency (Link)

Pandemic

- <u>Planning Guidance for Response to a Nuclear Detonation</u> (PDF)
- American Red Cross (Link)
- <u>Nuclear Regulatory Commission</u> (Link)
- Department of Energy National Nuclear Security Administration (Link)
- Environmental Protection Agency (Link)

Power Outages

- <u>Power Outage Information Sheet (PDF)</u>
- <u>Department of Energy</u> (Link)
- Individuals with Disabilities and Others with Access and Functional Needs (Link)
- <u>Heat</u> (Link)
- <u>Winter Weather & Extreme Cold</u> (Link)
- <u>Centers for Disease Control</u> (Link)
- Food Safety (Link)
- <u>Generator Safety</u> (Link)

Radiological Dispersion Device (Dirty Bomb)

- Radiological Attack Fact Sheet: Dirty Bombs and Other Devices (Link)
- American Red Cross (Link)
- <u>Centers for Disease Control and Prevention Radiation</u> <u>Emergencies</u> (Link)
- <u>U.S. Environmental Protection Agency</u> (Link)

Severe Weather

- <u>Severe Weather Preparedness Social Media Toolkit</u> (Link)
- Flood Safety Social Media Toolkit (Link)
- <u>National Weather Service Weather Ready Nation Spring Safety</u>

Outreach Toolkit (Link)

• <u>Community Weather Alerts</u> (YouTube)

Snowstorms & Extreme Cold

- Winter Safety Social Media Toolkit (Link)
- Winter Storm Information Sheet (PDF)
- National Weather Service (Link)
- American Red Cross (Link)
- <u>When The Sky Turns Gray Animated</u> (Video)

Space Weather

- NOAA Space Weather Scales (Link)
- <u>NWS Space Weather Prediction Center</u> (Link)

Thunderstorms & Lightening

- <u>Thunderstorms Information Sheet (PDF)</u>
- NOAA Watch (Link)
- <u>Centers for Disease Control and Prevention Lightning</u> (Link)
- American Red Cross (Link)

Tornadoes

- <u>Coronavirus (Federal Government Response) (Link)</u>
- <u>Tornado Information Sheet (PDF)</u>
- <u>Taking Shelter from the Storm: Building a Safe Room Inside Your</u> <u>House (PDF)</u>
- <u>American Red Cross</u> (Link)

Tsunamis

- <u>Tsunami Information Sheet (PDF)</u>
- <u>NOAA Tsunami program</u> (Link)
- <u>American Red Cross</u> (Link)
- USGA Pacific Coastal & Marine Science Center (Link)

Volcanoes

- <u>Volcano Information Sheet (PDF)</u>
- American Red Cross (Link)
- <u>U.S. Geological Survey Volcano Hazards Program</u> (Link)

Wildfires

- <u>Coronavirus</u> (Federal Government Response) (Link)
- Wildfires Move Fast. What's Your Plan? Survivor Stories (Video)
- Wildfire Safety Social Media Toolkit (Link)
- <u>Wildfire Information Sheet</u> (PDF)
- <u>Cloud of Smoke</u> (Video)
- Fires and Your Health (Link)
- Fires Current Conditions (Link)
- <u>When the fire starts</u> (Video)
- <u>United States Fire Administration</u> (Link)
- <u>Smokey Bear</u> (Link)
- <u>United States Forest Service</u> (Link)
- <u>American Red Cross</u> (Link)
- <u>NFPA's Firewise USA</u> (Link)
- Fire Adapted Community (Link)
- <u>Understanding Mudflow and the NFIP (PDF)</u>

Recovering from Disaster

- <u>Health and Safety Guidelines</u>
- <u>Returning Home</u>
- Helping Others

Appendix 2 - Essential Books

Some subjects are too complex for this book and need a book devoted just to that topic. These are our suggested books.



The Survival Medicine Handbook: A Guide for When Help is Not on the Way

Most First Aid books are designed to give instruction on what to do until expert medical care arrives. In disaster situations this may not always be the case. There may be situations where there is no help coming. This book is designed for that scenario.

\$37.99 From Amazon



Edible Wild Plants: A North American Field Guide to Over 200 Natural Foods

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INDEX

1

12 months of supplies, 5512 months of supplies in store, 55

A

Active Shooter, 11, 139 add to your store, 55 adding to your stockpile, 54 After a flood, 50 After the Earthquake, 36 After the Wildfire, 46 aftershocks, 35 Aggressive attack, 84 Alert Systems, 11, 139 alerts, 26, 39, 40, 43, 45 alternative power, 119, 133 alternative power systems, 119 Alternative View, 11, 138 Amazon, 23, 55, 62, 64, 78, 79, 119 Asthma sufferers, 50 Attack, 84 attics, 50

Avalanche, 11, 139 average homeowner in the USA, 118 average house, 118, 119, 122 average house in the USA, 118

B

bar-b-cue, 60 barking dog, 90 Bathing, 10, 131, 132 battery bank, 117 below the surface, 133 best wind resources, 121 Bioterrorism, 11, 139, 140 blackout curtains, 88 Blackout Curtains, 10, 127, 128 BOB, 15, 17, 18, 23, 26, 27, 29, 34, 35, 36, 37, 39, 40, 43, 45, 49, 98, See Bug Out Bag BOB (Bug Out Bag)., 15, 17 boil water, 102 Boiled water, 103 bottle cleaning, 102 bottled water, 101 boysenberries,, 90 bricked tunnel, 134 bridges, 40, 48, 50 bright lights, 88 Bug Out Bag, 15 Building a Survival Store, 53 Bulgaria, 58, 60, 133, 136 Burglars, 94 buy in bulk, 55

С

California, 43 Can you plant crops, 55 Candles, 10, 22, 129 Canned foods, 56 cannot contact each other, 98 Carrots, 68 Castle Doctrine, 87 cataclysmic event, 88, 134 cellar, 71, 96 Chemical Emergencies, 11, 140, 143 chlorine bleach, 103 Chronic Diseases, 9, 112 Citrus trees, 74 cob, 97, 134 Cob building, 136 Cob Building, 136 coconut trees, 126 combine the wind and solar, 121 Communication networks, 30 Conclusion, 11, 137 Cooking Food, 58 Corn, 70 CORONA virus, 27 COVID-19, 4, 13, 26, 28, 39, 40, 43, 45, 49, 143 creating a stockpile, 54 cross head turbine, 122 crowds would start to gather, 53

Cyber Security, 11, 140 Cyclones, 38

D

daily menus, 57 Deadbolts, 92 *deadly force*, 87 Debris Flow, 11, 144 dehydrated, 69, 99 Desperate people, 53 direct current, 117 Dirty Bomb, 12, 146 Dishwashing, 10, 132 Documents, 31 Dogs barking, 90 Door Barricades, 92, 93 Doors, 90 doors and windows, 29, 45, 136 Drought, 11, 141, 142

Ε

earthquakes, 34, 126 Earthquakes, 3, 11, 33, 39, 141 EAS, 26, 50 easy target, 84, 85 EDC bag, 15 electricity cabling, 35 electricity is consumed, 123 Emergency Alert System, 26 emergency contact list, 30 Emergency Contact Plan, 30 **Emergency Meeting Places**, 30 Emergency Resources, 11, 138 Emergency Situations, 8, 105 escape tunnel, 134 Essential Books, 12, 149 evacuate, 23, 28, 29, 36, 40, 43, 48, 49 evacuate by car, 29 Evacuated Tube Cookers, 66 Evacuating the House, 98 Evacuation, 28, 29, 40, 97 evacuation plan, 28, 31, 98 evacuation route, 49, 98 evacuation routes, 29, 49 Every Day Carry, 15 excess electricity, 117 Explosions, 11, 141 Extreme Heat, 11, 141, 142 Eyes, 85

F

face shields, 40 Family Communication Plan, 30 fast moving water, 40, 48 fear of imminent peril or death, 87 Fig Tree, 72 First Aid, 2, 9, 16, 21, 114, 150 flash flooding, 47 Flood Warning, 48
Floods, 4, 11, 38, 47, 142 Food for Hydroponic Mixes, 78 food will all be rotated, 54 Foods that are Nutritious, 55 forage for wood., 59 frames, 91 Friends, 51 Fruit Trees, 71 Fuel Conservation, 123

G

gas lines, 35 Giraffe-X Hydroponic Grow Kit, 78 Glow Sticks, 10, 130 goji berries, 90 gooseberries, 90 Groin, 86 Growing Food, 67 guns, 23

Η

Hazardous Materials Incident, 11, 142 Health, 8, 105, 142, 144, 148 Heating, 18, 124 heavy duty gates, 90 Herbal medicine, 8, 105 Hidden Food Store, 57 hidden keypad lock, 96 high fences, 90 Hinged Wedge Locks, 93 hinges, 91 Home Fires, 11, 143 Home inventory and insurance records, 32 Home Security, 88 Hotnitsa, 136 house, 29, 31, 32, 33, 34, 35, 36, 40, 45, 46, 57, 59, 71, 90, 93, 95, 96, 97, 98, 117, 118, 120, 121, 127, 128, 130, 133, 134, 135, 136, 151 How Many Watts, 117 How Much Electricity, 123 Hurricanes, 3, 11, 38, 143, See Hybrid Installation, 121 Hydroponic System, 76 Hydroponics, 75, 78

Ι

Κ

Identification records, 31 If in your car, 44 If on foot, 44 If trapped, 40, 43, 45, 50 insurance company, 41 Interior walls, 134 Inverter, 117

Kale, 67, 68 <u>Keyed locks</u>, 93 Knee, 85 L

Landslide, 11, 144 landslides, 47 large thorns, 90 Laundry, 10, 132 law and Order, 24 law and order break down, 57 LED Lanterns, 10, 129 Legal Records, 32 lethal force, 86, 87 Lighting, 22, 125 living without power, 42 local meet-up point, 98 long term preparedness, 36 low key, 53 Low Key Preparation, 51

Μ

Make a Food Plan, 56 making preparations, 14 manage the storeroom well, 54 Manila, **127** masks, 27, 28, 40, 46 Mass Care Center, 27 Medicinal Herbs, 8, 106 Mindanao, 34, 125 mob breaking into your house, 53 mud, 133, 134 Mulberry Trees, 73

Ν

Natural disasters, 14 Natural Light, 10, 130 Neck, 85 neighbors starve, 53 New Way of Living, 50 night skies, 127 NOAA Weather Radio, 26 Nose, 85 Nuclear Explosion, 11, 144 Nuclear Power Plants, 11, 145 nutritious foods, 55

0

off grid, 36, 58, 122, 132 Off Grid, 117, 130 off the grid, 50, 136 off the grid home, 136 off-grid cooking, 58, 65 Oil Lamps, 10, 129 On Grid, 117 out of state contact, 29, 30, 98 outdoor sensors, 97

Pandemic, 11, 145 Panel Cookers, 63 Р

Parabolic Solar Cooker, 65 Passive Hydroponic Systems, 77 Pear Tree, 72 Pecan Trees, 73 Pepper Spray, 16, 24, 82, 83 Peppers, 69, 70 pests, 75, 78 Petchka, 58, 59, 60, 62 Philippines, 34, 125, 127 physical barriers to entry, 90 Pin Locks, 93 Place of Escape, 132 place to retreat, 132 plant fruit trees, 71 plexiglass, 64, 94 Plexiglass, 94 Polycarbonate Windows, 94 Potatoes, 70 Power, 16, 55, 116, 118, 122 power cables, 41 Power Outages, 11, 145 preparations, 15, 26, 39, 53, 89, 96 prepare for an emergency, 52 Preparing for a Flood, 49 protect your home, 45, 88 Protect Your Home, 89 protect your home and family, 88 Protect your property, 49 Protecting Your Home, 87 protecting your supplies, 96 protection, 24, 40, 90 Puerto Rico, 36 purpose built off-grid house, 133

R

Radiological Dispersion Device, 12, 146 raspberries, 90 Recent financial statements, 32 recharge battery, 119 Recovering from Disaster, 12, 148 reduce electricity usage, 123 remain very low key, 53 Residential Wind Turbine, 119 respectable neighbor, 96 Returning Home, 41 rocket stove, 60, 62, 134 Rocket Stove, 60, 61 Rocket Stoves, 61, 63 rose bushes, 90 rotating stocks, 57 rules have changed, 89

S

Safe and Well, 35 safe room, 95, 96, 97, 133 safe room access, 96 Safety Windows, 94 Sanitation, 130 Sash Locks, 94 scaring away intruders, 89 Scott Hydroelectric Turbine, 122 seas become warmer, 39 seawater, 104 Security Bars, 92 Security of Doors, 90 Security of Windows, 93 seed potatoes, 71 self defense, 79, 81, 82, 83, 84, 86 Self Defense, 23, 24, 79, 81, 86 Self-defense law, 86 Self-Defense Moves, 83 self-sufficient, 36, 136 Set a Food Goal, 54 Severe Weather, 12, 146 Shelter at Home, 26 Shelter Plan, 26 Sheltering in Place, 27 Signs of Dehydration, 7, 100 Signs of Severe Dehydration, 7, 100 Situational Awareness, 80 Smart Locks, 91, 92 Smoky conditions, 46 Snowstorms & Extreme Cold, 12, 146 soil, 71, 72, 75 Solar, 62, 63, 64, 65, 66, 116, 117, 118, 119, 128 Solar Cookers, 62, 63, 64 solar panel, 117, 118, 119 solar panels, 116, 121 solar power, 135 Space Weather, 12, 146, 147 Staying Safe, 39 Stevia, 71 stockpiling, 39, 53 store of fresh water, 100 storm surge flood zone, 49 storm surges, 38, 47 storms, 38, 39, 47 Straw and Cob Design, 133 straw bales, 133 strengthen your external doors, 91 strike plate, 91, 92 Stun Gun, 82 support your immediate family, 52 survival food store, 54 Surviving an Earthquake, 34 Surviving During a Flood, 49 Susan Hagan, 136

Т

Take photographs, 46 Taser, 82 Tax Records, 32 Tempered Glass, 94 The Bug Out Bag, 17 The Door Frame, 92 The Safe Room, 95 The Strike Plate, 92 thorny shrubs, 90 Thunderstorms & Lightening, 12, 147 Tomatoes, 69 Tornadoes, 12, 38, 147 trapped by wildfire, 43 Tsunami, 35 Tsunamis, 12, 147 Typhoon & Hurricanes, 38 Typhoons, 38, 39

V

Vertical Hydroponic Systems, 76 Volcanoes, 12, 147

W

water, 34, 35, 36, 39, 40, 41, 45, 47, 48, 49, 50, 51, 55, 57, 60, 72, 75, 77, 78, 89, 90, 122, 135 Water, 18, 97, 98, 99, 100, 101, 102, 103, 104, 122 water intake, 99 water pipes, 35 water testing kits, 104 weapons, 80, 96 Weapons, 81 weeding, 78 When the Shit Hits the Fan, 53 Wildfires, 4, 12, 42, 43, 45, 147, 148 wind electric system, 120 wind power, 122, 135 wind turbine systems, 120 Window Bars, 95 Window locks, 93 Wireless Emergency Alerts, 25 World War 3, 13

[RB1]