

# The Solar Apocalypse Survival Guide First Edition

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Toes in the Water Publishing, LLC



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#### **Forward**

When ML Banner approached me with his project, I was intrigued. He was researching solar storms for his new novel, *Stone Age*, but found there was too much to tell in a fictional book. He piqued my interest with his desire, through his novel and now this Survival Guide to do what I have been trying to do through science for years: Call attention to the dangers of coronal mass ejections or CMEs and our need to better prepare.

Over 150 years ago an amateur astronomer witnessed an unprecedented event: The Carrington Flare as it would be called and the CMEs which followed were so large they caused fires, electrocuted some telegraph operators, shut down telegraph operations for weeks, and belied their peril with beautiful auroras as far south as the Dominican Republic. The CMEs struck Earth at a time when we had very little technology. If the same event were to occur today, with our technologically driven infrastructure and intricate computer dependent systems, it would be catastrophic.

You probably do not even think twice about turning on your light switch and knowing your lights will turn on; or opening the faucet and assuming the water will come out; or twisting the ignition key and believing your car will start; or going to the grocery store and never imagining there wouldn't be any food to buy; or visiting the bank and expecting to be able to withdraw your money. Yet, all of these modern conveniences can be taken away from all of us in literally a flash.

If you will accept anything from this book, consider this. The sun emits CMEs daily. Giant CMEs, similar in size to the Carrington Flare, hit our Earth at least every hundred years or so. The last one was in 1859. So, we are overdue.

I implore you to commit to two actions: Prepare your family to be emergency ready by reading and adopting some of what is discussed in this book, and help to prepare our nation by calling on your elected representatives to invest in shielding our power grid better. A small investment of time and money into preparedness can save thousands, perhaps millions of lives, when we experience the next solar apocalypse.

**Dr. Carrington Reid**Founder CME Research Institute
<a href="https://www.cmeresearchinstitute.org">www.cmeresearchinstitute.org</a>

### A quick commercial break...

### Is it fiction or reality?

A vacationing family is separated;

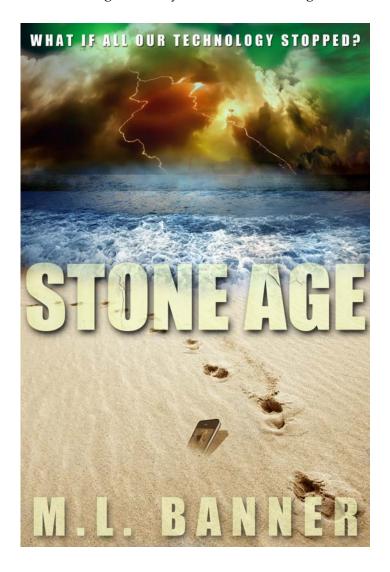
A friend readies them for a world-wide catastrophe;

A young love blossoms;

A prophet's fame rises;

A prepper waits for the violence to come;

All are unprepared for the apocalypse about to strike the Earth, one so great and unprecedented, it will bring humanity into a new Stone Age.



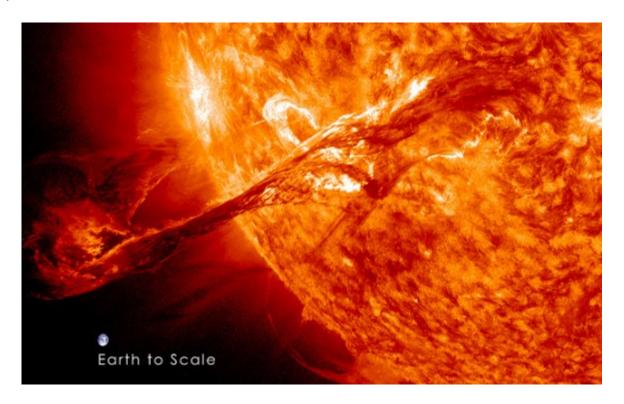
Available today on Amazon.com (<a href="http://amzn.to/1n1GY6z">http://amzn.to/1n1GY6z</a>)

#### The Problem with Solar Storms

Before we get into the mechanics of planning for the next Solar Apocalypse, we should first cover the science and realities of solar storms, and why some scientists are absolutely sure that a solar apocalypse is coming our way soon. Do not just accept what I have written in my fictional novel *Stone Age*. Consider the science behind the proposition of this book.

#### The Science of Solar Storms

Our sun is a massive ball of superheated gases that swirl with incredible currents and magnetic fields. At times, the pressure builds up into sunspots which explode out from the sun in daily events known as solar flares and separately, coronal mass ejections (CMEs).



When the matter from CMEs strikes the Earth, they are often referred to as "solar storms". CMEs bombard the solar system – and Earth – with magnetic shock waves that can wreak havoc on magnetic fields, power systems, and electronics devices. Solar flares hit us with excess radiation. The Earth's protective shield, called the

magnetosphere, defends us from much of the radiation, electro-magnetic waves, and plasma. But the effects of larger CMEs are substantial and can include:

- Shorting out satellites and taking down GPS, cell phone, Internet, and TV services.
- Causing damage to electronic devices and computers.
- Disrupting the power grid resulting in overloads, widespread power outages, and dangerous power surges.
- Increasing corrosion and breakage of gas and fuel pipelines.
- Confusing compasses and electromagnetic gadgets (and animals such as birds)
- Causing beautiful light displays, like the "northern lights", in the sky.
- Knocking out communications, including radio, military communications, and early warning systems.

#### The worry about a solar apocalypse

It is the really big one, similar or larger to the Carrington Flare that has many scientists worried.

The biggest worry right now is our power grid system, which has been poorly maintained and is near capacity. If geomagnetically induced electrical currents from a large enough CME were to hit our power lines today, it would destroy most, if not all of our power grids, plunging America (most of the world has similar problems) into darkness for potentially years, maybe decades.



Until our country spends the money to shield the thousands of transformers which make up our power grid, we currently remain poised at the precipice of a calamity largely of our own making because we have done nothing to prepare for this inevitability.

#### The chances of a solar apocalypse



Northern lights

One estimate has the sun releasing a coronal mass ejection equal to or greater than the Carrington storm of 1859 within the next five to ten years.

In my novel *Stone Age* I write about multiple solar storms equal to or worse than the Carrington Flare, and what would happen when we lose our technology.

It is certainly arguable that we are overdue for another Carrington-type event. It is not a question of if; it is a question of when. However, speculation is more suited to my fictional writings than this non-fictional guide. Much more realistic, certainly in our lifetimes is to expect a moderate storm, less in severity than the one that hit 150 years ago. This could still

cause serious damage and potentially bring some or all of our power grid down for months. Shouldn't you at least be prepared for this?

#### Wakeup call

Our Earth had a wakeup call in July 2012; did you even hear about it? A giant CME, larger than the two which hit in 1859, narrowly missed our Earth. If it had been emitted only a few days earlier or later, causing a more Earth-bound trajectory, you would not be reading this book; instead, you would struggling to survive. There may not be another warning.

#### Can you expect any government help?

If the worst case scenario occurs and we have a Carrington-sized event, can you depend on our government to get you the resources you will need to survive? I'm afraid not. Our government is very much like us, it is run by people, who have as many inadequacies as you and me. Because most of the public does not consider planning for the coming solar apocalypse to be a priority, there is very little planning or money

invested in emergency preparations, outside of emergencies believed to be more common, such as hurricanes or enemy invasions.

Additionally, the government and our military will be beset with the same problems that we will. They won't have power and their vehicles won't work; so they won't be able to protect us or deliver food or water or medicine to us. In other words, we will be on our own.

#### Why is this not reported more?

The news reports mostly cover the calamities that have already occurred, but rarely do they report the calamities that might be. Because of this, you rarely will read something other than from a scientific white paper, or a fictional novelist, or a prepper website which posits the possibilities of what might happen if we experienced a solar apocalypse.

We Americans live in a land of plenty where everything is at our fingertips. Most have no idea what it is like to go hungry. But the facts are clear, when something like a Carrington storm hits the Earth, all our power grids will go down; all our electrical devices will be damaged or destroyed; we will no longer have easy access to food, water and medicine; computers and the Internet will be out; and there will be bad people, without the accountability of the police or the military, who will try to take what you have. Because of all of these reasons, it is not only a good idea, it is necessary to plan for the worst, taking precautions to protect your home and your family from a solar apocalypse.

#### How to plan for the solar apocalypse

Did you hear why the survivalist kept lots of Rottweilers, Chihuahuas, and Shih Tzus? He liked ethnic food.

Anonymous

#### Is it even possible to prep for the end of the world?

Food is just one item that you must consider when it comes to the planning for an epoch event such as a solar apocalypse. You might ask, is it even possible for the average Joe and Judy Lunch Bucket to plan for the coming end of the world? Yes, it is!

The remaining pages of this book cover this.

#### Small steps or big steps

As with anything, when you are planning for something as big as the end of the world, you must start with baby steps. This is especially important if you have not even started preparing for emergencies, much less a calamity of epic proportions. So, if you have not done any planning to this point, we will cover some immediate and easy steps you can take to prepare you and your family for emergencies. We will start with an immediate One Month Plan, and then we'll move to a Twelve Month or Longer Plan. In other words, you will start small but you'll still be working towards preparing for how to survive for twelve months or longer without any outside help.

#### **Considerations**

How you go about planning for survival for the end of the world, or simply being without power for a few days, will depend entirely on your situation: your location, your family, your economics, your current skills, your access to many of the crucial resources you will need to survive, and equally important, your mindset.

It is important that you are realistic about your situation so that you can better prepare for the end of the world as-we-know-it scenario we are discussing here.

#### Where you live (urban or rural)



The Northeastern Blackout of 2003

It does not take a rocket scientist to imagine what Manhattan would be like if the power went out. It has happened before. In 2003 the power went out for only seven hours and over ninety people died. Now imagine if it were out for days, weeks, months, or even years? It would be near impossible to survive for very long in Manhattan, with supplies limited, and too many people trying to get at those limited supplies. Starvation, disease and violence would eventually kill most everyone in the city.

If you live in a large urban area, part of your long term plan, should include a what is called, a bug-out plan. That is going to someplace more rural where you could survive. Otherwise, it is unrealistic to assume that you would be able to survive for longer than a few weeks, unless you get real creative in storing your supplies.

A farmer who grows what he needs, produces his own power, pumps his own water, and makes holistic remedies, is probably going to fair much better than someone living in a large urban center. Are you getting the hint? Your best chance at long term survival is to be "off the grid" in rural America.

#### Your family structure

If you have family to protect, this makes your task a bigger one when planning for survival. A family of five means you have four times as many mouths to feed and protect. However, it also means that you have more hands to carry some of the burden. Part of planning is not only accounting for the additional supplies, but teaching each of your family members how to carry their load. You will also need to educate them about your survival plans, even practicing some or all just so they are ready, especially if you have to bug out to another location.

#### Your economics

If you have lots of money, it will be a lot easier for you to purchase your way to preparedness than someone with limited means. However, even if you are of limited means, there are lots of do-it-yourself actions you can take to prepare, which do not require much money.

Keep in mind you cannot buy your entire way to preparedness. Part of being prepared is coming to terms with your own skill sets. In fact, someone who has limited means, but knows how to hunt, forage for food, build things, etc. stands a better chance of surviving than someone who just bought their supplies. In other words, ask yourself, if you have consumed all of your purchased supplies, how will you survive after that?

#### Your current skills

Analyzing your survival skill set is so important. If you have very few skills, outside of banking, acting, shooting hoops, or writing checks, you probably are not going to survive a global solar apocalypse. If you have limited skills, there is no time like the present to learn.

NOTE: In future editions of S.A.S.G., I will be connecting you to more Preppers, who have the skills you need, and love to teach how to acquire them yourself. I have provided some hands-on "how to's" in the Appendix. There will be many more in future editions.

#### Access to water, food & medicine

If you have ready access to potable water, and/or to natural food sources, then you are probably in pretty good shape. Think about it, if our power grid is down for as

long as a decade or longer, you cannot realistically store up enough food and water. You will need renewable resources to survive this.

#### Your mindset

This is where I might get a little preachy on you. Don't worry, it won't hurt too badly. I promise.

Planning for the worst case scenario is not only about gathering enough food, water and other resources, it is about coping with what this will do to you, your family, and to others around you. If you do not have a well-grounded moral center, for instance, one based on a fear of God, you are going to have some big difficulties dealing with some of the moral situations with which you will be presented. Here are just a few scenarios you will have to face after a solar apocalypse:

- People are starving, but you have a limited amount of food, which if you give up, may very well mean the death of your own family
- Someone tries to steal your food
- Someone tries to rape your daughter
- Someone may kill a family member
- You are forced from your home

Part of planning is the mental and moral preparedness of what you may have to do to protect you and your family. Don't just roll past this issue. Take some time to consider some of these scenarios. Talk them over with your spouse/significant other and your family or survival group. Consider role playing. Not planning for these issues will cause hesitation when the situation arises. Hesitation may cost your life or the lives of your family.

#### **Planning for Each Problem**

Just how crazy should you get when it comes to prepping? After all wouldn't the solar apocalypse described in this book be so great that we would have to pretty much build our own self-sustaining compound to even survive?

The simple answer is "No!" What I am suggesting is that you start small and build a **One Month Plan** first. Then move towards longer term planning. Again, examine the Chapter 2 considerations to determine how far forward you are able to plan right now. Most important is that you take baby steps first!

#### Solar Storm Protections/Issues

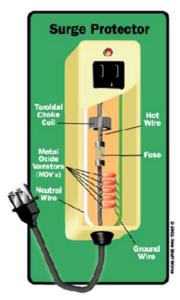
There are multiple problems that will arise from a giant solar storm, and certainly a solar apocalypse. If a solar storm produces induced currents from a CME and radiation from a flare, then you have these concerns:

- Danger to humans/animals Much of my writing about a solar apocalypse has
  centered around the damage it will cause to the systems that we depend on
  which bring us our food, water, information, transportation, communication, etc.
  Of course, these all deleteriously affect our health and welfare. But, less has been
  made about the direct effects of a solar storm on us and our animals.
  - Electrical shock In 1859, telegraph operators and train conductors were electrocuted during the Carrington Flare. During a solar storm caused by a CME, anything conductive can produce electric shock. So, the first thing you want to do during a solar storm is stay away from large amounts of metal. One of the worst is the electrical line running right into your house and your electrical circuits. We will cover later how to protect your home against this. The big thing here is to be aware of the danger so you can better avoid it. That said, stay away from railroad tracks, automobiles (even though they are grounded), metal roofs, etc. Other considerations are those with pacemakers (see section on Faraday Cages) and other electronic devices (i.e. hearing aids).
  - Excess solar radiation Because of degradation of the magnetosphere and ozone layers from a solar storm, radiation from the sun could be several

times worse than say a typical summer day. Bottom line, cover up or stay out of the sun entirely during daylight.

- **Disorientation** A 2007 Solar Storm Threat Analysis described cases of disorientation and diminished brain functions in adults and children from solar storms. There is something that occurs with the protons from a solar storm that bangs about in our ionosphere which causes this. Additionally, animals that use radar or sense electromagnetic waves, such as birds will become disoriented as well. You may witness birds fly into structures or flying erratically during the height of a solar storm.
- O Danger to systems There is one main issue with solar storms born out of CMEs, they create electrical current. And too much electrical current can cause damage to your stuff. Think of the damage one lightning strike can cause. This is one bolt of electricity (albeit much greater in strength than that created by a CME), whereas a large CME will create electrical current just about everywhere. There are three levels of severity of damage to systems which are a direct result of the strength of the solar storm: Power surges, power outages, and total destruction.
  - Power surges For the same reasons that our power grid is already so susceptible to the power surges and therefore destined to go down from a powerful solar storm, your household electronics will also get fried from a surge in power caused by induced current running through your electrical lines.

If the solar storm is not too large, a simple surge protector will protect your electronics from an excess surge in power. You have three choices:



From Howstuffworks.com

Whole House Surge Protector -

A whole house surge protector connects to your breaker panel and provides protection from lightning and other power surges.

Individual Surge Protectors:

For added protection, or in the absence of a whole house surge protector, install surge protectors on computers, TVs, stereos, and other electronics in your home.

- Unplug Electronic Devices Of course, the simplest way to protect
  a device from a power surge is to unplug it from your household
  electrical line. However, do not plan on much, if any, advanced
  warning for the next solar storm.
- Power outages If the power grid goes down from a major solar storm, remember it could stay down for a long time. This is because most of the power grid's network of transformers would be seriously or even permanently damaged. And currently, even without an apocalyptic societal collapse, building new transformers cost over \$1 million and take a year or longer to put into service because most are built overseas. It becomes apparent why then a power outage could last months, years, or maybe even much longer.

Providing alternative power is obviously a lot harder and more expensive problem to solve. Here are your options for setting up, bringing back power to your household, and how to plan for this.

Battery backup for computers – If you are dealing with solar apocalypse, this will be the last thing you will worry about. But for a very short-term power outage, a UPS or Uninterruptable Power Supply is vital for your computer equipment. When your power goes down unexpectedly, your computer is shut down hard, causing damage to your hard drive. To prevent this, buy a UPS

with a surge protector (kill two birds with one stone) for about \$100 and plug your computer and monitor only into this. Do *not* connect your printer or other devices to this: use a separate surge protector. With a UPS, if your power goes out, you will have time to shut down your computer the safe way.

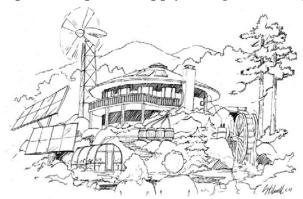
• **Portable generators** – If your power goes out longer term, you can use a gas



powered generator to provide electricity, once the solar storm has passed. There are many great options available, but remember, besides the generator, you must also store enough gas to keep it supplied. This is a shortterm solution, and certainly

you cannot depend on it for months or years. Expect to pay anywhere from \$600to \$5000 or more.

• **Going off the grid** – Truly, the only way to insure that you will have a dependable power supply is to go "off the grid". That means creating



your own sustainable power supply. Unless you live next to a volcanic fissure, where you could harness the geothermal heat, there are only three viable sources for creating your own power (from least to most feasible):

 Water Power – This would probably be the best if you happen to live on a fast flowing river/stream and where you wouldn't be sued by your neighbor or town for utilizing its power via some sort of water mill or similar generator. It was good enough for our first President, George Washington who used a water mill for his profitable whiskey business. However, it is not feasible for most of us.

- Wind Power This is pretty old technology, dating back to at least the first century AD. Yet, recent technological advances have made wind power much more efficient and feasible than even a few years ago. However, to build a system that can generate thousands of watts of power, you'll need a steady supply of wind, the zoning for it and lots of money.
- Solar Power Much has been made of the average person setting up solar panels on their roof and cutting the line to the electrical company. It is actually possible to do and is not ridiculously expensive. There are still tax breaks for building a system, under the current pro-green federal government, so perhaps now is the time to take advantage of these. Be wary of electrical company subsidies and offers to buy your excess power; these require your connection to their lines. Also, make sure that you have enough power to do the job. Most solar systems are not quite powerful enough to take on a full sized air conditioner, but they're close.

There are two more points to consider when planning a solar system, with an eye on the coming solar apocalypse. If we are hit with multiple CMEs, as I posit in my novel *Stone Age*, your solar panels will degrade from excess solar radiation. Also, your batteries may be damaged if connected to your home when a large CME induced current is surging about, so you may need to disconnect them until it is safe to reconnect them back online.

- Solar storm protection The final planning point we need to cover here is the idea of protecting your electronic stuff from a solar storm. Granted, you could probably live without most of your electrical based appliances, computers, etc. And you would have to if you experienced a house fire, or if you have to bug-out because of approaching violence. As discussed the induced currents from a large enough solar storm could potentially damage all of your devices, car, computers, appliances, etc. Thankfully, you can protect all of these with a simple device called a Faraday Cage.
  - Faraday Cages This is an enclosure formed with conducting material, such as metal mesh, in which your delicate devices would

go, so that external static and electromagnetic charges are blocked and unable to damage those devices. Many of the modules on the International Space Station have similar shielding around them to protect the electronics from the same electromagnetic waves we are worried about down here on terra-firma.





From physicsforme.com

The good news is that a Faraday Cage can be made cheaply for something as small as your phone or for larger prospects such as a whole room of the house. Even a microwave can be used as a quick Faraday Cage (with minor modification). Simply taking a cardboard box and wrapping it with aluminum foil, will work as a make-shift faraday cage. Simply unplug the devices you want to protect, and place in your Faraday Cage and do not turn it on until you are sure the dangers are gone: Hint, if you see auroras at night, you probably want to keep the faraday cage closed another day.

Keep in mind if you have to bug out, or there are multiple storms causing total destruction, you might have to get used to living mostly without power. But, look at the bright side. You probably enjoyed camping at one time. Now, you'll get a chance to do a lot more of it.

Emergency supplies: Create an emergency box with flashlights, batteries, cooking and heating fuel, food, and clean water. Also, consider a backup stash with paper copies of financial and personal records, cash, road maps, address book, radio, first aid kit, and anything else you'd need if your handy digital gizmos – along with your car, credit cards, bank, and shopping center – are out of commission for a while.

#### Staples (food, water & medicines)

After you have properly protected and/or made arrangements for protecting against the direct effects of a solar storm, you must now turn your attention to the most crucial elements of survival: how will you be able to store or produce enough of the staples such as food, water, and medicine needed to survive for your planned period?

If you are planning for only a month, it is simply a matter of putting away enough for you and your family for that period. The longer the planned period of survival, the larger the task of storage, especially just the sheer volume of space needed to safely store months or even years of food.

Next, you'll need to consider how long you will be storing these supplies as stored food will eventually go bad after months or certainly years. So, part of your planning will be to find food that will last a long period of time, like Meals Ready to Eat or similar freeze-dried meals that are made to store for many years undisturbed. There are also companies that specialize in other foods that are sealed for long term storage.

With water, it is simply the amount of space needed. If we are supposed to consume eight ounces of water, eight times per day, that's half a gallon per person. If you are supporting a family of five, that's a bare minimum of 2.5 gallons of water per day or 75 gallons of water per month or 15 X 5 gallon bottles. If you had shelving to hold this, one month's supply of water, for nothing but drinking (i.e. no washing) would equal 5' long X 6' high X 1' wide. A year's supply would, including access, take up all of a good size bedroom. There are better alternatives such as 30 gallon opaque containers made for long term water storage solutions.

Don't forget an ample supply of medicines. Having a proper supply of your prescription meds is a must. Looking for a homeopathic alternative now, merits consideration, as you are often limited in the types of meds you can stockpile. Non-prescription meds need to be considered too: consider anything that is in

your medicine cabinet and a first aid kit and then consider how long your plan is. Store a feasible amount.

#### o A bug out plan

Even if you live in a rural area, in a place with access to water and self-sustaining food, and it is defensible, you must still have a bug-out plan. Therefore, if you potentially have to leave quickly, you must know ahead of time where you will go and how you wil get there. Additionally, you will need to pack out the resources and tools you will need to survive the journey to that location. This is called your bug out bag. In later editions, we will cover some suggestions about what your bug out bag should look like.

# A One Month Plan (or Longer)

As I mentioned before, start small. Work on the items mentioned so far that you can do, and then work on the other items when you have the resources to do so.

To get going, I recommend that you put together a One Month Plan. That is, being able to live without any outside help for one month. That means that you have to store up enough food, water, and other supplies, or have a simple way of getting them – planning that our society has collapsed – for one month total. If you can do this, you will be a lot further ahead than your neighbor. Even if we do not experience a solar apocalypse, this would be a good plan in case of many more normal emergencies.

Here is a list you might consider:

- Water
- Food
  - Fruit juices
  - Canned vegetables
  - Canned fruit
  - Evaporated milk
  - Canned tuna
  - Canned soup
  - Canned meat
  - Rice
  - Noodles
  - Dry cereal
  - Granola bars and snacks
  - Bread
- Refilled medicine & first aid kit
- Fire starting & burning supplies and/or equipment
- Gun and ammo
- Knife
- Flashlight & extra batteries
- Cash or other form of trade hint ammo will be very valuable to others
- Battery powered lamp or lantern
- AM/FM battery powered radio
- Battery powered smoke and CO detectors

- Manual can opener
- Road maps
- Address book
- Paper printouts of financial and insurance records
- Basic tool kit (hammer, screwdriver, pliers, handsaw, utility knife)
- Toilet paper and other toiletry & personal items
- Full containers of gasoline
- Gas grill with several full propane canisters
- Baby supplies (diapers, wipes, baby food, medicines, etc.)
- Pet supplies (food, kitty litter, medications, carriers)
- Portable or whole house generator
- Faraday Cage to store electronic devices

### Twelve Month or Longer Plan

When you start thinking twelve months or longer, you are thinking permanent. Then, just storing up food and water isn't enough. You'll need to make sure that you have sustainable sources of necessary resources. This is very different than what we were discussing in Chapter 4. All of those supplies are necessary, but not as important as providing for the very long term. In a total and absolute societal breakdown, this is what would happen. There would be no services, supplies, nor government available outside of you or your family or chosen prepper community to depend on, perhaps for the rest of your life. A solar apocalypse could do just this.

The planning for this exceeds this guide, as your planning will be a lot greater than just going off the grid. You would need land large enough to farm and raise and support the plant and livestock necessary to provide the food sources you and your family will need for years to come

Hopefully, now you have a better conception of what is involved in longer term planning.

# Chapter 6

# Prepping Is a Lifestyle Change

If you haven't figured it out yet, prepping is a lifestyle change. It's not something you can just turn on and be prepared. It is something you have to plan, study, learn, and follow for years, with the ultimate goal of being as self-sufficient as possible, based on your own individual considerations. This is not for everyone, especially prepping for multiple years. And most of you will simply hope that none of this will come to pass.

Planning for you family's protection is a necessity. To what extent you do so is a personal choice. In researching for my book, *Stone Age*, I saw the need to share these ideas in a simple to read and prioritized format. Even if a solar apocalypse does not occur in our lifetimes, if you have taken some of the steps outlined here, you will be better prepared for most any emergency. However, if we are unlucky enough to experience a solar apocalypse, you will have a much better chance at survival.

# **Appendix and Sources**

#### Web Resources

There is a wealth of free resources available to everyone for learning more about preparedness from small emergencies up to a global apocalypse.

#### Solar storm information



# The CME Research Institute

Alerting the world to the mysteries and dangers of Coronal Mass Ejections

http://cmeresearchinstitute.org

**Additional web resources** (list from http://selfsustainablelife.com)

- **Farming For WildLife** (http://farmingforwildlife.com/)
- Find A Spring (http://www.findaspring.com/)
- How Living Off the Grid Works
   (http://science.howstuffworks.com/environmental/green-science/living-off-the-grid.htm)
- **HowToLou** (http://howtolou.com/)
- **Living Without Electricity** (http://www.motherearthnews.com/modern-homesteading/living-without-electricity-zmaz80ndzraw.aspx)
- Longevity Warehouse (http://www.longevitywarehouse.com/)
- Natural Health News (http://www.naturalnews.com/)
- **Self Defense Information** (http://www.nononsenseselfdefense.com/)
- **Self Sufficient Forum** (http://www.sufficientself.com/forum)
- **Self-Sufficient Homestead** (http://www.motherearthnews.com/modern-homesteading/self-sufficient-homestead-zm0z11zkon.aspx)
- **Self-Sustainability** (http://en.wikipedia.org/wiki/Self-sustainability)
- Self-Sustaining Communities (http://www.self-sustainingcommunities.org/)
- Surviving In The Wild (http://artofmanliness.com/2010/10/06/surviving-in-the-wild-19-common-edible-plants/)
- The King of Random (http://www.youtube.com/user/01032010814/videos)
- The Self Sufficient Gardener (http://theselfsufficientgardener.com/)
- **Weapons For Self Defense** (http://www.primermagazine.com/2008/learn/hero-training-the-best-weapons-for-home-defense)

#### How to information

#### **First Edition Note**

Because this is the first edition and we were anxious to get it to press, we are offering a limited menu of information in this Appendix. However, in future editions we plan to fill this area up with more "how to's" in the following areas:

Water - How to find it, purify it, and get enough of it

Food - How to find it, hunt it, store it, & safely prepare it

Fires – How to start them, use them, & extinguish them

**Shelter** – How to find it, make it, and use it safely

**Sun protection** – How to dress for the coming Solar Apocalypse

**Self Defense** –what to have, how to use it and, finally, how to take out the bad guy.

**NOTE**: Check back with the site you obtained this guide from to receive an updated edition when it becomes available.

#### Starting a fire with a water bottle



This involves our using the sun's intensity to make fire. Here are the steps from selfsustainablelife.com

#### **Ingredients**

- Water Bottle Must be rounded and smooth; any size is good
- 3 sheets of 8.5X11 papers Best with lots of black/dark ink; if only white paper, rub in dirt or mark it up. The dark colors absorb the sun's heat better.

#### Steps:

1. Remove label from water bottle & fill with water.

- 2. Fold one piece of paper in half 3 times with dark surface exposed.
- 3. Rip other 2 pages in half & then fold those 4 pieces in half.
- 4. Hold bottle up to dark-surfaced pages Slowly pull away until the beam of light from the sun is focused to a pin point. Hold focused on that point for a few seconds, until it starts to burn a hole into the paper. Wait until the hole gets to be the size of a quarter.
- 5. Slide a creased page, tented upwards, with the side of the paper over the smoldering quarter-sized hole. The airflow should make this page start to smolder. Continue with the next and the next page, until all four are smoldering.
- 6. Blow on the smoldering embers or swing gently until flames come.

Now you can jump up and down yelling like Tom Hanks *Cast Away*, "I have made fire!"