BUILD THE PERFECT BUG OUT BAG

YOUR 72-HOUR DISASTER SURVIVAL KIT

Creek Stewart

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BETTERWAY HOME
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INTRODUCTION

YOU CAN HEAR THE SIRENS in the distance. Your electricity is out, and your home phone has no dial tone. When you try to use your cell phone, you get the same message over and over: “All circuits are busy.” You know a disaster is quickly approaching. And you know that waiting this one out is not an

option. In the breathtaking stillness, you can hear the clock on the wall. Tick-tock, tick-tock. The eleventh hour is here. You have to leave your home immediately or you and your family will die.

Like it or not, disasters happen. And they do not discriminate. It does not matter what you look like, where you live, what you drive, or how much money you have—no one is exempt from the threat of disaster. Disasters strike suddenly and give little, if any, warning. There are few moments in one's life when every second and every action count. It is in these critical moments that nothing else matters except life itself. In the few moments you have just before a disaster strikes, your preparedness level will define the rest of your life.

Disaster preparedness is no longer a mentality reserved for the sub-culture survivalist. This awareness is quickly becoming a mainstream phenomenon as people from all walks of life begin to embrace the reality of the following statement: It's not *if* a disaster will strike, but *when*.

Highly visible media coverage of countless natural and man-made disasters in recent years has heightened the senses of the inner survivalist in all of us. History repeatedly confirms that city, state, and federal emergency systems, however well intended, are not able to adequately cope with large-scale disasters. Normal public safety and operating procedures crumble under the overwhelming chaos that follows a disaster. This awareness has led many very normal people on a journey of self-sufficiency and preparedness. They, like yourself, are realizing the need to proactively prepare in advance for sudden and unexpected disasters.

Oftentimes, a disaster will threaten the safety of you and your family in your own home. Suddenly, staying at home and "hunkering down" is no longer the safest decision. To stay alive, the best decision may be to leave. The buzz term for this decision is *bugging out*.

BUGGING OUT: DEFINED

The term *bugging out* refers to the decision to abandon your home due to an unexpected emergency situation—whether a natural disaster or one caused by man. The thought of having to evacuate your home due to a sudden and imminent threat is not at all unrealistic. The reality is that sudden and uncontrollable events of nature and man do happen. Natural disasters such as hurricanes, storms, earthquakes, floods, wildfires, heat waves, and volcanic explosions can strike fast and hard—wreaking havoc on homes, vehicles, roads, medical facilities, and resource supply chains, such as food, water, fuel, and electricity. Time and time again, we have seen disasters strike the United States and abroad forcing tens of thousands of people from their homes with little warning. Unprepared and with no emergency plan, many of these people are left completely dependent on scavenging and hand-outs while living in make-shift shelters—fending for themselves in a time of complete chaos and disorder. Given the world's unstable and unpredictable political and economic climates, we would be foolish to completely rule out the chance of a terrorist or military attack from forces domestic or foreign that could possibly force us to evacuate our own homes. An act of war is not the only threat from man. Dams burst, power plants go down, pipelines explode, oil spills occur, and other man-made structures and facilities can fail, resulting in disaster. Outbreaks of sickness and disease could also warrant an evacuation.

We cannot control when, where, or how disasters strike. But we can control how prepared we are to deal with a disaster. There is a fine line between order and chaos and sometimes that line can be measured in seconds. When every second counts, having a plan and the tools to see that plan through are crucial to survival. A 72-Hour Emergency Kit packed with survival essentials is a priceless resource in any Bug Out scenario. This kit, called a Bug Out Bag, is an important resource in your overall Bug Out Plan and may very well be your key to survival one day.

BUG OUT BAG: DEFINED

A Bug Out Bag (BOB) is a self-contained kit designed to get you through at least 72 hours of independent survival while on the journey to your destination, often called a Bug Out Location (BOL). This kit is also referred to as a 72-Hour Bag, a Get Out Of Dodge Bag (GOOD Bag), an EVAC Bag, a GO Bag and a Battle Box. Regardless of the name, a BOB is a well-thought-out 72-hour survival kit tailored specifically to meet the needs of you and your family. Bug Out Bags are prepared in advance of a disaster and are typically stored in your home ready for deployment at a moment's notice.

YOUR BUG OUT BAG GUIDEBOOK

Many fine books have been written about Bugging Out. This is not a book about Bugging Out. This book is your complete guide from start to finish and everything in between about how to build your own Bug Out Bag capable of assisting you and your family through 72 hours of independent survival in the event that you choose to Bug Out. In this book, I cover much more than just building a BOB for a fit, single young adult. You'll find specific instructions for preparing BOBs for families, children, the elderly, the physically disabled, and even pets. The specific category checklists included make it simple and easy to ensure all of your bases are covered. The function and importance of each pack item is thoroughly explained and I also provide instructions on how to use most items.

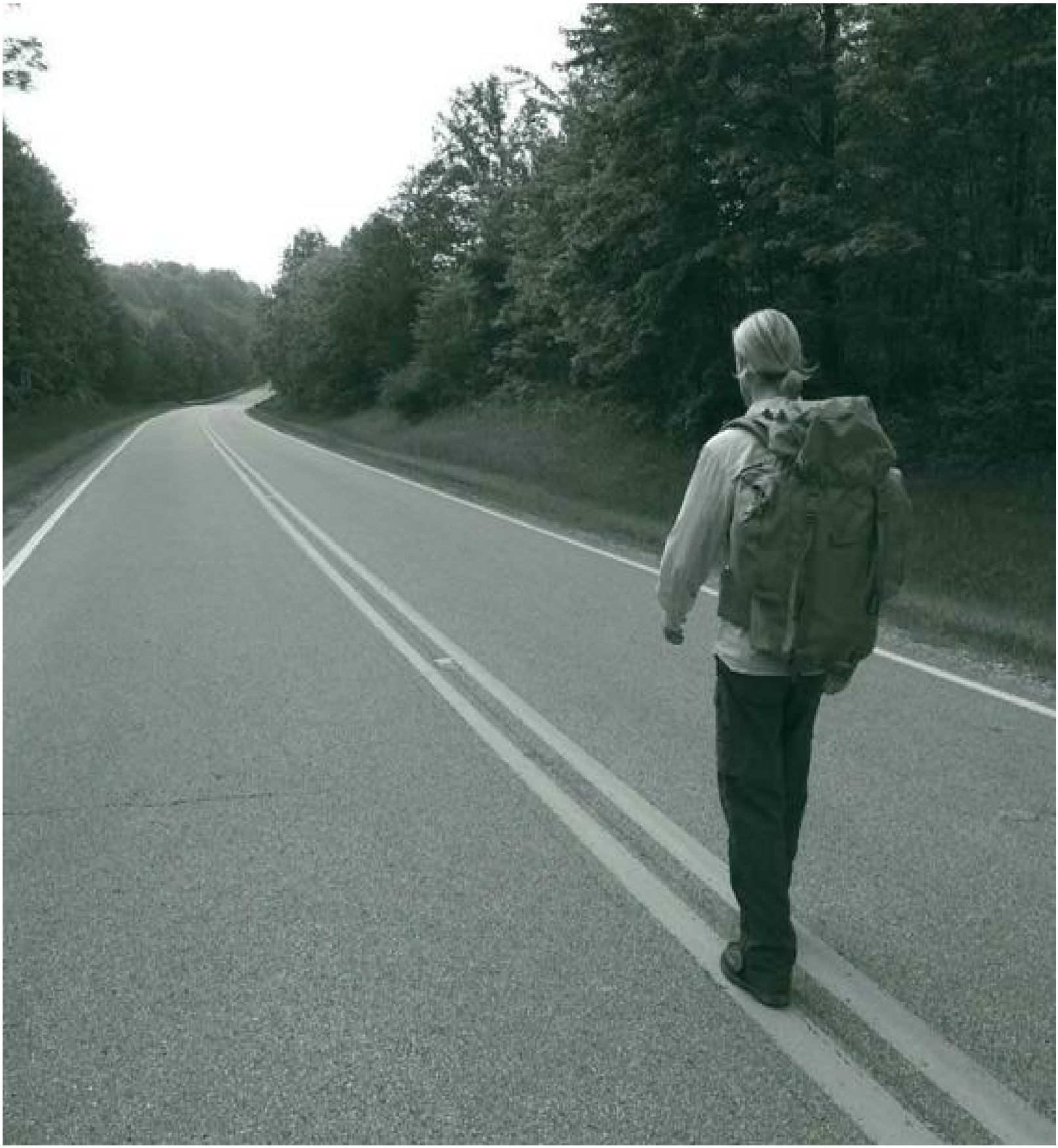
The Bug Out Bag, a 72-Hour Disaster Survival Kit

The book takes into account all of the most common disasters and makes special notations of things to consider or add to your pack should you live in an area prone to specific disasters. I will guide you through the "build" every step of the way, helping you create a complete Bug Out Bag tailored specifically to your comfort level and environment. You will not find a more thorough and well-thought-out guide anywhere about how to build your own Bug Out Bag.

You've heard the phrase "If you build it, they will come." When discussing Bug Out Bags and disasters, my survivalist motto is "Build it, they are coming."

Let's get started.

1 MEET BOB—THE BUG OUT BAG



DISASTERS CAN DELIVER some of the harshest survival scenarios on the planet. They are sudden and chaotic. They make otherwise very normal tasks incredibly complicated and dangerous. Disasters are life–and-death situations.

Assembling a Bug Out Bag (BOB) capable of contending with these unpredictable and unforgiving survival environments can be an overwhelming task—especially if you have no formal survival or preparedness training. Before you start to build your own kit, let me outline some important basic concepts you need to understand about a BOB to give you a clear understanding of exactly what to expect in this process and dispel any misguided expectations you might already have. In my training courses at Willow Haven Outdoor, I call this part "Getting to know BOB the Bug Out Bag."

GETTING TO KNOW BOB

BOB is simple, yet deep.

The purpose of a Bug Out Bag is very simple—to provide you with basic survival needs. In reality, however, this is easier said than done. Just building or buying a BOB will not save your life. You have to understand how to use the contents of your BOB to maximize its true life-saving potential. Disasters do not create ideal survival environments. If survival were easy and fun, it would be called camping. Providing yourself with basic survival needs in perfect conditions can be challenging. Add a horrific, chaotic disaster to the mix and there is no doubt you will need to intimately understand how to use your BOB as a tool and resource. This comes *only* from experience and practice. The bottom line about your relationship with BOB: You will get out of it what you put into it.

Often, the Bug Out Bag is over simplified by people I call "sofa survivalists." These are people who dole out survival advice and instruction but have little to no hands-on field experience. The closest they come to fire by friction is the heat generated in the wheel of their computer mouse. *Beware* of over simplified Bug Out survival advice.

BOB and Its Many Facets

BOB is an investment.

Like any worthwhile relationship, BOB will require a certain degree of commitment in order for things to work out. He is not a one-night stand. Plan on spending some time building your Bug Out Bag. It will take time to source and assemble the contents of your kit. Learning how to use the survival tools will also require an investment of time and energy. BOB wants and needs quality time.

BOB Requires Some Time

Also, don't plan on taking BOB to a cheap burger joint and expect him to save your life for the unforgettable experience.

BOB Costs Some Money

Building a proper BOB that you can depend on in an emergency is going to cost some money. Many of the individual components are economical, but combined, it all adds up. Plan to spend a few hundred bucks. This, of course, will vary depending on how many items you already have on hand. I don't suggest cutting corners when it comes to procuring supplies that you will use to save the lives of you and your family. In my experience you get what you pay for. Your BOB is an investment in your future.

Your relationship with BOB changes as you do.

All long-term relationships evolve as your life circumstances change, and this evolution can take effort. Your relationship with BOB needs to evolve as well. Expect to update your Bug Out Bag when you update your life. For example, if you are now single and get married, then you will need to update your 72-hour kit accordingly or add a second kit. Or, if you have a new addition to the family, such as a child, there will be new considerations for your Bug Out Bag. If your job relocates you from Northern Maine to Southern California, the clothing in your BOB will change. You get the point.

Your Bug Out Bag will also require a little maintenance. I recommend a biannual review, which I will discuss later.

BOB is an insurance policy.

I carry the following insurance policies:

- Car insurance
- Home insurance
- Life insurance
- Health insurance
- SHTF insurance

The last policy listed, my S#!t Hits The Fan Policy, is my trusted buddy BOB. It's easy *not* to prepare for the "what-ifs" in life. You aren't required to buy a SHTF Policy, and your employer probably isn't going to help with your premium. Regardless, you should have a Bug Out Bag in place. Life insurance is paid *when you die*. Look at BOB as a "don't die" policy for you and your family. What could be more important than this insurance? You really can't put a price on peace of mind.

BOB can be a fun and rewarding friend.

Spending time with BOB can be fun and rewarding for the whole family. Building a Bug Out Bag is so much more than just filling a backpack with supplies and tossing it on a shelf. Knowing how to use the tools and kits in your Bug Out Bag effectively takes practice. "Practicing" is the best part of the build.

BOB presents so many learning opportunities for adults and children. Learning how to use tools to provide yourself and others with basic survival needs is challenging and encourages creativity, problem solving, teamwork, patience, self-sufficiency, and determination. Everyone can benefit from the lifelong character-building lessons that can come from assembling your own Bug Out Bag. Think of the sense of accomplishment and peace of mind you'll find as you learn new skills.

FOUR KEY ATTRIBUTES OF A BUG OUT BAG

Now that you have a broader mental scope of the project, let's look at the four key physical attributes to a well-contrived Bug Out Bag.

A 72-Hour Kit

Your BOB should be designed to sustain you and your family for 72 hours. You should be able to reach a safe destination with access to supplies within a 72-hour time frame. In the right hands, a BOB as described in this book will provide the necessary resources to survive much longer than 72 hours.

Manageable and Comfortable

In an ideal situation, if Bugging Out is your only option, you will want the luxury of traveling by vehicle. We have to assume, though, that this is not a guarantee. Some events that might render vehicle travel impossible are:

- no fuel or access to fuel
- road closures or roads destroyed
- traffic jams
- vehicle break-down

Consequently, you (and your family) need to be prepared to travel by foot. For this reason, your BOB needs to be manageable and comfortable. It needs to be sized appropriately for your build. Its total weight needs to fall within a range that allows you to carry it for extended periods of time—hours and even days. The style, size, and weight of a BOB will vary from person to person depending on personal preferences, build, and fitness level.

Bugging Out on Foot

Ready, Set, GO!

Your BOB needs to be prepared in advance and stored for swift deployment at a moment's notice. Disasters are merciless, and your ability to react and evacuate in an instant is critical. With that said, do not advertise your BOB to visitors in your home. As I said, your BOB is an investment. You likely keep your valuables in a safe in your home to protect them from burglars. Take the same precautions to protect

your BOB from theft.

Urban Camouflaged BOB

A BOB should be stored in a place that is out-of-sight, but not out-of-mind. It needs to be hidden but easily accessible. I camouflage my BOB on a shelf leading out my back door. To the average person it looks like a pile of towels and some cleaning supplies. In reality, it is one of the most critical resources in my entire home. I call this urban camouflage.

Custom and Tailored

Every Bug Out Bag should be different because they are designed for and by unique individuals. Your Bug Out Bag should be a reflection of your particular tastes, needs, and requirements. Do *not* buy a premade BOB. Premade kits are designed to provide the most "stuff" for the least "cost" to make the highest profit margin for the company selling it. This is not an equation on which I'd like to stake my life. Premade kits are also generic and lack many elements that should be tailored to you and your environment. A premade kit is better than no kit at all, but you are truly robbing yourself of the knowledge gained from designing and building your own custom kit.

SUMMARY

Building a Bug Out Bag is not a "matter-of-fact" process. It is subjective and allows for a certain amount of creative freedom and personal expression. There are no definitively right or wrong answers. This book defines how I build my kit. You may have different solutions to solve similar problems. And there are other tools and gear that I have not listed that you may prefer to use. This is completely acceptable and expected. As my mom always says, "There's more than one way to skin a cat." Every time I teach a Bug Out Workshop, I learn from my students, and I love that. I will present the facts about basic survival needs as well as my ideas about solutions to provide those basic needs. If you build your kit exactly as I do, then you are missing a key point of this project. This is *your* kit.

Building a BOB is not a one-day project. It's not even a weekend project. Preparing for a Bug Out is a mindset and a way of life. In life, nothing worth having comes easy, and the same is true for a top-notch Bug Out Bag. When your kit is finished, you should feel confident in the items you have chosen and in your ability to use those items to save the lives of you and your loved ones in the event of an emergency disaster evacuation—a real life Bug Out.

2 THE BUG OUT BAG: CHOOSING YOUR PACK

YOU HAVE NUMEROUS STYLE OPTIONS available when you select your pack. I have experimented with, used, and tested countless pack styles in environments all over the world—from single-sling backpacks to duffle bags and everything in between. In my opinion, *every* Bug Out Bag

(BOB) *must* be a backpack with two shoulder straps. Here's why:

- A backpack is designed to distribute weight evenly—thus reducing fatigue from extended use.
- Backpacks allow your hands to be free for other tasks. Limiting the use of your hands is a huge compromise you make when carrying a hand-held-style kit such as a duffle bag.
- Backpacks offer a more streamlined contour, which allows for less restricted travel.
- A backpack is strapped and attached to you, which reduces incidence of loss.

BACKPACK STYLES

There are literally thousands of backpacks available from hundreds of different manufacturers and retailers. Choosing only one can be a daunting task, but it's your first very important decision in building your BOB. Function and comfort are your two top priorities. The guidelines on the following pages will help you wade through the sea of choices. Almost all backpacks fall into one of three main categories.

Frameless

These packs are typically the smallest and offer the least support. They are also the cheapest both to manufacture and to buy. I don't recommend using a frameless pack as a primary BOB. Save these for going on a picnic or to the beach, not for hauling life-sustaining survival supplies.

Frameless Backpacks

External Frame

I own many external-frame backpacks, and I like this style very much. External-frame packs are known for their performance with heavy loads. They do a great job of distributing weight to your hips, which helps to reduce fatigue in your shoulders, upper body, and back. Because the pack is mounted to a frame and not directly against your back, this style also offers excellent air circulation, which you will appreciate in hot weather.

External Frame Backpack

External Frame Pack Against Back

External-frame packs can feel “shifty” and top heavy because the weight is mounted slightly away from your back. They also tend to feel slightly bulky as compared to other styles. My personal BOB was an external frame pack for a very long time. This style works well as a BOB.

Internal Frame

Most of the backpacks you will find for sale are internal-frame style packs. The rigid support system that gives the backpack structure and shape is built into the pack body. These supports can be plastic, metal, or even foam. Internal-frame packs are very popular with adventure sports enthusiasts because of their sleek, agile appearance. They are close-fitting and hug very snuggly to the body, which causes poor air circulation—the number one frustration with this style of backpack. This can be annoying in warmer climates.

The form-fitting nature also reduces load shifting, which helps with balance—especially on rough, uneven terrain. These packs are very maneuverable and also are easier to store in your home because they typically have a smaller overall footprint. Internal-frame packs make excellent BOBs. My current BOB is an internal-frame pack.

Internal Frame Backpack

Internal Frame Backpack Side View

SIZE DOES MATTER

Balancing Act

Choosing your BOB pack size is a balancing act between comfort and necessity. It needs to be large enough to contain a certain amount of necessary gear while still remaining comfortable and manageable during extended periods of use.

Too Big and Too Small BOBs

Follow Your Gut

Choosing the right pack is a gut feeling. There are no right or wrong answers, only shades of gray. Your pack shouldn't be too small, and it shouldn't be too large.

Some of my students collect all of their Bug Out gear first and save the pack decision for last. This is certainly an option. Choose a medium-size pack that feels right and looks appropriate on your body frame.

Seeking Help

Don't order your pack online! Many specialty outdoor and camping stores (especially independently owned stores) will help you find backpacks tailored to your size and weight. Some packs can even be heat molded to your specific form, which is a pricey but cool feature.

Retailers can add weight bags to the pack while you are in the store to give you an idea of how the pack wears and feels when loaded. When asking for help, a good rule of thumb is to tell the store associate that you are taking a three- to five-day backpacking trip. This will help narrow the field into the size category that is appropriate.

Making the Wrong Decision

Choosing the wrong pack can have painful consequences. There is nothing more miserable than hiking all day with an uncomfortable and ill-fitting backpack. And, packs are expensive. When buying a backpack, make sure there is a satisfaction guarantee and warranty. If you use it and don't like it, *return* it!

Hey! They've Got Stuff!

Building a "tricked out" looking Bug Out Bag is a bad idea. You might as well put a bull's-eye on your back.

It's human nature to show off our cool stuff. Resist the urge and be humble when it comes to your BOB. It's good practice to ask yourself, "What can I do to look *less* prepared?" Supplies of all kinds will be at a premium in any disaster scenario, and you will be carrying an incredibly valuable assortment of merchandise on your back. If you choose to share, that's great, but being forced to share is something totally different.

What Not To Do

Desperation can bring out the worst in people, and you will have enough problems without sending signals to "scavenging opportunists" that you and your family are stocked with survival rations.

Rioting, looting, mugging, and pillaging are all very common (guaranteed) in disaster emergencies. Do yourself a favor and keep your BOB low-key.

KEY FEATURES OF A BOB

Durable Construction

Not to state the obvious, but the pack you choose needs to be built and designed to take abuse. Some telltale signs of a well-constructed backpack are reinforced seams and double stitching.

Reinforced Corner With Double Stitching

No cheap zippers are allowed! If it has zippers, make sure they are good ones. Some packs have water-tight zippers. This is a great feature.

Compartmentalized

Choosing a BOB that has defined compartments helps to organize gear and facilitates quick access to important items. Sifting through a pack with one cavernous compartment is not only frustrating, but also inefficient.

The Black Hole BOB

Being organized is extremely important. In time-sensitive situations, such as signaling for rescue, your level of organization can change the course of your entire experience.

A Compartmentalized BOB

Water Resistant

Wet gear, clothing, and bedding can be deadly in certain conditions and down right miserable in *all* conditions. Choose a pack constructed from waterproof or water-resistant material. Some packs have built-in rain covers.

Water Sealed Zipper

Snug Pack With Rain Cover Extended

I've learned from outdoor experience to line my BOB with a construction-grade trash bag as an added layer of water-proof security. I suggest you do the same.

Trash Bag BOB Liner

Pack Support

Choose a BOB with padded shoulder straps. Thin shoulder support straps can cause blisters and sores over long distances.

Many medium- to large-sized backpacks have built-in hip belts that help distribute the pack load to your hips rather than on your shoulders and upper body. A hip belt can drastically reduce shoulder and neck fatigue by supporting up to 90 percent of a pack's weight and centering that weight nearer the center of mass. For extended carry, I wouldn't even consider a pack without a hip belt unless I had no choice.

Hip Belt in Action

MULTI-USE ITEM: CONSTRUCTION-GRADE TRASH BAG

★★★★★ **FIVE-STAR RATING**

Besides serving as a BOB pack liner, a quality trash bag has many multi-functional survival uses. Among those are:

- water-collection device
- ground tarp
- make-shift shelter
- poncho
- flotation device (filled with air and tied securely)
- comforter (filled with dried leaves or grasses)
- rescue signal

Hole Lined with a Trash Bag to Collect Water

Ground Tarp

Sun Shade Shelter

Poncho

Flotation Device

Rescue Signal

FOR FAMILIES, DOES EVERYONE NEED A BOB?

All family members need to be considered in a Bug Out disaster evacuation. There are certain considerations that must be addressed when it comes to Bugging Out with children, the elderly and even pets (discussed in chapter fifteen).

The Primary Bug Out Bag

If you're single, this is the only pack that concerns you. Families will also have only one primary BOB. This pack contains all of the essential survival tools for the family along with the user's personal items. This is the one pack you *don't* want to leave home without in the event of a disaster Bug Out. This pack is carried by the group's strongest and most able-bodied adult.

Additional Adult Packs

Additional adults include all able persons eleven years of age and older. These packs should contain only personal survival items such as water, food, clothing, hygiene items, and bedding. Anything else is optional. All of the group's survival gear, such as shelter, fire building tools, etc., will be carried in the Primary BOB. The style of this pack does not need to be as functional or elaborate of the Primary BOB because it will weigh significantly less. A basic, frameless school-style backpack will work just fine.

Additional Adult Pack

Youth Packs

The general age range for a youth pack is six to ten years old. These should contain only light-weight items such as clothing, hygiene items, bedding, and maybe a small toy. All other survival essentials, such as food and water, will need to be split among adult packs or carried in the primary BOB.

Youth Pack

Children Under Six Years Old

It's unrealistic to expect to bug out on foot while carrying not only the necessary survival gear but also a small child or children. This situation exceeds most adult's physical limitations and just isn't practical. If you have small children who are unable to travel independently, purchase a wagon or stroller to use specifically in the event of a Bug Out.

Radio Flyer Wagon

Not only can a pull-behind wagon transport small children, but it can also help carry other gear as well. From the traditional Radio Flyer to more rugged off-road models, many different wagon styles are available. Your local lawn and garden center will offer several options. Wagons can be stowed in the trunk or mounted to a car roof rack in the event of Bugging Out in a vehicle.

Beefy Off-Road Wagon

A rugged, three-wheeled, collapsible stroller is also a great "infant-toting" alternative. These are light-weight and very quick to deploy. The three-wheeled models are better suited for rough terrain and faster travel. Many styles also have storage areas as well. Don't even consider the four-wheeled options with the cheap plastic wheels.

Wheeled Stroller

For even greater mobility, consider a baby backpack. This pack style integrates a seat and harness for toting small children and many also have sizable compartments and extra lashing points for gear. A pack like this could serve as both an additional adult pack and a baby hauler.

Kelty Brand Baby Backpack

Disasters often disrupt transportation systems such as roads, trains, buses, and subways. Road closures, traffic jams, and fuel shortages can force you to travel by foot. Having a Bug Out wagon or stroller at the ready can make this possibility much more practical.

Elderly and Disabled

When Hurricane Katrina struck the United States in 2005, hundreds of elderly and disabled people were left behind and consequently died in the disaster's aftermath. To a certain extent, the elderly and disabled must be treated in the same way as small children. You need to be prepared to transport them *and* their personal survival supplies.

Wheelchair With Bug Out Bag

Never bug out with a battery-powered wheelchair or mobility device. Insufficient resources to recharge batteries can leave you stuck with few options. Without a charge, these modern contraptions are bulky and virtually impossible to move. A traditional push-powered wheelchair should be on hand and ready to use in the event of a Bug Out. Bug Out Bags can be mounted to the wheelchair for assisted travel.

In the event that vehicle travel is not possible, a manual push wheelchair might be the only solution that allows an elderly or disabled person to continue on a Bug Out journey with you. Please give yourself this

option. You cannot carry them.

STOCKING YOUR PACK

Up to this point, building your own BOB has been fairly conceptual—mainly defining expectations about the build. From here on out, this is a *hands-on* project. It's time to start collecting gear to stock your Bug Out Bag. And, it's time to begin understanding this gear and start learning how to use it. This is the *fun* part. There are twelve supply categories that need to be considered when stocking your Bug Out Bag. They are:

- Water and hydration
- Food and food preparation
- Clothing
- Shelter and bedding
- Fire
- First aid
- Hygiene
- Tools
- Lighting
- Communications
- Protection and self-defense
- Miscellaneous supplies

CHAPTER ORGANIZATION

I have devoted the following twelve chapters to each of the supply categories. I will list exactly what needs to be included in your pack (or packs) and explain why those items need to be there. At the end of the book, there are supply checklists divided into the following three levels.

Level P1

This level is for the Minimalist Packer. It is designed for someone with outdoor knowledge and survival experience. A level P1 packer is comfortable in the outdoors with minimal gear. In the world of survival, there are many instances when knowledge can replace gear. And knowledge is very lightweight. Simply put, more experience and more knowledge allows for less gear in a Bug Out Bag. Areas of redundancy are kept to an absolute minimum with P1 checklists as a user depends more on skill than gear. Consequently, a P1 pack will be smaller and will weigh less.

Level P2

This is the supply checklist level for the Average Packer. P2 packs will include gear designed for someone with an average level of survival skills and knowledge. The majority of the population will fall into the P2 pack category. Redundancy will exist in critical survival areas, such as fire tools and water purification.

Level P3

Level P3 supply lists are designed for individuals or families who are completely at the mercy of the gear on their back and have very little confidence in their outdoor survival skills. A P3 pack will be the heaviest of the grouping and may be limited by one's ability to handle the increased weight and bulk that comes with additional resources. P3 pack lists will include the most instances of redundancy in critical survival categories.

A Note About Customizing

These three pack levels are recommended guidelines. You will need to further personalize and customize your BOB supply list depending on your very specific needs or wants. You might decide to pick and choose between the lists in certain supply categories. This is absolutely expected and recommended.

DISASTER PRONE CONSIDERATIONS

Each chapter includes special notations for specific disaster scenarios. Take note of the suggestions for disasters common to your region.

3 WATER & HYDRATION

IN THE WORLD OF SURVIVAL, remember the rules of three.

Rule 1: You can live for three hours without shelter (in extreme conditions).

Rule 2: You can live for three days without water.

Rule 3: You can live for three weeks without food.

The average adult needs at least one liter of water per day for proper hydration. This amount is slightly reduced by size and age. Thirst is the first symptom of dehydration. Others include dizziness, headache, dry mouth, dark urine, and light-headedness. Dehydration can set in very quickly and the effects often lead to poor decision making and/or injury. Proper hydration is absolutely critical in *every* Bug Out scenario.

Because a Bug Out Bag (BOB) is a 72-hour kit, I suggest you pack a minimum of approximately three liters of fresh drinking water per person. Even with three full liters, there is little margin for error. Certain weather climates increase the amount of water a person needs to survive. You'll consume more water if your journey is especially rigorous. Personal hygiene can also tap into your water supply. The water you carry will constitute a large percentage of the overall weight of your BOB. The good news is that the weight will decrease as you hydrate. In a survival situation, a good water container can be invaluable. Your choice in water containers is very important.

CONTAINERS

Divide your water supply up among different containers. I never suggest carrying all three liters of water in a single container for two reasons.

1. If you have only one container and you lose or break it, you no longer have a viable way to carry and store water. This can present a very serious threat. Natural water-tight containers are not easy to find or make.
2. It's easier to distribute the weight of the water in your BOB when it is divided into two or three smaller containers.

I suggest dividing your water into the following three different containers.

32-oz. Wide-Mouth Nalgene Hard Bottle

These bottles are durable and crush resistant. I have used them in countless adventures and never has one failed me. I've even dropped one from fifty feet while rock climbing and it came out unscathed. Get the wide mouth version. They are easier to fill and they can double as a dish to eat from if necessary. On their sides are printed measuring units, which is convenient for preparing dehydrated meals. I've also never had one leak. You can trust it in your pack.

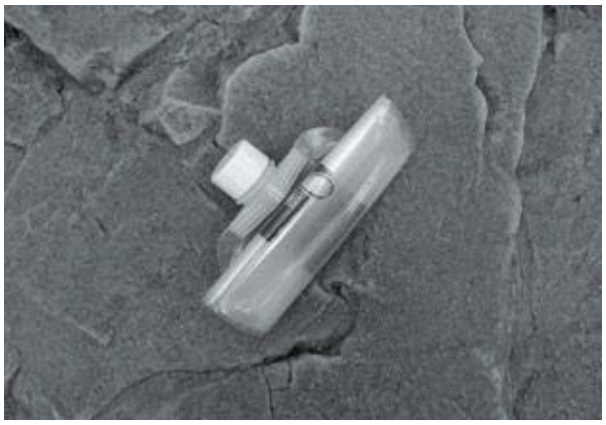
Metal Water Bottle

These canteens weigh about the same as any Nalgene bottle. Rather than just carrying two Nalgene bottles, I suggest opting for a metal alternative. A metal container can be used to boil and purify drinking water collected "in the field" should your immediate supply run dry.

Collapsible Soft Bottle

Packing a collapsible soft container allows you to reduce bulk as water is used. Consume the water in this container first. When empty, they take up virtually no space and weigh just a few ounces. They are not as durable, but with the two other containers listed above, you can afford to sacrifice durability for weight and space with this option. There are many different styles of these available at most outdoor retailers. The brand I use is Platypus.

Platypus Soft Bottle Full



Platypus Soft Bottle Empty

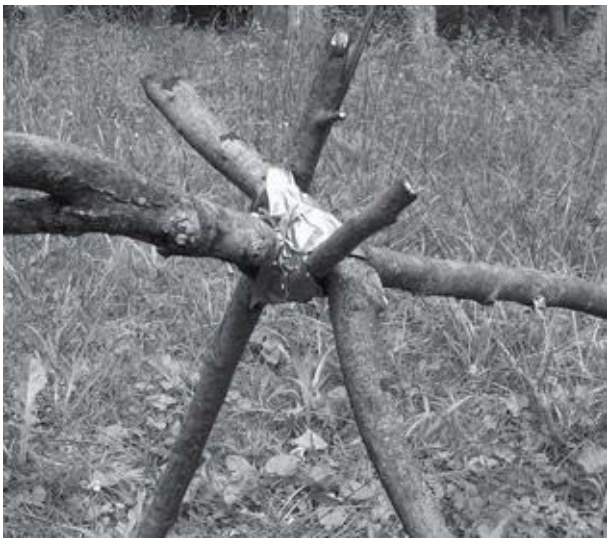
SURVIVAL QUICK TIP

Wrap your Nalgene Bottle with ten to fifteen feet of duct tape! Not only does it help protect your bottle, but duct tape is an excellent multi-use survival resource. It has hundreds of uses. Some of these include: first aid bandage, cordage and tarp/tent/gear repairs. Wrapping your water bottle instead of packing an entire role of tape saves you space and weight.

Nalgene with Duct Tape

Emergency Bandage

Repair Tear in Tarp



Shelter Building Cordage

WATER PURIFICATION ON THE GO

There are many factors that can impact how long three liters of water will last. If the weather is hot and arid, you will naturally consume more water. Traveling by foot through rough terrain can require more water as well. Personal hygiene will also deplete water rations. Because water is so critical to survival, I highly recommend packing two water purification options to safely replenish supplies when given the opportunity. While your BOB is planned for 72 hours, there is no guaranteed timeline. You need to be prepared to collect water from resources in route to your Bug Out Location.

SURVIVAL QUICK TIP

There are several fresh water sources that do not need to be purified.

1. Snow: Pack snow into a container and melt with body heat or next to a fire.
2. Rain: Harvest rainwater by funneling into a container using a tarp, poncho, or garbage bag.
3. Dew: Soak up morning dew with clothing or bandana and suck it out or ring it into a container.
4. Vines: Large vines can store water. Cut at a diagonal toward the bottom and let water drip into a container. In the US, grapevines are perfect for this. Avoid vines that seep milky, discolored or strong-smelling liquid.
5. Trees: In the spring, trees such as maple and birch can be tapped for drinkable sap. Cut a V-notch in the tree and use a small stick or leaf to drip sap into a container below.

Boiling Water

Bringing water to a rolling boil is one purification option, but it's certainly not always the most convenient when headed out of or through a disaster zone. Boiling water takes valuable time and fuel resources. Building a fire may also draw unwanted attention. It is a good idea to have at least one additional (if not two) method of purifying water.

Advantages:

- no need for fancy equipment
- 100 percent effective in killing harmful bacteria, viruses, and cysts

Disadvantages:

- requires fuel source
- weather can interfere
- takes time

Hand Pump Filter System

Manufacturers have created an assortment of amazing backpack-friendly filter systems to meet outdoor enthusiasts' increased demand for smaller and lighter water filter options. The most popular of these systems is a hand pump water filter. They are incredibly effective and robust. However, for a Bug Out Bag, they can be a little pricey—ranging from eighty to three hundred dollars depending on the features. In my BOB, I carry the Katadyn Hiker Pro, which costs around eighty dollars.

Pump Filter System

Katadyn MyBottle Purifier

This pump filter is about the size of a pop can and weighs in at 11 oz. It can filter up to one liter of water per minute, which is almost as fast as any water faucet. It's durable, easy-to-use and perfect for a BOB. Similar models are made by other manufacturers, as well.

Advantages:

- speed of delivery—up to one liter per minute
- no skill or experience required
- effective in removing Cryptosporidium and Giardia
- includes multi-use tubing

Disadvantages:

- takes up valuable BOB space
- pricey: $80+
- useless if broken
- most do not remove viruses

MULTI-USE ITEM: RUBBER TUBING

★★★ THREE-STAR RATING

The rubber tubing that comes with a hand pump filter kit can also be used as a fuel siphon, an emergency tourniquet, or a long straw for inaccessible water sources.

Straw to Reach Water in Hollow Tree

Tubing as Fuel Siphon

Emergency Tourniquet

Integrated Bottle Filters

Several manufacturers have also introduced an integrated bottle and filtering system. This combo unit allows you to scoop up questionable water and then drink out purified water through a built in filter and chemical treatment system inside the bottle itself. These are very good water purification solutions for Bug Out Bags.

Advantages:

- no skill or experience required
- effective in removing Cryptosporidium and Giardia
- can be used as one of your three water containers

Disadvantages:

- Pricey: $45+

Straw Filters

Often called Survival Straws, these are exactly what they sound like—a straw with a filter attached. They are very inexpensive (around fifteen dollars), lightweight, effective, and compact.

Aquamira Frontier Filter in Action

These are excellent BOB filtering systems. For the price, performance, and size, you just can't beat a straw-style filter. I keep one as a backup should anything happen to my pump system.

Advantages:

- no skill or experience required
- effective in removing Cryptosporidium and Giardia
- lightweight and compact
- inexpensive

Disadvantages:

- filters up to twenty gallons
- most do not remove viruses

Chemical Treatment Tablets

Chemical treatment tablets are extremely lightweight and take up almost zero space in a BOB. They are also pretty cheap and readily available at most any outdoor retailer. When it comes to these, I ask, "Why wouldn't you include them in your BOB?"

Bottle of Tetraglycine Hydroperiodide Purification Tablets

Depending on the brand, one tablet usually treats one liter of water. The purification wait time can be anywhere from thirty minutes to four hours. You can fill up a bottle, toss in a tablet and let it work while you continue to hike. For minimalist packers, these are a perfect purification back-up option. And, if stored properly, they have a very long shelf life.

Advantages:

- no skill or experience required
- very effective when used properly according to instructions
- lightweight and compact
- inexpensive

Disadvantages:

- water must be clear—cloudy or dirty water drastically impacts results
- have an expiration date

WATER FILTER VERSUS WATER PURIFIER

Many people use these terms interchangeably when in fact, they are very different. A water filter does just what you would think—it filters debris from water. Most do an excellent job of filtering out threats such as bacteria and protozoan cysts. However, many filters don't remove viruses. Viruses are best killed using some sort of chemical or UV treatment. Water purifiers combine both a filter and a chemical treatment for an all-in-one system. The threat of water-borne viruses is very low in the US and Canada and a .2–3 micron filter is considered sufficient. In third world countries, though, a combination purifier is recommended.

SURVIVAL QUICK TIP

Water with floating particles and debris should be pre-filtered before running through one of the above-listed purification methods. Several items in your BOB can serve as a Multi-Use Crude Water Filter. Three of these options are:

1. Bandana
2. Socks
3. Dust mask

Using a Bandana as Crude Pre-Filter

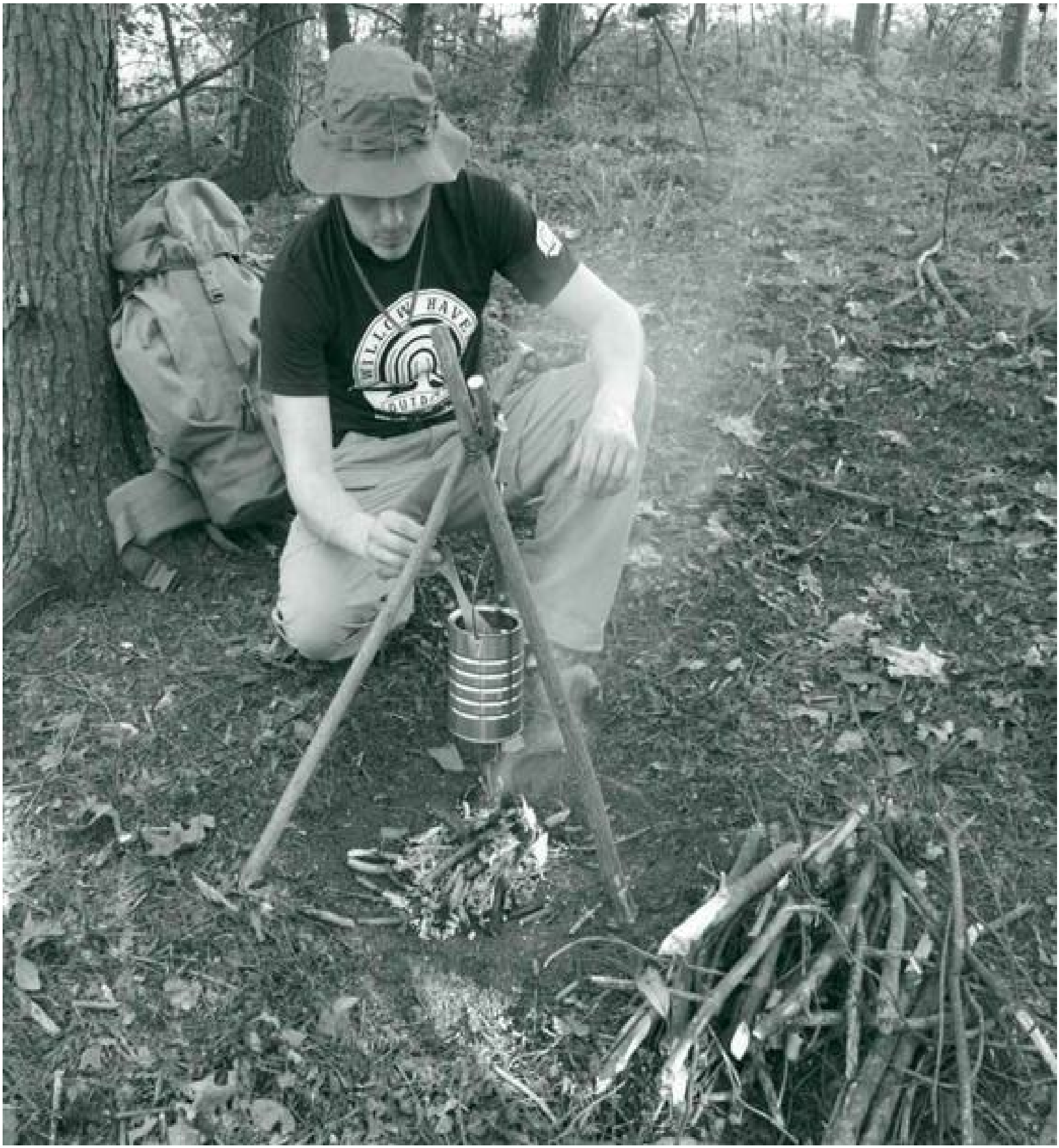
SUMMARY

When it comes to water, I have some redundancy in my personal BOB. In addition to three fresh liters, I also pack a Pump Filter, a Survival Straw, and Purification Tablets. I could also boil water with my metal canteen or cooking pot if necessary. I've been sick from drinking bad water in the field and it was one of the worst situations of my life. I recommend you have at least two water purification methods in your BOB. Find the Water and Hydration Organizational Supply Checklist in the appendix.

COMMON DISASTER CONSIDERATIONS

If you live in an area prone to heat waves or drought, consider packing more than three liters of fresh drinking water, and also pack a local map that indicates waterways and bodies of water.

4 FOOD & FOOD PREPARATION



WHEN PREPARING for a 72-hour survival Bug Out, food doesn't top your list of priorities. You can survive three weeks with no food at all. However, when you use up more calories than you consume, there are undesirable consequences, including light-headedness, lack of energy, weakness, and poor

thought-processes. All of these effects can be dangerous. In a survival situation, it's important to be clear-minded, strong, and confident of your decisions and capabilities. Your body is an engine that runs on calories. Refueling your body with calories is critical to maintaining your physical and mental endurance. With that said, however, don't worry about planning well-balanced three-course meals. This is three days of survival—not three days of vacation or car camping.

BUG OUT SURVIVAL FOOD

Open and Eat

The best types of BOB foods are what I call “open-and-eat” meals. The foods you pack need to be easy to prepare. Therefore, the best solutions are packaged meals that can simply be opened and consumed with little to no preparation. Little prep work saves time and fuel resources.

Long Shelf Life

Save your organic fresh-foods diet for normal and peaceful conditions, not disaster emergencies. Bugging out is the one instance when I promote the consumption of foods with a long shelf life. Remember, your BOB is prepared in advance and all of these items need to be packed and at the ready for months at a time. Choose foods that can be safely stored in your BOB for up to six months. Otherwise, you will need to review and replace your BOB food rations more frequently.

Lightweight

Your food choices need to be light-weight and packable. You might have to travel by foot, so keep it simple. As I tell my students, follow the KISS rule: *Keep It Simple, Stupid*. All foods should be sealed in durable, waterproof packages or resealable bags to prevent contamination and/or spills in your pack. Weight should take priority over taste.

Carbs + Calories

Your strict diet is not a priority during a Bug Out so forget about counting calories. Choose foods that are high in both carbohydrates and calories. Our cells and muscles are fueled by carbohydrate-rich foods. Carbohydrates are converted into sugars, which our bodies burn as energy. This “fuel” is critical in keeping us mentally and physically energized. Dried cereals, grains, pasta, and rice are all very rich in carbohydrates.

High-calorie foods are also important. Calories = energy. Your body needs calories (energy) to maintain vital functions. Two great high-calorie BOB food sources are dried meat and nuts.

SPECIFIC SUGGESTED BOB FOODS

Meals Ready to Eat (MRE)

Soldiers are issued MREs while serving in the field. Essentially, these are completely self-contained meal kits. They typically contain an entrée, a condiment pack, a large cracker, a small dessert, and a water-activated chemical heat source. Often, the outer package serves as the heating container. These meal kits are time-tested in the field and are very reliable and nutritious BOB food rations. They contain the most calories of any food item listed in this chapter—typically 1000+ calories per meal. The government restricts the commercial sale of official military MREs. You can still find them in Army/Navy surplus stores and at gun shows. However, these are typically overpriced. The better option is to buy what are called "commercial" or "civilian" MREs, which are very similar to the military version and often produced by the same manufacturers that sell direct to the military. I don't recommend buying MREs on eBay—there are just too many impostors and it can be difficult to tell the difference. Below is a list of reputable companies from which to purchase commercial MREs. You can compare the prices and kits and make your own choice. I have purchased from each of them with no issues.

- MREdepot.com (sells MREs from a variety of manufacturers)
- MRESTAR
- AmeriQual (US Military MRE Contractor)

Meals Ready to Eat (MRE)

MRE Package Contents From MRESTAR

The MRESTAR MRE in the photo includes:

- 8 oz. entrée (e.g., Lentil Stew with Potatoes and Ham)
- 2 oz. dry fruit (e.g., banana, pineapple, papaya)
- 2 oz. raisin mix (e.g., raisins, peanuts, almonds, sunflower seeds)
- 2 oz. sugar cookies
- Drink mix (e.g., Orange Flavor with Vitamin C)
- Accessory pack (spoon, coffee, sugar, creamer, salt, pepper, napkin, moist towel)

Advantages:

- very high in carbohydrates and calories
- durable, water-tight packaging
- easy to prepare
- complete meal in a bag
- does not require additional heat source
- can be eaten cold if necessary

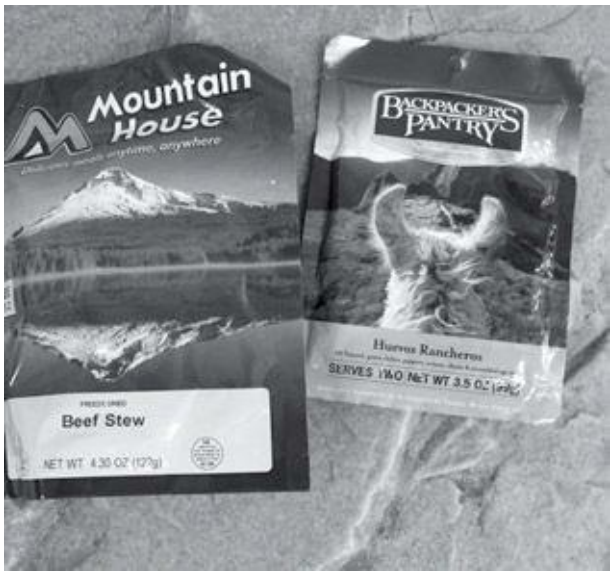
Disadvantages:

- pricey: $8+ per meal kit
- a little extravagant for a 72-hour BOB
- bulky and heavy (1–1.5 pounds)
- better-suited for longer-term survival than a 72-hour Bug Out

Dehydrated Camping Meals/Noodle Meals

Most, if not all, outdoor retailers sell dehydrated camping meals designed for backpacking enthusiasts. These meals are also readily available on-line. They come in a variety of entrée choices and are surprisingly tasty. Dehydrated meals are excellent lightweight BOB meal options and have very long shelf lives. They are a no-frills meal and typically just contain one main entrée, unlike MREs, which contain

several food items.



Dehydrated Camping Meals

I would also add ramen noodles and similar just-add-water noodle meals to this category. While not specifically designed for backpackers, noodle meals are very similar in nature to dehydrated camping meals. They are lightweight, portable, and easy to prepare. And, for the price (around fifty cents each), it's hard to beat ramen-style noodle meals. Add in a little beef jerky and you've got a very practical and nutritious Bug Out meal.

Ramen Noodle and Beef Jerky Meal Cooking Over Fire

Because these meal options are dehydrated, they need to be reconstituted with water. You will need a heat source, such as a fire or small pack stove, to prepare these meals. Depending on the circumstances, bringing water to a boil is not always the most convenient option. However, in a worst-case scenario, these meals are palatable if soaked in room-temperature water for a while.

Advantages:

- adequate in carbohydrates and calories—200–400 calories
- nice-quality meals

- light-weight and functional

Disadvantages:

- require boiling water (or time) to reconstitute
- not an open-and-eat meal

Bars

Energy bars, candy bars, and granola bars are the most practical eat-on-the-go mini-meals available. There are hundreds of different brands and varieties from which to choose. A handful of these would be more than sufficient to satisfy the basic energy needs of an average adult for three days. They wouldn't be a suitable long-term solution, but they are perfect for a short-term Bug Out. Bars are packed with carbohydrates and sugars, and they are compact and lightweight. These single-serving bars are easy to tuck into small spaces within a BOB, so they don't add bulk to the bag the way other food options can.

They are very affordable. But, most importantly, they require no preparation; just open and eat.

Advantages:

- no preparation
- adequate in carbohydrates and calories—200–400 calories
- lightweight and very packable
- huge variety to choose from
- prepackaged in single servings

There are no disadvantages to using energy bars and candy bars for 72-hour Bug Out purposes.

Honorable Mentions

There are five other items that are not necessarily category-specific but make good BOB food ration additions. These are:

- whole-grain rice
- instant oatmeal
- beef jerky
- soft tuna packets
- nuts

In addition to being lightweight and pack friendly, each of these items has an amazing shelf life if stored properly. Each has its own individual nutritional and functional benefits.

Other Great BOB Food Items: Rice, Instant Oatmeal, Beef Jerky, Tuna Packs, and Nuts

Whole grain rice needs to be prepared with water, but is high in carbohydrates and is also very filling, which will satisfy hunger pains.

Instant oatmeal is a very healthy stick-to-your-bones meal and can be quickly prepared with boiling water or soaked longer with room temperature water. For more food energy, select oatmeal with added raisins, nuts, and sugars.

Beef jerky can be eaten on the trail or can be reconstituted with other ingredients in water, such as ramen noodles. Tuna packs require no preparation and are very nutritious. Tuna also mixes very well with other ingredients; such as pastas. Don't get cans, choose the soft-foil packs, which are lighter and easier to pack.

Nuts are another high-carbohydrate, no-prep snack that be eaten on the go. You can repackage canned nuts in resealable bags to save weight and space.

BABY/INFANT FOOD ITEMS

Breastfeeding

For infants still on a liquid diet, breastfeeding is the obvious best option. It provides milk at the perfect temperature with no food preparation, heat source, or equipment. If breastfeeding is not an option, powdered formula is the next best thing.

Powdered Formula

Several manufacturers package powdered baby formula in watertight, easy-pour, single-serve packets that makes preparing formula very simple. Consider packing these packets with disposable bottle liners and nipples to eliminate the need for bulky containers and messy clean-up. Everything is light-weight, very packable, and easy to prepare. Your metal cup (mentioned later) can be used to heat water for mixing. Be sure to pack a bottle and collar.

Powdered Baby Formula and Disposable Bottle Inserts

Solid Foods

For infants on semi-solid baby food, you have three good options:

- Mash up your own food into the consistency of baby food.
- Pack baby food. Soft-foil packaged baby foods work great and have a long shelf life (a year or more).
- You can make your own dehydrated powder baby food mix by dehydrating vegetables and blending them into a powder consistency using a food processor or blender. Then, mix this powder with water for rehydrated soft baby food.

Soft Packaged Baby Food

Dehydrator

SPECIAL DIETARY NEEDS

While not detailed earlier in this chapter, food adjustments and substitutions must be considered for people with special dietary needs. These may include individuals with certain allergies, diabetic concerns, or cardiovascular conditions. The same dietary guidelines that you or your family follows due to certain medical conditions must be reflected in your BOB food supply.

BIANNUAL REVIEW

I recommend a biannual review of your BOB food items. Regardless of the expiration date, I replace all of the food items in my BOB twice each year. I do this at the same time I change out my winter and summer clothing items—November and May. This schedule ensures that the food in my BOB is always safe to eat. If you wait for the food items in your BOB to expire, then you are wasting them. Exchanging them before they expire allows you the opportunity to cook the older food items and practice your Bug Out food preparation methods. Coordinate your food review with your clothing review to save time.

FOOD PREPARATION

Regardless of how easy the food you pack is to prepare, it's a good idea to include a simple cooking kit in your BOB. Having this kit on hand gives you the option to prepare more complicated meals if necessary. Even if you are just boiling water to reconstitute dehydrated meals, having the necessary tools on hand is critical. It's better to have it and not need it than to need it and not have it.

BOB COOK KIT CONTENTS

Metal Cooking Pots

A metal pot can be a life-saving survival tool. There are virtually no viable natural substitutes for a simple, everyday metal cooking pot. We take them for granted in our daily lives. Without one, however, it can be extremely difficult to perform very simple cooking tasks such as boiling water. The ability to boil water is an absolute Bug Out necessity. Although not totally necessary, it's best to purchase a metal pot designed for camping. These pots usually have a folding or collapsible handle and can be found at any camping or backpacking retailer. Pots designed specifically for camping and backpacking can be very expensive. You can use a generic metal pot. Below are some guidelines:

- Size: one liter minimum. (Larger families should consider a two-liter pot or bigger to reduce multiple meal preparation sessions and conserve fuel.)
- A handle: this allows you to maneuver the pot while hot. You can use the pliers in your multi-tool (see chapter ten) as a makeshift handle.
- Non-stick finish: reduces messy clean-up.

Metal Pot Options

If you do not have the means to boil water in your BOB, then you are *not prepared*.

Meal Heating Over Esbit Cook Stove

Boiling is one way to purify water and it's the cooking method for most of your Bug Out meals that are not open-and-eat.

Even the vast majority of wild edible plants are best (and easiest) prepared in a pot. It is also most advantageous to prepare wild caught meat and fish as a stew. This allows you to consume every last bit of nutrition—all the oils, fats, and juices, which are lost when meat is cooked over an open flame. A small metal pot takes up very little room in a BOB because other items can be packed inside of it to maximize space.

Cooking Items Packed Inside of Metal Pot

I personally pack my meals and other cooking items inside and use the pot as my "cooking kit" container. When I'm ready to eat, I know exactly where to go!

Metal Cup

I use my small metal cup more than almost any other piece of gear while on extended stays in the wilderness. They have all the advantages of a metal pot and are perfect for smaller, individual servings. These cups are also very easy to clean. There are several styles of metal cups on the market. Instant oatmeal is a perfect metal-cup meal. Just boil your water in the cup and pour in the oats. Metal cups are also ideal for making hot cups of tea or coffee, which can help warm you up if you are bugging out in

cooler climates. A metal cup with measuring units can help eliminate guess work when preparing camp meals. Many of the inexpensive metal cups (like the one I use) do not have this feature. Luckily, most Bug Out meals are not an exact science.

Metal Cup Options

Choose a metal cup that fits snugly on the bottom of one of your water containers, as shown in the photo. This keeps your cup and water together and conserves valuable pack real estate. Based on my experience, I recommend either of the metal cup options in the photograph.

Nalgene Bottle with Glacier Bottle Cup From gsioutdoors.com

Canteen With Canteen Cup by Canteenshop.com

Utensils

When it comes to utensils, you can't go wrong with a combination spoon and fork, or spork. Don't grab a handful of cheap plastic sporks from your local fastfood restaurant. They won't hold up to the rigors of cooking in the field. Get one made from a heat-resistant material such as metal or polycarbonate. These are available at most outdoor retailers or online. To conserve weight and pack space, I recommend sharing utensils with small children and infants rather than packing extra sets. Your survival knife (discussed in detail in chapter ten) can double as your kitchen knife. The knife you pack will prove to be an invaluable food preparation tool.

Polycarbonate Spork, Titanium Spork

SURVIVAL QUICK TIP

If you are on a budget, a great substitute for a BOB metal cooking pot is a coffee can with a metal coat hanger handle.

Makeshift Coffee Can Cooking Pot

CONVENIENCE ITEMS

Can Opener

Even if you don't pack canned food items, I suggest including a small, lightweight, manual can opener. Having this tool on hand gives you a quick and easy way of opening canned food should the need arise. I suggest purchasing a military P-38 can opener from any Army/Navy surplus in your area. It will cost around fifty cents and is smaller than a normal house key. I keep one of these on my key ring as Every Day Carry (EDC).

P-38 Military Can Opener

Pot Scrubber

Keeping your cooking items clean is important for food safety and hygiene. Dirty cooking utensils in your BOB will contaminate the entire contents with food particles and food odor that may attract insects. The smell of food will also attract animals, especially at night, and these animals could damage your BOB trying to get to the food. Purchase a small, inexpensive scrubbing sponge from a grocery store for your BOB cook kit. Cut it in half to reduce weight and size (every ounce counts when you are carrying weight for extended periods). A general all-purpose soap can be used for washing (detailed in chapter nine). A pinecone is an excellent natural scrubber alternative.

Pine Cone Pot Scrubber

HEAT SOURCES

In order to boil water or prepare hot meals (with the exception of MREs that include water-activated chemical heating systems), you will need a heat source. Ultimately, you need a heating solution that is:

- lightweight
- easy to use
- compact
- efficient

When it comes to heat sources, you have several great lightweight options that are well suited for a BOB. I have listed the best three below.

Fire

Fire is one of your most important Bug Out survival resources. There is an entire chapter dedicated to fire later in the book. Fire is the oldest heat source known to man and is an excellent way to cook or heat foods and boil water. Fire is also very lightweight—weighing only as much as your ignition device (also discussed later). However, fire is not a turn-key cooking solution. You can't just pull it out of your pack and turn it on like other heating options. It takes practice and skill to build a fire. And building a fire isn't always the most convenient cooking heat source for a Bug Out. In damp conditions or in environments where there is very little fuel to burn, starting and maintaining a fire can be nearly impossible. Even in perfect conditions, starting and building a fire sufficient for boiling and cooking can be a challenge. Fire may also draw unwanted attention to your location. Sometimes, a less noticeable heat source is advantageous. Even still, the means to create fire should be at the top of your BOB heat source options.

Advantages:

- lightweight (mostly skill)
- very effective
- huge variety of fuel sources—from furniture to pinecones
- most affordable option

Disadvantages:

- requires practice and skill
- requires sufficient fuel that you must find on-location
- affected by environment and conditions

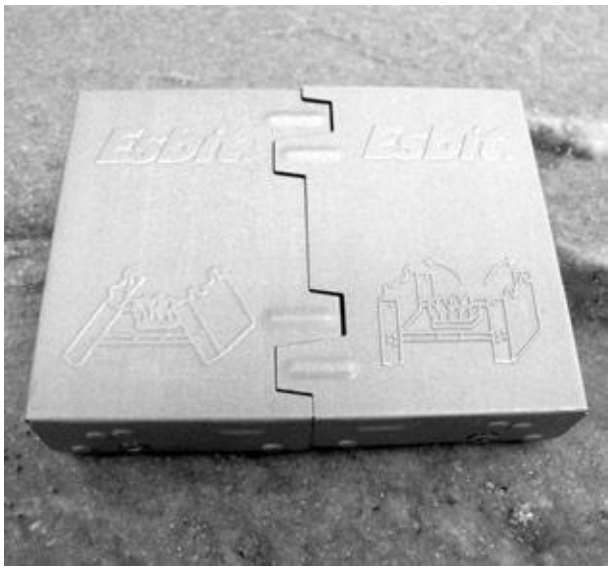
Because of the challenges and drawbacks that fire presents, you should also include one of the other heating sources from this list in your BOB.

Solid-Fuel-Tablet Stoves

The most popular solid-fuel-tablet stove is the Esbit stove. This compact folding-style stove is a German design that has been issued to military troops around the globe for decades. The Esbit-style stove folds down to about the size of a deck of cards and weighs only a few ounces. Several fuel tablets can be stored

in the folded stove.

Esbit Stove Opened



Esbit Stove Closed

It uses Esbit (or similar) solid fuel tablets that burn for eight to twenty minutes. The burning tablets can be blown out and relit for future use, and they are very easy to ignite. Solid-fuel-tablet stoves are perfect for small cook pots and one-cup meals. Depending on the conditions, these stoves can bring one pint of water to a boil in just a few minutes. Though not as efficient as solid fuel tablets, you can also burn small twigs and pinecones as fuel in this style stove.

I recently went on a four-day backpacking trip and used natural-found fuel such as twigs and pinecones in an Esbit stove frame to boil water and prepare eight full meals. Natural fuel isn't as convenient, but it is an excellent alternative should you run out of tablets.

Similar style stoves can be purchased in outdoor retail stores and Army/Navy surplus stores, and online. They all burn a version of solid fuel tablets with varying chemical compositions. All solid fuel tablets can pretty much be used interchangeably.

An Esbit stove with six fuel tablets costs around ten dollars. A package of twelve fuel tabs can be purchased from Campmor.com for only $5.99. In a recent effort to reduce weight in my own BOB, I substituted an Esbit stove for the canister stove (discussed next) that I had been using. If you decide to use a solid-fuel-tablet system, I recommend packing six fuel tablets per two adults. These small-scale systems are not the best solutions for large groups or families unless you pack multiple stoves and pots.

The Canteen Cook System by CanteenShop.com is another great option. Their uniquely designed metal stove fits directly over a standard-issue military canteen cup, which then slides over a standard-issue military canteen. This makes an excellent compact cooking set for any BOB.

Canteen Cook Set Assembled Together

Canteen Cook System Set Up to Cook With Solid Fuel Tablet

It's a water container, a metal cook cup, and a multi-fuel stove all in one package.

Advantages:

- lightweight and compact
- easy to use and ignite
- eight-minutes (or more) burn time per tablet
- stoves can use solid fuel tablets and natural-found fuel
- affordable

Disadvantages:

- not a great solution for large families

PRESSURIZED GAS STOVES

Pre-Pressurized Canister Stoves

Pre-pressurized canister stoves are available from several manufactures and are sold at a variety of price points. They are also easy-to-use and work well in almost any environment, except extreme cold. They do tend to depressurize in low temperatures, but a few minutes under your shirt will bring the pressure back up to a suitable performance level.

The fuel comes in small, self-sealing pressurized canisters that simply screw onto a stovetop. Screw on the stove, turn the knob to "on," light it, and you are ready to cook or boil water. Look at this stove as a miniature BBQ gas grill.

Depending on the size, some canisters can burn upwards of thirty minutes or more. Thus, a couple of canisters would be sufficient for a 72-hour Bug Out Bag. While these are very popular, very efficient and very easy to use, the canister stove is actually my last choice as a Bug Out heat source solution because it is so dependent on store-bought pressurized canisters. If you run out, game over.

MSR Superfly Mounted on Pressurized Fuel Canister

MSR WhisperLite Stove From ForgeSurvivalSupply.com

Multi-Fuel Liquid Gas Stove

With a multi-fuel liquid gas stove, a manual pump pressurizes liquid fuel inside the fuel bottle. The liquid fuel is then vaporized and burned from an external burner attached with a flexible pipe. The benefit of this stove is it can burn several different liquid fuels including white gas, gasoline, kerosene, and jet fuel. This

makes it a more flexible heating option than the pre-pressurized canisters because you can fill up the fuel bottle on your own if you have access to liquid fuels. This versatility makes this style stove a very practical BOB heating solution. Multi-fuel liquid gas stoves also work very well in all temperatures because you manually pump the pressure.

Advantages:

- easy to use
- effective for boiling water (1 liter boils in under 4 minutes)
- manual pump models can use a variety of liquid gas fuels
- better-suited for larger multi-person meals

Disadvantages:

- pricey: $40+ (without fuel)
- completely dependent on liquid fuel and/or fuel canisters
- fuel is heavy and bulky
- stove top can get damaged

SUMMARY

If you are packing dehydrated meals, also pack one additional heating option besides the ability to make fire. Don’t pack any food that requires more than hot water for preparation. Anything more complicated is a waste of time, resources, and energy.

COMMON DISASTER CONSIDERATIONS

If you live in an area prone to heat waves, droughts, or wild fires, prepare your fire/cooking area accordingly. Keep at least a 36" diameter of bare earth or noncombustible material around any open flames.

SURVIVAL QUICK TIP

On a tight budget? You can use a coffee can to make your own Bug Out hobo-style stove that works excellently with natural-gathered fuel, such as small sticks and pinecones. Simply remove one end of the can and make a 4"×4" cut out along the bottom edge. Then, drill five 1" holes around the bottom and five 1" holes around the top and five to ten 1" holes in the top to make a grilling/cooking area. Build the fire in the stove and feed it through the 4"×4" fuel cut out. You will be surprised at how well a simple stove like this works!

Bug Out Hobo-Style Stove

5 CLOTHING

HYPOTHERMIA is the number one killer in outdoors settings. By definition, hypothermia is when a person's core body temperature drops dangerously low. Hypothermia sets in with exposure to cold weather and is intensified by wind and water. Hypothermia leads to heart and respiratory failure and

eventually death. Low temperatures, wind, and moisture make a lethal combination for the ill-prepared.

The exact opposite, hyperthermia also ranks high as an outdoor killer. Hyperthermia occurs when someone's core body temperature rises dangerously high. When left untreated for even a short period of time, hyperthermia is debilitating and lethal.

Proper clothing is your first line of defense against overexposure to the elements—hot or cold. You're especially at risk of exposure when traveling by foot in the aftermath of a disaster. Consequently, clothing is a very important Bug Out supply category. It's not very exciting but it's important. Children and the elderly are even more susceptible to exposure, so pay special attention to ensure their clothing needs are met. This chapter includes several considerations and guidelines for Bug Out clothing.

WEATHER APPROPRIATE

If you live in northern Minnesota, your clothing needs are going to be vastly different from someone who lives in southern Florida. Because there are so many different weather regions all over the world, clothing is a somewhat personalized supply category. Common sense is required. I conduct a biannual review of my Bug Out Bag and change out my clothing items every November for the onset of winter and every May for the onset of spring and summer. If you live in an area with distinct seasons, I suggest you follow a similar clothing review/replacement schedule. You will not have time to think about what clothing items to take when a disaster strikes.

CLOTHING SPECIFICATIONS

When selecting Bug Out clothing, remember rule number one: Stay away from cotton. On the scale of available fabrics, cotton is probably the worst for survival. Cotton is like a sponge—it retains moisture and is slow to dry. It's also bulky.

In survival situations, you need fabrics that wick moisture away and that are fast drying. In cold temperatures, these are especially important qualities. The best survival fabrics are wool and wool blends, fleeces, nylons, and polyesters.

Following is a quick list of attributes your Bug Out wardrobe should possess:

- quick-drying
- moisture-wicking
- durable
- nonrestrictive
- loose-fitting
- muted colors (just in case you need to hide)

WOOL FABRIC PROS & CONS

Wool is a natural fiber fabric made primarily from sheep fur. It performs best in cold weather environments due to it's insulation properties.

Pros:

- maintains insulation properties even when damp or wet
- extremely durable and rugged
- non-flammable
- breathable
- naturally wicking material—absorbs moisture from skin

Cons:

- heavy
- bulky—does not compress well
- holds moisture
- takes a long time to dry

BUG OUT CLOTHING GUIDELINES

You should have two sets of clothing during a Bug Out—one on your body and one in your BOB. This includes a shirt, pants, socks (three extra) and underwear.

Extra Set: Shirt, Pants, Socks, Underwear

You should have only one each of any accessories, such as a jacket, gloves, and hat. An extra set of clothing is important because as clothing becomes soiled with body oils, grime, and dirt, the clothing loses its core insulation properties and also becomes less breathable. Both of these consequences drastically reduce fabric performance.

Excellent All-Season BOB Clothing Options

Light-Weight Long-Sleeve Shirt: Regardless of the season, full coverage protects from weather exposure and insects.

Mid-Weight Fleece: Fleece is light-weight and very packable and its good practice to carry one in any weather condition. Even in warm climates, a mid-weight fleece can be useful on chilly nights.

Moisture-Wicking Short Sleeve Undershirt: The word "wicking" refers to a fabric's ability to draw moisture away from your body to evaporate more quickly. Wicking fabrics are light-weight and fast drying. They help regulate your body temperature more efficiently.

Nonrestrictive Long Pants: No jeans allowed! Cotton-denim jeans are your worst enemy when wet. When selecting a fabric for pants, my favorites are light-weight wool blends or polyester-nylon blends.

Light-weight Crushable Brimmed Hat: This style hat can be a lifesaver in protecting your head and face from elements, such as sun, wind, and rain. A severe sunburn can turn into a serious medical crisis without proper care. I recently planned a 120-mile canoe trip through the state of Indiana. One of the guys had to cut the trip short because of an extreme blistering sunburn on his face. A "Boonie" style hat could have prevented this.

Boonie Style Jungle Hat

PROTECTING YOUR FEET

I can't stress enough how important it is to have proper foot protection. If you are Bugging Out on foot, your feet are your only means of transportation. If your feet give out and you can't walk, your bug out is over. You're stuck where you are. Take care of your feet and they will take care of you.

Wool Socks

To ensure my feet are properly taken care of, I pack three extra pairs of wool hiking socks. Don't pack socks made from any other material! Wool is naturally breathable. This allows for better airflow, which helps to prevent blisters. Prolonged hiking can really give your socks a workout. Wool excels in hard-use environments because of it's durability and resiliency. I prefer the brand SmartWool. They are a little expensive but worth every penny. Below are some specific features/benefits of SmartWool socks:

- made from top quality no-itch Merino wool
- blended with elastic and nylon which helps to hold shape even with extended wear and washings
- Merino wool properties regulate temperature and moisture, which helps to reduce foot odor

Wool Socks

When you have extra socks, you can switch them out regularly if your feet are damp or wet (whether it's sweat or outside moisture). You can dry used socks by keeping them close to your body or by hanging them off your pack. I keep an extra carabiner clipped to the outside of my BOB for just this purpose.

Wool Socks Hanging From Carabiner

Hiking Boots

Get a pair of durable, waterproof, ankle-high hiking boots. There are many different styles and brands that will work just fine. These don't need to be packed inside your BOB but should be kept very close to it as you will be wearing these boots in the event of a Bug Out. Break them in! Don't plan on wearing a new pair of hiking boots in a disaster Bug Out. You could potentially be walking for several days with a twenty- to thirty-pound backpack. Your BOB boots need to be broken in, tested, proven, and comfortable.

Ankle High Hiking Boots

COLD WEATHER ESSENTIALS

Bugging out in cold weather adds to the severity of any disaster. The 2011 Tohoku earthquake and tsunami in Japan forced thousands of people to Bug Out in freezing conditions. Many of these people fled into the mountains with only what they could carry.

Ideally, you will be wearing most of the items listed below in a cold weather Bug Out.

These are items that don't necessarily need to be kept in your BOB year-round.

The key to warmth is layering, not one bulky parka or snowsuit. Layering is incredibly effective because it creates dead air space between the layers of clothing. Heat stays trapped within that air space. Layering also lets you to control your body temperature by adding and shedding clothing items as necessary. I've spent days at a time in temperatures below 10°F with the following layering system.

Outer Shell

Your outermost layer is the outer shell. An outer shell is critical to any cold weather layering system. It has two primary functions:

- wind break
- rain protection

Outer Shell

Wind and rain can turn even moderately cold weather into a hypothermic situation. Protecting your core from these elements is critical and that's what your outer shell will do. It is a protection layer, not an insulating layer, so your shell should not be big and bulky. This shell could be a waterproof rain jacket. Be sure it has a hood. In most conditions, you will only need a shell for your upper body. In extreme conditions, outer shell pants would be a great idea. This depends on where you live.

Heavy Fleece (Rated 300-Weight Fleece) or Wool Sweater

Beneath the outer shell is a rated 300-weight fleece. This is an upper-body warmth layer that is especially important in low temperatures. The structure of fleece fabric allows for trapped air within the fibers. It has excellent insulation properties. A heavy wool sweater is also an excellent choice. Wool is hands down the best survival fabric on the planet. Wool's biggest drawback is that it can be bulky.

Heavy Fleece: Rated 300-Weight Fleece

Mid-weight Fleece (Rated 200-Weight Fleece)

Beneath the rated 300-weight fleece is a rated 200-weight fleece. This, too, is an upper-body warmth layer. A mid-weight fleece is the most popular weight. It can easily be used as an outer layer in moderate temperatures, but is very well suited for layering. This is the layer I shed most often while adventuring in cold weather environments. If you are starting to sweat, then you need to shed layers or reduce your physical exertion. Sweating moisture into your clothing can kill you. Cold temperatures and damp clothing is the perfect recipe for hypothermia.

Light-Weight Wicking Base Layer

The base layer is the layer of clothing against your skin. In cold temperatures, I wear both upper- and lower-body base layers. The function is to hold and trap warmth. Choose a base layer made from a wicking fabric designed to draw moisture away from your body. It should be breathable, stretchy, and very comfortable. *No itchy base layers allowed*. For this reason, wool is a not a recommended base layer fabric. These garments should also be form fitting—not loose and baggy.

COLD WEATHER ACCESSORIES

Wool or Fleece Hat

Up to 30 percent of your body heat can be lost through your head. Warm head protection is critical. In extreme conditions, a balaclava is an excellent alternative that provides face and neck protection.

Balaclava Face Mask

Cold Weather Gloves

Don't risk frostbite to your extremities. A pair of cold-weather gloves should be in your pack or on your person if bugging out during the winter season. In a survival situation, the ability to use your fingers and hands is imperative. Almost every survival function requires good hand dexterity—using a knife, lighting a fire, tying knots, preparing food, administering first aid, etc. Nothing will cripple your hands like cold weather—*pack gloves!* The pair I pack is a very simple set of 100 percent wool gloves I bought at an Army/Navy surplus store for $5.99.

RAIN PONCHO

A light-weight military-style poncho will prove to be one of your most valuable Bug Out items. I would probably put this on my top ten list of Bug Out items. While there are many different makes and models of ponchos, the most popular are constructed from sealed rip-stop nylon. This makes them very light-weight and crushable—perfect for a BOB. They come with a drawstring hood and also with metal grommets in key points around the edge. The grommets add versatility and multifunctional uses. Using these grommets, some cordage, and a little creativity, you can use the military poncho as a quick and effective survival shelter.

Rain Poncho

MULTI-USE ITEM: RAIN PONCHO

★★★★★ **FIVE-STAR RATING**

The military-style rain poncho can also be used as an emergency survival shelter. Here are three different configurations that I've used:

Poncho Tent

Poncho Ridge Line Lean-To

Poncho Diagonal Lean-To

DURABLE WORK GLOVES

From shelter building to collecting firewood, there will never be a shortage of manual chores to complete when the grid goes down. Your hands are one of your most valuable tools in disaster survival scenarios—protect them. Include a durable pair of leather work gloves in your BOB. You can pick up a pair at any hardware store for just a few bucks. You will not be able to purchase a new pair of hands after yours are blistered and shredded from hard labor.

SHEMAGH

Pronounced *schmahhg*, the shemagh is a large square scarf worn primarily in the desert regions of the world to protect one's face from sun, wind, and sand. It's an item widely used by American and British troops serving in the Middle East. The shemagh is much more than just a head and face wrap. It's probably the most multifunctional survival item I have ever owned with literally hundreds of uses. It makes an excellent BOB addition. It can be purchased at many Army/Navy surplus stores and we also carry several different colorways at www.willowhavenoutdoor.com.

MULTI-USE ITEM: SHEMAGH

★★★★★ **FIVE-STAR RATING**

This large square scarf is similar to a bandana but much larger—typically around 40"×40". It can be used for hundreds of different survival applications. A few are listed below:

Cordage for Tripod

Face and Head Protection

First Aid Arm Sling

SHEMAGH SLING PACK

Through a series of folds and rolls, a shemagh can also function as a makeshift sling- pack to tote additional supplies.

Makeshift Sling Pack: Step 1

Makeshift Sling Pack: Step 2

Makeshift Sling Pack: Step 3

SUMMARY

Thoughtful preparation and planning is absolutely necessary if you expect to survive the extreme elements. Use common sense when choosing clothing for your immediate environment. If you have distinct seasons where you live, be sure to change out the clothing in your BOB at least once a year.

COMMON DISASTER CONSIDERATIONS

If you live in an area prone to winter blizzards or snow storms consider packing snow shoes. Heavy snowfall can be nearly impossible to travel in by foot.

6 SHELTER & BEDDING

THE BEST SHELTER SYSTEM for a Bug Out Bag is a subject heavily debated within the survival community. Everyone has his or her own opinion and favorite pick. There are many different options ranging from makeshift tarp tents to hammocks.

A Bug Out shelter needs to be light-weight and packable. These are your two primary concerns. It also needs to be tested and proven in extreme conditions. Protection from rain, wind, sun, and snow is essential. The shelter also needs to be easy and quick to set up—even in low-light conditions. And the shelter should not be dependent on certain environmental crutches. Hammocks, for example, are dependent on an environmental crutch. They requires two solid anchor points—either trees or other fixed objects. For this reason, hammocks don't pass my BOB shelter criteria even though a hammock is my preferred way to sleep when I venture into the woods.

Hammock

As I said, shelter is a heavily debated topic. This chapter will cover what I believe are the two best options for BOB shelters based on my field experiences.

BOB SHELTER OPTION 1: TARP SHELTER

Tarps are incredible survival resources that can be deployed and set in a variety of shelter configurations. Several manufacturers offer tarps in many different sizes and materials. Some tarps are better suited for a BOB than others.

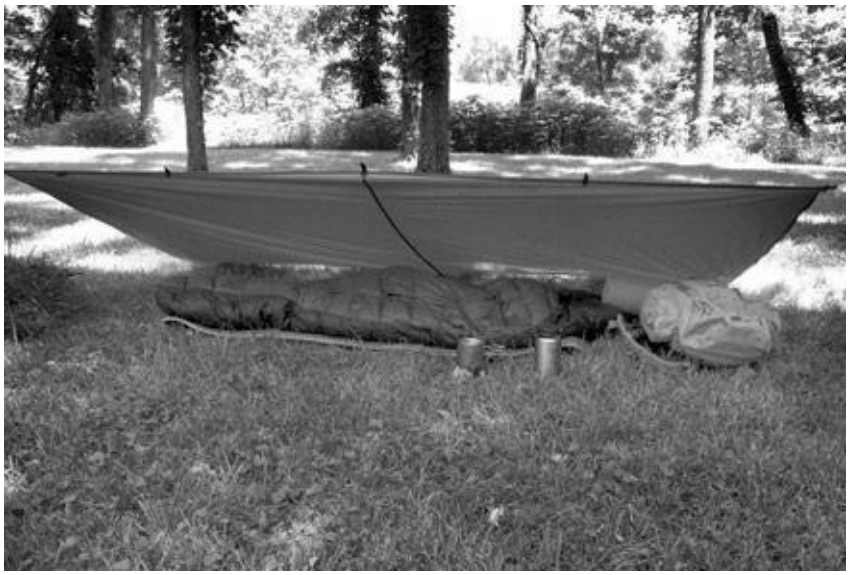
Don't buy the thick, blue polypropylene woven tarps that you see at hardware stores and big-box retailers. Though they are inexpensive, price is about the only advantage these have over other options. This type of tarp is heavy, bulky, and loud.

If you choose a tarp shelter, you need to purchase a light-weight nylon tarp specifically designed for camping and backpacking. These are much better suited for a BOB. They are thin, water repellent, durable and quiet to use. An 8'×10' tarp is sufficient to build a one- or two-man shelter. For two to four people, select a larger size, 10'×12'.

Many experienced survivalists and outdoor enthusiasts prefer a tarp shelter because of its simplicity. Though simple, a tarp shelter can be configured in a variety of sets. And, with practice and experience, tarp shelters can offer just as much protection as any store-bought tent. Following are four very popular tarp shelter configurations. They are anchored using an adequate supply of cordage (discussed later in chapter fourteen).

Lean-To Tarp Set

The lean-to tarp shelter configuration is the most basic of all shelter designs. This would be considered a three-season design and would not be ideal in extreme cold environments. It simply puts a roof over your head to protect against rain, dew, snow, and wind. This tarp shelter works best when set so that the slanted roof *faces* the wind. If you can determine a primary wind direction, setting the shelter in this way drastically reduces exposure and also helps prevent the wind from catching your shelter like a sail. It also prevents the wind from blowing rain or snow in through the open faces. From an efficiency perspective, this design works as a very effective heat shield. The heat from a fire built in front of the shelter will be reflected down on the sleeping area, maximizing warmth. To further reduce exposure, this configuration can also be set against a large object such as a rock, earth mound, or fallen tree.



Basic Tarp Lean-To

Ridge-Line Lean-To Tarp Set

This set is very similar to the basic lean-to but with the addition of a ridge-line, which allows you to angle the front face and further reduce exposure. This ridge-line can be a pole lashed between two anchor

points or a piece of cordage pulled taught. The same considerations apply to this configuration as with the basic lean-to.

Ridge Line Tarp Lean-To

You can also configure a center ridge-line for an overhead canopy design. This set is best in warmer climates because it lacks protection from any of the sides. This is also a great way to shelter a hammock.

Overhead Center Ridge-Line Tarp Canopy

Tarp Tent Set

This set is best suited for windy and rainy conditions. It is very similar to the overhead center ridge-line tarp canopy except it's directly on the ground. Because of the design it has limited "inside" space. It's typically pretty tight sleeping quarters, which can be an advantage in cold weather environments when retaining body heat is critical to warmth.

Tarp Tent With Center Ridge-Line

Diagonal Tarp Set

Anchoring the corner of a tarp to a tree or pole allows you to stake the other three corners to the ground and create a diagonal tarp set. This creates a very well protected shelter area. A guy-line pulling on the center back of the tarp helps create more inside head room. Anchoring to a large tree can also help reduce exposure on the front open side.

Diagonal Tarp Set

TARP SHELTER INSIGHTS

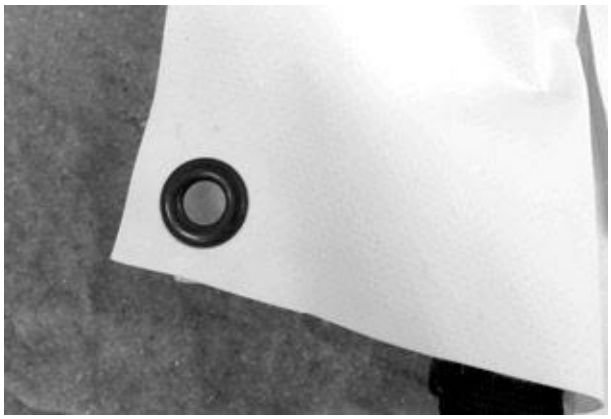
Drawbacks

The drawbacks of choosing a tarp as your BOB shelter are threefold:

1. Constructing an effective tarp shelter requires experience and skill. If poorly constructed, a tarp shelter can be a disaster in and of itself. To properly execute a tarp shelter, you must have knot-tying skills and practice setting up the shelter.
2. Many tarp tent configurations have at least one open wall, which can allow mosquitoes and other biting insects inside to feast while you sleep. To counteract this, see *insect repellent* in chapter eight.
3. Because tarp shelters are single-walled shelters and have at least one exposed face, they are best for three-season Bug Outs. Using this style of shelter in extreme cold can present a serious risk without a nice big fire or sufficient bedding.

Tie-Downs and Cordage

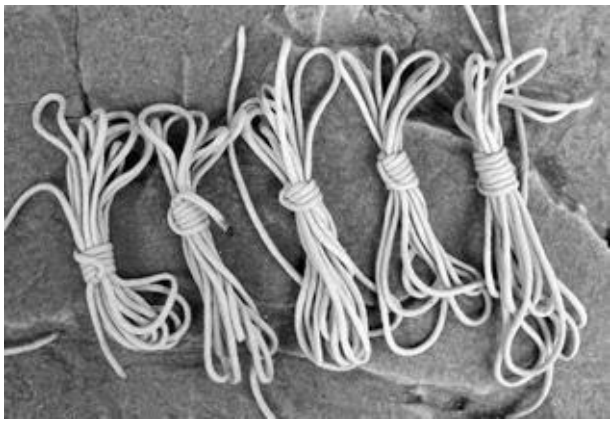
If you like the idea of a tarp shelter, make sure the tarp you purchase has either metal grommets around the edges or reinforced tie-downs.



Grommeted Corner

Reinforced Tie-Downs

Having adequate attachment points is critical in using a tarp as a shelter. Even more important is cordage. I suggest keep a minimum of fifty feet in your BOB. The best cordage for the job is 550 Parachute cord. I detail why in chapter fourteen.



50' Paracord

Tarp Shelter Summary

Regardless of whether or not you feel a tarp is the right shelter match for your BOB, you should consider packing a backpacking tarp anyway. They are very light-weight and fold up very small. The weight-risk versus the survival-reward makes the tarp an excellent BOB pack item.

THE MANY USES OF A TARP

When you are limited in the amount of resources you can pack, the ability to use an item for multiple functions is a value-add to any piece of gear. A light-weight, waterproof tarp is a multifunctional survival item that can be used in a variety of ways in addition to shelter. A tarp can be a very valuable piece in your BOB. Following are just a few ways a tarp can be used to provide survival needs in a Bug Out crisis.

Rain Catch

The great advantage of rainwater is that it doesn't need to be purified. It can be collected and consumed with no processing. Rainwater can also be used for hygiene needs. A tarp can be used to funnel rainwater into a hole in the ground that is lined with the bottom of the tarp. The tarp is the funnel as well as the container. Or, it can direct water into another container, as shown.

Tarp Configured as a Rain Catch

Ground Cover

Protecting your body from the cold or wet earth is equally important as protection from the elements. You can have the best shelter in the world, but the shelter won't matter if you are sleeping on wet ground. Tarps make excellent waterproof ground covers. They don't offer insulation, but they are a moisture barrier.

Tarp Ground Cover

Emergency Stretcher

In the event of a demobilizing condition or injury, a tarp and two sturdy poles can make a functional emergency stretcher. Simply roll the poles up three or four times from the edge of the tarp on each side and it will not come loose when someone is being carried.

Emergency First Aid Stretcher

Sleeping Hammock

In extremely damp, flooded, or swampy conditions, it might not be possible to sleep on the ground. In this situation, you would typically construct a platform off the ground to elevate sleeping quarters away from the water. Another option is to use a tarp as a makeshift sleeping hammock. Roll a golf-ball-sized rock or stick in opposite corners for a tie-down anchor point and secure the tarp between two trees. I've slept in a makeshift hammock this way before in pouring rain. I was able to throw the other corners over me for protection. It was like a tarp hammock cocoon. Some water did get in at my head and feet, but it was better than any of my alternative options at the time.

Makeshift Tarp Hammock

SURVIVAL QUICK TIP

Through a series of folds and rolls, a tarp can also function as a makeshift sling-pack to tote additional supplies.

Makeshift Sling Pack Using a Tarp: Step 1

Makeshift Sling Pack Using a Tarp: Step 2

Makeshift Sling Pack Using a Tarp: Step 3

BOB SHELTER OPTION 2: TENT SHELTER

Almost every modern tent manufacturer has models designed specifically for light-weight backpacking. These tents are the perfect shelter solution for any BOB. Backpacking tents range in size from single-person to multi-person for families and are constructed from light-weight, waterproof fabrics and poles. A tent can feel like a home away from home. When the zipper closes you are in your own private space and feel less vulnerable and more protected than in a tarp shelter. Tent shelters have many advantages:

- require little skill to set up
- easy to set up even in the dark
- very practical four-season shelter
- more privacy
- keeps out insects and critters
- built in ground cover
- more practical for families

Light-weight Backpacking Two-Person Tent

Choosing a BOB tent shelter will ultimately come down to decisions that involve what I call the *backpacker's trilogy*:

- price
- weight
- footprint (space that it takes up in your pack)

Your trilogy equation and final valuation will be different from mine and any other BOB prepper out there. I can only offer guidelines to choosing a BOB tent shelter. It's up to you to determine how much you are willing to spend, how much weight you want to carry and how much pack space you want to devote to your tent.

Tent Shelter Guidelines

- Total tent weight should not exceed two pounds for each adult in your Bug Out team. If you have two adults, you can have a four-pound tent and evenly split up the tent equipment between your two BOBs.

- Choose a three-season tent. This is the most versatile tent option.
- No bells and whistles. Don't get sucked in by fancy (and heavy) add-ons, such as vestibules, pockets, multiple entrances, gear lofts, etc. You just need a shelter. This is not for a family vacation and you aren't competing with your neighbors.
- If your tent comes with steel stakes, replace them with lighter-weight aluminum alternatives.
- If the tent canopy (the top) has mesh panels, make sure a *rain fly* is also included.
- Bathtub bottom tents are better. The bottoms of tents are made of thicker waterproof material. In a bathtub bottom tent, the bottom material extends three to five inches up the tent walls, an added protection against groundwater and rain.
- The lightest tent poles are aluminum.
- Choose a free-standing tent. This style is not dependent on trees or anchor points. They're also very easy to move.

Mesh Panels

Bathtub Bottom

PONCHO SHELTER

As mentioned and illustrated in chapter five, a military-style poncho with grommets can be used as a makeshift survival shelter. It can also be used as a ground cover coupled with a tarp shelter design. Ponchos make excellent waterproof moisture barriers. Again, 550 paracord is my cordage of choice for erecting poncho shelters.

BUG OUT BEDDING

The final layer of defense in the shelter category is bedding. There are two components to an effective multi-season Bug Out bedding system: a sleeping bag and a ground pad.

BUG OUT SLEEPING BAG

A Bug Out sleeping bag is no different from sleeping bags designed for light-weight backpackers. Choosing a sleeping bag is a numbers game. You are trying to find the best offering in all of the following categories:

Degree Rating

A sleeping bag's degree rating denotes the lowest temperature at which the bag is generally comfortable. For example, a 30-degree rated bag should be comfortable for most people down to around 30˚F. You need to choose a degree rating that makes sense in your environment. A practical year-round rating is 30–40 degrees. While not totally necessary in warm climates, it still gives you security in cold weather. Even in 10-degree temperatures, a 30-degree bag will keep you alive. It won't be fun, but you'll live. Remember, this isn't car camping—it's disaster survival. Choose a mummy-style bag with a built-in hood. This will help to trap and retain body heat.

Two Sleeping Bags

Mummy Hood

Sleeping bags are filled with one of two insulation materials: down feathers or synthetic fibers. Natural down is lighter-weight and more compressible but is more expensive. Synthetic insulation is not as compressible but it isn't so hard on the wallet either. Their performance is very similar. Neither perform too well when wet. I prefer down-filled sleeping bags.

Weight

Every ounce counts when trying to keep the overall weight of your BOB manageable. You want the lightest-weight sleeping bag at the lowest degree rating. Try to keep your sleeping bag weight in the 2–3 pound range. Any heavier and your sleeping bag will be too bulky.

Size

If your sleeping bag does not come in a compression sack, buy one. Compression sacks are designed to crush and compress bags into small packages. Size is critical. Ideally, your sleeping bag will be about the size of a cantaloupe.

Sleeping Bag in Compression Sack

Price

Not only do you want the best bag but you want it at the best price possible. Your sleeping bag will be one of the most expensive items in your BOB if purchased new. Don’t sacrifice quality and performance for price. A good sleeping bag is an investment that should last a lifetime. You can and will use this for years to come. Try eBay or craigslist for used BOB sleeping bags. I have purchased many slightly used camping and backpacking items on these sites for a fraction of their original cost.

GROUND SLEEPING PAD

Sleeping on the ground can compromise the performance of even the best sleeping bag and shelter system. A ground pad reduces conductive heat loss between you and the earth. Besides insulation, a sleeping pad provides cushion for added comfort. Sufficient rest is critical in any survival situation. For many, lack of rest can have dangerous mental and physical consequences. For example, if I am sleep deprived, I get nauseous. Clouded mental processing can lead to poor decisions. Sleeping pads work by trapping dead air space between your body and the ground. This dead air space acts as an insulation barrier. If you do not have a ground cover such as a tarp, a sleeping pad can also function as a moisture barrier. Ground pads come in two main styles.

Air-Filled Ground Pad

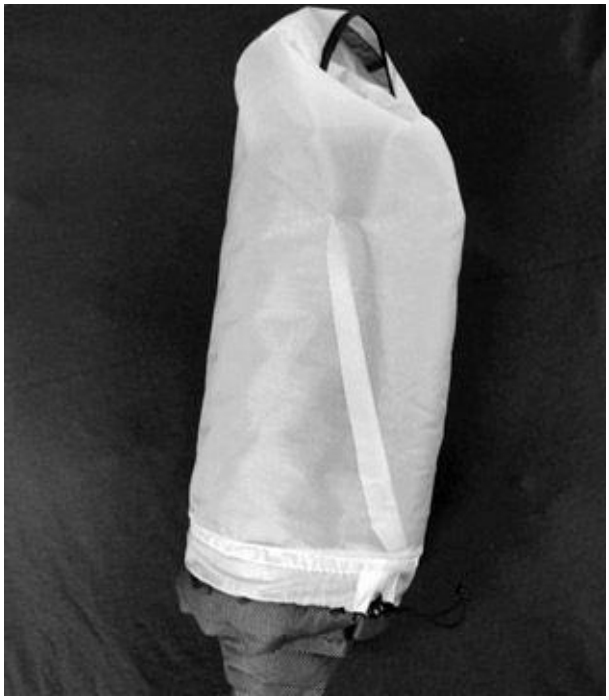
Air-filled grounds pads are basically blown up before use and deflated when ready to pack. An air-filled pad provides a very soft sleeping surface and works as an excellent cold and moisture barrier. Many air-filled ground pads are extremely compact when deflated, as can be seen in the photo on this page. However, you pay for the benefits of being light-weight and compact—they aren't cheap. If punctured, these pads loose almost 100 percent of their insulation properties. Each brand of these ground pads also has a small repair kit available for purchase. If the possibility of puncturing concerns you, one of these small and light-weight kits can easily be tucked into your BOB.

Advantages:

- very comfortable
- very compact

Disadvantages:

- expensive for a BOB
- no insulation value if punctured



Therm-a-Rest Sleeping Pad in Stuff Sack

Therm-a-Rest Sleeping Pad Inflated

Foam Pads

Foam pads are very light-weight but bulky in size. They are inexpensive and durable. In addition, these ground pads are molded from solid closed-cell waterproof foam—making them an ideal moisture barrier from the wet or damp ground. I use one of these as my BOB sleeping pad. There are many models available from different manufacturers but each design is very similar.

Foam Pads Rolled

Foam Pad Packed and Ready to Go

Puncture holes will not affect their performance. Because of its size, this style pad is best mounted to the outside of a BOB.

Advantages:

- very durable—almost indestructible
- affordable

Disadvantages:

- bulky

MULTI-USE ITEM: FOAM SLEEPING PAD

★★★ THREE-STAR RATING

Foam pads are wonderful multi-use products. In addition to being a sleeping pad, they can be used for a number of survival functions.

Foam Pad Life Preserver

Foam Pad Camp Chair/Recliner

SUMMARY

Shelter is near the top of the list when it comes to basic human survival needs. In extreme conditions, it is your number one priority. Within a safe, protected area, shelter provides both physical and mental security. Disasters can devastate a person's mental and emotional sense of normality, and a simple shelter can be a huge morale boost in a time of chaos and disorder. Regardless of which shelter and bedding system you and your family choose, it's extremely important to test it out and make sure everything functions as you intend—inside and outside of your BOB. If it doesn't, rethink your choice.

COMMON DISASTER CONSIDERATIONS

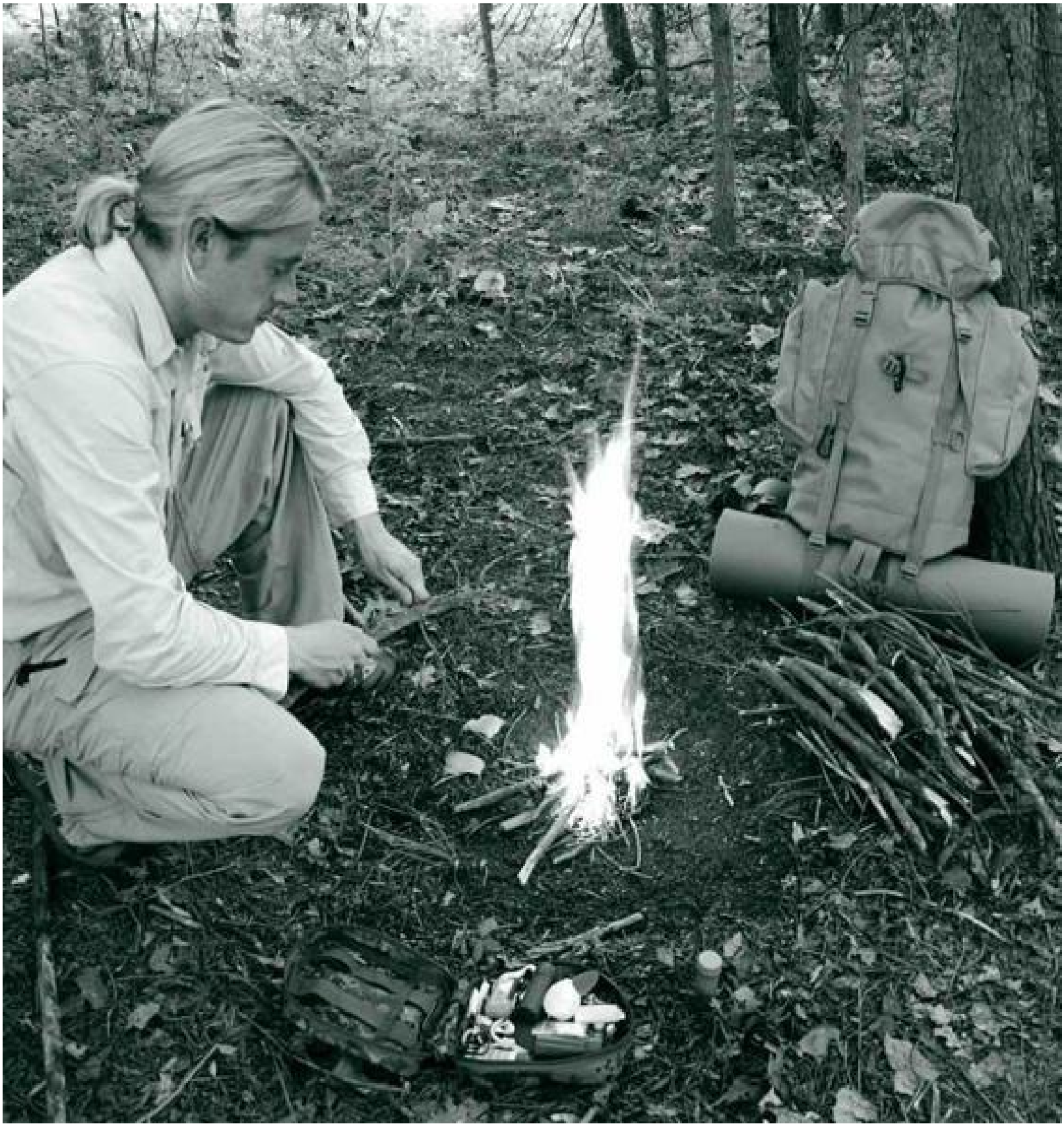
If you live in an area prone to heavy snowfall or winter storms, a tent shelter will be preferred over a tarp shelter because of the added protection.

SURVIVAL QUICK TIP

If you don't have access to a store-bought sleeping pad, an excellent natural alternative is a bed of pine boughs. To create this bed, pile eight to twelve inches of pine boughs on the ground in the rough shape of your body. This creates a surprisingly comfortable sleeping pad that helps to insulate your body and bedding from the cold ground. Most evergreen trees such as juniper, cedar, and pine work great.

Natural Tree Bough Sleeping Pad

7 FIRE



THE ABILITY TO CREATE FIRE is quite possibly the most important survival skill on earth. Fire has been the core of survival since the beginning of time. It allows a survivalist to accomplish a huge variety of life-sustaining tasks. Bugging out can present a family or an individual with a myriad of ways to die. Below are several ways you can use fire to help stay alive.

Heat

In certain situations, fire may be your only way to stave off severe cold and control your body's core temperature. The heat from a fire not only provides warmth, but it can be used to dry clothes, shoes, and gear. Wet clothes and cold temperature is a recipe for death. As I mentioned earlier, hypothermia is the number one outdoor killer. Fire is the best way to battle hypothermic conditions.

Drying Out Wet Boots

Cooking/Boiling

Fire can be used to cook and heat food. It is also necessary to boil and purify drinking water.

Cooking Food With Fire

Signaling

Creating smoke signals by day and signal fires by night are two effective and proven methods of signaling for rescue. Both have saved the lives of countless lost survivors.

Morale

In a disaster, 90 percent of survival is dependent on a person's mentality. As I tell all of my students, the *will* to survive is greater than the *skill* to survive. Fire can go a long way in boosting one's morale in a disaster scenario. The warmth and light a fire provides is calming, uplifting, and empowering. Building a fire gives you a sense of control and accomplishment in a very defeating environment. Staying positive is absolutely critical to surviving a situation where the odds are stacked against you. Fire can help sustain a positive mindset.

YOUR FIRE KIT

Kit simply means a smaller compartmentalized container within your BOB. As I mentioned earlier in the book, keeping category items compartmentalized in their own kits makes the items easier and faster to find when you need them. Fire items should be stored in their own waterproof kit to protect them from water and moisture. You can use a vast number of containers for your fire kit. Several practical examples are:

- sealed aluminum containers with o-ring
- watertight bags, boxes, and tubes
- non-watertight containers with contents packed in resealable bags

Sample Fire Kit

Pelican Case and Resealable Bags

Regardless of the container style and size you choose, practice identifying this kit inside of your BOB in complete darkness or while blindfolded. You could very well need to find and use this kit in low-light circumstances. Again, disasters don't present ideal environments. Prepare for the worst and anything better is a bonus.

Because fire is such an important survival resource, I encourage redundancy when it comes to packing fire-making tools and supplies in your BOB. Your BOB fire kit should contain two main fire-making components:

1. ignition sources
2. fire-starting tinder

IGNITION SOURCES

Pack a minimum of three ignition sources. I can justify this redundancy because the cost and weight of each one is very minimal.

Ignition Source 1: Cigarette Lighter

Lighters are cheap, lightweight, reliable, easy-to-use, long-lasting and extremely effective. I carry one lighter in my waterproof fire kit and two more in separate spots on my BOB. Lighters do have certain limitations. They don't function well in extreme cold or when wet.

Ignition Source 2: Waterproof Strike Anywhere Matches

Regular matches are just too vulnerable to moisture. Be sure to pack a dozen or so waterproof strike anywhere matches stored in a sealed match case. You can purchase both in the camping section of any outdoor store or even a big-box discount retail store.

Strike Anywhere Matches and Waterproof Match Container

SURVIVAL QUICK TIP

Make strike anywhere matches waterproof by dipping them in fingernail polish. Dip twice for a waterproof seal. Dip a third time for peace of mind.

Waterproofing Matches in Fingernail Polish

Ignition Source 3: Fire Steel Striking Rod

The technical name for this product is a ferrocerium rod. Many people also use the name ferro rod or metal match. A fire steel can generate sparks at over 2,000˚F when scraped with a metal striker or the back of your survival knife. There are many different styles of fire steel sparkers. Generally, they all work using the same principle.

Several Ferrocerium Rods Including Kodiak Firestarter

Striking Sparks With Knife

A fire steel can generate sparks even in damp and wet conditions. An average fire steel can be used thousands of times and is an excellent survival ignition source. Striking these sparks into prepared fire tinder is a very effective fire-starting technique and one that I use almost exclusively while in the bush. The fire steel I carry is one made by Kodiak Firestarters. They manufacture a fire steel that is mounted to a small bar of magnesium. Of course, you can use the fire steel alone to ignite dry tinder in reasonable conditions just as you would any ferro rod. However, if your conditions or fire-starting tinder aren't ideal, you can scrape off shavings from the built-in magnesium bar into a small pile with your knife or the included striker tool and use these shavings as tinder. Magnesium shavings ignite with just a spark and burn at over 5,000˚F. It's hard not to get a fire going with a small burning pile of metal! These integrated fire steels are a little pricier but the added bonus of built-in magnesium fire-starting material is worth the extra few dollars and ounces. This is an ignition source and fire-starting tinder in one compact package.

FIRE-STARTING TINDER

The ignition source is only half of the fire-starting equation. In a Bug Out scenario, I want *guaranteed* fire. This means I need a guaranteed ignition source and some fire-starting tinder that is guaranteed to light when I hit it with one of my ignition devices. The only *guaranteed* fire tinder is the tinder that you pack with you. Although natural fire-starting materials exist, certain weather conditions can make finding dry, flammable fire tinder very difficult. Below are several great BOB fire tinder options. I recommend you pack at least two of these.

WetFire Fire-Starting Tinder

WetFire is a brand name, store-bought fire tinder available at most outdoor retailers. It is undeniably the best fire starter available. It will light with just a spark in almost any weather condition. It will even light and burn while floating in water.

Package of WetFire

WetFire Burning in Water

It's a remarkable product and makes a very reliable BOB fire-starting pack item. WetFire tablets will burn approximately two to three minutes and come individually wrapped in a waterproof package. With

this burn time, you can even burn a WetFire tablet as the fuel source in an Esbit stove mentioned in chapter four, making these tablets a good multi-use item.

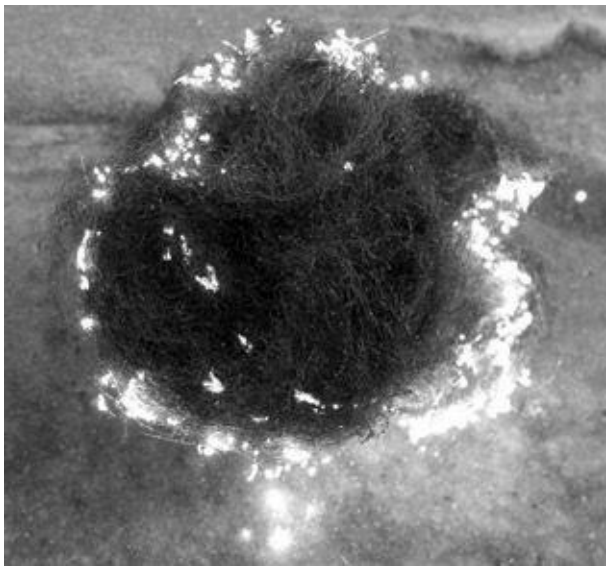
WetFire Cube in Esbit Stove

A tablet of WetFire also fits into the handle of the StrikeForce Fire Starter. This is an excellent tool that includes a ferro rod and striker built into a durable plastic housing with a compartment that fits one cube of WetFire. This makes for a very compact all-inclusive, fire-starting package.

StrikeForce Fire Starter From ForgeSurvivalSupply.com

Steel Wool

Common steel wool is one of the best fire-starting materials available. The smallest spark will ignite the thin metal fibers into a smoldering ember that burns at a very high temperature. The smoldering steel wool can then be used to ignite combustible tinder, such as dried grass, leaves, paper, etc. Steel wool is readily available at any hardware and grocery store. It is also very cheap.



Steel Wool Smoldering

Like WetFire tinder, steel wool burns even when damp. Even if it's soaking wet, you can shake it out and ignite it within a few seconds. You can pack a good amount of steel wool in a very small container and it doesn't have an expiration date. Steel wool will ignite and smolder even in freezing conditions.

PET Balls

One of best fire starters I've ever used can be made at home in just a few minutes and costs virtually nothing. This homemade tinder only requires two ingredients: petroleum jelly and either cotton balls or dryer lint. (PET is short for petroleum—hence the name PET Balls.)

These are very easy to make. Simply saturate a cotton ball or comparable-sized chunk of dryer lint with a quarter-sized scoop of petroleum jelly.

Then, mix it in thoroughly so that all of the fibers are coated.

Lastly, roll each chunk into little balls and store them in a watertight container or resealable bag.

The petroleum jelly acts as a fire extender. It becomes a fuel source and turns the cotton/lint into a makeshift wick that will light with just a spark and then burn for several minutes. Without the petroleum jelly, the burn time would be just a few seconds—drastically reducing your window of opportunity to get a healthy fire going. In addition, the petroleum jelly helps to waterproof the cotton/lint as well. Petroleum jelly can also be mixed with natural tinder such as dried grass, cattail down, or milkweed down with similar success.

Dried Grass, Cattail Down, and Milkweed Down

For this reason, I always travel with a tube of Carmex lip balm, a petroleum-jelly-based product that can easily be used as a fire extender in an emergency.

To use a PET Ball, pull it apart to separate and expose the fine fibers. This increases surface area and facilitates airflow. Then, simply strike it with a spark from a fire steel or light it with a match or lighter and get ready to place small kindling on the flame.

BUILDING A FIRE

Igniting flammable fire tinder is one thing; building a fire and keeping it burning is a practiced skill in and of itself. Allow me to stray from "building your Bug Out Bag" for a few minutes to outline a simple five-step system for building a successful fire. There are many different ways to build a fire. This is the one I use most often.

Step 1: Fire Platform

A good fire platform is a solid foundation for any successful fire—especially in damp, snowy, or wet environments. The purpose of a fire platform is to keep your dry tinder kindling and initial flame off of the ground. Even the slightest bit of moisture can affect your fire-starting material's willingness to burn. Your platform can be constructed from a huge variety of materials—natural or man-made. I've used everything from flat rocks to a metal trash can lid. Three fire platform ideas are:

- flat rock
- tree bark
- wood branch

Flat Rock Fire Platform

Tree Bark Fire Platform

Wood Branch Fire Platform

Step 2: Tinder Bundle and Ignition

It is very important to have the next three phases of the fire building process prepared in *advance* before lighting your fire tinder. Time will be working against you and your only defense is proper preparation—especially when working with quick-burning tinder material.

When your platform is ready and you have all the sticks ready, ignite your fire tinder. In the photo for step 3 I'm using a cube of WetFire as tinder. Your fire kindling materials need to be as dry as possible. The material should snap and crack when you break them, not bend.

Step 3: Toothpick Tepee

Once your tinder bundle is burning, pile toothpick-sized twigs and splinters of wood in a tepee fashion around the burning tinder. Give these small twigs and splinters enough time to start burning. Fire needs oxygen to burn. It may be helpful to fan and blow the small flame to help intensify the heat.

Step 3: Toothpick Tepee

Step 4: Q-Tip Tepee

Your next layer of fuel should be slightly larger than the first—about the size of Q-Tips. Stack these around the small fire in the same tepee arrangement. Allow them time to burn. Fan and blow as necessary.

Step 4: Q-Tip Tepee

Step 5: Pencil Tepee

As with before, your next layer of fuel should be larger—about the diameter of a pencil. They should also be stacked like a tepee around the flame. Carving these into "feather sticks" will drastically improve your rate of success. To create a feather stick, carve back thin strips from the stick. This creates more surface area to burn on the stick.

At this point, your fire should be steadily burning on it's own. You can continue to stack on larger limbs and branches.

Step 5: Pencil Tepee

Pencil Tepee With Feather Sticks

SUMMARY

Your Bug Out fire kit is one of the most important additions to your BOB. Spend some time in your backyard using your fire kit to make fire in a variety of weather conditions. If you don’t know how to use the kit, it will be worthless in an emergency situation.

COMMON DISASTER CONSIDERATIONS

If you live in an area prone to heat waves, droughts, or wild fires keep at least 36" diameter of bare earth or noncombustible material around any open flames. Working with fire in areas prone to these natural disasters can be extremely dangerous. Prepare your fire/cooking area accordingly.

8 FIRST AID

IN A DISASTER EMERGENCY, you are almost guaranteed to be confronted with some kind of first aid need. From bee stings to broken bones and everything in between, anything is possible. Combine the disaster environment with fatigue, panic, hunger, fear, and disorder and you are exposed to all kinds of

ways to be injured. Add “field medic” to your list of responsibilities during a Bug Out.

Insufficient first aid supplies during a chaotic disaster evacuation can make an already very bad situation worse. Proper treatment materials are must-haves in a first-aid emergency. There are no ideal substitutions. Pack size and weight restrictions will limit how much you can bring, but the goal is to pack enough first aid supplies to cover the majority of what could happen. Beyond this, you will have to improvise or wait.

First aid is a compartmentalized kit within your BOB. It should be easy to recognize by both sight and touch. This is the one category within your BOB that I actually recommend starting with a prepackaged kit—then supplement and customize it with additional items. Buying a “starter” kit saves time in collecting many of the basic first aid items. You can certainly build your own kit from scratch as well.

PREPACKAGED FIRST AID KITS

Prepackaged first aid kits are available in almost every grocery store, pharmacy, and general merchandise store. And all of these are inadequate for your Bug Out needs. For most of these kits, you'll find the manufacturers put more thought into the fancy packaging than actually assembling the contents. *Don't buy one of these generic first aid kits!* You need to start with a more substantial base kit designed specifically for outdoor enthusiasts.

Several Generic First Aid Kits

Most outdoor sports stores (and related retail websites) have a first aid section within the camping and backpacking department. Two great sources for emergency first aid kits are Nitro-Pak (nitro-pak.com) and Adventure Medical Kits (adventuremedicalkits.com).

Camping and backpacking prepackaged first aid kits are the kind you want to use as your base kit. Off the shelf, they are still too inadequate for a BOB, but these kits are more substantial and specialized than general-purpose kits. Many of these kits are also designed to contain enough material to adequately treat a specific number of people, which can really save you time in putting together the first aid kit for your family or Bug Out team.

Purchase a kit designed for the number of people in your household and modify it by adding items from those listed in this chapter.

Specialty Four-Person First Aid Kit by Adventure Medical Kits

Military-Style Specialty Kit

FIRST AID KIT CONTAINER

The first step in assembling your final kit is choosing a container. If you purchase a premade specialty kit, its container will probably work just fine. The only important factor about your first aid kit container is that it must be waterproof. If the container it not watertight, you will need to package the items in several watertight resealable bags. Water and moisture will completely compromise the efficacy of many items in your kit including bandages, gauze, and pills.

In addition to packing groups of items in resealable bags, I pack my entire kit in a watertight flexible map case that can be purchased in the kayak department of most outdoor retailers. These plastic cases are durable, flexible, and made specifically for keeping items dry. As you'll see in chapter twelve, this is the same style case I use for my important documents.

First Aid Kit Supplies Packed in Resealable Bags

First Aid Kit Packaged in Waterproof Map Case

KIT CONTENTS

Following is a list of contents that should be included in your BOB first aid kit. For applicable line items, I break down the quantities for one-to-two person kits and four-to-six person kits. Many of these items can be purchased in small quantities from the travel-size section at any pharmacy.

Cut and Wound Items

Antiseptic Wipes and Adhesive Bandages

- **Antiseptic Wipes**
  1–2 persons: 10
  4–6 persons: 15
- **Adhesive Bandages** (1"×3")
  1–2 persons: 12
  4–6 persons: 18
- **Adhesive Bandages** (Knuckle & Elbow)
  1–2 persons: 3
  4–6 persons: 5
- **Adhesive Wound Closure Strips**
  1–2 persons: 5
  4–6 persons: 8
- **Sterile Gauze Pads** (3"×3")
  1–2 persons: 4
  4–6 persons: 8
- **Sterile Gauze Roll Bandage** (2", 2 yards)
  1–2 persons: 1
  4–6 persons: 2
- **Medical Tape** (1", 10 yards)
  1–2 persons: 1
  4–6 persons: 2

Gauze Roll and Medical Tape

Blister/Rash/Burn Treatments

- **Moleskin Patches** (4"×5")
  1–2 persons: 2
  4–6 persons: 4
- **Sunscreen:** Small tube or towelettes
- **Lip Balm:** Petroleum-based lip balm can be mixed with fire tinder and used as a flame extender to help start a fire

Moleskin, Sunscreen Towelettes, and Lip Balm

Support

- **Elastic Wrap Bandage** (3", 2 yards): For wrapping sprained and or strained joints

Medicines/Ointments/Washes

Variety of First Aid Medicines

- **Antibiotic Ointment**
  1–2 persons: 1 small tube or 2 single-use packets
  4–6 persons: 1 small tube or 4 single-use packets
- **Alcohol Swabs**
  1–2 persons: 4
  4–6 persons: 6
- **Ibuprofen Pills:** Reduce fever and treat pain or inflammation
  1–2 persons: 5 200mg pills
  4–6 persons: 8 200mg pills
- **Antihistamine Pills:** Reduce cold and allergy symptoms
  1–2 persons: 4 25mg pills (diphenhydramine hydrochloride)
  4–6 persons: 6 25mg pills (diphenhydramine hydrochloride)
- **Acetaminophen Pills:** Reduce fever and treat general aches and pains
  1–2 persons: 5 200mg pills
  4–6 persons: 8 200mg pills
- **Aspirin Pills:** Reduce fever and treat pain and inflammation
  1–2 persons: 3 325mg pills
  4–6 persons: 6 325mg pills
- **Imodium pills:** Antidiarrheal medicine
  1–2 persons: 2 125mg pills (simethicone)
  4–6 persons: 4 125mg pills (simethicone)
- **Antiemetic (Dramamine):** For motion sickness
  1–2 persons: 3 50mg pills (dimenhydrinate)
  4–6 persons: 6 50mg pills (dimenhydrinate)
- **Baby Vitamins**
- **Visine Eye Wash**

Small aluminum and plastic pill containers are available at any pharmacy for just a few dollars. These are perfect for storing a variety of medicines within your first aid kit. They are crush resistant, compact and waterproof. I use several of these containers in my BOB for a variety of mini-kits, one being my mini fishing kit.

Aluminum Pill Capsule

MISCELLANEOUS MEDICAL ITEMS

Rubber Gloves, Tweezers, and Safety Pins

- **Rubber Gloves:** Can also be used as water containers, and to keep items dry, such as fire tinder
- **Tweezers:** For splinters and ticks
- **Safety Pins:** Quantity of five in a variety of sizes—for gear repairs and/or emergency sutures
- **Insect Repellent:** 100-percent DEET is most effective. Many insect repellents are also flammable and can be used as a fire-starting aid in damp or windy conditions (available in small single-use packets or small spray bottles).

Insect Repellent and Survival Blanket

Mirror

A mirror can be a very useful first aid and hygiene tool, especially when traveling alone. It's useful when self-treating any type of injury to your eyes, face, head, or back. Once while back-country camping, I nearly had to cut my trip short because of something in my eye. Since that experience, I always camp with a small survival mirror regardless of how lightweight I'm trying to pack. I also include one in my BOB.

A mirror is also a proven signaling tool. Sunlight reflected by a mirror can be seen for miles, and it's

perfect for trying to signal a rescue plane, vehicle, or team. A specially designed signal mirror has a "sighting hole" in its middle to help the reflected sun rays directly at your target. The two mirrors in the photo are both signal mirrors. I carry a small dog-tag sized signal mirror in my BOB that doubles as a first-aid and hygiene mirror. It's small but mighty.

Two Survival-Style Pack Rescue Mirrors

Dog Tag Rescue Signal Mirror

MULTI-USE ITEM: EMERGENCY SURVIVAL BLANKET

★★★★★ **FIVE-STAR RATING**

An emergency survival blanket can be used for a variety of survival related functions. They make excellent signaling devices. They can also be used as a makeshift poncho, a quick waterproof shelter, a ground tarp or gear cover. All of these features from a product that weighs only 3.2 ounces.

Used in the Traditional Method as a Survival Blanket

Makeshift Lean-To Shelter

Survival Blanket Poncho Wrap

Waterproof Gear Cover With Log Weights

Emergency Survival Blanket

Survival blankets are windproof and waterproof and reflect 90 percent of your body heat. They are a very flexible multi-use survival product. In cold weather, you can wrap yourself in the blanket to stay warm by conserving as much body heat as possible. In full sun, the blanket can be set in reverse as a shade shelter to reflect the sun's rays. My survival blanket of choice is the Heat Sheet by Adventure Medical Kits. The Heat Sheet survival blanket is thicker and more durable than the average silver mylar blanket.

Adventure Medical Kit Heat Sheet Survival Blanket

One side of the Heat Sheet is a bright orange color, making it a very useful emergency rescue signal. It also has survival instructions and diagrams printed directly on the blanket for quick reference. At 60"×96", the Heat Sheet is large enough to accommodate two adults, which is really a nice feature.

SURVIVAL QUICK TIP

Survival blankets don't come with tie-down points, such as grommets. This can make them tricky to tie down when using them for shelters or gear covers. A quick tip is to put a small rock in the corner and tie your rope around this rock. This creates a very solid tie-down point that will not tear the blanket.

Rock in Corner of Survival Blanket for Tie-Down Point

PERSONALIZING YOUR FIRST AID KIT

Medications

Each individual has his or her own very specific medical needs. You must consider each of these needs when assembling your first aid kit. Below are areas for consideration:

- daily prescriptions
- allergy medicines/emergency allergic reaction medicines
- asthma inhalers
- medical instruments, such as syringes, blood sugar testers, etc.
- special baby and children's medicines

Consider keeping full prescriptions in your BOB if possible. It may be difficult to get a refill even after you reach safety. To keep the medication fresh, rotate the prescriptions in your BOB on a regular basis. When you refill the script, put the new one in the BOB and take the old one out for your use. This system should allow you to use up all your medication before it expires.

Glasses and Contacts

If you wear prescription glasses, keep a backup pair in your BOB. One of your older prescriptions will work just fine. Otherwise, breaking or losing your primary pair can leave you very vulnerable and dependent—neither being ideal in a Bug Out environment. You want to be a resource to your crew, not a liability.

Don't rely on contacts as your only vision source. Pack a backup pair of glasses even if you pack a backup pair of contacts. Also be sure to pack a travel-size bottle of contact solution and a contact case.

SUMMARY

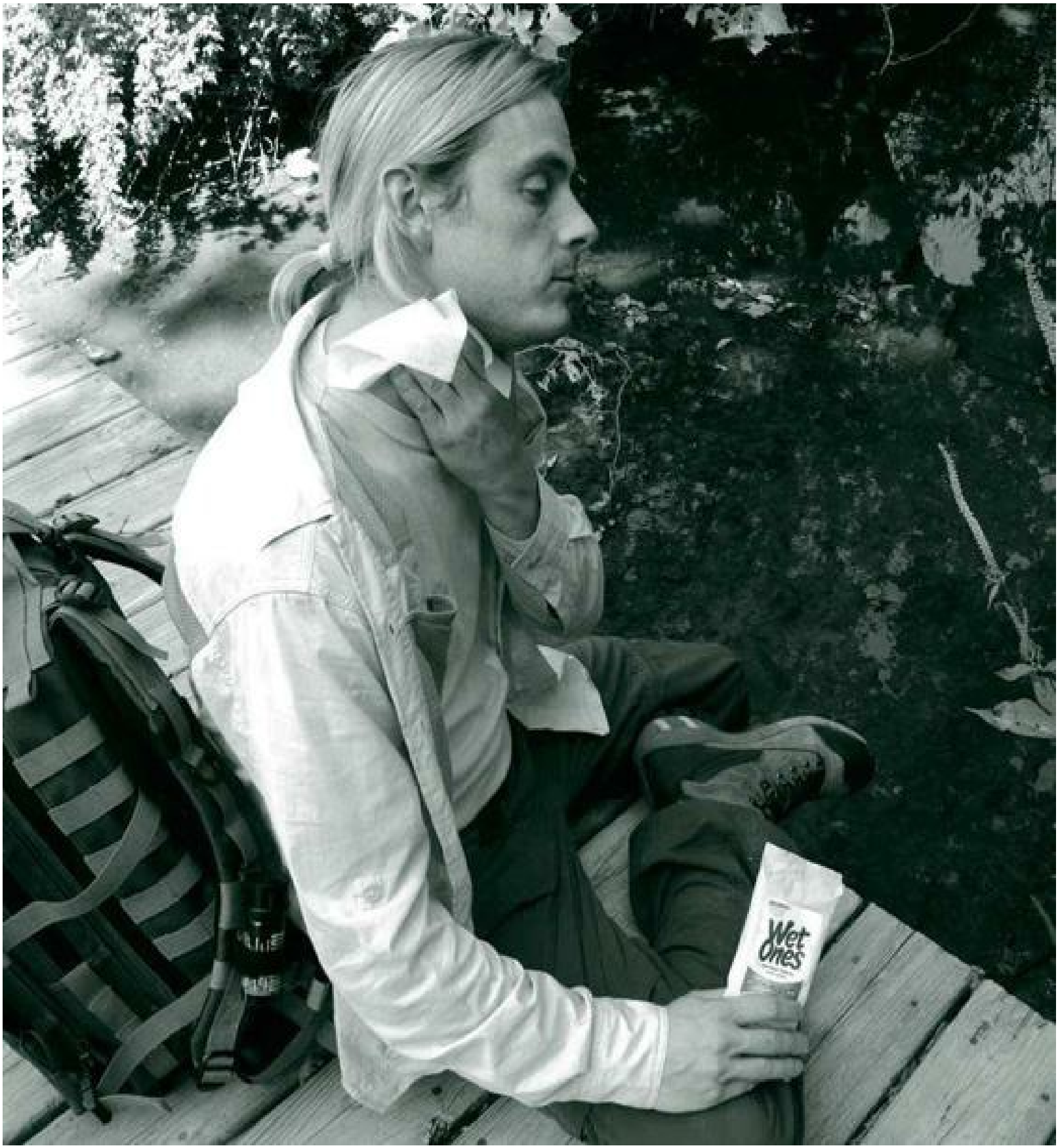
Remember, this is a 72-Hour BOB. It's easy to get carried away and over-pack only to realize at the end of the project that you need to reevaluate your contents. Be thorough but not excessive when it comes to first aid. I've seen guys pack entire surgical kits with IV drips and anesthesia medications in their Bug Out Bags. I choose to keep it fairly simple. You will have to draw your own limitations.

COMMON DISASTER CONSIDERATIONS

If you live in an area prone to nuclear attack or fallout, please take note of these special considerations and/or pack items.

Potassium iodide pills taken before exposure to nuclear fallout can provide almost 100 percent protection from thyroid damage associated with radiation exposure. High-risk nuclear areas would be large cities prone to military attack, coastal states at risk of exposure from overseas trade winds, and areas near nuclear power plants. Plan on a ten-day supply of potassium iodide pills per person. A vast amount of information about nuclear threats can be found on www.ki4u.com. Potassium iodide pills can be purchased online at www.campingsurvival.com.

9 HYGIENE



PEOPLE OFTEN UNDERESTIMATE the importance of personal hygiene when preparing for disaster survival. It's an easy category to overlook. In reality, hygiene-related issues are some of the most critical and complicated concerns in the aftermath of a disaster. We take so many modern conveniences for

granted:

- running water
- working restrooms
- clean clothing
- clothes washers and dryers
- access to cleaning supplies
- regular trash-removal service
- electricity

Trash Dumpsters

Most, if not all, of these luxuries will be off-grid or unavailable during and after a large-scale disaster. There are two areas of hygiene to consider in disaster survival: public and personal.

PUBLIC HYGIENE

An incredible network of people, facilities, and machines organize each day to relocate, dispose of, disinfect, and treat our insane amount of garbage, raw sewage, hazardous materials, and medical waste. Removal and proper handling of animal and human corpses is included in this orchestra of daily events.

Sewage Treatment Plant

Historically, large-scale disasters cripple the normal waste removal and treatment services that we depend on to keep our cities clean.

The inability to properly deal with unclean waste presents life-threatening challenges.

During this time there is a much higher risk for the spread of disease and illness. Your countermeasures against this risk are to keep your personal hygiene and waste removal in check.

PERSONAL HYGIENE

Everything becomes less efficient and productive when dirty or soiled—including the human body. Not only is personal hygiene important to prevent the spread of disease and infections, but it also impacts morale. Keeping your spirits high and maintaining a semi-sense of normality is very important. When survival is 90 percent mental, anything you can do to boost your morale goes a long way. This starts with packing items in your BOB to maintain personal hygiene.

BOB PERSONAL HYGIENE PACK ITEMS

Create a mini-hygiene kit within your BOB to keep these items together and easy to find.

All-Purpose Bar of Soap or Packaged Soap Sheets

Soap is the recommended cleaning agent for open wounds until you can access medical treatment. You can obviously also use soap to bathe and wash other items, such as clothing and cooking utensils. Dirt and body oils can clog the breathable fibers of your clothing, reducing its insulating properties. Washing soiled garments keeps them functioning at peak performance. My BOB hygiene kit includes a hotel-size bar of soap in a resealable bag. There's no way you would use up this much soap in a 72-hour time frame.

Travel-Size All-Purpose Soap or Packaged Soap Sheets

Coleman makes a pretty cool soap product called Soap Sheets. I found the ones photographed at Wal-Mart. Fifty little soap sheets come packaged in a small, compact flip-top container. The sheets dissolve into a sudsy lather when they come in contact with water. The container is not watertight, so be sure to pack these in a resealable bag if you choose this option.

Tampons and Sanitary Napkins

Besides their intended purpose, tampons and sanitary napkins have a variety of survival uses. They can be used as gauze-like first aid bandages and secured with duct tape or medical tape.

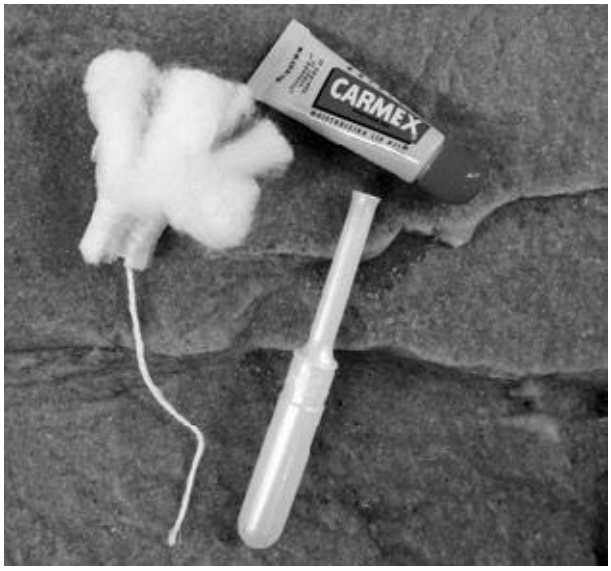
Sanitary Napkin Used as Emergency Bandage With Duct Tape

They can also be used to pre-filter cloudy/dirty water.

Sanitary Napkin as Water Filter

In addition, they make excellent fire tinder. You can mix the cotton-ball-like material with your Carmex lip balm to create a fire starter that will burn for several minutes.

These items are an excellent multi-use BOB survival pack item.



Tampon With Carmex Lip Balm

Disinfecting Wet Napkins

Antibacterial wet naps are available in grocery stores. Find them in the paper product aisle. (Be sure to buy brands specifically designed for use on skin. Don't buy the surface-cleaner wipes—they're too harsh and may cause damage to your skin.) These are a perfect bathing alternative. A quick "spit-bath" with a couple of wet naps will help to clean your body of bacteria, grime, and body oils. These are especially useful when water is scarce or in cold weather. Wet naps can also be used to clean and maintain survival gear such as your cooking pot and utensils.

Travel-Size Hand Sanitizer

Hand sanitizer has a high alcohol content, which makes it perfect for quickly disinfecting your hands and other body parts if necessary. And it does not require precious water to be effective. It can also be used to disinfect small scrapes and cuts. However, any open wounds should be washed only with soap and water. The alcohol content in hand sanitizer also makes it a viable fire starter. It burns fast but could be useful as a fuel source in less-than-perfect fire-building conditions.

Diapers

If you will be traveling with a young child who isn't potty trained, you'll need an ample supply of diapers for 72 hours. This is critical to group hygiene. Pack disposable diapers, even if you use cloth diapers at home. Update the diapers in your BOB as soon as your child moves up in size. (You may need to do this every two to three months if the child is under one year of age. This is also a good time to update clothes you have packed for the baby.) An additional stock of wet napkins and a small container of baby powder and diaper cream (to prevent diaper rash) is also recommended.

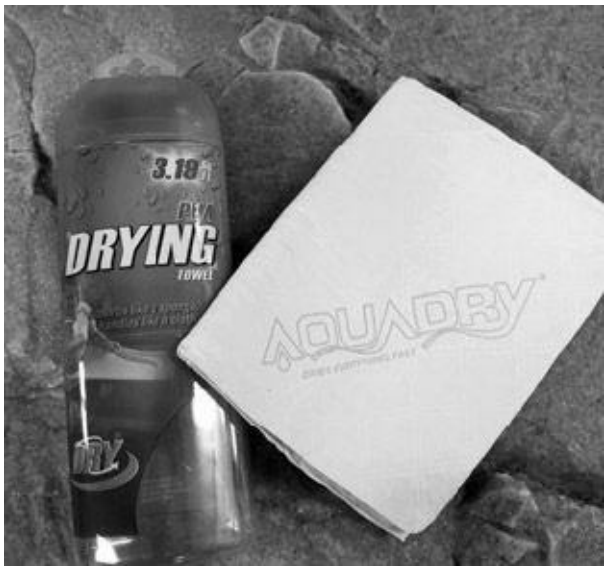
Small Pack Towel

Do *not* pack a normal cotton bath or beach towel. Items made of 100 percent cotton take forever to dry. Plus these are way too heavy and bulky, and you don't need a full-sized towel.

You need a towel made from a super-absorbent material that is lightweight, easy to ring out, and quick to dry. The Lightload Towel is a very popular brand of this style towel and is available at ultralighttowels.com. These towels are made from a 100 percent viscose material and can double as a water filter, first-aid bandage, strainer, fire starter, diaper, mask, and scarf. They're compacted into a small, waterproof puck that is the perfect size for a BOB. Even when opened, they can still be squished into very small spaces. I carry two of the 12"×24" towels in my BOB. They're small, but if using it to dry off your body, you can ring it out several times in the process.

Lightload Towels Opened and Two Compressed Towels

Car shammies/chamois are another great BOB towel option. Made from absorbent, sponge-like fabric, they are durable, washable, lightweight, and quick to dry. Find them in the auto detailing section in any discount department store.



Sample Specialty Car Shammy

Any of these camp towels can be disinfected by boiling in water. Ultra-light packers can use their bandana as a camp towel.

Two Mini Travel Toothbrush/Pick

Mini Travel Toothbrush/Pick

You can certainly survive for 72 hours without a toothbrush, so this item is optional. However, miniature travel-size toothbrush and floss combination items are cheap and weigh almost nothing. They are also disposable.

With two functions in one tool, this is a smart item to carry. It is one of those morale-boosting items. This is more a mental than physical exercise that reminds you that “normal” is still possible.

Travel-Size Toilet Paper

Toilet Paper

Be sure to pack a few yards of toilet paper unless you want to use leaves and/or scavenged paper. Prepackaged travel rolls like the one shown are available for a couple of bucks, or you can just roll some up and store it in a resealable bag like I do.

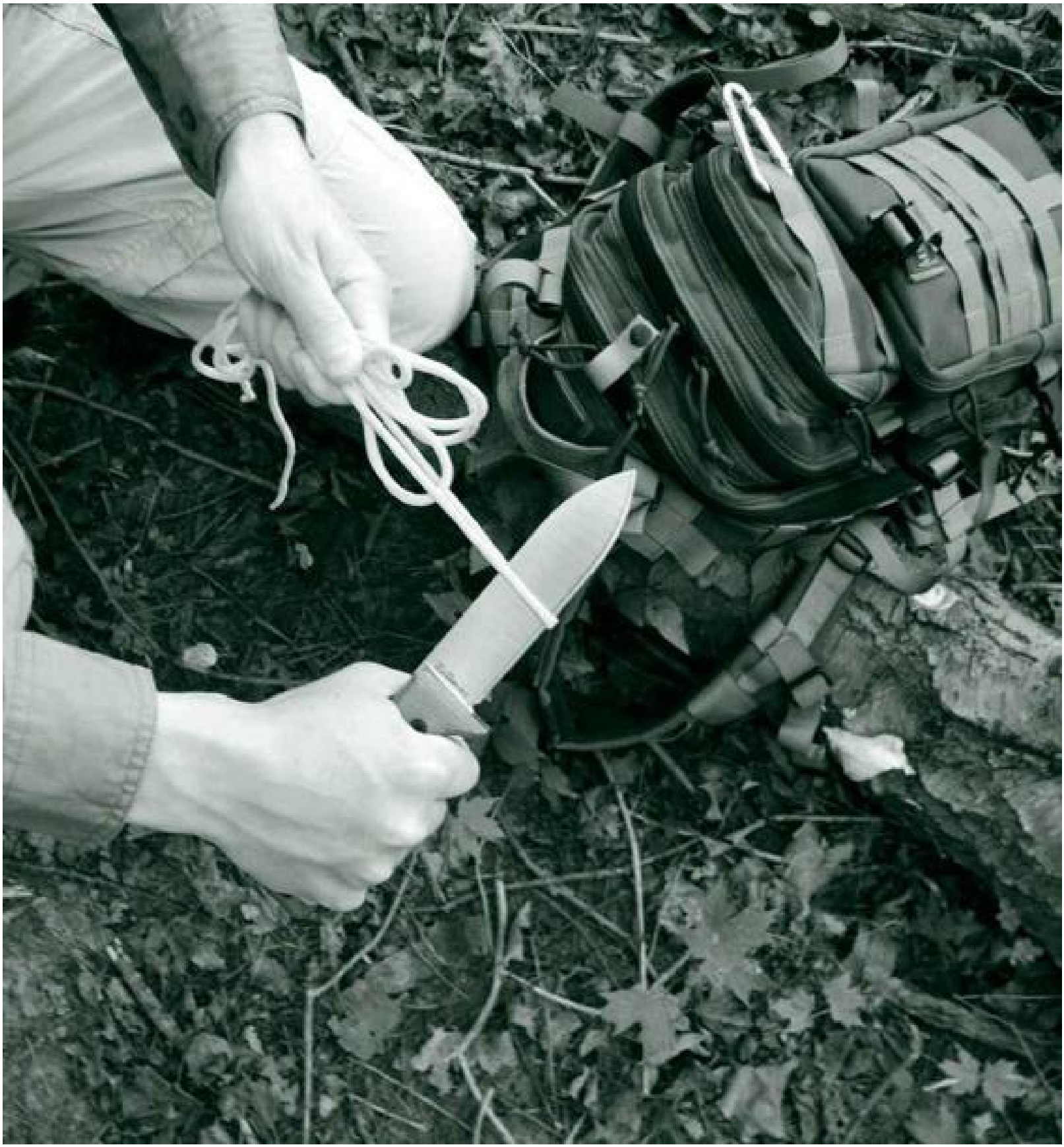
SUMMARY

Even in a short-term 72-Hour Bug Out, hygiene has mental and physical repercussions that affect your ability to survive. Taking simple steps towards maintaining cleanliness can prevent the onset and spread of disease as well as make bugging out more comfortable.

COMMON DISASTER CONSIDERATIONS

If you live in an area prone to heat waves or droughts, pack extra wet naps. When water is scarce, personal hygiene can become more difficult.

10 TOOLS



INDEPENDENT "OFF-GRID" SURVIVAL requires us to perform tasks that are completely out of the normal daily routine for the vast majority of modern society. Without the proper tools, even the simplest of survival duties can be extremely difficult, time-consuming, and labor-intensive. A small assortment of

specialized tools is a critical addition to every BOB.

BUG OUT TOOL 1: SURVIVAL KNIFE

Your survival knife is without question one of the top three most important items in your BOB. (An ignition device and a metal container are the other top two.) For many, choosing a survival knife is a very personal decision. With thousands of knives in the marketplace, the choices can be somewhat overwhelming. Don't be fooled by what you see in the movies. The fancy knives seen in survival movies are more for prop collectors than for real survivalists. By design, a survival knife should be fairly simple. It should be about function not "flash." In this section, I will discuss why a survival knife is so important as well as the attributes of a good survival knife. I will also give you my top four survival knife picks to help get you started in your knife search.

Functions of a Survival Knife

Your knife is probably the most multifunction piece in your entire BOB. Its list of survival uses are endless. You don't know how much you need a good, sharp cutting tool in a survival situation until you don't have one. I learned this first hand on a three-day survival trip in which I was not able to bring a modern knife. I will never take my knife for granted again. Below is a short list of tasks a knife can assist you with:

- cutting
- hunting
- dressing game
- hammering shelter anchors
- digging
- self defense
- splitting/chopping
- making fire
- carving
- signal mirror (if blade is polished steel)
- building shelter
- food preparation

Using Pommel to Hammer Tent Stake

Carving Feather Sticks for Fire Building

Rescue Signal With Reflection From Sun

Carving Frog Gig

You will use your knife often. Keep it very accessible. I actually store my survival knife strapped to the

outside of my BOB.

Survival Knife Strapped to Bug Out Bag

In a BOB situation, I plan to immediately secure my knife on my belt where it will be ready for quick deployment.

Survival Knife on Belt

I have no interest in digging through my pack to access my knife.

ATTRIBUTES OF A SURVIVAL KNIFE

Fixed Blade

Your survival knife should have a fixed blade—not a folding- or lock-blade style. True, folding knifes can be more convenient to carry, but strength is compromised at the folding joint. If the knife breaks during rigorous use, you are SOL. If you really like folding knives, carry one as a backup but not as your primary survival knife. I carry a Spyderco Native locking folder as my everyday-carry knife and it will be my BOB backup knife as well.

Fixed Blade Knife and Folding Knife

Spyderco Native Knife

Full Tang

The phrase *full tang* means the metal knife blade and handle are made from one solid piece of metal. The metal handle is then sandwiched with knife scales to form a grip. Full tang construction is much more substantial and less likely to break during hard use. The alternate to a full tang is a rat tail tang. A rat tail tang is much smaller and narrow.

Rat Tail Tang (left) and Full Tang Blade (right)

A full tang blade is much more robust and stable. It can withstand incredible abuse from demanding tasks, such as splitting wood—often called batoning in the survival community.

I own many non-full tang knives and love them all. However, they aren't my first choice in survival knife picks.

Sharp

Your survival knife should be razor sharp. It should shave the hair off your forearm. If it doesn't, buy a whet stone and hone the blade until it does. You should take pride in your knife's razor edge. A dull knife is more difficult and cumbersome to use effectively. It requires more effort and pressure to perform tasks, which leads to erratic carving and cutting. A sharp knife is actually safer to use and is a more precise cutting tool that requires less energy and time as compared to using a dull knife.

Sharpening Knife on Whet Stone

Size Does Matter

As a rough estimate, the overall length of your knife should be in between 7 and 11. A knife that is much larger that 11 isn't practical for delicate and detailed tasks. However, a knife smaller than 7 is less capable of performing tasks that require a larger blade—especially demanding jobs.

Pointed Blade/Single Edge

Your knife needs to have a pointed blade tip. The point comes in handy for all kinds of chores. I broke the point off of my favorite survival knife and it drastically impacted the knife's effectiveness as a useful tool. I eventually had to replace it.

Also, the knife blade should not be double-sided. Choose a single-edged blade only. You won't have a need for two sharp edges. The flat back ridge of a knife blade can actually serve several functions. Below are some of the most common:

- striking a fire steel
- used as a stabilizing platform for thumb or hand
- pounding surface while splitting or batoning wood

I use the back ridge of my knife in these ways all of the time. A sharp, double-edged blade makes these important functions impossible.

Using Survival Knife to Split Wood (Batoning)

Stabilizing Knife With Thumb While Carving

Quality Sheath

There is nothing I hate more than a substandard knife sheath. Many knife enthusiasts feel the same way I do about quality sheaths. Poorly designed and cheaply made sheaths can be frustrating and dangerous to use.

A quality sheath should hold your knife in place snugly and securely. Your knife should not fall out when the sheath is shaken or turned upside down. At the same time, though, the knife should be easy to put in and take out of the sheath. You should be able to comfortably remove and insert the knife single-handed. Personally, I prefer molded Kydex or leather sheaths. Both are rugged materials that can handle extreme environments.

Even some great knifes come with horrible sheaths. I've lost knives in the field due to poor sheath retention. A knife is an investment. If you find a great survival knife but hate the sheath, there are several companies that can make custom kydex or leather sheaths specifically for your knife. Hedgehogleatherworks.com in St. Louis is one such company; they make aftermarket leather sheaths for several very popular survival knives including the Blackbird SK-5 and the Becker BK2 listed in my top survival knife picks. I own several Hedgehog Leatherworks knife sheaths and can attest to their quality and workmanship. Another company, SharkTac, specializes in custom-molded kydex sheaths.

Two Kydex Knife Sheaths

Leather Knife Sheaths from Hedgehogleatherworks.com

FOUR GREAT SURVIVAL KNIVES

Blackbird SK-5 Survival Knife

The Blackbird SK-5 has been meticulously designed by survivalist Paul Scheiter. It meets all of the survival-knife criteria listed earlier in the chapter. It is extremely well suited for any kind of survival environment or disaster-emergency scenario. The Blackbird features a very solid spear point tip and an abrupt angle grind on the back of the blade that is outstanding for striking a fire steel rod. The leveled pommel provides enough surface area for light-duty pounding. It also has a slot on the handle for attaching a lanyard or wrist leash. As an added bonus, the ergonomic grip prevents hot spots and blisters that form on the hand after repeated handling of the knife. The blade is made from 154CM, a high-grade stainless knife steel requiring relatively no field maintenance when on the go. This is a plus, especially in tropical, wet, or humid environments when lesser-grade steels might corrode and rust. 154CM grade steel also holds a very good edge even during strenuous cutting.

Blackbird SK-5 Survival Knife

Blackbird SK-5 Specs:

- Overall length: 10
- Blade length: 5
- Blade thickness: .13
- Price: $149.00
- hedgehogleatherworks.com to order

Becker BK2 Companion Knife

The Becker BK2 is very simple but incredibly functional. It includes everything you need and nothing you don't. This is an example of a classic, no frills, workhorse survival knife. One very cool feature many people aren't aware of is that the knife handles can be removed with a small allen wrench. The handles have recessed cavities on the inside that allow you to store small kit items such as fish hooks and line or fire tinder. The tang also protrudes from the bottom and can be used for pounding and batoning.

Becker BK2 Knife Shown With the Black Nylon Sheath That Came With It and Also a Custom Hedgehog Leatherworks Leather Sheath

BK2 specs:

- Overall length: 10.5
- Blade length: 5.25
- Blade thickness: .25
- Price: approximately $70
- Where to order: www.willowhavenoutdoor.com

Gerber Big Rock Camp Knife

I realize that not everyone can afford to spend seventy dollars or more on a survival knife for their BOB. If you are budget conscious, Gerber makes several excellent full tang, fixed-blade knives. For example, the Gerber Big Rock pictured here is available online and at many outdoor retailers. It is a very solid full tang knife that performs very well with demanding use. It has a nonslip rubberized textured handle for a sure grip in almost any condition. It also has a lanyard hole and a half serrated blade for dual purpose cutting and ripping. I've used this knife on many occasions and have not been disappointed.

Gerber Big Rock Camp Knife

Big Rock specs:

- Overall length: 9.5
- Blade length: 4.5
- Blade thickness: .19
- Price: $34.99
- Where to order: www.rei.com

Mora of Sweden 840MG Clipper

The Mora of Sweden knife company has a rich history in manufacturing outdoor lifestyle knives. While not a full tang blade, you won't find a better knife for the money spent—only around fifteen dollars. I've used and abused this knife on countless adventures and have yet to destroy one. Because it does not meet all of my survival knife criteria, I wouldn't recommend it for your primary BOB knife, but it is an excellent backup blade.

Mora 840MG Camp Knife

840MG specs:

- Overall length: 8.5
- Blade length: 3.88
- Blade thickness: .08
- Price: $15
- Where to order: www.willowhavenoutdoor.com

BOB TOOL 2: MULTI-TOOL

A good multi-tool is like having a compact, lightweight toolbox in your BOB. Many multi-tools have up to ten different tools built into one unit. Like your knife, these tools can and will be used for countless tasks in a survival environment.

Schrade Tough Multi-Tool

Following is a list of tools that should be integrated into any multi-tool that you purchase for your BOB.

Knife

I know, you've already chosen a survival knife. The multi-tool knife is not your survival knife. This one is your backup knife just in case something happens to your primary. The knife blade in your multi-tool will be much smaller than the blade on your main knife and might be better suited for certain detail-oriented tasks. Regardless, having redundancy in the cutting tool department is never bad practice. No knife is bad news.

Knife Blade on Leatherman MUT Multi-Tool

Mini Saw Blade

A mini saw blade can buzz through 2–3 limbs and small trees in no time. This can certainly be helpful when collecting fire wood or building makeshift shelters.

Saw Blade on Leatherman MUT Multi-Tool

Leatherman MUT Sawing Branch

Pliers

When you really need a set of pliers, nothing else will quite do the trick. It's one of those items that you don't think about until you need it. Among other tasks, pliers can be used to loosen or tighten nuts and bolts, bend metal or wire and hold hot cooking pots. In cold weather, pliers can be more useful than your own hands with many mechanical tasks.

Pliers Tool on Schrade Tough Multi-Tool

Multi-Tool Pliers Holding Hot Cooking Pot

At the base of your pliers should be wire cutters. These can be used to strip wire if necessary. They can also be used to cut snare wire or fencing. You never know what kind of crazy situation you are going to be faced with. Rather than dull and damage your knife blade, use a tool designed to get the job done quickly and with less energy.

Cutting Fence With Multi-Tool Wire Cutters

Repairing Vehicle with Multi-Tool

Cross-Point and Flat-Head Screwdrivers

Both styles of screwdrivers are a must. These two screw bits will fit 95 percent of all the screws you might encounter. They can be used with your own gear repair and for a myriad of potential tasks along the way. I've used my flat-head screwdriver on several occasions as a mini pry bar.

MACHETE (OPTIONAL)

If you anticipate going through or into any kind of wilderness area during a potential Bug Out, a machete can be an incredibly useful too. Machetes make fast work of chopping and gathering wood. They are also useful when clearing thick brush and blazing trails through dense undergrowth. A machete can be used to carve out snow blocks for building wind shelters. It makes a very efficient digging tool as well.

Kukri Style Machete

Latin-Style Machete

Personally, I like the added benefits a machete offers and have chosen to pack one in my BOB. Many tasks can be performed faster and with less energy with the use of a machete instead of your survival knife. It certainly isn't a necessary piece of Bug Out gear. This is a luxury item.

Latin-Style Machete inside of BOB

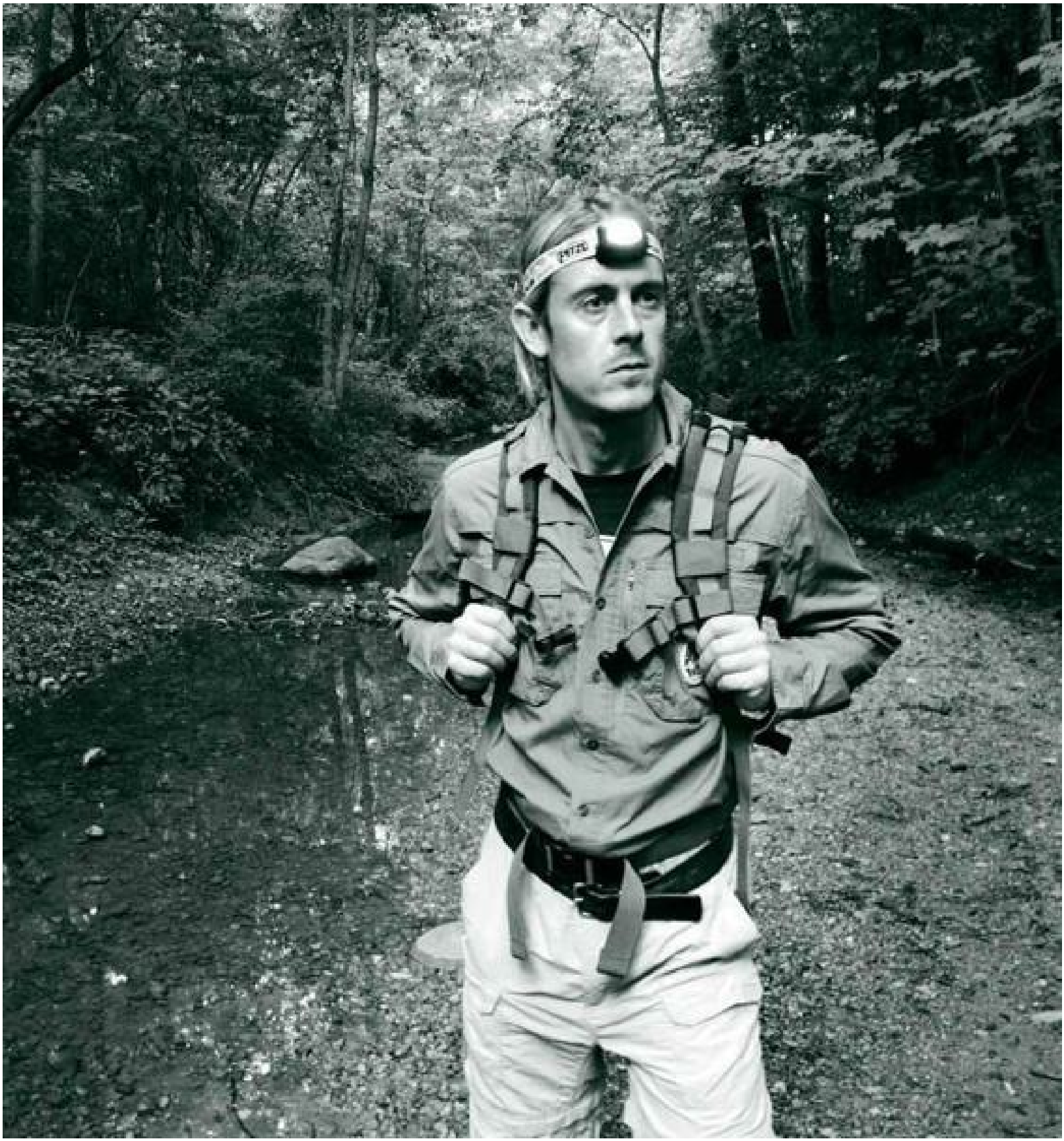
SUMMARY

The sky is the limit with all of the situations you could face during a disaster Bug Out. Having a small assortment of tools on hand can save you valuable time—not to mention wear and tear on your body. I've always tried to live by the phrase "work smarter, not harder." Tools allow you to do this.

COMMON DISASTER CONSIDERATIONS

If you live in an area that experiences heavy snowfall, you might consider packing a lightweight collapsible snow shovel in your BOB during the winter months. Remove it in your summer season review. The ability to shovel deep snow may prove to be an invaluable survival option. Several manufacturers sell pack shovels designed for climbers and mountaineers that are surprisingly compact and lightweight. A good collapsible shovel for this is the Black Diamond Deploy.

11 LIGHTING



IN A BUG OUT SCENARIO, the electricity will almost certainly be off-grid. Besides the sun and moon, your only light source might be inside your Bug Out Bag. Not having a flashlight of some kind can stop you dead in your tracks during low-light or dark conditions. There are countless reasons to include a

light source. The most obvious are listed below.

LOW-LIGHT OR NIGHTTIME TRAVEL

Traveling at night can be advantageous in some instances. In desert regions, for example, traveling by night is cooler and conserves precious water versus traveling under full-sun by day. Depending on the circumstances, you may want to avoid interaction with other survivors by traveling at night and remaining low-key. Regardless, traveling in nighttime or low-light conditions without a flashlight can be very dangerous. Even a very minor injury can be a devastating setback and travel burden.

SETTING UP CAMP IN LOW LIGHT

If you do travel during daylight hours, you'll get farther faster if you can begin traveling at first light and stop after twilight. This means you'll be setting up and breaking up camp in low light. For ease and safety, you'll need to be able to see what you are doing. Carrying a light source increases your productive time on your route and in camp settings.

SIGNALING

A high intensity flashlight makes an effective signaling device. It can be used for a variety of applications.

Signaling Within Your Bug Out Team

The members of my Bug Out Team and I have developed a very simple communications code using flashlights. We can use “flashes” of light to relay basic messages should the need arise to communicate from afar or in silence. Each of us keeps a small laminated note card in our BOB with the signal codes. Below are a few from our list:

- 1 short flash: *Safe*
- 2 short flashes: *Come to our location*
- 3 short flashes: *Meet you at the BOL (Bug Out Location)*
- 4 short flashes: *Leave me* or *Keep moving*
- 1 short, 1 long flash: *Danger*
- 1 short, 1 short, 1 long flash: *Affirmative*
- 1 long, 1 short, 1 short flash: *Negative*

Signaling for Rescue

A flashlight can also be used to signal for rescue. Besides just waving it around to get a rescue team’s attention, there are internationally recognized distress signals. The most popular is Morse Code for the letters SOS. In Morse Code, the letter S is three dots and the letter O is three dashes. Thus, using your flashlight, the SOS distress signal would be three short bursts of light then three longer bursts of light then three shorts bursts of light. Then, this pattern is repeated. Typically, the longer burst should be equal in length to the three short bursts combined.

LIGHTING OPTIONS

When it comes to the lighting category, I suggest packing one main flashlight, one very small backup light, and one alternative light source.

Ultralight Head lamp: Black Diamond ION

Main Flashlight: LED Headlamp

Get a hands-free LED headlamp. Don't bother with any other styles for your primary BOB light source. The most obvious benefit of a headlamp is that both of your hands are free to work. They are also extremely lightweight and the LED models last a very long time before new batteries are needed. Some models weigh in at only a few ounces. There are a huge variety of headlamps on the market at varying price points. Regardless of your budget, I'm sure there is one to meet your needs.

Headlamps provide ample light for normal tasks such as setting up camp, preparing meals and traveling. These are the perfect BOB lighting source—compact, lightweight, bright and long-lasting.

Mini Maglite

Two Great Backups

1. Mini Maglite LED. The mini Maglite LED is a perfect backup BOB flashlight. Below are some reasons why I love it:

- durable
- waterproof
- shines an impressive light beam for its size
- small and compact
- lightweight
- long-lasting battery life
- extra bulb stored inside handle

I've gone on many overnight camps when I've used the Mini Maglite exclusively. It is a good, reliable tool.

2. Mini Keychain LED. These little keychain-style LED lights are surprisingly bright for their size. They are also very cheap, typically around five dollars. If you are a minimalist packer, then these are an excellent solution. They can be attached to zipper pulls or tucked into almost any small space. I keep mine as a zipper pull on one of my smaller kits. They are also virtually indestructible. The Photon brand (my choice) has a crush-proof bulb and is visible over one mile.

Photon Brand LED Mini Light

Photon Light as Zipper Pull

ALTERNATE LIGHT SOURCES

While neither of the following options are completely necessary, they are both small and lightweight with unique benefits in a survival/rescue scenario. Because of this, I have included them as recommended pack items.

Candle

Any small candle will work just fine. The one I use is 1 in diameter and 4 tall. The brand is 9-Hour Candle and it's designed specifically for survival and preparedness applications. It has a long, steady burn time (nine hours).

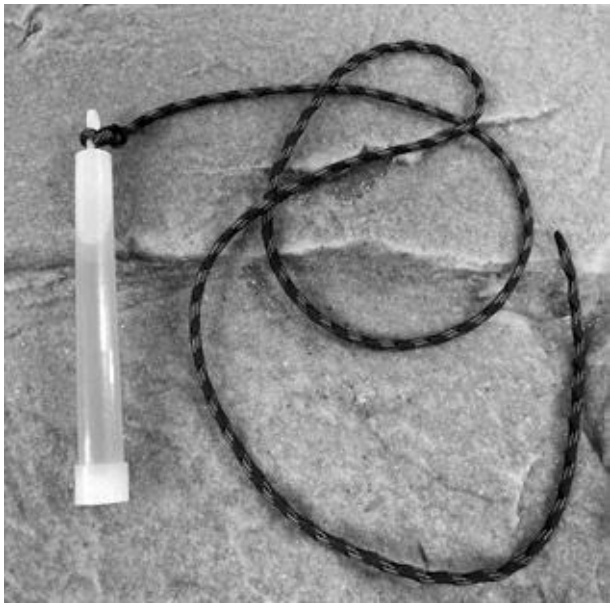
9-Hour Candle

A candle can be used for light in a base camp or shelter but also can be helpful while starting a fire in less-than-perfect conditions. If you find yourself working with damp fire tinder, you can light the candle first and use it to ignite your tinder. This is a much more efficient way to start a fire and helps to conserve your ignition source. In a small, protected shelter, the flame from a candle can also be used as a heat source to raise the temperature a few degrees if necessary. This is especially true in a snow-cave-style shelter.

Glow Sticks

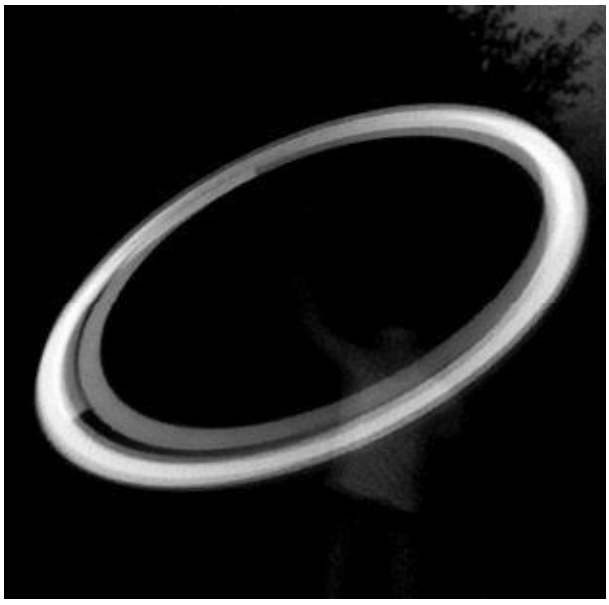
Snap-style glow sticks typically last anywhere from two to four hours and can be an excellent overhead lighting solution when hung from the ceiling of a shelter or tent. They also make a highly visible nighttime signaling device. There are two important attributes to a good visual rescue signal. The first is motion. The second is that it looks out of place from its surroundings. This can be accomplished with shape, color, or both. The best way to signal using a glow stick is to attach a 36" length of cord onto one end and swing it in circles as fast as you can while facing your target.

Glow Sticks



Glow Stick Fitted With 36" Length of Paracord

The produces a very unique circular motion of light that can be seen for miles.



Glow Stick Rescue Signaling Technique

SUMMARY

Just for kicks, I weighed all of my lighting tools:

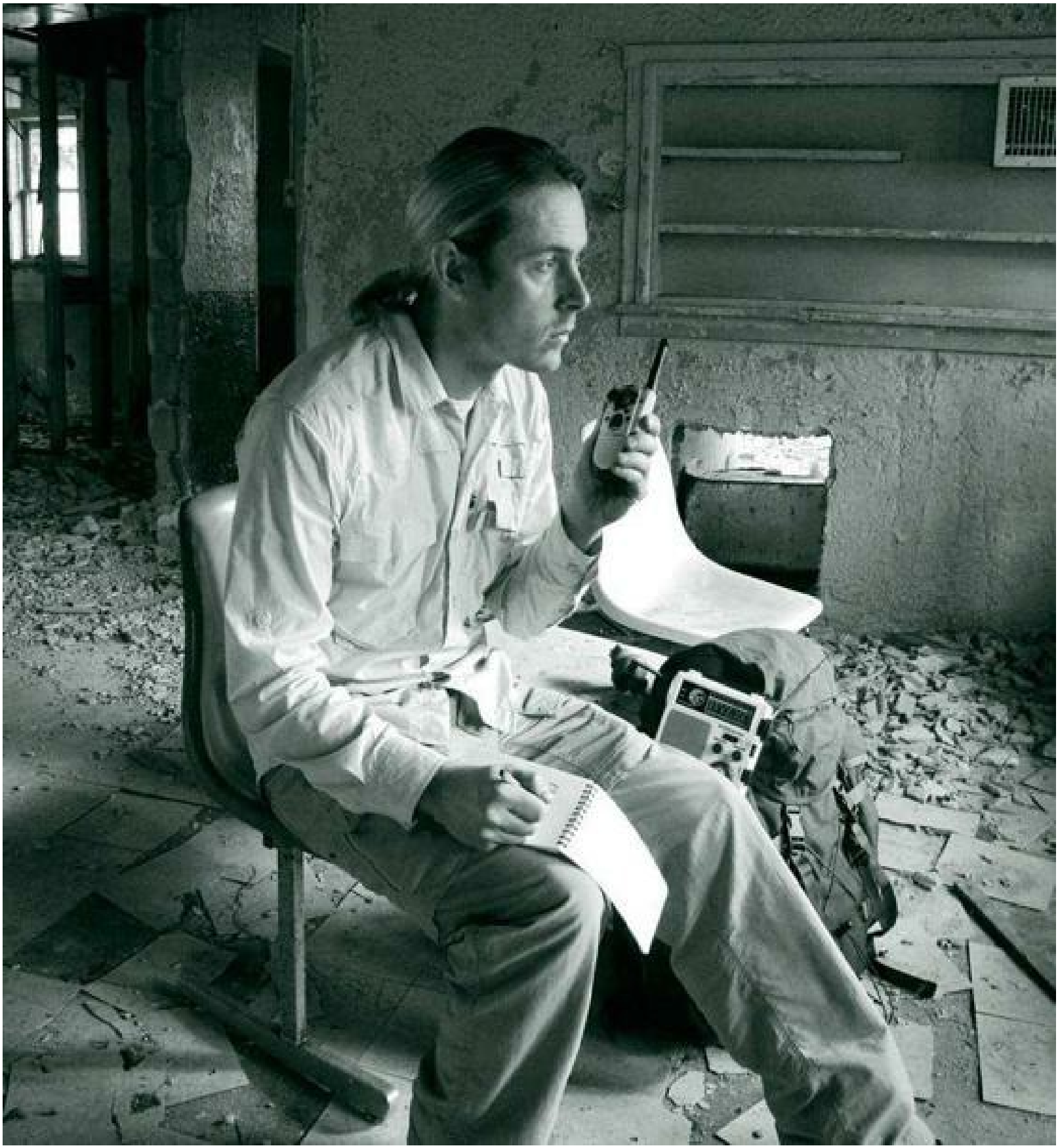
- one headlamp
- one Photon keychain light
- one 9-Hour Candle
- one glow stick

All Lighting Items Fit In Your Palm

The total weight came in at 7.2 ounces—not even half a pound! And all of them combined fit into the palm of my hand.

Just these few ounces can make such a huge difference in a disaster survival scenario. They can drastically impact your chances of a successful Bug Out and rescue.

12 COMMUNICATIONS



THE COMMUNICATIONS CATEGORY en-compasses a variety of topics. Ultimately, communication deals with anything related to:

- sending information
- receiving information
- recording information
- navigation

When large-scale disasters strike, you can no longer depend on normal communication services. “Normal” will not exist for hours, days, and maybe weeks. Most, if not all, communication services will go off-grid. Cell phones and landline phones probably will not work. Local radio and TV stations will most likely not be broadcasting. And digital GPS systems may be inoperable. Lastly, you can forget about getting an internet connection. A large-scale disaster will completely disconnect you and the affected area from the rest of the world for an undetermined amount of time. This will inevitably lead to a great deal of chaos, panic, and disorder. To successfully navigate through this chaotic aftermath, you need to make preparations in advance. Below are several communications-related topics that need to be considered when assembling your Bug Out Bag.

CELL PHONE

It's almost guaranteed that your cell phone will not be working during a disaster Bug Out. Either local towers will be destroyed or the networks will be overwhelmed with volume. Despite this, you need to bring your cell phone with you just in case. In past recorded disasters, survivors have had more success sending and receiving text messages than actual phone calls. Even a sporadic text message could be very instrumental in communicating with friends and loved ones. In the remote chance that your cell phone can send/receive calls or texts, it will be your main point of contact—making it an incredibly valuable asset.

Many cell phones will not last seventy-two hours on one charge. I recommend packing either a second fully charged battery or a manual hand-crank charger. There are several affordable hand-crank chargers on the market with optional adaptors to fit virtually any cell phone make and model. I picked up the one in the photo for fifteen dollars on Amazon. It charges a cell phone and also has a built-in LED light for emergency lighting. My Etón FR300 Emergency Radio (detailed in the next section) also has a hand-crank cell phone charger port. This is an awesome built-in feature.

Sidewinder Hand-Crank Cell Phone Charger

If bugging out by vehicle, be sure to have a car charger.

There are also solar chargers. These, however, are useless without sun, so don't rely solely on them. Even in a typically sunny environment, disaster conditions may block the sun.

EMERGENCY RADIO

An emergency radio is a great communications addition to your BOB. This may be your only source of incoming news while on your Bug Out journey. Knowing disaster updates can help you coordinate your travel and plan your routes. Radio updates can also provide information about safe and/or dangerous areas as well as rescue points, supply schedules, or imminent threats.

There are many makes and models of emergency radios available. The one pictured above from Etón Corporation (etoncorp.com) has a built-in hand-crank cell phone charger and an LED flashlight. The hand-crank can also power the radio should the batteries and built-in battery pack die. There are small emergency radios available with fewer options. In my opinion, though, the hand-crank power option is a must.

Etón FR300 Multi-Purpose Emergency Radio

When selecting an emergency radio, it is critical to choose a model that is equipped with NOAA Weather Radio. National Weather Radio (NWR) is a public service from the National Oceanic and Atmospheric Administration (NOAA). The NOAA broadcasts weather alerts, warnings, and disaster information twenty-four hours a day through more than a thousand transmitters that cover most of the United States. Even when local radio and TV stations are not broadcasting, you should be able to get a NOAA signal. Radios must be equipped with special receivers to receive this NOAA signal, and, typically, this station is clearly marked on emergency radios that have this feature.

In addition to weather-related information from the National Weather Service, the National Weather Radio stations can also transmit a variety of other disaster-related information by collaborating with other government entities, such as the Federal Emergency Management Agency (FEMA) and the Emergency Alert System (EAS). This can include state and local emergencies, hazards, environmental threats and even Amber alerts. Each state has its own Emergency Alert System in place. Get familiar with your state's EAS policies and plans. You can find that information on the FCC's website www.fcc.gov/encyclopedia/state-eas-plans-and-chairs.

IMPORTANT DOCUMENTS

I could probably write an entire chapter on how and why to carry important documents. While dealing with this paperwork may seem boring, it's vitally important to carry this information in your Bug Out Bag, so don't overlook this section.

If you've decided to bug out, it's safe to assume that there is a risk your house will be destroyed and/or looted and robbed. Sorry to be pessimistic, but the reality of a disaster is that *both* do happen. Unfortunately, the house you leave behind is not only at the mercy of the disaster but also people who take advantage of horrible situations. This is a fact rarely covered in the news. You must prepare in advance a portfolio of your most important personal documents.

Important Documents in Waterproof Map Case

These documents are critical to getting your life back in order during the "recovery stage" after the dust has settled. They can also be extremely useful during the actual Bug Out as well. Authorities may require proof of identification or other documents and you don't want *anything* holding you up once you've decided to move. Don't let something as simple as a passport or driver's license delay your travel. In the event of a Public Health Emergency it's likely you will be required to provide medical documentation to clear check-points. There are countless reasons to prepare and pack your Survival Document Portfolio (SDP) in your BOB.

If the documents listed below are destroyed, replacing them can be a very difficult, time-consuming, and costly process. Acquiring duplicate or replacement copies can take weeks or months and can really affect your ability to react quickly and efficiently to the logistical aftermath of any disaster. Organizing your SDP ahead of time and taking it with you can save a lot of heartache and money in the future.

Identification Documents

Below is a list of documents that might be necessary for identification:

- driver's license
- birth certificate
- Social Security card
- passport
- military ID
- marriage license

Insurance Documents

It is important to be able to provide proof of insurance during and after a Bug Out. These should include account numbers and contact information. Your insurance documents might include some of the following:

- property insurance
- auto insurance
- life insurance
- rental insurance

Medical Documents

Proper and current documentation can make life so much easier in the event of a Medical or Public Health Disaster. Below are the most important medical related documents:

- health insurance cards
- record of immunizations
- list of prescription medications
- documentation related to disabilities
- allergy information
- will

Financial Documents

Having account information and contact numbers for the following items can be incredibly useful if you are displaced for a period of time following a disaster:

- bank accounts
- credit cards
- loan accounts
- mortgage

Document Security

Even if you are not preparing for a Bug Out at all, it's good practice to keep the above documents (or duplicate copies) together in a safe and secure place at home. A shoe box hidden in the closet is not sufficient. Invest is a good quality water-tight and fireproof safe that can be bolted to a wall or floor—preferably to the concrete foundation of your home. I keep my SDP inside a safe and also sealed in a water-tight map case.

Similar map cases can be found in the camping or kayak section of most outdoor retailers. These cases are typically larger and much more durable than an average resealable bag.

I do *not* keep my SDP in my BOB year-round. This is the one item I will grab in addition to my BOB during a Bug Out. In the photo, you might notice that I also keep *cash* stored with my SDP.

CASH MONEY

Don't expect to swing by the ATM on the way out of town while a hurricane is tearing through behind you. First, all the "unprepared" will be doing the same thing, so prepare to get in line. Second, the ATM probably won't work anyway. Don't plan on accessing your safe deposit box either. Carry *cash* in your BOB!

Pack five hundred dollars minimum—preferably one thousand dollars. This cash should be in small denominations—ones, fives, tens and a few twenties. Keep this cash in your safe with your SDP. In a Bug Out situation, as soon as you remove the cash from your safe the cash should be split up and kept in five different places on your person. If and when you do need to take out some cash, it's important not to display everything you have. There will most certainly be a need for money at some point along your Bug Out journey. A handful of quarters is also a good idea. You might have a need for coins, i.e., vending machine or pay phone.

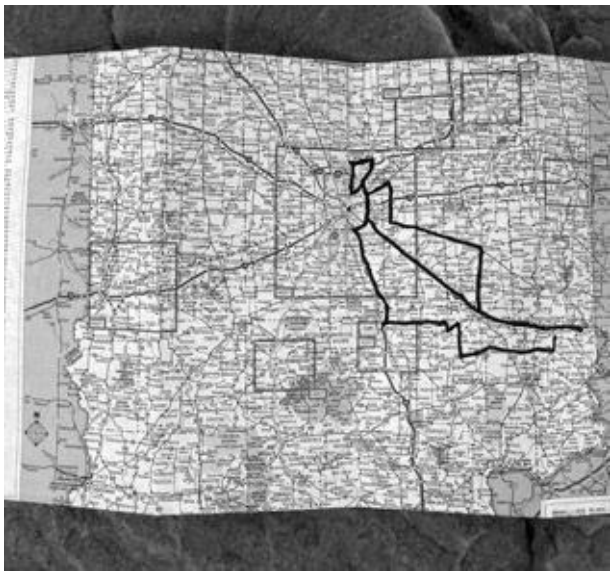
SDP With Cash in Small Fireproof Safe

AREA MAP

Knowing where you are going is one thing. Getting there in the wake of a disaster is something totally different. Disasters have a bad habit of completely destroying and/or blocking roads. If the roads aren't destroyed, they are often jammed with other vehicles "getting out of Dodge". Navigating out of a disaster field can be very frustrating and difficult.

Please, please, please, don't depend on your GPS or SmartPhone to provide you with alternate escape routes. Most likely, neither will work. Remember that ancient thing called a map? Buy one for your local area and keep it in your BOB!

Highlight at least three routes on the map from your home to your Bug Out Location (BOL). Expect blockages and have contingency plans in place. If you travel to your BOL throughout the year, explore alternate routes.



Local Map With Highlighted Routes to BOL

COMPASS

A reliable compass is a necessity for any traveling survivalist. Add one to your BOB. My compass is an old Boy Scout model that I've had for about twenty years.

Compass

TWO-WAY RADIOS

I personally don't carry two-way radios, and they aren't a necessity. However, if you plan on bugging out with a large family or team, these are worth your consideration. If there was ever a reason to split up, a set of two-way radios would be a very valuable piece of kit. Pack a set only if they make sense for your Bug Out needs.

Two-Way Radio Walkie-Talkies

NOTE PAD AND PENCIL

The ability to record important information and leave notes is an important facet of the communication category. Both are very applicable in a Bug Out scenario. A company called Rite in the Rain makes a very unique all-weather writing paper created to shed water and enhance the written image. Their paper is widely used throughout the world for recording critical field data in all kinds of weather. I carry one of their 4"×6" notebooks in my BOB. I cut a pencil in half and keep it in the top spiral binding. I recommend you do the same.

Rite in the Rain Water Proof Note Pads

SIGNALING TOOLS

In a Bug Out scenario, it is critical that you can signal for rescue. Signals are a very important component of a BOB communication kit. During the 2011 Tohuko earthquake in Japan a man was swept eleven miles out to sea on the roof of his house. He was eventually found, but a signaling device could have shortened his time lost at sea. I've highlighted several ways to signal for rescue in previous chapters. Some of these include:

- signal mirror (chapter eight)
- survival blanket signal (chapter eight)
- flashlight (chapter eleven)
- glow stick (chapter eleven)
- signal fire (chapter seven)

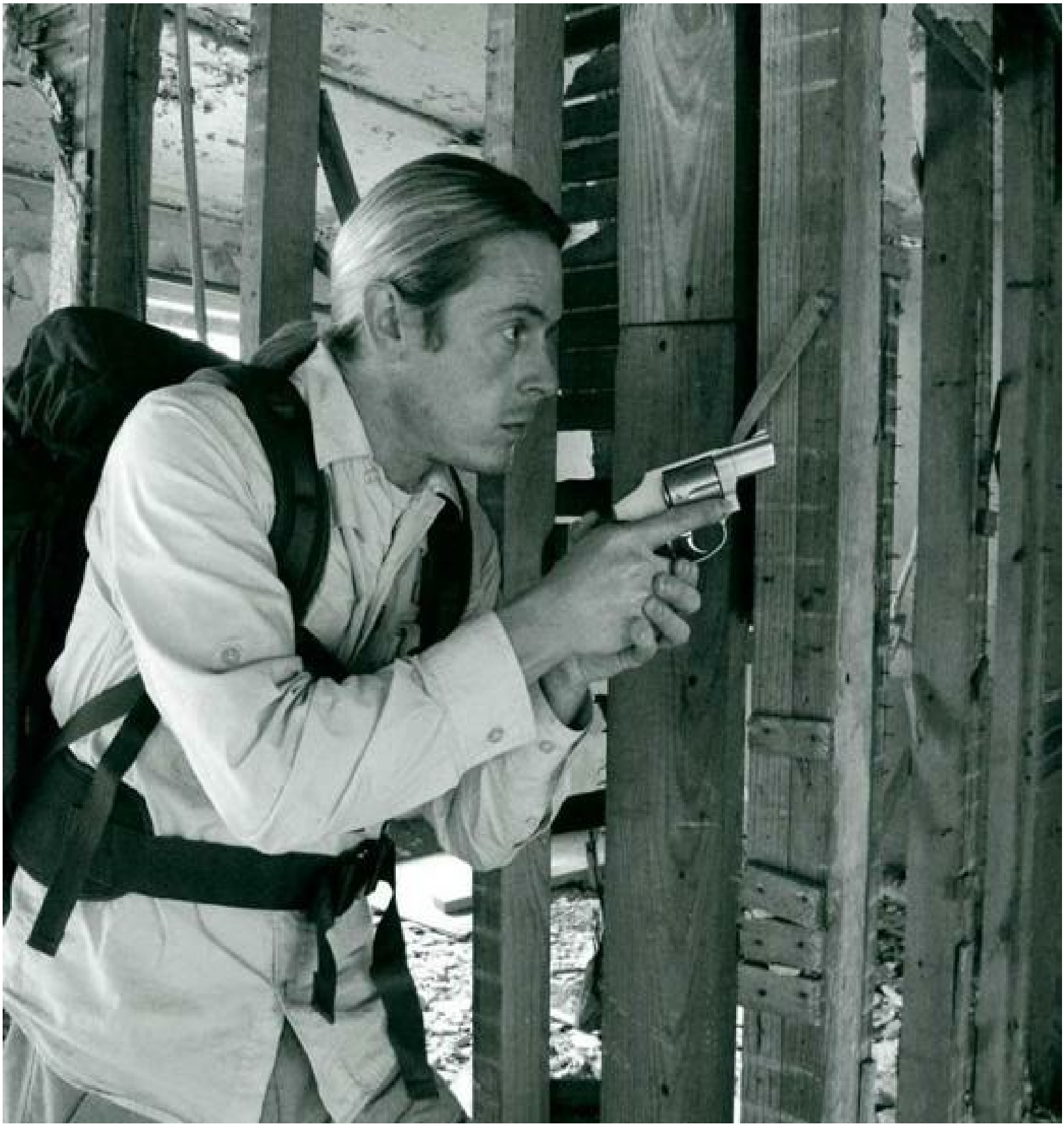
In addition to all of these, I also suggest packing a small whistle. The brand I use is Fox 40 available from fox40world.com. This whistle is made from a durable polycarbonate that is water and rust proof. It has no moving parts to jam or freeze and can even be blown underwater. The 120-decible blast travels for miles.

Signal whistles are far more effective than using your own voice. The whistle blast is *much* louder and travels *much* farther than any sounds you can make by screaming. It also takes far less energy to blow a whistle than to scream.

SUMMARY

This chapter is about sending and receiving *information*. Whether providing identifying documents, writing down emergency data or listening to disaster radio broadcasts, the ability to exchange information is critical. It is necessary to have a variety of alternative tools on hand to send and receive information.

13 PROTECTION & SELF-DEFENSE



TO APPRECIATE THE INFORMATION in this chapter you must read it with a different mindset. You have to imagine yourself actually in a disaster Bug Out—picture yourself really there. Your family is scared and you are just trying to get somewhere safe. Traffic was at a complete stand-still so you were forced to abandon your vehicle and travel by foot to your destination. As dawn approaches, you notice the

silhouettes of three or four guys swiftly approaching your family from behind. You get an uneasy feeling in your gut and instinctually know that this is not going to end well. Maybe their intent is to take your food and water or your shelter. That would be a best-case scenario. Or, maybe they just want to borrow your daughter for a while. Their strategy might also be to beat everyone unconscious, take everything you have and leave you for dead. Regardless, you have some very serious decisions to make in about thirty seconds.

I am not crazy, and this is not fiction. Scenarios just like this happen in the wake of *every* disaster in *every* country and in *every* neighborhood. I told you in the very beginning of the book that this was going to be a complete and thorough guide about how to build a Bug Out Bag. This is a chapter that will make some people uncomfortable. I can't in good conscious give you a product that is not complete. A Bug Out Bag is *not* complete without inclusions for self-defense.

THE UGLY TRUTH

Disasters have devastating consequences and can leave people, cities, and regions with horrific and unimaginable circumstances. I am always amazed at how generous my fellow Americans are when responding to help victims of disaster. It seems that disaster sometimes brings out the absolute best in people. Whether it be in the form of donations or hands-on labor, it is very moving to see people rally behind those who have suffered so much loss. These efforts are always covered by news outlets weeks and months after a disaster strikes.

Unfortunately, however, there are people in this world who do not share the same sentiment about helping our brothers and sisters who are hurting. For some, disasters bring out their worst qualities. These predators use the chaos and disorder that surround disasters to further victimize people through looting, robbing, violence, and rape. These events are rarely, if ever, mentioned by news outlets—leaving many unaware of the potential dangers. This reality is the darkest side in any disaster situation and is rooted in selfishness, greed, and sometimes desperation.

It's no mystery that large-scale disasters overwhelm normal public-safety operations—at least temporarily. It's during this time when most violent crimes occur. You must be prepared to defend yourself and your family from individuals and gangs should the need arise. Whether you like the idea or not, you would be naïve and foolish not to take this category seriously—especially if traveling with women and small children.

SELF-DEFENSE MENTALITY

Self-defense is a very touchy subject. I am not an expert on the laws surrounding self-defense or the use of lethal force. I do know, however, that there is a very fine line between defending yourself or your family and attempted murder, manslaughter, or homicide. Legally, you can only respond to an attack with an equal amount of lethal force.

I know what I would do to protect myself and my family. Everyone has his or her own comfort level, limitations, morals, and boundaries. It's not my place to tell you how you should act if threatened. That's your business. What I can do is provide you with some basic self-defense guidelines and list what I think are a few practical self-defense tools to keep in your BOB. How you use this information is your call.

Bottom Line

You can only use lethal force when you or your family are faced with an absolute and unavoidable act of injury or death from someone else. It must be your last and only option. The laws of this country and your state apply before, during, and after a disaster.

SELF-OFFENSE

The best self-defense is self-offense. Self-offense is taking every precaution possible to avoid any kind of confrontation. This includes evading from and removing oneself from dangerous, confrontational, or questionable situations.

There is absolutely *no* benefit in trying to prove yourself. Confrontation is a *lose-lose* scenario. No one wins.

Below are self-offense tips and guidelines that can help you avoid using self-defense options:

- Check your ego and pride at the door. They have no place here. The desire to prove yourself will only get you in trouble. Embrace humility.
- Be observant.
- Don't flaunt your tools and supplies. Keep your behavior low-key.
- Never travel alone unless you have no choice. There is safety in numbers.
- Never assume anything. Make decisions based upon facts.
- Don't just acknowledge your gut feeling—follow and act on it.
- Question everyone.
- Trust no one.

These guidelines may seem to border on paranoia, but who cares? In the midst of lawlessness and pandemonium, it's okay to behave a little bit paranoid and cautious. Let your survival instinct guide the decisions you make. Below are some words that should describe your mental state of self-offense:

- steady
- observant
- calculated
- attuned
- methodical
- aware
- cautious
- humble

You are only one side to this delicate equation. You can control yourself but you cannot control other people. Conflict is sometimes unavoidable. When faced with conflict, you must know your self-defense options. You need to prepare these options ahead of time. These tools need to be accessible. And as with any Bug Out survival skill, training, practice, and experience drastically increases your odds of successful deployment.

SELF-DEFENSE OPTIONS

Your Body

If trained properly, your body can be an effective defense weapon. I completely endorse and recommend taking a local self-defense course or enrolling in regular self-defense training classes. Knowing how to effectively strike an attacker with specific targeted blows takes professional training and experience. A demobilizing strike doesn't just happen randomly. It is intentional and premeditated. If properly executed, powerful strikes to the throat, groin, and knees can instantly neutralize an attacker. If possible, it is best if these strikes are made proactively and offensively to catch the attacker off guard. Defense is reacting to an event. Offense is acting before an event happens. It is much more effective to make an offensive strike than a defensive one. Offensive strikes are also more controlled and precise.

Hand-to-hand combat should be your absolute last option of self-defense or self-offense. It is incredibly risky and dangerous. If your attacker wields a weapon, or if there are multiple attackers, your chances of successfully defending yourself with your bare hands go *way* down. Unarmed self-defense skills are very important and should be a part of your disaster preparedness training regimen. However, you would be completely misguided and naïve to depend on these skills as your sole self-defense options.

I don't like or condone violence. However, protecting myself and my family from harm is an exception. You *must* pack self-defense weapons in your BOB.

Pepper Spray

There is a reason why military, police, and security professionals carry pepper spray—it works! I have chosen to carry a canister of Cold Steel Inferno pepper spray as a part of my BOB rig. I applied an adhesive Velcro strip to the side of the canister and applied another Velcro strip to the padded shoulder strap on the front of my BOB. This keeps the pepper spray secure, but easily accessible. I can detach and deploy this spray in under two seconds.

Cold Steel Inferno Pepper Spray

Inferno Secured to Shoulder Strap

Following are my general guidelines when it comes to purchasing and using pepper spray:

- Buy a pepper spray that has the active ingredient Oleoresin Capsicum. Oleoresin Capsicum is derived from pepper plants and is extremely effective in irritating the eyes, airways, and lungs of an attacker. The spray you choose should have around 5 to 8 percent Oleoresin Capsicum. A pepper spray's strength is measured by Scoville Heat Units (SHU). My pepper spray is 2,000,000 SHUs. Anything in this range is sufficient.
- Buy a pepper spray that sprays in a *stream* pattern as opposed to a *fog* or *mist* spray. A *stream* pattern typically sprays the farthest distance and performs better in outside conditions. *Fog* and *mist* sprays are considered very effective in terms of stopping power because they have better disbursement of active ingredients, but they are drastically affected by wind strength and direction, so for a disaster Bug Out, I suggest *stream* spray. For all effective purposes, I consider a *foam* to be in the *stream* spray category because it shoots straight and fast. My pepper spray is a *foam* that dissolves on contact.
- Spray and retreat! Don't hang around to watch what happens. The entire purpose of pepper spray is to disorient and demobilize an attacker long enough for you to escape. Spray your attacker and, after you confirm a direct hit, retreat immediately. Any decent pepper spray should buy you enough time to get away safely.

Pepper spray is legal in all fifty states, but some states have imposed certain restrictions. Be sure to check your local and state laws to see if they have any that apply specifically to the purchase and use of pepper spray. You can review your state laws and purchase Cold Steel Inferno at www.coldsteel.com/pepper-spray.html.

Survival Knife

Remember your Survival Knife from chapter ten? This knife is an excellent self-defense weapon. Again, however, this is certainly considered close quarters, hand-to-hand combat. Even with training, self-defense with a knife can be very dangerous. The most obvious is the risk of your knife being taken from you by an attacker. Attackers typically don't give fair warning. Like animal predators, they prefer to stalk and surprise their victims to prevent retaliation. Consequently, the chances of unsheathing and using a knife for defense is fairly remote. Regardless, it is still a viable self-defense option that has it's place in this chapter.

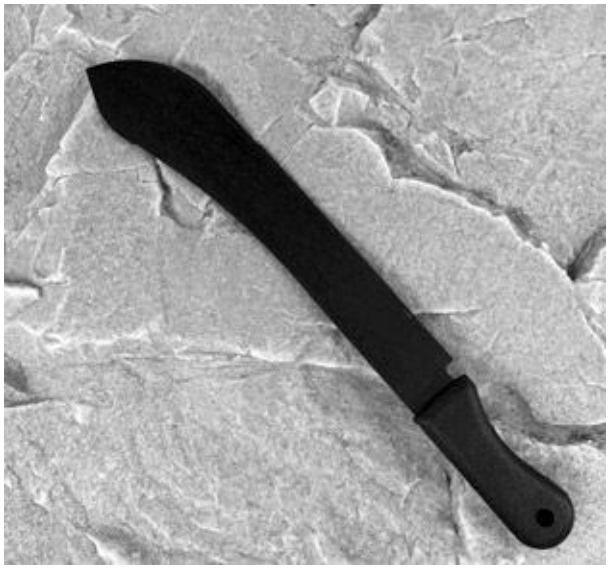
Self-Defense Knife

When you call around to local organizations offering self-defense classes, ask if they teach knife courses. You may want to consider this training.

Machete or Other Long Reach Tool

Machetes and the like have been used as self-defense weapons for centuries all over the globe. If you've decided to pack a machete in your BOB, it is not only an effective deterrent, but it can be an incredibly effective weapon to keep an attacker at bay. It has reach and chopping force—a deadly combination. I'll admit, it sounds like something out of a Mad Max movie. However, if I were an attacker looking for victims, I probably wouldn't go after the guy with a machete if there were other targets; would you?

Machete in Bug Out Pack



Cold Steel Bolo Machete

There are countless other items that can be found on location that make excellent self-defense weapons. Just to name a few:

- hammer
- pipe
- chain
- bat
- pry bar
- axe

Anything that can be swung, thrust, thrown, chopped, hacked, slammed, pounded, shoved, slashed, whacked, smashed, thrashed, or bashed can be used as a self-defense weapon. Remember, though, it can also be forcefully taken and used against you as well.

If a true life-or-death violent attack actually did occur in a Bug Out Scenario against me or my family, there is only one self defense weapon I hope to have. That weapon is a gun.

BUG OUT GUN

Guns aren't for everyone. In the wrong hands, guns can cause more harm than good. Ownership of any deadly weapon is a huge responsibility and should be taken very seriously. If ever faced with a Bug Out Scenario, I will be taking a gun. I have a gun packed with my BOB. I will discuss what kind of gun a little later. I know several people, however, who I hope will not be taking a gun. They don't have the proper training; they aren't practiced or experienced with firing a gun; and they don't have the calm resolve that is needed to make good, solid decisions in a scary and chaotic environment. These individuals are best *traveling with* someone who knows and understands firearms.

What type of person are you? Do you have firearms training or experience? Are you an accurate marksman with a gun? Only you know the answers. Be honest and responsible. Don't carry a gun unless you can back it up with knowledge and know-how. If you don't feel prepared to travel with a gun right now but you see its place in a Bug Out Survival situation, then get some training under your belt and start building competence and confidence with your weapon of choice. Almost every large city has a firing range that offers gun ownership classes.

Handgun vs. Shotgun vs. Rifle

I love handguns. I love shotguns. And I love rifles. I own several of all three types. In a disaster, you can't take all of them or even two of them—it just isn't practical. What fits into your Bug Out Bag the best? The primary use is self-defense. Theoretically, your BOB contains 72 hours worth of food, so it's not necessary to pack a hunting weapon. Ideally, your gun can be hidden and concealed from the view of others. Remember, you don't want your stuff to make you a target. You also don't want to become a target of authorities or law enforcement. Carrying a gun during chaotic disaster emergencies does not settle well with authorities and they *will* stop you. They don't know each individual and are looking out for the best interest of the community, so the general rule of thumb is that anyone running around with a gun in the midst of a disaster is dangerous. If you want to keep your gun, it must be concealed.

Given these considerations, I believe the best type of Bug Out gun is a pistol. Handguns are very easy to conceal. They are also fairly lightweight, which is certainly a concern. The ammo is small and packable as well. A pistol is an incredible self-defense weapon. Depending on the model, a typical handgun holds between five and nine rounds of ammunition—giving the user multiple shots before reloading. Some high-capacity magazines can extend this number to upwards of thirty rounds. Though no maintenance should be necessary in a 72-hour Bug Out, most handguns are fairly simple to maintain. Narrowing the gun choice down to a handgun is only half of the decision-making process. There are literally hundreds of different handgun makes, styles, and calibers.

Survival Shotgun

Ruger 10/22 Rifle

Glock Pistol

SURVIVAL QUICK TIP

Know your local and state gun laws! Each state has it's own unique set of gun ownership, carry and transport laws. Find out the answers to the following questions by contacting your local police department.

- Can I travel with a gun?
- What kind of guns can I travel with?
- Do I need a permit to travel with a gun?
- Can I carry a concealed weapon?
- What else do I need to know about traveling with a gun?

Revolver vs. Automatic

I am certain to ruffle some feathers with my opinions about whether you should pack a revolver or a semi-automatic pistol. First, let me say that there are excellent revolvers and excellent semi-auto pistols. I would be happy to carry either one in a Bug Out. However, I choose to pack a revolver in my BOB for two main reasons:

Reason 1: Simplicity. I like how simple a revolver is. There's a barrel, a bullet, and a hammer. It's pretty hard for something to go wrong or jam. They are also very easy to load and unload. Semi-auto pistols have several moving and sliding parts. And, as much as hard-core semi-auto die-hards don't want to admit it, these guns occasionally jam. I've shot thousands of rounds through both revolvers and semi-autos. I've never had a revolver jam on me. I have had semi-autos jam on several occasions. I remember one instance vividly.

Reason 2: Caliber Flexibility. When it comes to choosing a caliber, I want something with knock-down power. If the situation has called for me to aim and fire my weapon at an attacker, I don't want to just injure him. I want to *stop* him—period. For this reason, I have chosen to carry a .357 Magnum 5-shot revolver in my BOB. .357 caliber revolvers will also fire .38 caliber rounds, which gives you some flexibility in sourcing ammo. If you're in a pinch, trying to find two popular calibers is easier than trying to find one.

Revolver Cylinder With 5 Rounds

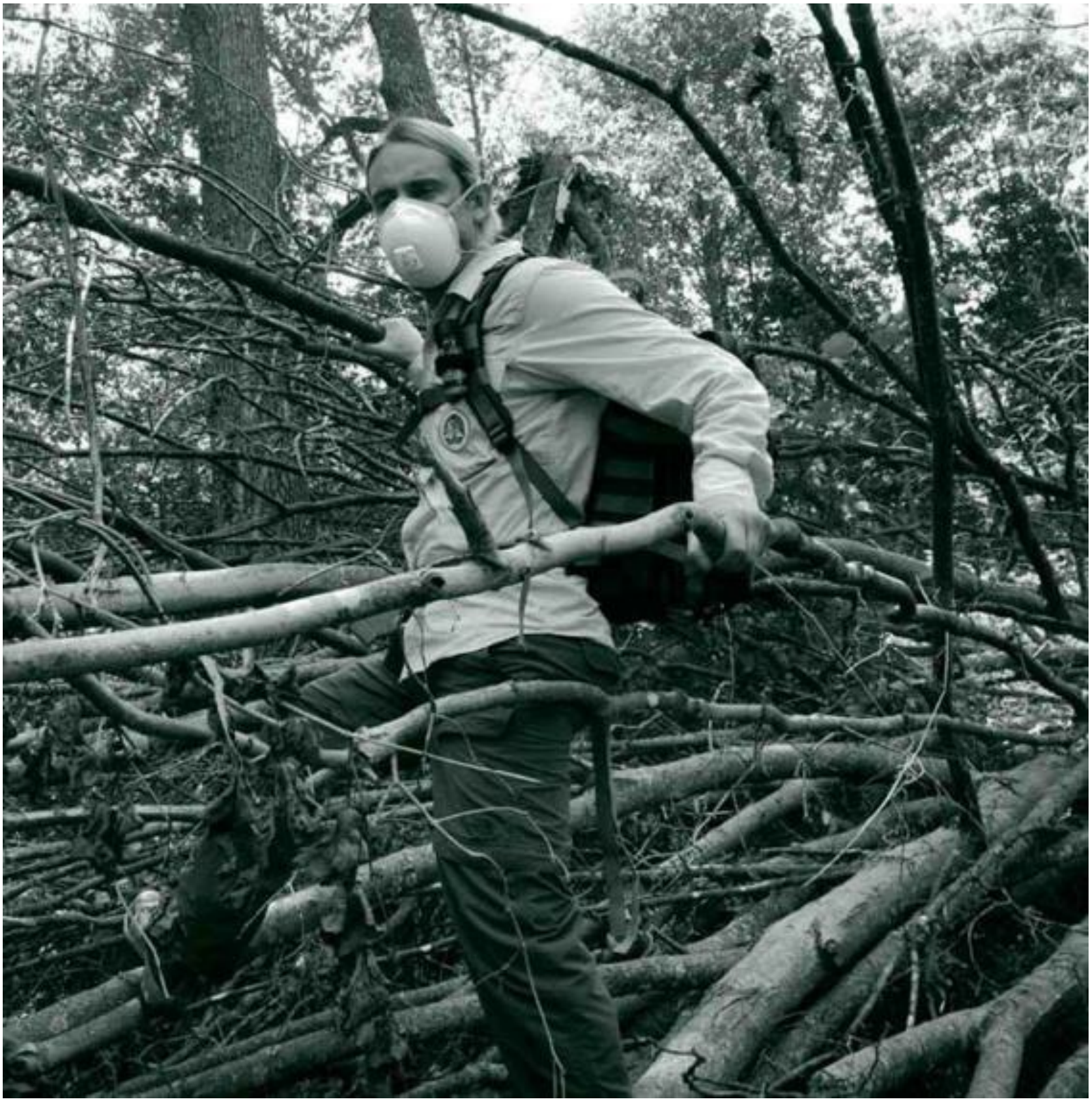
Taurus .357 Magnum

.357 Bullets (left) and .38 bullets (right)

SUMMARY

Remember, self-offense is the best self-defense. Use your wits and gut feelings to keep out of potentially dangerous situations. And, just because it's a disaster environment doesn't mean that normal laws do not apply.

14 MISCELLANEOUS SUPPLIES



THIS CHAPTER IS DEDICATED to BOB items that don't necessarily fall into the first eleven supply categories. Some are luxury items based on pack size and weight. Others are items that I would consider necessities. I will indicate importance in each description.

RESEALABLE BAGS

Resealable bags are excellent disaster survival tools. They have a plethora of survival-related uses. In a pinch, they can be used as water storage or carrying containers.

They also make excellent waterproofing containers for moisture-sensitive items in your BOB, such as first aid kits and fire-starting implements. I double-bag anything I want to protect for an added layer of protection. I also keep three to four extra empty one-gallon bags in my BOB just in case I need them.

CONTRACTOR-GRADE TRASH BAGS

As mentioned in chapter two, contractor-grade 55-gallon trash bags can be used for all kinds of survival related tasks.

To recap, here is a short list of uses below. Pack two of these in your BOB if space allows.

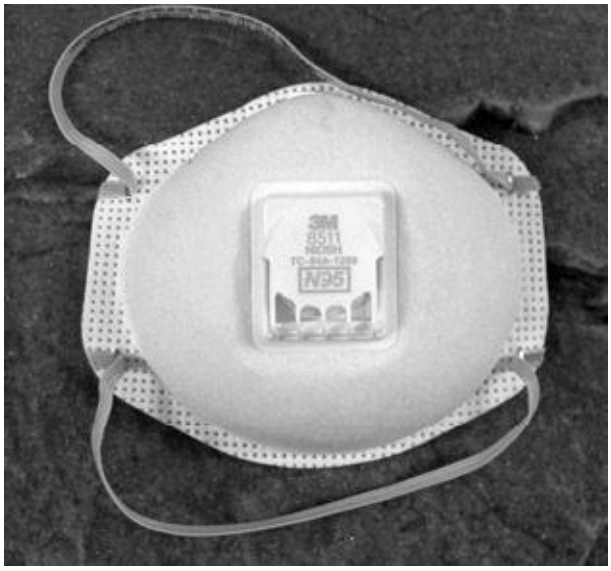
- waste storage and disposal
- BOB water-proof pack liner
- ground cover
- poncho
- flotation device
- shelter canopy
- rescue signal
- water container/collection

N95 DUST MASK

N95 is a nationally recognized rating given to indicate that a mask filters airborne particles that are .3 microns or larger in size. N95 masks are made by a variety of manufacturers. When selecting a dust mask, remember it's the rating that is important, not the brand.

The Centers for Disease Control (CDC) recommends the use of an N95 rated mask to prevent the spread of airborne viruses, such as H1N1. The mask basically traps particles, bacteria, and viruses that would otherwise be inhaled. I can think of several Bug Out scenarios when there would be a need for an N95 mask:

- volcanic eruption with plumes of dust, smoke, ash, and debris
- terrorist attack, nuclear attack, or bomb with explosions, smoke, ash, debris, dust
- pandemic, disease, or plague
- wild fire with airborne ash and smoke



N95 Dust Mask

When using an N95 mask, there are some tips to improve results:

- **Tight Seal:** A nice tight seal against your face improves performance. Be sure to form the aluminum nose guard to the contour of your nose. Thick facial hair prevents a good seal.
- **Exhalation Valve:** In the photo, this valve is the small, plastic square on the center of the mask. It allows for quick release of the carbon dioxide and moisture you expel when you exhale. The valve helps to prevent moisture from clogging the fibers of the mask. It also helps to prevent glasses from fogging up as you breath.

N95 dust masks can also be used as crude water filters to filter out floating particulates.

Mask as Crude Pre-Filter

550 PARACHUTE CORD

550 indicates that this rope has a tensile strength of 550 pounds. True military-spec paracord is comprised of seven inner strands encased in a woven nylon sheath. The tensile strength of these seven inner strands is 35 pounds. Even these seven strands are comprised of two twisted strands. In reality, a length of 550 paracord can be broken down into fifteen separate ropes—the fourteen inner strands and the woven sheath. Thus 10 feet of paracord can equal 150 feet of cordage if absolutely necessary.

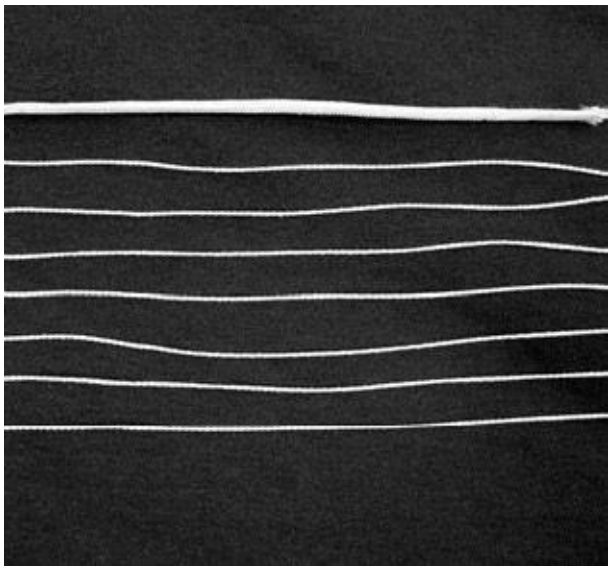
This versatility combined with its strength makes 550 parachute cord a very popular cordage choice for disaster preppers and survivalists. It can be used for thousands of survival-related projects. Below is just a small list:

- shelter building
- snares
- repairs
- fishing line
- emergency climbing rope
- belt

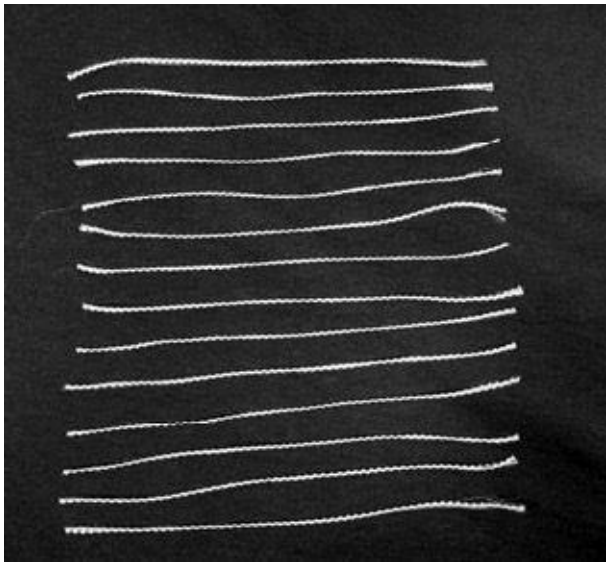
I suggest carrying fifty feet minimum of 550 Paracord. I carry two hundred feet cut down into the following more manageable lengths:

- quantity 2: 5-foot sections
- quantity 10: 10-foot sections
- quantity 2: 20-foot sections
- quantity 1: 50-foot section

Ten-Yard Hank of 550 Military-Spec Parachute Cord



Seven Inner Strands and Nylon Sheath



Seven Inner Strands Unraveled Into Fourteen Strands

BINOCULARS/MONOCULAR

These are certainly a luxury item but can be very useful if you have the extra space in your BOB. The ability to clearly see into the distance can give you several advantages. Some of the most notable are to:

- avoid threats
- inspect Bug Out Location before approach
- look for rescue or help
- look for best travel routes
- observe groups of people from afar
- read signage
- keep track of team members

Creek Scanning Horizon

SMALL FISHING KIT

Again, you have already planned for 72 hours worth of food, so this is not a BOB necessity. However, a small fishing kit can be packed into an extremely small container and weighs very little. In my opinion, it is a worthy addition.

A fishing kit should include the following items:

- 30–50 of 30lb.+ test line
- 3–5 hooks in a variety of sizes
- 3–5 sinkers

I pack my fishing kit into a small aluminum pill case that I purchased at a local pharmacy.

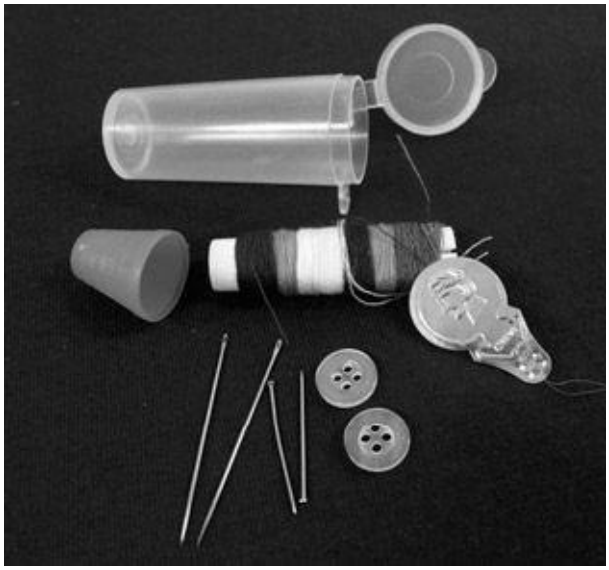
Fishing Kit

SMALL SEWING/REPAIR KIT

Virtually weightless, a sewing kit can be useful to make necessary gear or clothing repairs while in route. It could also be used for emergency sutures. I purchased my kit from a local fabric store and keep it in the film-canister-style container in which it was packaged. It contains the following items:

- a variety of threads
- 2 sewing needles
- 2 push pins
- 1 button
- 1 needle threading tool
- 1 thimble

I also added about five feet of waxed dental floss. This thread is incredibly strong and perfect for repairs that need to be able to take some continued abuse, such as backpack straps or tarp tears.

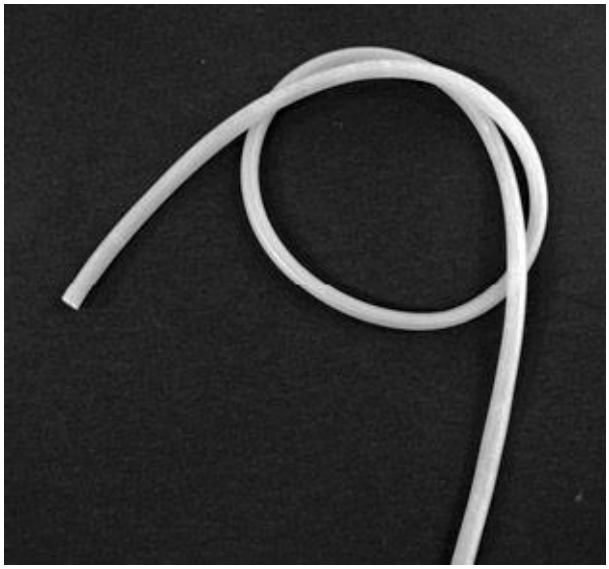


Sewing Kit and Container

RUBBER TUBING

I mentioned this item in chapter three. Some pump water filter systems come with rubber tubing that you could use for other functions if needed. If you are not packing a system that contains rubber tubing, consider packing a 36 length of rubber latex surgical tubing. It can be used for many survival applications. Some include:

- tourniquet
- siphon
- drinking straw for hard to reach water supply
- makeshift slingshot
- makeshift fishing spear gun



36 Length of Latex Surgical Tubing

Slingshot Made With Surgical Tubing

Hawaiian-Style Fish Spear Made With Surgical Tubing

DUCT TAPE

I also mentioned this item in chapter three. I wrap fifteen feet or so of duct tape around my Nalgene water bottle. I also wrap duct tape around several other items as well for easy storage. You can never have too much duct tape! For example, I also wrap my lighters and my backup Mora 840 knife sheath.

Between these items, I have approximately twenty-five feet of duct tape that can be used as needed. It is a multi-use product with uses only limited by your imagination. I've even seen videos and pictures of people making functional boats and rafts using duct tape. Several more practical noteworthy uses are:

- emergency first aid bandage
- cordage
- gear/clothing/shoe repairs
- makeshift emergency water container

Lighters and Sheath Wrapped in Duct Tape

SUNGLASSES

Besides protection from the sun, a good pair of shades can double as safety goggles. Take every precaution to protect your eyes—especially when you have limited access to medical facilities and/or treatment. An eye injury can be a devastating blow to your Bug Out plans. Buy a cheap pair of sunglasses and a neck lanyard to prevent accidental loss.

TWO BANDANAS

It's amazing how something so simple and cheap as a bandana can have so many uses for a disaster survivalist. Bandanas literally have hundreds of uses. They are also nearly weightless and are very easy to pack—stuffing into even the smallest cracks of your BOB. I recommend packing two bandanas in your BOB. Below are some very practical Bug Out uses:

- face mask
- pot holder
- trail markers to leave signs of travel
- cordage—cut into strips and tied together
- crude water filter
- first aid bandage
- surface cover for food prep

Bandana as Pot Holder

Strip of Bandana as Trail Marker

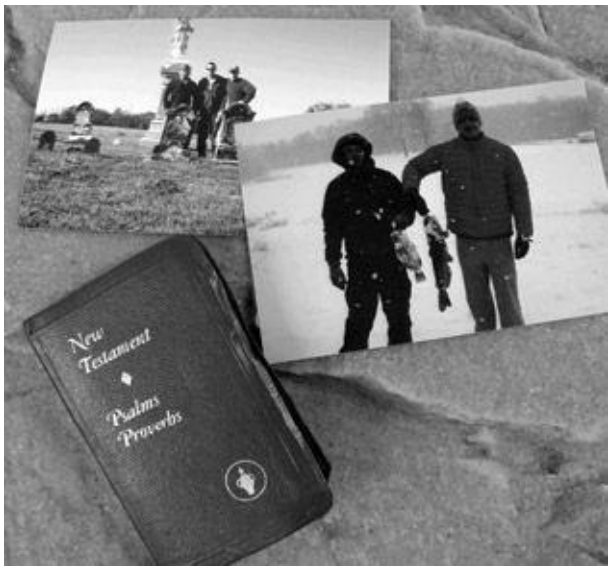
Bandana as Food Prep Surface Cover

Bandana Cut Into Strips and Tied Together For 20′ of Cordage

INSPIRATIONAL ITEM

In every survival kit I build, I always include a small “inspirational” item. This item can be a source of motivation for when morale is low. It can be anything meaningful—something that keeps you going and reminds you that life is worth fighting for when the going gets tough. This item is different for everyone. It can be a family photo, a picture of your girlfriend or boyfriend, a small meaningful trinket or a religious item. Personally, I keep a small King James Bible in my BOB and a fun family photo. These two items inspire and motivate me not to give up.

For children, a toy, trinket, or stuffed animal can go a long way. Anything positive that can help distract them from the reality of a disaster environment is a good thing. Familiar pleasures to a small child can represent hope, reassurance, and normality. A small comfort item even for tweens and teens can help reduce stress and maintain a sense of calm and normality amidst the chaos around them. Keep these comfort items packed in their bags ahead of time. Don’t expect to be able to round up a favorite toy as you are bugging out. If your child is particularly attached to a specific toy, buy a duplicate to keep in the child’s BOB so it’s always ready to go.



Inspirational Item

SUMMARY

Use your best judgment when it comes to pack real-estate. You have to make decisions based upon space and how much weight you can carry. Inevitably, some items just aren't going to make the cut. That is okay and expected. The check-list in the appendix is actually organized in order of importance. If you are running low on space or coming close to your weight-cap, cut the items lower on the list first and work your way up.

15 BUGGING OUT WITH PETS

A FRIEND OF MINE who works in the veterinary business told me that more than 30 percent of American households own either a dog or a cat. She also said that more than 60 percent of households own some kind of pet. Consequently, this chapter is applicable for many readers. Whether or not your pet

survives a disaster Bug Out has a lot to do with the steps you take to prepare in advance. Pets need to be considered when assembling your BOB if you plan on taking them with you. It might not be practical to take some pets if you are forced to Bug Out. This is a fact of life and a sad reality for many pet owners. This decision needs to be made in *advance*. If a disaster strikes and a Bug Out is necessary, you need to already know which, if any, pets you are taking with you. There is no time for arguments and thoughtful decisions in the middle of a crisis.

After you've made that decision, below are some BOB considerations for pets. Basic survival needs aren't really that much different between humans and animals—food, water, and shelter are the major concerns.

WATER

Just like humans, an animal's daily water requirements vary with size, weight, type, and environment. The best rule of thumb is that if you are thirsty, your pet is probably thirsty. It is a fallacy that dogs and cats are not susceptible to illness, vomiting, and diarrhea from water-born pathogens such as Giardia—especially those pets who are on very sheltered and strict in-house diets. Unfortunately, gone are the days in most parts of the world when humans or domestic pets can drink from natural water sources with no worries. It is certainly a risk, even for pets. If I had a pet, I'd probably still plan on them drinking from a natural source, but that is a personal choice.

Animals don't drink out of Nalgene water bottles very well. It's impossible not to waste water while trying to let them drink this way. For fifteen dollars, I bought a collapsible water dish made by Granite Gear. It's the perfect pet-watering container for a BOB.

Granite Gear Slurpin Bowl

FOOD

In addition to water, you will also need to pack pet food. The same guidelines apply that you used to pack your own food. Your pet's food must be lightweight, packable, and kept in a watertight container. I suggest dry pet food triple-packed in resealable bags. Pack seventy-two hours worth of pet food.

Dry Pet Food Packed in Resealable Bags

MEDICINE

If your pet takes medication you will also need to pack items related to this need: pills, droppers, syringes, etc. These items should be kept in a kit separate from your own first aid and hygiene kit.

LEASH & MUZZLE (IF NECESSARY)

Without a leash, keeping track of a curious or scared pet in a chaotic disaster environment can be a challenge. A leash is especially important if you are forced to travel by foot. In a pinch, a simple leash can be fashioned from your supply of paracord mentioned in chapter fourteen.

If you have a dog that is prone to snapping or biting, a muzzle should be included in your BOB. The last thing you need is your dog biting someone in a crowd.

Leash on Small Dogs During Urban Bug Out

Maggie the Coon Hound Ready for a Bug Out

PACK ANIMALS

Many animals have the ability to carry their own Bug Out Items. It's not at all uncommon for service dogs to carry items for their disabled owners in specially designed saddle-bag style dog backpacks. I've seen this on numerous occasions. This same concept can easily be duplicated in a Bug Out Scenario provided you have a pet capable of the task and you have prepared a pack for it in advance. Even smaller dogs can be fitted with small packs.

Ideally, though, this strategy is best suited for medium- to large-breed dogs and farm animals. Goats, for example, make excellent pack animals capable of carrying a quarter of their own weight. Many "pack goat" enthusiasts routinely take several day backcountry trips using pack goats to haul the supplies. Here is a photo of Charlie Jennings with goats purchased from Carolyn Eddy's herd at Eagle Creek Packgoats.

Pack Goat Fitted with Packs.

Photo compliments of the North American Packgoat Association (www.NAPgA.org).

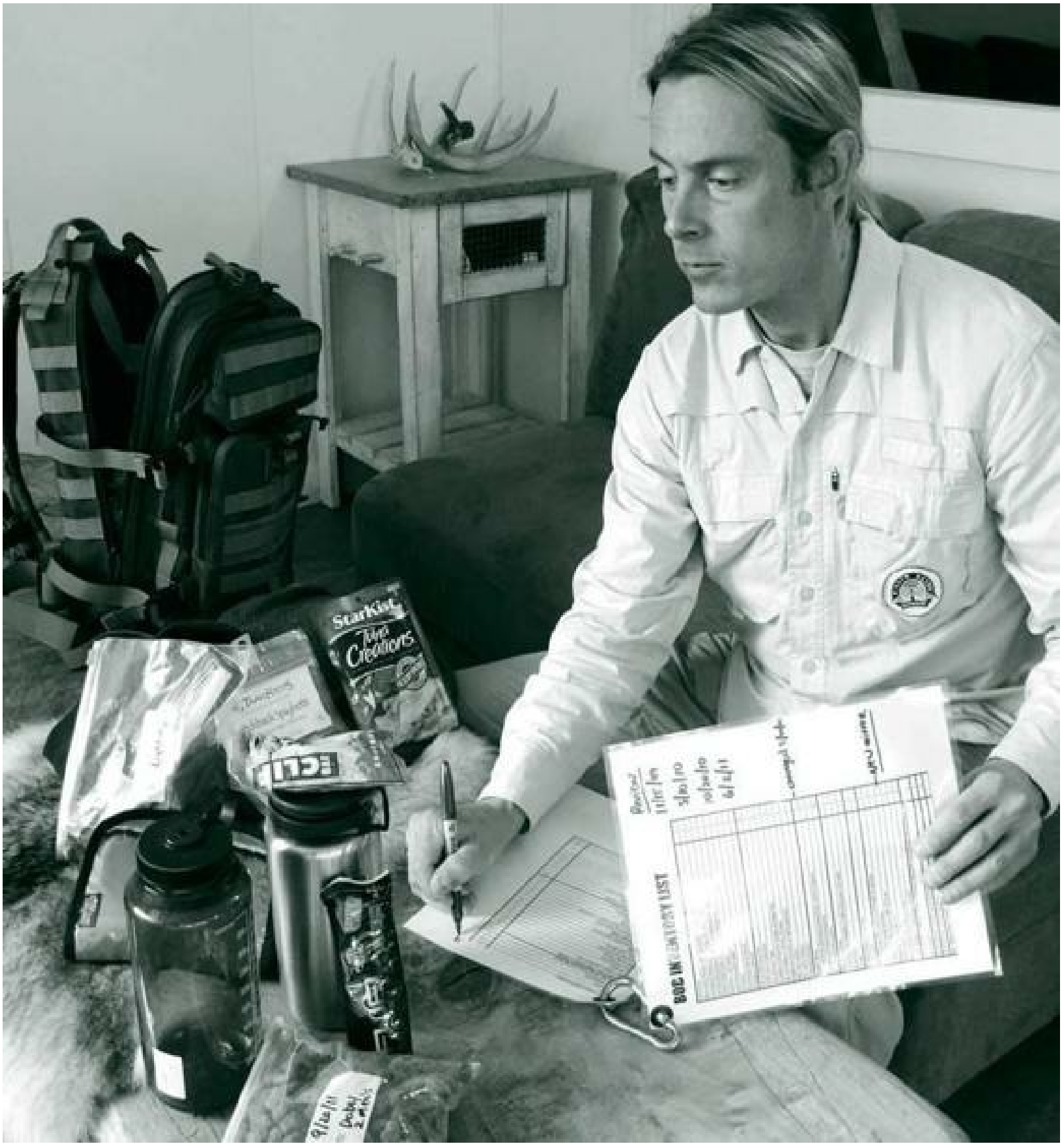
PAPERWORK/IDENTIFICATION

You need to also pack important documents and identification for your pet. Your pet should have an ID collar with your contact information and rabies tag. You should also include vaccination records to prove your pet has had the proper shots within the previous twelve months. This documentation can help to ensure smooth travel if ever questioned by authorities.

SUMMARY

I always joke with my brother, who owns two miniature Doberman Pinschers, that they might as well be his children. That statement is especially true during a disaster Bug Out. If you are taking your pets, make preparations in advance. Try your best to make them as self-sufficient as possible.

16 BOB ORGANIZATION & MAINTENANCE



NOW THAT WE'VE DISCUSSED what belongs in your Bug Out Bag, it's time to think about packing the bag. From inside to out, every step of assembling your BOB should be methodically and strategically orchestrated. There should be nothing random or circumstantial about its content. Everything should be

chosen with purpose and the way you organize the contents of your bag should be intentional.

When you are on the move in a disaster situation, you won't have time to dig through the entire contents of your bag to find what you are looking for. You need to be able to access and find exactly what you need at a moment's notice. Plus, your odds of losing items greatly increase if your bag is disorganized. Things will get scattered, dropped, or left behind.

The contents of your bag also need to be up-to-date. You don't want to face a Bug Out situation with a pack full of expired food and medication and out-of-season clothing. A regular maintenance schedule will keep you prepared year-round.

Below are the guidelines I use to organize and maintain my BOB.

WATERPROOFING

As I mentioned in the beginning of the book, the first piece of kit in my BOB is a 55-gallon contractor-grade trash bag. Even though my pack of choice is water resistant, I don't want to take any chances when it comes to getting my lifeline wet. After everything is in my pack, I fold up and tie off the top of the trash bag with a length of 550 paracord.

Trash Bag Liner Folded and Tied Off With Paracord

COMPARTMENTALIZING

I've also mentioned the importance of compartmentalizing in previous chapters. I try to keep each supply category in it's own separate "kit" with a few exceptions. Compartmentalizing categories facilitates quick access to items when you need them. It also helps you to identify kits by touch in low-light situations. I tend to color code and label my kits as well.

Sampling of Separate Compartmentalized Kits

PACK ORGANIZATION

Believe it or not, the order in which you pack a BOB actually matters. There are items that need to be packed for quick and easy access and then there are items that don't require a sense of urgency. I classify these two groups as "urgent" and "nonurgent." Nonurgent items go into the pack first, thus taking longer to access. Urgent items go into the pack last and are easily accessed.

First-In Items

- extra clothing
- bedding
- hygiene
- first aid
- miscellaneous supplies

Last-In Items

- shelter
- water
- food (human and pet)
- fire
- cold weather clothing items

Finally, there is a small grouping of items I consider "Emergency Items." These items should be either strapped to your body or in an easy and quick-to-access pack pocket. Sudden use of these items is likely necessary.

Emergency Items

- communication (except for radio)
- self-defense
- lighting
- tools—especially survival knife
- poncho

You will find that adopting this three-step priority system will make the most efficient use of your time, energy, and pack real-estate in a Bug Out Scenario.

BUG OUT BAG BIANNUAL REVIEW

I've mentioned the concept of a biannual review several times in previous chapters. There are two main reasons to conduct a review of your BOB twice each year:

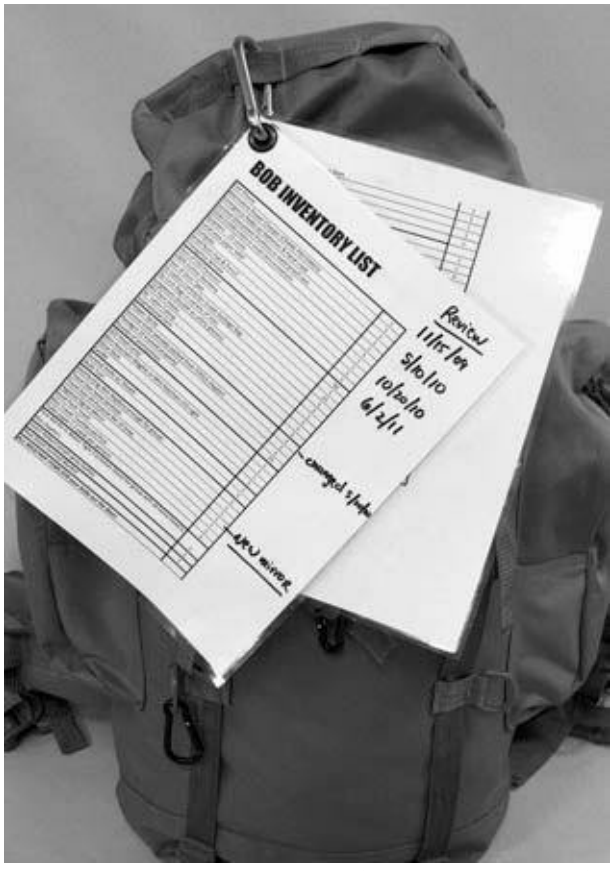
1. Food/water: You should replace and replenish your BOB food and water storage at least every six months. This includes both human and pet items.
2. Clothing: If you live in a region with distinct seasons, as I do, it will be necessary to add and remove cold-weather clothing before and after the onset of winter.

I have categorized food, water, and cold-weather clothing as "last-in items" so they will be easy to access during your biannual reviews. Schedule your biannual review on or near holidays or annual events so they are easier to remember. If you have a long cold-season, Labor Day and Memorial Day could be your events. If you have a shorter cold season, changing to and from Daylight Saving Time could be your marker. Whatever schedule you choose, don't forget to mark it in your calendar.

Even if you don't get outdoors much to practice your survival skill sets, a biannual review can be the perfect excuse to brush up. Your review can also include a "skill review" where you take an afternoon to practice critical BOB skills such as fire making, shelter building, and food preparation. Having the tools does not make you proficient in using them. Practice does.

BOB Inventory Checklist

I've created an BOB inventory checklist that you can download for free at betterwaybooks.com/bobinventory. Keep this list with your pack to make it easier to conduct your biannual review. Write the date of each review on the checklist so you know at a glance when you need to change out the food and first aid equipment.



Laminated Inventory Sheet With Noted Review Dates

Lifestyle Review

A BOB review is also a time to evaluate any major life changes that can affect your BOB pack items. I call this a *lifestyle review*. Some life changes that could affect this review are:

- children (addition or loss)
- marriage or divorce
- location/environment
- weight/health/medications
- additional family member, such as live-in grandparent or live-in parent
- pets (loss or addition)

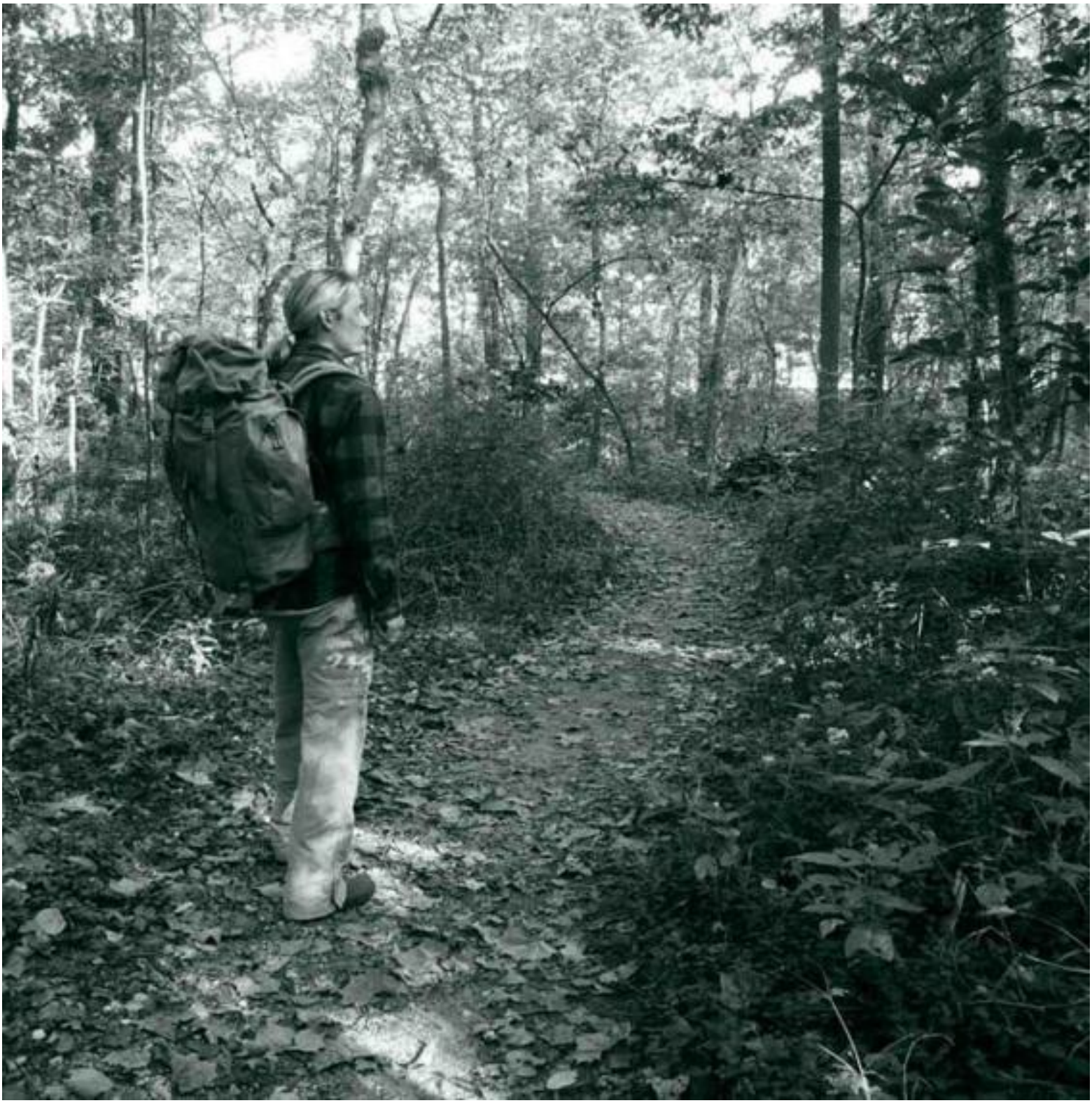
It's easy to forget items in your BOB after it has been sitting in wait for six months or longer. A lifestyle review can be very time-consuming if you have to go through your entire pack from start to finish. For this reason, I keep a laminated inventory sheet attached to the outside of my BOB. The sheet helps me quickly review the contents without completely unpacking the bag. I simply make notations on the inventory sheet with a marker for all changes that I make. I also date this sheet each time I conduct a review or make changes.

PACK STORAGE AND MAINTENANCE

I'm often asked during my Bug Out classes where is the best place to store a BOB in your home. Having lived in several apartments and homes over the past ten years, I've kept my BOB in a variety of areas. Once, when I was in an apartment with limited space, I kept my BOB inside an ottoman next to my couch. I've also kept it in an old, unplugged freezer, and under a coat in the closet. Currently, my BOB sits near my back door hidden amongst a variety of cleaning supplies. So there is no definitive answer. The general rule is that it should be out of sight yet readily available. It's not something that should be advertised to visitors.

Years ago, I lived in a small studio apartment with very little storage space. I kept my BOB and some other items in a laundry basket covered up with what appeared to be dirty clothes. One day, I came home late after work and pulled up to the outside entrance door to my apartment, like I had done so many times before. Something was different. The headlights of my truck were shining right through an *open* apartment door and into my closet. Someone had pried open the door and robbed me. They took many items—money, knives, sentimental things… it was a horrible feeling. They didn't seem too interested in my dirty laundry, though—*luckily*! There is no doubt in my mind that if I had not camouflaged my BOB with normal household items (laundry) they would have stolen it. At that time, my BOB was one of my most valuable possessions. That was a lesson I will never forget and one that I hope to pass on to you. The point of my story is to hide or camouflage your BOB. By the time you are done putting it together, you will have many hours and many dollars invested. Protect your investment.

17 MENTAL & PHYSICAL PREPAREDNESS



YOU CAN BUY GEAR. You can buy survival books like this one. You *can't* buy mental and physical readiness. You also *can't* buy the survival skills that only come from practice, repetition, and experience. That level of preparedness is reserved for those willing to train their mind and body.

Yes, survival tools are important—very important. But tools alone are insufficient and can be a false sense of security. Packing and storing a BOB is just the beginning of your preparedness journey. You must also be mentally and physically ready to follow through with your Bug Out Plan.

MENTAL PREPAREDNESS

No matter what anyone says, you can never be 100 percent mentally prepared for an emergency disaster. There's just nothing in life that trains us for that kind of "jolt" to the system. Mental readiness comes down to two basic truths:

1. having the mental fortitude to handle the stress of the situation without panicking
2. having the know-how to use the resources on hand to meet necessary survival goals

As far as the first truth goes, either you are the type of person who can keep it together when the going gets tough or you're not. Be honest with yourself. If you can't handle that kind of mental stress, I'd suggest becoming close friends with someone who can.

Truth number two is completely and wholly in your control. Knowing how to use the resources in your BOB comes down to one thing—*practice*. Survival knowledge is not an inherent talent or gift. It is the direct result of experience, repetition, trial, and error. Some of the best survival experts in the world are self-trained, and I'll take hands-on experience over classroom instruction any day of the week. You can read the best books and study under the best instructors, but until you practice the skills with your own hands, you have a slight advantage at best.

Take control of your destiny and truly understand how to use your BOB as the life-saving resource that it is. The only way to master a skill is by practice and repetition. Most important survival techniques are practiced skills—not black-and-white facts:

- fire building
- navigation
- rope work and knot tying
- food prep with few tools
- shelter building
- effective signaling

At this point, you have meticulously assembled your BOB. Now it is time to build your mental readiness. Task + Repetition = Skill. Your mind is your most valuable resource —train it.

PHYSICAL PREPAREDNESS

If your mind is your most valuable resource, then your body is your most valuable tool. Just like any piece of mechanical equipment, your body requires routine maintenance and care to be in peak condition. Have you ever let an engine just sit in the garage for a long time—a car, a lawn mower, a chain saw, or weed eater? The engine can be very difficult to start after sitting idle for so long. And when the engine does start, it doesn't run like it should. The same is true with your body. If you sit idle for a long time without proper diet and exercise, your body will not perform well when it's suddenly needed to get you through a Bug Out.

You can have the knowledge and the tools but if you don't have the endurance and strength to perform, nothing else matters. Unfortunately, the time when many people realize the importance of health is when they lose it or when they need it most. It would be a shame to go through all of the effort to assemble and prepare your BOB and not be able to physically handle a Bug Out journey. Below are some basic minimum guidelines to keep you on track physically.

Regular Exercise

A Bug Out could potentially require you to walk for many miles with a loaded pack. If you don't exercise routinely, this will be a big struggle. Being out of shape can be a real danger—slowing your progress both to your destination and away from potential threats. Don't be a liability to your group. Establish a regular exercise schedule to strengthen your muscles and boost your endurance. Join a gym or consult with a personal trainer if you need help getting started.

Diet

I'll keep this heading short and sweet. You are what you eat. Garbage in, garbage out. Make a concerted effort to eat a healthy, balanced diet. Your body will reward you for it.

Regular Medical Care

Do you have nagging medical conditions that could impede a Bug Out? Are there any debilitating physical problems that need to be addressed? For example, as I write this book I have a hernia. I've had it for a few months. During times of extreme physical exertion it bothers me. I believe it would impede my peak performance if I were ever faced with an extreme Bug Out. It's not life threatening but needs to be addressed and fixed. How about you? Do you need to schedule an appointment with your doctor to take care of an issue? Just get it over with already!

KEY PRACTICE EXERCISES

All competitive activities and sports have their own unique set of mental and physical exercises. Horse jockeys train different from long-distance track runners and tennis players. Competitive chess players have a completely difference training regimen from archers. Mentally and physically preparing for a Bug Out is no different. Although I mention more than thirty different practice exercises in chapter nineteen, there are six areas I feel are most important. Practice in these six areas will not only improve your chances of survival but will also build confidence in your abilities and tools.

Exercise 1: Fire

Practice building a fire using the fire kit in your BOB. Familiarize yourself with the different ignition devices and fire tinder.

The test of a good fire is if it can boil water. Position a metal container of water above or beside the fire and bring the water to a boil. Below is a list of fire drills to practice:

- Start a fire at night using your headlamp to help you see to prepare your materials and search for fuel.
- Start a fire after a good rain when the ground is damp and wet. Practice building a fire platform and finding dry fuel.
- Start a fire when it's cold out. You will quickly understand how the cold weather can limit the mobility in your fingers and hands.

Exercise 2: Preparing Meals

If you've decided to pack meals that require any kind of preparation, a few practice runs can work out any potential problems in your kit. Become comfortable with the following:

- Prepare a meal for yourself and your family using only your Bug Out Bag. For this meal, use whatever heating device you've decided to pack, i.e., solid fuel tablets stove or canister stove. Just have a Bug Out dinner in the backyard one night. Also practice cleaning the items with the resources in your BOB and packing everything back up. Take note of how much water is used and think of ways to make the entire process easier and smarter.
- Do exactly as listed above except heat your meal using an open fire.
- If you are really ambitious, take a weekend camping trip and bring only the meal items in your BOB and see how realistic your food items are. Did you pack too much or not enough?

Exercise 3: Shelter

The ability to quickly and safely set up a reliable shelter system is critical. Get this wrong in a real Bug Out and it could very well be game over. The following exercises will help:

- Set up your main shelter system. Make sure you have enough cordage, stakes, etc. Take mental notes about how much space you need to set up the shelter.
- Do the same as above but do it at night with only the light from your headlamp.
- Pretend your primary shelter system has been lost, damaged, or stolen. Practice setting up a backup shelter system using a poncho, tarp, or emergency blanket. Do you have the proper materials in your

BOB to get this done? Don't worry, this exercise takes practice. I've set up tarp/poncho shelters many times over the years and am still perfecting the process. Many variables can affect the set-up configuration including weather, trees or lack of trees, and soil consistency, such as rock or sand.

Exercise 4: Take a Hike!

I remember my first Bug Out Bag. I was an overzealous survivalist and got a little carried away … until I decided to take a ten-mile practice hike with it. I realized about one mile in that I needed to make some serious changes. First, the pack did not fit me well. It did when it was empty but not loaded to capacity. Second, it was *way* too heavy. I immediately started to refine my pack list to reduce weight and bulk.

- Hike five miles with your BOB. If you have a family, take them, too. Take the Bug Out Wagon and the dog. Do a five-mile Bug Out dry run. Don't forget to wear your Bug Out Boots. Make any necessary changes based on this experience.
- Do this at least once every two months.

Exercise 5: Water and Hydration

In any survival situation, potable water is at the top of your priority list. It is very important to be comfortable and confident with using the water purification resources you have in your BOB: boiling, filter systems, or chemical treatment. Following are some important exercises in learning and understanding your hydration equipment:

Boiling: Using your metal water container or cooking pot, bring water to a boil. Do this with both your cooking heating system and an open fire. Use your multi-tool or leather gloves to handle the hot container and manipulate it around the heat. Take note of the following:

- How long does it take to bring water to a boil?
- How close does my container need to be to the fire?
- How big does my fire need to be?
- How much fuel did I use?
- How did my container perform? Do I need a different container?

Filtering: First, practice pre-filtering water from a nearby stream or pond through a bandana into one of your water containers. Remember to always keep at least one container sanitary and untouched from contaminated water. Then, using your filter system, filter your pre-filtered water from your "contaminated" container into your sanitary container. Be sure you understand how to assemble, disassemble and store your filtration system without written directions.

Chemical Treatment: Memorize the instructions and doses of your chemical treatment tabs. This information might wear off the bottle and you need to know it by heart.

Exercise 6: Self-Defense

The average person has *zero* self-defense training. Unless your job requires some kind of close combat training (i.e., police, security, professional or amateur fighter, military), you've probably never taken any formal self-defense instruction. You should really consider enrolling in a local self-defense class to understand the basics of a few demobilizing striking techniques that may allow you to escape if ever attacked.

I'm not asking you to go get a black belt in karate. I am asking that you become familiar with the human

body, it’s weaknesses, and how to exploit them if necessary.

SUMMARY

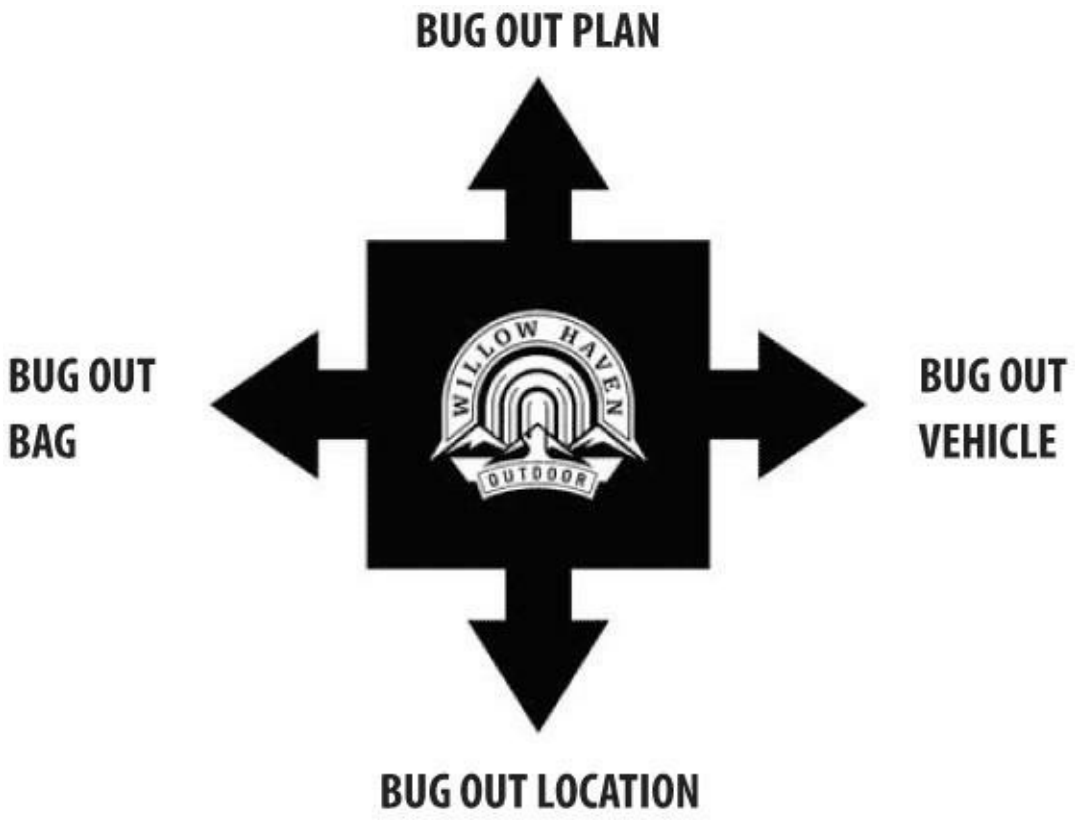
Your mind and body are your two most important Bug Out resources. They both require proper and specific training to be prepared for the demands of a disaster Bug Out.

There are hundreds of ways to die and none of them require skill or repetition. Increase your chances of survival by practicing the mental and physical exercises in this book.

18 THE BUG OUT PLAN

I WISH I COULD TELL YOU that building a Bug Out Bag and being competent in using it's contents was all you needed to be prepared for a Bug Out. While you've made a *huge* stride in the right direction, the BOB is one of four Bug Out preparedness elements.

Theoretically, each element could justify it's own book like this one. For now, though, a basic understanding of each element is sufficient. I do offer a three-day Bug Out Training program at the Willow Haven Outdoor Training Facility, if you are interested.



THE BUG OUT PLAN (BOP)

A BOP is your overall action plan should a real Bug Out actually be necessary. It is a pre-thought-out play-by-play guidebook to getting out of Dodge. It can be as simple as a checklist or checklists (for families). Preparing and storing a BOB is a part of your overall BOP. There are many facets to consider before, during, and after a Bug Out. Below are a few important questions that should be covered in a BOP.

1. Where is the family/team meeting?
2. What vehicle will we be driving?
3. What needs to be done to the house to prepare it for an evacuation?
   install waterproof and fireproof safe
   lock away valuables
   turn off water and utilities
   plug drains
   disconnect gas lines
   secure doorways
   leave notes
   get extra gas cans
4. Who is responsible for each task?
5. Does each person have a checklist of responsibilities?
6. Are any pets going?
7. If we Bug Out, where is our destination?
8. How will we be getting there?

A disaster Bug Out is going to be mass chaos! Having an action plan will expedite the process as well as help to avoid costly mistakes. Don't think you can possibly remember to do everything without a clear and concise checklist and action plan. This plan is your Bug Out Plan.

BUG OUT VEHICLE (BOV)

A Bug Out Vehicle is your preferred mode of transportation to your Bug Out Location (discussed next). It may or may not get you all the way there for a variety of reasons but ideally you need to choose a solid, capable, and reliable BOV. One of my friends swears the best BOV is a horse. He argues that it doesn't require fuel, is fairly self-sufficient, can carry plenty of gear and can travel through and across a huge variety of terrain—on and off road. He makes some great points but it certainly isn't practical for everyone to have a horse for their BOV.

Bug Out Horse

I believe that all families should consider a potential Bug Out when purchasing vehicles. Here are some guidelines that I consider important when choosing a BOV:

Guideline 1: In Good Working Order/Low Maintenance

This is pretty much common sense. Your BOV must be reliable and it must be equipped with the proper tools and parts for emergency maintenance. Below is a basic checklist of items you need to have in your BOV:

- spare tire (or 2)
- solid jack and lug wrench
- extra fluids (oil, transmission, power steering fluid, brake, coolant, etc.)
- oil filter
- new replacement belts
- spare hoses
- new battery
- maintenance tools to replace the above mentioned parts
- trickle charger
- work gloves

Solid Spare Tire is a Must

If you know your BOV is in good working order, you really shouldn't need a whole trunk full of spare auto parts to get you to your destination. On a side note to this first element—you should know how to work on your BOV. That may mean that you have to practice. My personal BOV is a 1972 Bronco. A big reason for this is that I can pretty much fix anything that goes wrong with the engine. Modern vehicles equipped with computers and thousands of parts can be very difficult to work on. This is definitely something to consider.

Creek's 1972 Ford Bronco

Guideline 2: Off-Road Capabilities—4×4

Your BOV must be able to go off road. Four-wheel drive is a must. Most SUVs are probably sufficient enough to do the trick. If you are ever in a situation when you actually need to use your BOV, my guess is that it's not a far stretch to imagine that you might have to take it off road. Having a wench (or two) would be nice, but those can be pricey. You might be able to find a good used one online. At the very minimum,

store a come-a-long and fifty feet of chain. Nice, solid-tread tires are a good idea for snow and mud. Keeping a set of traction devices in your vehicle is a good idea, too. A friend of mine told me that two strips of old carpet turned upside down work as good traction devices to help you get out of ditches, drifts, or mud holes.

Guideline 3: Fuel Range/Efficiency

What's the point of having a BOV unless it has the fuel range to get you to your destination? Your BOV should have a full tank of gas at all times. More than likely, your Bug Out Trip is not going to be a straight and easy uninterrupted path to your destination. You might have detours, traffic jams, and even off-road situations. It's a good idea to know exactly how much fuel you will need to get you to your BOL. After you know that, you need four times this much stocked on your BOV—either in an aftermarket large-capacity fuel tank or separate five-gallon fuel cans. No fuel means no driving. You would be naïve to think that pulling over for a fill-up is going to be an option.

Five-Gallon Refueling Cans

Fuel Storage Rack

Guideline 4: Cargo Space

Clearly, you need cargo space to transport you and your loved ones. But you also need to calculate in enough space for Bug Out Bags and other essential items that should be in your BOV including shelter, food, weapons, water, maintenance tools, and gas. Roof racks and add-on cargo baskets are great solutions to storage problems. I'm not a big fan of towing a trailer with your BOV, but if you have to, you will need to make sure you have a heavy-duty hitch that will take some off-road beatings. A custom roof cage provides plenty of overhead cargo storage space.

Roof Storage Rack and Brush Guard

Creek's Former 4×4 Ford Van With Roof Cage Cargo Rack

Brush Guards

Guideline 5: Supplies

This topic is not just one item. It is a category that encompasses a variety of items that I classify as *supplies*. Your Bug Out Bag should already contain most of your 72-hour survival needs. The supplies in this category are in addition to the supplies already in your BOB. This is not necessarily a complete list. I am always changing and adapting my kits—it's what I call a "live" list. In no particular order, your BOV kit should include:

- large axe or saw for clearing brush/cutting wood
- flares/signaling devices
- shovel
- fire extinguisher
- paper maps of your local area/region
- extra batteries for any battery-powered tools
- two flashlights
- more extensive first aid kit than what is in your BOB
- bolt cutters
- large-scale crowbar
- functional CB radio
- basic toolkit
- vehicle manual
- clean drinking water—as much as you can store
- GPS
- binoculars
- fishing gear (it packs tight and weighs almost nothing)
- blankets
- extra fuel
- one-gallon of bleach (disinfectant)

Alternative Bug Out Vehicles

Everyone's situation is different. A car might not always be the best BOV. If you live in a large city like New York, you might not even own a car or SUV. Bug Out Vehicles are only limited by your creativity. Almost any form of transportation is better than traveling by foot. Smaller BOVs, such as bicycles, scooters, motorcycles, all-terrain vehicles (ATVs), and utility terrain vehicles (UTVs) all have their own set of unique advantages.

Bug Out ATV

Bicycles, for example, can be outfitted to carry a surprising amount of extra supplies in addition to the BOB on your back. They are also not dependent on fuel, which will be in limited supply during any large-scale evacuation. Bicycles, scooters, dirt-bikes, and motorcycles also have excellent maneuverability through traffic jams and congested traffic.

Bug Out Bicycle

Three-wheelers, four-wheelers, dune buggies, and utility vehicles all make excellent BOVs for cross-

country travel. They can haul tons of gear and go nearly anywhere. The big drawback is that they are not road-legal. However, if I'm running from the wake of any large-scale disaster, I don't think I will be too concerned, but it's still an issue to keep in mind.

BUG OUT LOCATION (BOL)

How can you expect to get somewhere if you don't know where you are going? A BOL is your destination point. This could be your home away from home for quite a while so it needs to be chosen with thoughtful consideration. Below are my basic guidelines about a BOL:

A Realistic Distance

It is my opinion that a BOL needs to be at least one gas tank away from all large cities. Should there be a large-scale economic, infrastructure, and supply chain collapse, people will be venturing out from the cities into the surrounding area in search of resources, such as food, fuel, medicines, etc. If this happens, fuel will be scarce and very costly. Being at least one-gas tank away will drastically limit how much you encounter scavengers and population crushes.

Remote Cabin

At the same time, a BOL needs to be within a 72-hour walk from your home. If for some crazy reason you need to abandon your vehicle, you should be able to reach your BOL on foot within the survival time frame of your Bug Out Bag—72 hours. My BOL is eighty miles away from my home. I really hope I never have to walk eighty miles with my BOB. In my opinion, your BOL should be no farther than an eight-hour drive (preferably less) from your home. Theoretically, it should only be a two to three hour drive.

Might have to walk to BOL

House, Hotel, Woods—Where?

I believe your BOL should be the home of a friend or family member who has agreed to house you and your family in the event of a Bug Out. You can offer them the same exchange. I'm not a big fan of bugging out to a hotel simply because you have no guarantees of availability. I've also heard more times than I can count from friends within the survivalist community about their plans to Bug Out into the wilderness. Typically, whoever says this hasn't spent much time in the woods. Surviving for an extended period of time in a wilderness environment is *extremely* difficult—especially after you've exhausted your immediate Bug Out supplies. Bugging out into the primitive wilderness is not practical or realistic. It sounds fun and adventurous, but the reality of it is quite the opposite—even for an experienced survivalist. My BOL is my childhood home—my parents' farm in southern Indiana. It is important to make BOL arrangements in advance.

Here are a few short-term BOL options to consider:

- Stay with friends or family (preferred option)
- Purchase and prepare a small plot of remote land with a camper, travel trailer or cabin
- Stay mobile in an RV
- Campgrounds/parks/retreat centers
- Establish relationships with local/regional preppers through clubs and meetings
- Network with co-workers, friends and church members
- Have a second home (not necessarily short-term)

Should I have supplies at my BOL?

Yes, you should. I store a three-month supply of food at my BOL as well as an extensive first aid kit. I also keep a cache of hunting supplies, ammo, and several other survival items. Without trying to sound apocalyptic, getting to your BOL might just be the first phase of survival. Your BOB covers the first 72 hours, your BOL should sustain you long-term until you are able to reestablish yourself back at home.

Two of Six Supply Shelves at Creek's BOL

Wood Burning Stove, Solar Power Kit, Candles and Oil Lamp

SUMMARY

Clearly, there is more to consider than just a Bug Out Bag. Hurricanes, floods, tornados, terrorists, wild fires, plagues and foreign invaders will show you no mercy. None of these disasters will pause while you argue about where to go or whether or not to take Freckles the Ferret with you. Survival is not about guarantees—there is always a gamble and the disaster typically has the house advantage. The only way to increase your odds of living is to plan and prepare in advance. A thorough understanding of the four facets of a Bug Out will drastically improve your chances of survival.

19 BUG OUT RESOURCES & AT-HOME EXERCISES

BUILDING A BUG OUT BAG requires three main areas of preparation: Bug Out Gear,

information/knowledge and hands-on practice. I have divided this chapter into the twelve Bug Out supply categories (plus pets). Under each category I have listed the following three headings:

1. **Gear Resources:** Under this heading, I have listed many of the Bug Out Gear items mentioned in this book along with where you can purchase them.
2. **Further Study:** Under this listing, I include a variety of resources for more in-depth study of that particular category. These resources can be books, websites, organizations, schools, etc.
3. **At-Home Exercises:** Practice makes perfect. It's important that you know how to use the gear and tools in your BOB. This heading lists important At-Home Exercises to familiarize yourself and your family with key Bug Out tools and skills.

WATER & HYDRATION

Gear Resources

Nalgene Water Bottles (Resin & Stainless)

- nalgene.com
- dickssportinggoods.com
- moosejaw.com
- rei.com
- many other outdoor camping retailers and websites

Nalgene Canteen that fits inside Metal Military Canteen Cup (Resin)

- www.canteenshop.com

Collapsible Platypus Water Bottles

- cascadedesigns.com/platypus

Metal Water Bottles

- campmor.com: Search *water bottles*
- kleankanteen.com

Water Purification Tablets

- aquamira.com
- katadyn.com
- moosejaw.com
- willowhavenoutdoor.com

Water Filter Systems

- aquamira.com
- rei.com
- moosejaw.com
- dickssportinggoods.com
- forgesurvivalsupply.com

Further Study

- aquamira.com

- katadyn.com
- youtube.com: Search *survival water purification*

At-Home Exercises

- Practice pre-filtering drinking water using a variety of items in your BOB including a bandana, a feminine napkin, and an N95 dust mask.
- If you've chosen to pack a filter purification system, be sure to understand exactly how it works. Practice filtering water using the system with special attention to keeping dirty containers separate from clean containers.
- Practice bringing water to a boil in one of your metal containers. Use your modern heating system (solid fuel tablet or canister) and also a fire. Make mental notes of how much fuel is required and how long it takes.

FOOD & FOOD PREPARATION

Gear Resources

Meals Ready to Eat (MREs)

- mredepot.com
- mrestar.com
- local Army/Navy surplus stores

Camping Dehydrated Meals

- wisefoodstorage.com
- mountainhouse.com
- survivalacres.com
- moosejaw.com
- rei.com
- forgesurvivalsupply.com
- dickssportinggoods.com
- many other outdoor camping retailers and websites

Lightweight Backpack Cook Set

- gsioutdoors.com
- rei.com
- many other outdoor camping retailers and websites

Metal Mug/Cup

- gsioutdoors.com: Search *glacier cup*
- basspro.com: Search *glacier cup*

Spork

- campmor.com: Search *spork*
- industrialrev.com

P-38 Can Opener

- willowhavenoutdoor.com
- local Army/Navy surplus stores

Esbit Stove and Fuel Tablets

- campmor.com: Search *esbit*
- industrialrev.com

WetFire Solid Fuel Tablet Stove and WetFire Tablets

- campmor.com: Search *wet fire stove*

Canister Stoves

- cascadedesigns.com/msr
- snowpeak.com
- dickssportinggoods.com
- moosejaw.com
- rei.com
- campmor.com: Search *stoves*
- forgesurvivalsupply.com

Further Study

- survivalacres.com
- mreinfo.com
- youtube.com: Search *survival cooking*

At-Home Exercises

- Prepare a meal using only items in your BOB. Do this both with your BOB modern heating stove and with a fire. Clean up afterwards using only items from your BOB. Take note of any ways to improve efficiency. Have a Bug Out "meal night" once a month. This not only helps with practice and repetition but also keeps fresh meal items in your BOB.
- Practice building a tripod by which to hang a pot over a fire for warming food or boiling water. Do you need to brush up on your tripod lashing skills?

CLOTHING

Gear Resources

Clothing (Shirts, Pants, Fleeces, Underwear, Wool Socks, Gloves, Hats)

- dickssportinggoods.com
- moosejaw.com
- rei.com
- many other outdoor camping retailers and websites (buy this in person)

Further Study

- None

At-Home Exercises

- If you live in an area with cold seasons, put together a cold weather layering system. Use this system when doing outdoor work to familiarize yourself with your needs and requirements.
- Build a fire and use it to dry out wet clothes and boots. Take special note of how long this takes and how much fuel it requires to get the job done. This is a very real Bug Out task.

SHELTER & BEDDING

Gear Resources

Military-Style Poncho

- uscav.com: Search *poncho*
- local Army/Navy surplus stores

Lightweight Tarp

- moosejaw.com (awesome selection)
- equinoxltd.com
- bushcraftoutfitters.com
- bensbackwoods.com
- etowahoutfittersultralightbackpackinggear.com

Backpacking Tent

- rei.com: Search *tent*
- campmor.com: Search *tent*
- dickssportinggoods.com
- moosejaw.com
- many other outdoor camping retailers and websites

Sleeping Bag

- many outdoor camping retailers and websites (buy this in person)

Ground Pad

- cascadedesigns.com/therm-a-rest
- rei.com
- many other outdoor camping retailers and websites

Emergency Blanket

- adventuremedicalkits.com
- Many other outdoor camping retailers and websites

Wool Blanket

- willowhavenoutdoor.com

Further Study

- youtube.com: Search *tarp shelter*, *poncho shelter*, *emergency blanket shelter, tarp shelter knots*
- realitysurvival.com
- animatedknots.com

At-Home Exercises

- Practice setting up your primary shelter until it becomes second nature. Use your shelter system for overnight camping at least two nights each season. This is the only way to identify flaws in your set-up and to improve processes.
- In addition to your primary shelter system, become proficient setting up an emergency shelter using a poncho, tarp, trash bag, or emergency blanket.
- Learn how to tie the following knots by memory: Taut-Line Hitch, Double Half Hitch, and Siberian Hitch. I use these knots with every shelter I build. Find an instructional video on how to tie these knots at willowhavenoutdoor.com.
- Test your sleeping bag and pad in *all* seasons. Have you chosen the right degree rating to survive a Bug Out in any season?

FIRE

Gear Resources

Weather Proof Matches

- campmor.com: Search *matches*

Ferrocerium Rods/Fire Steel

- bensbackwoods.com
- industrialrev.com
- kodiakfirestarters.com

WetFire Fire Starting Tinder

- campmor.com: Search *wetfire*
- willowhavenoutdoor.com

Further Study

- youtube.com: Search *survival fire starters*, *wetfire, how to build a fire*

At-Home Exercises

- Use your ignition devices (lighter, matches, fire steel) to ignite your cooking stoves. Understand what it takes to light each one.
- Practice lighting your store bought tinder (PET Balls and WetFire) using all of your ignition devices.
- Practice collecting and igniting natural found fire tinder, such as dry grasses, cattail down, and birch bark. Mix your Carmex lip balm with natural found tinder to see how it can be used as a flame extender.
- Practice building a fire large enough to cook a meal and boil water. Do this in all seasons and after it rains. Practice building a fire platform to protect your fire from the wet ground or snow.

FIRST AID

Gear Resources

Adventure Sports First Aid Kit

- adventuremedicalkits.com
- readykor.com
- rei.com
- dickssportinggoods.com
- moosejaw.com
- many other outdoor camping retailers and websites

Emergency Blanket

- adventuremedicalkits.com
- many other outdoor camping retailers and websites

Potassium Iodide Anti-Radiation Pills

- ki4u.com
- nukepills.com

Further Study

Websites

- cdc.gov
- *Wilderness Medicine* magazine: wms.org
- Wilderness Medicine Institute: nols.edu/wmi
- ki4u.com (great information about nuclear threats and radioactive iodine)
- nukepills.com (great information about nuclear threats and radioactive iodine)

Books

- *Field Guide to Wilderness Medicine* by Paul S. Auerbach
- *Where There Is No Doctor* by David Werner, Jane Maxwell, and Carol Thuman
- *Medicine for the Outdoors: The Essential Guide to Emergency Medical Procedures and First Aid* by Paul S. Auerbach
- *Outdoor Medical Emergency Handbook* by Dr. Spike Briggs and Dr. Campbell Mackenzie

At-Home Exercises

- Take a local first aid course to learn basic first aid skills and treatment methods. Many community

centers offer these classes. If yours does not, look for local class listings on americanheart.org and redcross.org.

- The Centers for Disease Control has a wealth of first aid and disaster related information on their website. Your taxes paid for it, so you might as well take advantage of the “free” information at cdc.gov.

HYGIENE

Gear Resources

Light Load Towels

- ultralighttowels.com

Personal Hygiene Items

- local markets and pharmacy stores

Further Study

The Centers for Disease Control also has some great information about disaster related hygiene issues. You can view it here: www.bt.cdc.gov/disasters

At-Home Exercises

- None

TOOLS

Gear Resources

Survival Knife

- Blackbird SK-5 Wilderness Survival Knife: hedgehogleatherworks.com
- Becker BK2 Knife: willowhavenoutdoor.com and hedgehogleatherworks.com
- Gerber Big Rock Camp Knife:gerbergear.com and dickssportinggoods.com: Search *Big Rock Camp Knife*
- Mora 840 MGKnife: willowhavenoutdoor.com and ragweedforge.com

Multi-Tool

- leatherman.com
- rei.com
- budk.com

Machete

- willowhavenoutdoor.com
- coldsteel.com
- uscav.com

Collapsible Snow Shovel (For Heavy Winter Snow)

- ebay.com: Search *ski shovel*

Further Study

- youtube.com: Search *knife batoning, feather sticks*, *leatherman survival*, *survival knife*

At-Home Exercises

- Practice "batoning" with your survival knife. Batoning is when you strike the back side of your knife with a heavy stick or rock to drive the blade into or through larger wood. This is a great method for splitting firewood or chopping down larger saplings.
- Carve a set of tent stakes and use them when setting your shelter. Make a note of how big/long they should be to work properly.
- Get in the habit of carrying a pocket knife and use it often.

LIGHTING

Gear Resources

Headlamps

- campmor.com: Search *headlamp*
- dickssportinggoods.com
- moosejaw.com
- many other outdoor camping retailers and websites

Mini Keychain Maglight

- local hardware stores

Photon Keychain LED Lights

- willowhavenoutdoor.com
- photonlight.com
- laughingrabbitinc.com

9-Hour Candles

- willowhavenoutdoor.com
- campmor.com: Search *candle*

Further Study

- None

At-Home Exercises

- Practice setting up your primary and emergency shelter at night using the light from your headlamp.
- Build a fire from scratch at night using just the light from your headlamp.
- Prepare one of your Bug Out meals at night using the light from your headlamp.

COMMUNICATIONS

Gear Resources

Hand-Crank Multi-Function Emergency Radio and Cell Phone Charger

- etoncorp.com
- campmor.com: Search *eton*
- rei.com

Heavy-Duty Document Map Case

- many outdoor camping retailers and websites: water sports section
- campmor.com: Search *map case*

Two-Way Radios

- Many outdoor camping retailers and websites

Compass

- many outdoor camping retailers and websites

Rite in the Rain All Weather Notebook

- riteintherain.com

Further Study

- Information about the National Weather Service and NOAA Weather Radio can be found at: www.nws.noaa.gov/nwr
- youtube.com: Search *how to use a compass*

At-Home Exercises

- Mark three different routes on a map to your Bug Out Location (BOL). Travel each of these routes at least once. It's a good idea to know these routes intimately with special notations made for gas stations, water sources, parking areas, camping areas, and detour options.
- Most people don't understand how to use a compass. Practice using your compass in coordination with your paper map to reach a destination. A simple Boy Scout manual will tell you everything you need to know about using a compass (called orienteering).
- Use your emergency radio to gather information. Know which stations work in your area. During bad weather, try to gather storm or weather information to make predictions. This radio is just a

paperweight if you don’t understand how to use it to receive valuable information.

PROTECTION & SELF-DEFENSE

Gear Resources

Pepper Spray

- coldsteel.com: Search *pepper spray*
- many other outdoor camping retailers and websites

Further Study

- local self-defense classes

At-Home Exercises

- Take a local self-defense class. Become familiar with very specific demobilizing strikes to key body parts.
- Before my first canister of pepper spray expired, I used it as a practice exercise because I had never fired a can of pepper spray. I wanted to understand exactly how it fired, how sensitive the trigger was, and what I could expect for accuracy and distance. I suggest you do the same if your canister comes to an expiration date.
- If you've decided to carry a gun, then you should know that weapon intimately. You need to know how to troubleshoot any issues, such as clearing a jam. This knowledge will come naturally with repeated practice at a range. You should be able to disassemble and reassemble your gun blind-folded. You should also routinely target practice with your gun. Clean your gun after every use to keep it in peak operating condition.

MISCELLANEOUS SUPPLIES

Gear Resources

Fishing Kit

- This is assembled yourself from à la carte items purchased at a local fishing shop.

550 Parachute Cord

- willowhavenoutdoor.com
- combatparacord.com
- uscav.com
- local Boy Scout shops usually carry 550 paracord

Small Sewing Kit

- local fabric store or big-box store

The following items can be purchased at pretty much any hardware store or discount department store:

- N95 Dust Masks
- contractor-grade 55-gallon garbage bags
- resealable plastic bags
- 36 length of latex tubing
- duct tape
- bandanas

Further Study

- youtube.com: Search *survival fishing kit, paracord uses*, *survival garbage bag*
- animatedknots.com

At-Home Exercises

- Build a makeshift rain catch in your backyard using a garbage bag.
- Using your 550 paracord, learn the following knots: Boline, Square Knot, Tripod Lashing, and Clove Hitch.
- Cut off 6 of 550 paracord and unravel the inner stands so that you understand how it's made.
- Make a quick poncho out of a 55-gallon garbage bag. Perfect the best location and size of your head and arm holes.

BUG OUT PET GEAR

Gear Resources

Dog Packs/Gear

- rei.com
- petco.com

Granite Gear Slurpin Bowl and Other Crushable Pet Bowls

- moosejaw.com

Goat Packing Supplies

- NAPgA.org
- northwestpackgoats.com
- buttheadpackgoats.com

Further Study

- NAPgA.org: pack goat information

At-Home Exercises

- If you plan on your pet carrying its own Bug Out Gear, it needs training just like you do. Start with just having your pet wear the pack or harness without any weight or gear. Over the course of a few weeks and several walks, gradually add a little weight one walk at a time.

THE QUICKIE $303.80 BUG OUT BAG

For me, building a Bug Out Bag is a very fun process. I enjoy the process of sourcing and gathering all of the different kit items that go into my BOB. I am a stickler about quality, too, so most of my tools and kit items are the best of the best. I understand, though, that some people have no interest in the building process at all but still understand the importance of having a Bug Out Bag. Many people just aren't "gear junkies" and are simply looking for a quick, easy, and affordable solution to assembling a sufficient BOB to have on hand.

If this is you, I've taken the liberty of putting together a nearly complete BOB contents list that can be sourced from one trip to your local big-box store for $303.80 (at the time of this writing). And, if you already have a few key items, like a backpack, sleeping bag, or survival knife, the cost goes way down. Please note—many of the items in this list are what I would consider to be "sufficient." Big-box stores such as Wal-Mart are not a specialty outdoor retailer that carry premier camping, backpacking, and survival brands, but I have watched their camping section evolve over the years to include a very descent selection of suitable gear. If you are looking for a one-stop Bug Out shopping trip, then this is the closest you are going to get. Because of the wide degree of variables, this shopping list does not include clothing, baby/infant, or pet items. I will also note a few items that are not included in the categories below.

Shopping Receipt for Majority of Bug Out Supplies

Big-Box Store Bug Out Bag Shopping List

Bug Out Backpack: Outdoor Products 3,440 cubic inch internal frame backpack: $59.00. Features:

- hydration reservoir compatible
- six easy-access outside pockets
- padded shoulder straps and hip belt
- bottom D-rings for strapping on sleeping pad

3,440 Cubic Inch Backpack

Water and Hydration

- Outdoor Products Aluminum Water Bottle: $5.00
- .75-liter store-brand plastic water bottle: $1.50
- Outdoor Products 2.0 Liter Hydration Bladder: $9.88
- Coleman Water Purification Tablets: $5.88

NOTE: Does not include water.

Water Bottles and Purification Tablets

Food and Food Preparation

- 2 Coleman Dehydrated Camping Meals: $4.88 each
- 3 CLIF Bar energy bars: $.98 each
- Coleman Max Micro Stove: $25.88
- Coleman Butane/Propane Fuel Canister for stove: $4.88
- Outdoor Products 4 Piece Spork Set: $3.88
- Great Value Coffee in metal can (to use as cooking pot): $2.98

NOTE: Does not include metal cup/mug, pot scrubber, and P-38 can opener

Food for Bug Out

Clothing

- Rocky Wool Hiking Socks: $7.97
- Coleman adult poncho: $6.44
- Wells Lamont Cowhide Leather Work Gloves: $2.50

NOTE: Does not include boots, clothing, underwear, hats, and cold weather gear.

Basic Clothing Items

Shelter and Bedding

- Ozark Trail 8'×10' Tarp: $6.88
- Coleman 40 Degree Sleeping Bag: $22.88
- Ozark Trail Camping Pad: $6.44

NOTE: Does not include tent or paracord.

Sleeping Bag and Sleeping Pad

Tarp

Fire

- Generic lighter: $.97
- Coleman Magnesium Bar & Fire Striker: $7.44 (Magnesium is a form of fire tinder)
- Coleman Waterproof Matches: $1.88
- Coleman Match Case: $1.00

Fire Starting Items

First Aid

- Ozark Trail Emergency Blanket: $2.88
- Coleman 15 percent DEET Insect Repellent: $2.88
- Coppertone SPF 30 Sunscreen: $.97
- Coleman Day Tripper First Aid Kit: $7.88

NOTE: Does not include any extra additions to the first aid kit.

Basic First Aid Items

Hygiene

- Coleman Camp Soap: $3.88
- Coleman Camp Towel: $3.88
- Generic compact mirror with brush: $.97
- Purell Hand Sanitizer: $1.52
- Wet Ones Antibacterial Wipes: $.97
- Kleenex 3-pack: $.97

- Wisp 4-pack disposable toothbrushes: $1.50

NOTE: Does not include feminine items.

Hygiene Items

Lighting

- Energizer LED Headlamp: $4.88
- Rayovac Keychain LED: $2.00

NOTE: Does not include candle or glow stick.

Lighting Items

Tools

- Remington Full Tang Fixed Blade 5⅜ Knife With Sheath: $24.97
- Ozark Trail Multi-Tool: $9.88 (I highly recommend an upgrade)

Tools

Communications

- Ozark Trail Compass/Whistle/Thermometer/Magnifier Combo Unit: $3.88

NOTE: Does not include emergency radio, local maps or two-way radios.

Emergency Whistle

Protection and Self-Defense

- Remington Full Tang Fixed Blade 5⅜ Knife With Sheath: $24.97

NOTE: Does not include pepper spray, gun, or ammunition.

Miscellaneous Supplies

- 48 Secure Line Nylon Braided Rope: $2.57
- Stanley N95 Disposable Respirator: $4.97
- Great Value freezer bags—quart and gallon: $1.76 each

- Two-pack 100-percent cotton bandana: $2.00
- Duck Brand duct tape: $2.97

NOTE: Does not include garbage bags, sunglasses, sewing kit, latex tubing, fishing kit, or binoculars.

Miscellaneous Supplies

SURVIVAL BLOGS: A WEALTH OF INFORMATION

It seems a new survival blog pops up online every day. Almost all of them are unique in their own way. Some are educational and some are just entertaining, but the common thread is that the authors are all enthusiastic about survival on some level. Many of these bloggers specialize in specific survival-related topics and perspectives ranging from seed collecting to prepping tips for apartment dwellers. Every writing angle is a little different based on the author's personal experiences and place in life—there is something for everyone. Following is a list of some survival-related blogs that you might find interesting. Some of them I read on a regular basis and some not at all. Tell them Creek sent you!

- 1800prepare.com/blog
- all-things-emergency-prepared.com/emergency-preparedness-blog.html
- amatterofpreparedness.blogspot.com
- americanpreppersnetwork.com
- apartmentprepper.com
- backdoorsurvival.com
- backwoodssurvivalblog.com
- beasurvivor.blogspot.com
- blog.iprepare.com
- bugoutsurvival.com
- canadianpreppersnetwork.com
- cardcanhelp.org/blog
- daily-survival.blogspot.com
- destinysurvival.com
- disasterpreparednessblog.com
- foodstorageandsurvival.com
- gsiep.blogspot.com
- heirloomseedswap.com
- ice-qube.com/blog
- justincasebook.wordpress.com
- modernsurvivalblog.com
- offgridsurvival.com
- pioneerliving.net
- preparednessandresponse.blogspot.com
- preparednesspantry.blogspot.com
- preparednesspro.com/blog
- prepperwebsite.com
- realitysurvival.com

realitysurvival.com

- saveourskills.com
- shtfamerica.blogspot.com
- shtfblog.com
- shtfplan.com
- stealthsurvival.blogspot.com
- survivalblog.com
- survivalcache.com

survivalcache.com

- survivalcommonsense.com
- survivaltopics.com
- survival-spot.com
- teotwawkiblog.blogspot.com
- texaspreppersnetwork.blogspot.com
- thereadystore.com/blog

- thesurvivalistblog.net
- thesurvivalmom.com

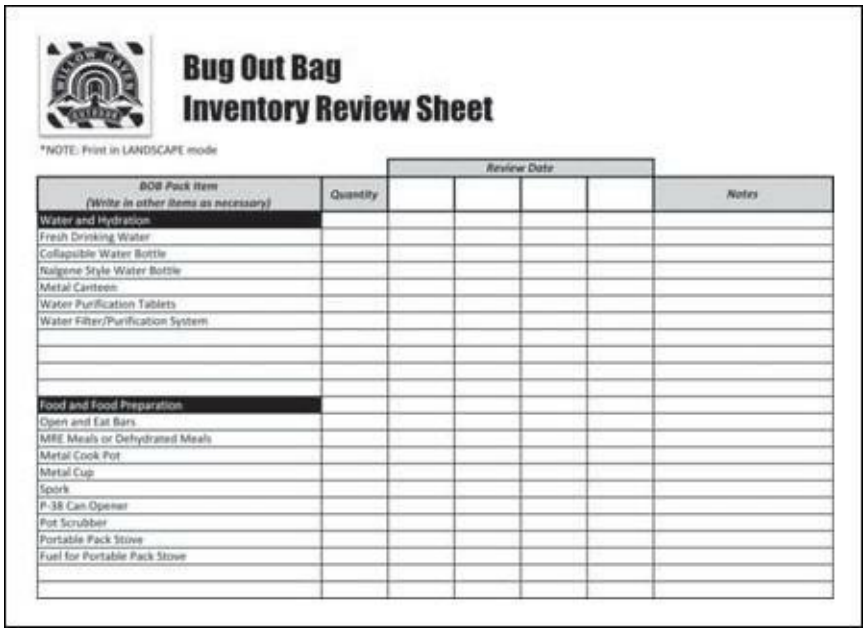
thesurvivalmom.com

- thesurvivalpodcast.com
- tslrf.blogspot.com
- vikingpreparedness.blogspot.com
- wilderness-survival-skills.com

To find supply checklists for each of the twelve supply categories in this book visit:
http://willowhavenoutdoor.com/build-the-perfect-bug-out-bag-e-book-checklists/

FREE BUG OUT BAG INVENTORY REVIEW SHEET

This five-page Bug Out Bag inventory Review Sheet will make packing and reviewing your Bug Out Bag's contents efficient and foolproof. Download it for free at betterwaybooks.com/bobinventory



Bug Out Bag
Inventory Review Sheet

*NOTE: Print in LANDSCAPE mode

BOB Pack Item (Write in other items as necessary)	Quantity	Review Date				Notes
Water and Hydration						
Fresh Drinking Water						
Collapsible Water Bottle						
Nalgene Style Water Bottle						
Metal Canteen						
Water Purification Tablets						
Water Filter/Purification System						
Food and Food Preparation						
Open and Eat Bars						
MRE Meals or Dehydrated Meals						
Metal Cook Pot						
Metal Cup						
Spork						
P-38 Can Opener						
Pot Scrubber						
Portable Pack Stove						
Fuel for Portable Pack Stove						

ABOUT THE AUTHOR

Creek Stewart specializes in disaster preparedness and has consulted with individuals, corporations, non-profits and government agencies all over the United States about a myriad of preparedness-related subjects, projects, and initiatives.

A lifelong student of survival, preparedness, and self-reliance, Creek Stewart wrote his first survival manual at the age of twenty-one. Soon thereafter Creek began teaching survival and primitive skills courses on his family farm in Southern Indiana.

He now owns Willow Haven Outdoor, a leading survival and preparedness training facility that is 10,000 sq. ft. in size and situated on twenty-one beautiful acres in central Indiana. For information about survival clinics and training courses visit www.willowhavenoutdoor.com.

Creek is an Eagle Scout and graduate of Butler University in Indianapolis.

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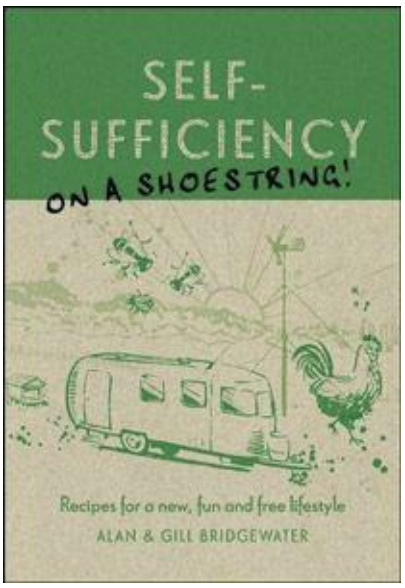
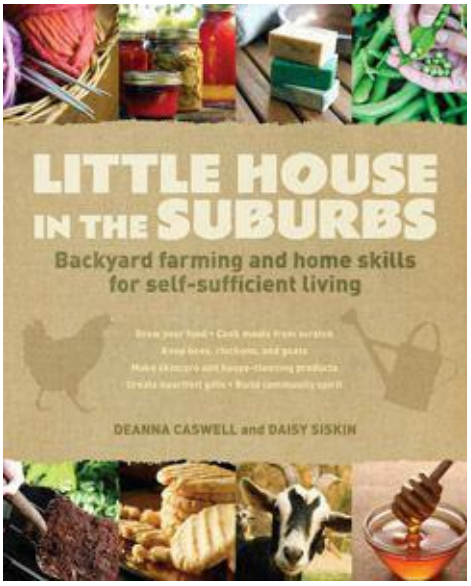
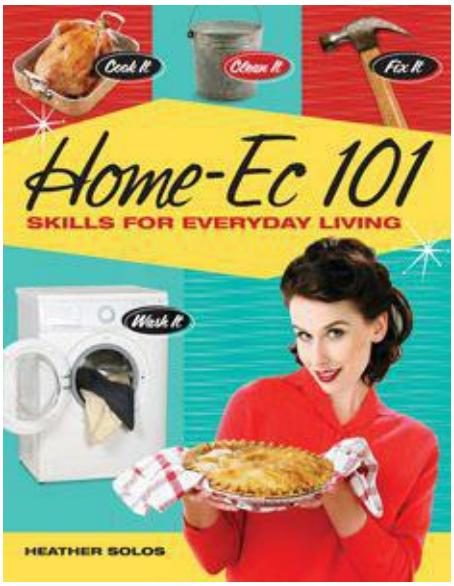
MORE BOOKS ON SELF RELIANCE



Self-Sufficiency on a Shoestring
by Alan & Gill Bridgewater



Little House in the Suburbs
by Deanna Caswell and Daisy Siskin



Home-Ec 101: Skills for Everyday Living
by Heather Solos

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