

Chapter 14: Bugging-Out ¹

Contrary to much of the literature, the order of preparation for bugging-out starts with identifying the types of disasters most likely encountered, and the bug-out site or destination. Without first identifying these two factors, constructing a bug-out bag has little or no utility regarding its contents. Its contents are determined by what you need to successfully get you to your bug-out site or destination. Intuitively, once the bug-out site has been identified, it determines the logistics including the bug-out bag, vehicle and other logistical needs.

In terms of the Surviving the Unexpected Emergency Model, bugging-out is influenced by the type of disaster, magnitude, duration, and whether it is man-made or natural. Hurricanes in the east, forest fires in the west, mud slides in California, tornadoes in the mid-west are fairly predictable time of year events. They occur during the same time of the year and usually there is advanced forecast of their coming. For example, bugging-out of the flood plain may involve simply moving to higher ground. For those bugging-out from a major hurricane like Katrina or Sandy, it may require traveling several hundred miles inland. Or, in the case of a storm that hit Washington, DC, this author had relatives bugging-out to his home 125 miles away.

As indicated in the previous paragraph, the first step in bugging-out is to identify the most likely bug-out situations. It determines the destination or bug-out site. The destination or bug-out site determines logistics including the travel vehicle, bug-out bag, and what will be needed at the destination. When reading this section, it might be helpful to select a likely scenario that you will be facing and then tailor the material in this section to your needs. It will help focus your thoughts and actions. A sample bug-out checklist of items is provided at the end of this section (see Appendix A).

Definition

Stewart (2012, p.7) defines bugging out as “the decision to abandon your home due to an unexpected emergency situation – whether a natural disaster or one caused by man.” Abandon is a good choice of words since you are assuming that your home and contents may not be there upon your return. Hence, good planning includes documenting personal records and documents that might perish. Second, it is an unexpected emergency. Most often emergencies do give forewarning although it may not be much time. Third, although not stated in his definition but implied is that you need somewhere to go. Fourth, you need to travel or be in transit to the bug-out location. This author would add to the Stewart (2012) definition “.... – *and traveling to a safer location.*” Unfortunately, sometimes the bug-out location is not safe but only a better location than where you are at.

Bugging-out is the decision to abandon your home due to an unexpected emergency situation – whether a natural disaster or one caused by man – and traveling to a safer location.”

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Developing a Bug-out Plan

As noted in the introduction think in reverse order. The following is a five step process for developing a bug-out plan. It corresponds with the handout titled: **Developing a Bug-out Plan** (see Appendix B). Also, the topics are discussed in further depth in the remaining sections.

Step 1: Identify Potential Disasters – The first step is to determine the types of disasters which will require your to bug-out to somewhere else. Familiarize yourself with the *Surviving the Unexpected Emergency Model*. Review the internet for major natural or man-made disasters that have hit your area within the last ten years. Which of these could have led you to evacuate the area? An important consideration is to develop your stay/go decision criteria. For each of the disasters, what are the circumstances which will cause you to bug-out? Identifying these criteria reduces hesitation and indecision when the pending disaster approaches. The following illustrates a possible “go” decision. “*If we are in the direct path of a Type III or greater hurricane as reported by the Weather Service 12 hours prior to its arrival, we will bug-out.*”

Step 2: Select Bug-out Sites – For each of the potential disasters, review potential bug-out sites that are in safe areas or that lie outside the impacted area. Most likely one site will service several disasters. Once the site is identified, the logistics can be determined to travel from your home to the bug-out site. Regarding bug-out sites, an important sidebar is that for everyone bugging-out there needs to be a host or bug-out site. Depending on where a person lives, they could easily become the destination and the host at a bug-out site.

Step 3: Determine Bug-out Route – Once disasters and potential bug-out sites have been identified, the next step is to determine the best route(s) to the bug-out site.

Step 4: Bug-out Vehicle (BOV) – A bug-out vehicle is necessary to transport you to the bug-out site. Most people will simply use their cars. Determine any modifications that you need to make to your vehicle such as a trailer hitch and small trailer.

Step 5: Bug-out Bag (BOB) – Think *checklist* and *packing for a trip*. The checkoff list is a refresher of what you need to take with you. Tailor the checkoff list to where you are going and how you are getting there. The bug-out bag is what you take with you. It can be a backpack, suitcase or what you pack in your car. Prepack your bug-out bag and store your checkoff list with it. As the disaster approaches, top-off the bug-out-bag and bug-out at the appropriate time. The bug-out bag is what you take with you. An important topic is what you leave behind or abandoning your home.

Identify Potential Disasters

The first step is to determine the types of disasters which will require your to bug-out to somewhere else. The purpose of this exercise is two-fold. You need to determine for which disasters you will need to bug out and which disasters you most likely will host others bugging out. In this section, you will identify the types of disasters for which you choose to plan. Your task is to determine the “decision criteria” which determine whether you stay or go.

The *Surviving the Unexpected Emergency Model* is used as the basic frame for planning (Figure 1). On the right side of the model are listed both natural and man-made disasters. The model is about making planning decisions. Review the internet for major natural or man-made disasters that have hit your area within the last ten years. Which of these could have led you to evacuate the area? Conversely, for which of the disasters will friends and family most likely use your home as their bug-out site.

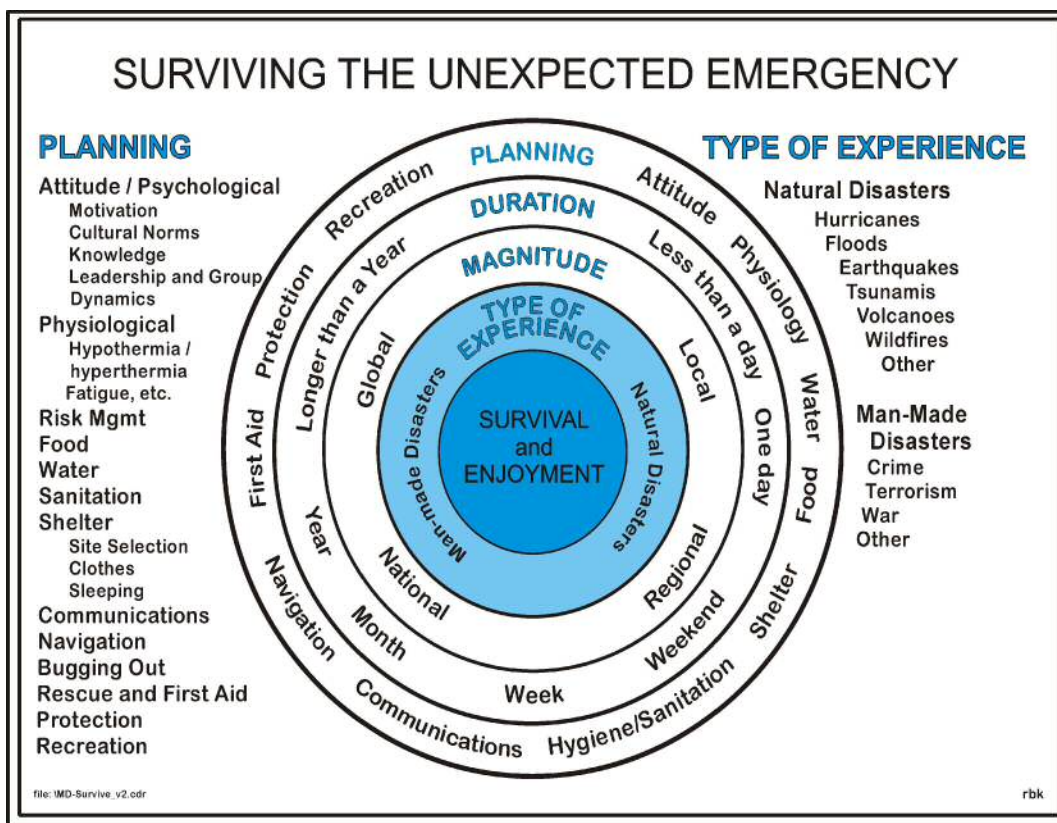


Figure 1: Surviving the Unexpected Emergency – Source: Author.

Examine the disasters to which you are susceptible in terms of the magnitude and duration. You are seeking to determine the criteria which you will use to determine whether you stay put or bug-out. The internet will provide a good source of information with which to examine previous disasters.

On the left side of the model is the planning process. It lists the major categories involved in the planning process. Bugging out is treated as a separate item. However, the other planning topics cut across the bugging out topics.

Develop your stay/go decision criteria. For each of the disasters, what are the circumstances which will cause you to bug-out? Identifying these criteria reduces hesitation and indecision when the pending disaster approaches.

Developing the decision criteria for each disaster is not a complicated process. Essentially, it is a statement of **who** will do **what when** certain events occur. The east and gulf coasts of the United States are prone to hurricanes. The west coast is prone to wildfires. Consider the following decision criteria statement. *“If we are in the direct path of a Type III or greater hurricane as reported by the Weather Service 12 hours prior to the arrival of the storm, we will bug-out.”* The **“who”** is the **“we”** or our family. The **“what”** is the decision to bug-out or stay put. The **“when certain events occur”** is the approaching hurricane. It is further defined as a Type III or greater hurricane as reported by the Weather Service. Also, the criteria of time is identified as 12 hours prior to the arrival of the storm.

The decision criteria can easily be expanded to include the preparation to bug-out. Consider the following decision criteria statement. *“If we are in the direct path of a Type III or greater hurricane as reported by the Weather Service 24 hours prior to the arrival of the storm, we will prepare the house for abandonment and make preparations to bug-out.”*

Selecting a Bug-Out Site

Most of the literature focuses on what you should include in your bug-out bag. Of equal or greater importance is the selection of the bug-out site. Think in reverse, to a large extent, the bug-out destination site determines your pre-planning efforts and what you take with you in your vehicle.

For most bug-outs, the travel portion is several hundred miles at most. The proposition could be advanced that shorter is better, and the longer the bug-out, the more problematic the bug-out can become. Under normal travel conditions, two hundred miles are four hours or a day’s travel at slower speeds. By design, the bug-out bag is prepared for 72 hours or three days of supplies. In contrast and depending on the crisis, the time spent at the bug-out site could be several days and in a bigger crisis several weeks or even months.

Second, the facilities and services available at the bug-out site will greatly affect your planning and preparation. Although FrFrog (2008) doesn’t indicate his location, it can be inferred that his bug-out site was still in the zone of destruction created by Katrina. From his blog, he didn’t have the full repertoire of utilities and services normally available to residents. In contrast, this author had six relatives descend upon his household during June of 2012. However, since my bug-out site was outside the area affected by the storm, everyone had full use of normal utilities and services. In contrast, in Stewart’s (2012) book, he considers his bug-out site primitive camping in the woods at an undisclosed site.



Figure 2: Superdome and Katrina – Sleeping arrangements inside the Superdome during Katrina. – Source: Jim Reed Photography.

Government Run Shelters – One of the bug-out sites that you can select is a government-run shelter. In terms of the Rescue Curve, a government run shelter is equivalent to rescue by others outside your group. It is your last choice. In the end, it may be your only choice. Conceptually, most people would prefer self-rescue (i.e. bugging-out), or rescue by others in your group (i.e. bugging-out to a site with family or friends). Regarding safety and prevention, the knowledge and practices that you will take will better prepare you for an eventual emergency.



Figure 3: Superdome – The role of the National Guard is to maintain order. – Source: National Guard.

Government-run shelters warehouse people (figure 2 and figure 3). They seek to maintain control and order. With limited personnel and resources, their ability to warehouse people and keep people fed can be a daunting task in itself. This is not to diminish what they do. It only raises the question whether this is what you want for you and your family. Obviously, FrFrog (2008) is not enthralled with government-run shelters in his passage below.

13) **Don't rely on government-run shelters if at all possible.** Your weapons WILL be confiscated (yes, including pocket-knives, kitchen knives, and Leatherman-type tools); you will be crowded into close proximity with anyone and everyone (including some nice folks, but also including drug addicts, released convicts, gang types, and so on); you will be under the authority of the people running the shelter, who WILL call on law enforcement and military personnel to keep order (including stopping you leaving if you want to); and so on. Much, much better to have a place to go to, a plan to get there, and the supplies you need to do so on your own. (Source: FrFrog, 2008).

When You Are the Bug-Out Site (i.e. Host)

Everyone discusses bugging-out to a bug-out site. For every person bugging-out, there has to be someone hosting the bug-out person. Depending on where you live, you could easily become one of those hosts. If you are one of those host sites, you too need to plan for the bug-out crisis. This section focuses on some of your needs.

Plan for More People than You Anticipate – The simple truth is that people will bring their friends, even if they are told not to do so. Prudent planning should anticipate this.

FrFrog (2008) provides this reflection on his experience as a bug-out site in Katrina. There are several points worthy to comment upon in his third item. If you are a bug-out site, plan for more people arriving at your door than planned. People bring friends. Second, if you are a bug-out site, you need to communicate to those bugging-out to your site what they can bring as well as rules and regulation onsite. These are noted in the following FrFrog (2008) comment below.

3) **Plan on needing a LOT more supplies than you think.** I found myself with over 30 people on hand, many of whom were not well supplied and the stores were swamped with literally thousands of refugees, buying up everything in sight. I had enough supplies to keep myself going for 30 days. Guess what? Those supplies ended up keeping 30-odd people going for two days. I now know that I must plan on providing for not just myself, but others in need. I could have been selfish and said "No, these are mine" - but what good would that do in a real disaster? Someone would just try to take them, and then we'd have all the resulting unpleasantness. Far better to have extra supplies to share with others, whilst keeping your own core reserve intact (and, preferably, hidden from prying eyes!). (Source: FrFrog, 2008).

Being a Bug-Out Site Requires Planning – Think about it. Everyone focuses on what are the needs of the people bugging-out, but no one focuses on the hosts at the destination sites. The simple fact of the matter is that the host needs to consider planning for all of the topics previously discussed in this section. Planning includes food (i.e. You can't count on what people bring with them.), water, sanitation (i.e. You are now running a hotel and taxing the sanitation facilities), shelter (i.e. You need to house these people somewhere.), first aid (i.e. More people and changed routines means more accidents), protection (i.e. You don't know the proficiency in firearms of those visiting you and you don't want anyone getting hurt either.), and recreation (i.e. You need to entertain everyone including children.).

FrFrog (2008) must have had a real circus in his backyard. His property became a RV park. If you are a bug-out site, you will need to consider most of the functions discussed elsewhere including food, water, shelter, sewage, and recreation. Also, it reinforces establishing rules and protocols for those coming from distant locations before they depart for your location. In addition, consider pets and their accommodation.

7) **Make sure you have a bug-out place handy.** I was fortunate in having enough ground (about 1.8 acres) to provide parking for all these RV's and trailers, and to accommodate 11 small children in my living-room so that the adults could get some sleep on Sunday night, after many hours on the road in very heavy, slow-moving traffic. However, if I hadn't had space, I would have unhesitatingly told the extra families to find somewhere else - and there wasn't anywhere else here, that night. Even shops like Wal-Mart and K-Mart had trailers and RV's backed up in their parking lots (which annoyed the heck out of shoppers trying to make last-minute purchases). Even on my property, I had no trailer sewage connections, so I had to tell the occupants that if they used their onboard toilets and showers, they had to drive their RV's and trailers somewhere else to empty their waste tanks. If they hadn't left this morning, they would have joined long, long lines to do this at local trailer parks (some of which were so overloaded by visiting trailers and RV's that they refused to allow passers-by to use their dumping facilities). (Source: FrFrog, 2008).

In contrast, June 29-30, 2012, a derecho (i.e. a severe line of thunderstorms) moved east and hit the Washington, DC area. It was not a major storm on the magnitude of Katrina or Sandy. Over 68,000 people lost their electricity in Washington, DC and 1.6 million people lost their electricity in Maryland for up to ten days (Wikipedia, 2012). There were water restrictions. The temperature and humidity made the area inhospitable. Without electricity, people were without air conditioning, cooking, and the workplace was inactive. It was an emergency situation and this author had six relatives descend upon his home in western Maryland, 125 miles away. Our house can accommodate close to this amount of people easily, but never-the-less it quickly became a cramped living experience.

We were taken by surprise. We had no reason to expect that we would become a bug-out site. In addition, we had full services available to us including electricity, cable, sewage, etc. Also, the local grocery chain store was relatively unaffected by the situation in Washington. Had we had the same outages as in Washington, our living conditions would have been considerably different.

Recreation – If you are a bug-out site, consider providing recreation and entertainment needs. You will have a group of people in a confined area for an extended period of time. You will need to provide them with recreation. It can be inferred from FrFrog’s (2008) comments that this was problematic after Katrina.

8) **Provide entertainment for younger children.** Some of these families had young children (ranging from 3 months to 11 years). They had DVD's, video games, etc. - but no power available in their trailers to show them! They had no coloring books, toys, etc. to keep the kids occupied. This was a bad mistake. (Source: FrFrog, 2008).

Abandoning Your House

Abandoning your house may seem like a simple task. Most people would think that you lock the doors and leave. In a minor crisis, this may be sufficient. However, there are things that you may need to do prior to leaving your home. In a major crisis, assume that your house will be ransacked or totally destroyed upon your return. Some tasks that you will need to do prior to leaving include:

- Turn off the water and other utilities – Note: *The house will be without heat.*
- Turn off the main circuit breaker in the circuit breaker box
- Plug the drains – Note: *This is necessary only if there is a possibility of a flood which can force sewage back into the house.*
- Turn off the gas line.
- Place valuables in a safe deposit box – Note: *Assume that your house will be ransacked or totally destroyed before your return.*
- Secure and lock the doors – Note: *Don't leave the key under the door mat or in the planter.*
- Secure windows – Note: *This needs to be appropriate for the pending crisis (e.g. hurricane)*
- Drain water pipes and place antifreeze in drain traps – Note: *This is only necessary in winter and if there is no heat in the house.*

Upon return, if your house was ransacked, you will feel violated. If it is destroyed, you cannot expect to retrieve anything that remains in it. Neither of these are pleasant thoughts. It helps to explain why many people refuse to leave their homes in times of crisis. Regardless, it should guide your planning processes and you should be prepared for the eventuality upon return.

Selecting a Route

Once disasters and potential bug-out sites have been identified, the next step is to determine the best route(s) to the bug-out site.

Depending on the type of crisis, GPS may or may not be functioning. Many experts recommend not relying on GPS for two reasons. It may not be available and you can't count on it. Second, you may prefer using primary and secondary roads for travel. GPS tends to direct you on the most direct route, and usually, the route includes interstates.

It is recommended that you have a hard copy (e.g. Rand McNally, or printed maps) of the maps to your bug-out destination (Figure 4). It increases self-reliance and decreases reliance on others. As an

alternative, print overlapping printouts of Google Maps ® of your route.

Consider traveling the bug-out route prior to actually having to bug-out. Preplanning and practice increased familiarity with the designated route, and reduces the likelihood of hesitation, indecision, or panic during an actual emergency.

Bug-Out Vehicle

Under the philosophy of what you have in your pocket is what you will have in an emergency situation, the vehicle that you own will most likely also be your bug-out vehicle. Most people are going to adapt their current vehicle to the task of becoming a bug-out vehicle. Few are going to buy a vehicle base solely on their bug-out needs. Assess your likely evacuation scenarios and determine if your vehicle is suitable for your needs. Sometimes a simple upgrade will benefit your needs. An all-wheel drive vehicle may be a simple upgrade over a front wheel drive vehicle.

Range of Travel – The range of travel of your vehicle should correspond with your anticipated bug-out site. If your bug-out site is 125 miles away and your vehicle gets 25 mpg, you will need a minimum of five gallons of fuel to reach your destination. If your fuel tank holds 17 gallons, you might have a rule not to let your fuel tank go below a third of a tank.

There are a lot of “rules of thumb” regarding filling your gas tank. Some suggest that you never let your gas tank go below half-full. Most likely it is not bad advice, particularly in time of a pending crisis. That dictum could be amended to keep your fuel tank topped off during periods of pending crisis. Even if you only have 125 miles to travel, a full tank leaves you with additional options after you arrive at your bug-out destination. One of those options is that you could drive home without refueling.

Do a Trial Packing of Your Vehicle – You have a list of items in your bug-out or “go-pack.” As part of the previously mentioned checklist, it should include a list of items to include in your vehicle. An often overlooked suggestion in the literature is to do a trial packing of your vehicle to see if everything fits. If there is a problem readjust your list of items or add a roof carrier. A trailer may create additional problems during an evacuation. During the trial pack, you can determine the best placement of items within your vehicle. Determine what can be put in the trunk and what items do you need to have immediate access?

Your Vehicle Determines Capacity – In backcountry planning there is a saying: “*Backpackers count ounces. Canoe campers count pounds, Rafters count tons.*” Your mode of transportation dictates what you can take with you and whether you count ounces, pounds or tons. If you are bugging out on foot or bicycle, what you can carry will be similar to what a backpacker can carry. The same rules of planning apply. In this respect, Stewart’s (2013) book on building the perfect bug-out bag is essentially a backpacking manual utilizing both old school and modern camping techniques. As a backpacker on foot, he is counting ounces.

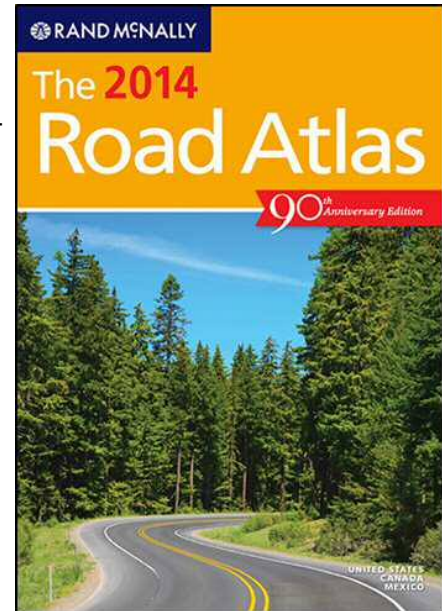


Figure 4 – Rand McNally – In time of emergency, you may not be able to use GPS. Also, Rand McNally shows all the back roads of travel. Source: author – [file:\BUG-RandMcNally[48].jpg]

A car can carry considerable weight. However, depending on its size and type, it is easy to overload the vehicle. However, it usually becomes a space or volume issue rather than a weight issue. Most people will fill-up their vehicle before reaching its weight carrying limits. The previous planning dictum could be modified to say: “*People bugging-out on foot count ounces. People bugging-out in cars fill space.*”

Big Vehicles Can Be a Disadvantage – In time of a mass evacuation, large vehicles and RVs can be a hindrance. FrFrog (2008) summarizes the disadvantage of large vehicles below. As a footnote, point 10 mentioned in the paragraph refers to starting the bug-out trip with a full tank of gas because you will most likely have difficulty buying gas along the way.

6) **A big bug-out vehicle can be a handicap.** Some of the folks arrived here with big pick-ups or SUV's, towing equally large travel trailers. Guess what? - on some evacuation routes, these huge combinations could not navigate corners very well, and/or were so difficult to turn that they ran into things (including other vehicles, which were NOT about to make way in the stress of an evacuation!). This led to hard feelings, harsh words, and at least one fist-fight. It's not a bad idea to have smaller, more maneuverable vehicles, and a smaller travel trailer, so that one can "squeeze through" in a tight traffic situation. Another point a big SUV or pickup burns a lot of fuel. This is bad news when there's no fuel available! (See point 10 below.) (Source: FrFrog, 2008).

Counter Viewpoint – As a counterpoint to using your existing vehicle as a bug-out vehicle, Google® “bug-out vehicle images.” The plethora of examples of bug-out vehicles (BOV) includes every conceivable variation of a bug-out vehicle imaginable. Stewart (2013, pp.164-167) provides a series of guidelines for a BOV. These are listed below. Other than being a 4x4 vehicle, most of the criteria could be applied to a regular vehicle also (Figure 5).

- Guideline 1: In good Working Order/Low Maintenance
- Guideline 2: Off-Road Capabilities – 4x4
- Guideline 3: Fuel Range/Efficiency
- Guideline 4: Cargo Space
- Guideline 5: Additional Supplies

Stewart’s (2013) preference for a bug-out vehicle is a 1972 Bronco. He notes that the big reason for this is that it is pre-computer. This is actually a very good point. The 1972 Bronco has fewer sophisticated parts, and it is easy to fix. His points are well taken, particularly with it being pre-computer. Return to the internet images of bug-out vehicles. How many of those vehicles have sophisticated computer operated systems? The owners of these vehicles would argue otherwise, but one good EMP (Electro-Magnetic Pulse) would render most of these vehicles inoperative. Regardless, they will have arguments that defend their designs. The point is that there is a divergence of opinions and designs regarding BOVs.

Return to the basic premise advanced in this section. Most people are going to select a vehicle for their normal every day needs. They might briefly consider



Figure 5 – Bug-out Vehicle – Stewart (2013) suggest as his idea BOV a 1972 Ford Bronco. It is pre-computer. It is not susceptible to EMP. It is four wheel drive. It is easy to repair. He has a point. Source: Internet – [file:\BUG-72Bronco[58].jpg]

how it would serve as their BOV, if they consider it at all. Unless you have identified specialized needs and unless you are wealthy, this is the reality facing most people.

Bug-Out Bag

A “bug-out bag,” “go-bag” or “bug-out kit” 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).” (Stewart, 2012, p.8). His definition is typical of the literature. Along with your vehicle which was discussed in a previous section, your bug-out bag is designed to travel light and fast to your destination. It is designed to be self-contained and self-sufficient. Usually, it is a backpack. However, it can just as easily be a travel suitcase on wheels.

The potential contents of your bug-out bag are reflected in the major headings used this chapter (Figure 6 and Figure 7).

Overview – As might be expected, authorities suggest having a fully prepared bug-out bag fully packed and ready to go at all times. This author suggests more of a hybrid approach. It is one that he uses for camping and travel trips. It starts out as a partially packed bag. As the trip approaches, the pack becomes more complete. Second and key to this approach is a printed checklist of all the items included in the pack. This list is critical to the success of this approach. In addition, the checklist is critical to anyone who is maintaining a fully packed pack approach also. You can always decide not to bring an item on the checklist. But the checklist is just that, a checklist not to forget anything.

In his first two points on his blog, FrFrog provides some insights regarding a bug-out kit. He suggests having a bug-out kit ready at all times and this of course requires renewing supplies in your bug-out kit on a regular basis. In part, this is a self-defeating strategy for most people because it requires constant maintenance. Only the truly dedicated preppers will maintain their bug-out bag on a regular basis. However, if there is a pending crisis looming in the near future, most people will begin to pay attention to their bug-out bag and its contents.



Figure 6 – Typical Bug-out Bag (BOB) and Contents: Contents of a typical BOB. If you are bugging out to a relative's house, do you really need a hatchet, large knife, or shovel? Source: author – [file:\BUG-BOBcontents[80].jpg]



Figure 7 – BOB Suitcase – A travel suitcase can make an excellent BOB. Approach bugging-out as if taking a trip. Source: author – [file:\BUG-Suitcase[47].jpg]

1) **Have a bug-out kit ready at all times.** Many of these folks packed at the last minute, grabbing whatever they thought they'd need. Needless to say, they forgot some important things (prescription medications, important documents, baby formula, diapers, etc.). Some of these things (e.g. prescriptions) obviously can't be stocked up against possible emergency need, but you can at least have a list in your bug-out kit of what to grab at the last minute before you leave! (Source: FrFrog, 2008).

2) **Renew supplies in your bug-out kit on a regular basis.** Batteries lose their charge. Foods have an expiration date. So do common medications. Clothes can get moldy or dirty unless properly stored. All of these problems were found with the folks who kept backup or bug-out supplies on hand, and caused difficulties for them. (Source: FrFrog, 2008).

As noted, this author suggests a hybrid approach which he uses for camping and travel. It focuses on the use of a check-off list of the contents of your bug-out bag. FrFrog first point really underscores the importance of the checkoff list and his second point underscores the hybrid approach of packing in stages as the pending disaster approaches.

First, pack your bug-out bag with stable and non-perishable items such as clothing, sleeping bag, freeze-dried food, and money. Next, develop a list of the contents for your bug-out kit. Print it out and keep it with your bug-out kit. It is your check-list of what you need to take with you. List items by location such as bug-out bag, car, etc. Third, as a pending crisis approaches, review the list and begin packing your bags. Since some level of advanced notice is given for most pending crises, this allows for the packing of perishable such as medications. Fourth, if you live in an area where there is period during the year where there is likely to be a bug-out situation, it might be wise to pre-pack the majority of your bug-out bag as suggested by FrFrog and others. This may be a hurricane season in the east or wildfires in the west.

Food – A review of the literature suggests that a bug-out pack should have an arbitrary three days of food supplies. Usually, these food supplies are freeze-dried or MREs. This approach is not really practical for several reasons. First, your destination and the travel time to the destination determine the amount food needed in-transit. Second, most freeze-dried food requires hot water which requires a stove and stopping the vehicle. Stopping to cook increases travel time and can be unsafe. Third, and particularly in temperate climates there is no reason why you can't use perishable foods in-transit. Last, there may be different food requirements in-transit and once you are onsite. For purposes of this discussion, food is divided into two phases, in-transit and onsite.

When bugging out, in-transit is simply the time in-transit from when you leave your house to when you arrive at your bug-out site. Onsite is defined as everything that occurs once you reach the bug-out site. In-transit food and onsite food requirements may differ greatly depending on circumstances.

In-transit Food – In-transit food selection focuses on expeditiously keeping the vehicle moving toward the bug-out site. Emphasize foods that do not require cooking. Cooking requires stopping and your task is to reach the bug-out site.

Depending on travel and forewarning, food can include a mix of perishable and non-perishable foods. Sandwiches can be made in-route. Most deli products will survive a day or more in temperate climates. Peanut butter and jelly sandwiches are always an



Figure 8 – Peanut Butter and Jelly Sandwiches – When bugging out, you are on the move. Avoid meals where you need to stop and cook. Source: Internet – [file:\BUG-PP&J[47].jpg]

alternative (Figure 8). Remember, the purpose is to arrive at your bug-out destination expediently.

Even if you use perishable food, consider having backup of non-perishable food. This can include MREs, dehydrated food, or freeze-dried food. Again, emphasize foods that do not require cooking. The backup food can also included items such as Cliff Bars ®. Cliff Bars ® which are energy bars. However, unlike most of the sugar laden versions, these bars contain more complex carbohydrates that digest more slowly in the digestive system (Figure 9).



Figure 9 – Prepackaged Foods – The Cliff Bars ® store well and provide good energy. Source: Internet – [file:\BUG-CliffBars[33].jpg]

When bugging-out, emphasize foods that do not require cooking. This author disagrees with the advice of others (e.g. Stewart, 2012 and Carr, 2012). As a general rule, the purpose of a bug-out bag is to facilitate moving quickly to your destination. With this in mind, travel should de-emphasize items that require cooking since cooking requires a stove and stopping the vehicle. For example, Ramen noodles ® store well and make a quick meal. They are the staple of many college students and campers. However, they require a stove to boil water. If you are traveling in your car, this requires you to stop and cook your noodles. A stop of half-an-hour for lunch is the loss of being thirty miles further down the highway.

Most people will have a small cooler. Try freezing two to three two-liter bottles of water. When bugging out, the frozen bottles are placed in the bottom of the cooler. If the bottles remain intact from freezing, they can provide another gallon of drinking water. The cooler can carry perishables used in-transit or later when onsite.

Onsite Food – Determining onsite food needs generally requires some pre-planning even if it is a quick phone call prior to bugging out. The type of onsite food taken will depend on the duration of onsite experience, the magnitude of the disaster, utilities provided onsite, and storage capabilities onsite. Often one or two days of onsite food supplies is good for transitional purposes with the host bug-out site or for short term stays.

Water – The rule of thumb is to plan for one gallon of water per person per day. Three days would be three gallons. Two people would require six gallons. Reusing two liter soda bottles is a convenient way to store water. Since a liter is very close in volume to a quart, two two-liter bottles equates to a gallon (Figure 10).

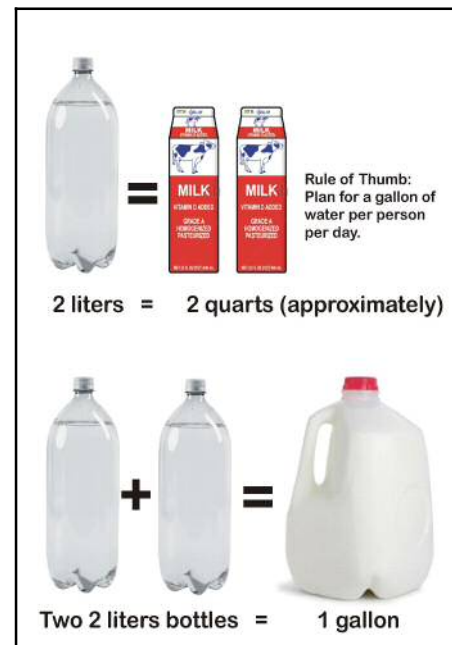


Figure 10: Conversion of two liter bottles to gallons.

As with food, consider in-transit and onsite water considerations. Preplanning is useful here in determining amounts. An extra day of water is not a bad idea in case there is a delay in-transit due to traffic or a vehicle breakdown.

While in transit, you shouldn't have need to purify water unless your mode of travel is by foot or bicycle where you don't have

the capacity to carry water. Then the same procedures for water purification in the backcountry are used. These methods would include filtration (e.g. pumps), chemical (e.g. iodine or chlorine), or boiling water. Boiling water can be cumbersome.

Sanitation – Toilets are more of an issue at the bug-out destination site than while in transit. For the most part chemical toilets are impractical for use in automobiles. In time of a major evacuation, expect rest stops to be unusable. Assume other toilet facilities in commercial settings to not be available either.

In time of emergency, most people will simply pull the car off the road and urinate along side the road. Be sure that you are safely off the road and not in danger of being hit by a passing vehicle. On interstates, this can be a potentially dangerous situation. Consider using an exit that has an easy exit and reentry to the highway.

Regarding excrement, WAG (Waste Alleviation and Gelling) bags provide a viable alternative to pooping along side the road. A WAG bag is a one unit disposal bag for wastes (Figure 11). Simply put the poop in it, seal it, and dispose it in the normal trash. Some bags come with a hand sanitizer and toilet paper.

Whether you choose to use WAG bags or not, remember to pack toilet paper and sanitizer.

Shelter – Generally, shelter is more of an issue at the destination than during travel. Hopefully, most bug-out sites are sufficiently close that they do not require overnight sleeping. Avoid sleeping along the highway were other vehicles could plow into your vehicle. Use rest areas or entrance and exit ramps. As a rule sleep in an area where others are doing the same.

If traveling in a car, the car can usually provide ample shelter. Sleeping in it may be less than comfortable, but adequate. This author always has a sleeping bag in his car in case there is an overnight stop in a rest area. The sleeping bag is rated down to 20°F. Remember to lock the doors for security and to keep a window cracked. There were many mornings that the ice had to be scraped off the inside of the windshield. The ice resulted from the condensing moisture from normal respiration while asleep.

Clothes – You need to dress appropriately for the time of year and location. Review the clothing section under shelter. Don't forget rain gear. A 20-gallon trash bag can serve in a pinch for a rain coat. In the bug-out bag, one change of clothes is probably adequate. You may want to include an extra set of underwear. Remember, most of your clothing needs will be for the onsite experience.

Communications – Most automobiles are equipped with and AM/FM radio and increasingly many cars have satellite radio. In time of pending crisis, AM radio can be a good source of information. Even so, it may be advisable to have a portable radio which provides continuous updates on the pending weather.

In time of a crisis, assume cell phone and other communications will not be available. In part, this will depend on the type of disaster present. If they are available, consider it an added benefit.



Figure 11: WAG Bag – Poop in it. Zip it and dispose it. Source: Internet advertisement.

First Aid – Include the same first aid kit that you would have at your bug-out site. You need not include anything that is different for the trip (Figure 12).

Having adequate medications for the duration of the crisis is important. This includes both in-transit and onsite experiences. Again, this is in part related to the type of disaster, its duration, and magnitude. Having adequate medications eliminates another worry once onsite at the bug-out site.

Protection – Weapons are always a sensitive subject. Review the section on weapons. In time of crisis, be sure to carry weapons in accordance with your state laws. If you cross state lines in route to your bug-out destination, familiarize yourself with the new state’s laws. Consider pepper spray for close-up situations if needed. Check with the bug-out site host regarding what their policy is toward weapons.

Money – Cash is king. Plan for at least two weeks where you pay for everything with cash. Consider small denomination bills in the ten and twenty dollar denominations rather than large denomination bills in the fifty or one hundred dollar denominations. Some even suggest an abundance of ones and five dollar bills. In a crisis situation, people may not be able to or want to give you change for purchases. If all you have is a hundred dollar bill, a moderate purchase could quickly become a very expensive purchase because no change will be provided (Figure 13).

In calculating your cash needs, include the purchase of items for which you normally use plastic. Assuming that you can purchase gas in route, the gas station’s electronic credit card device may be inoperative. Most stations don’t even have the manual credit card devices any more to manually process credit cards. Assume that ATMs and other banking services will be inoperative. By all means, bring your plastic credit cards and checkbook. If they are operative, fine. Just don’t assume that they will be functional and preplan that they won’t be functional.

FrFrog (2008) notes the importance of cash being king in his blog. Also, he notes some of the problems that he had with seemingly well intentioned people during an emergency situation. Forewarned is forearmed.

11) **Have enough money with you for at least two weeks.** Many of those who arrived here had very little in cash, relying on check-books and credit cards to fund their purchases. Guess what? Their small banks down in South Louisiana were all off-line, and their balances, credit authorizations, etc. could not be checked - so many shops refused to accept their checks, and insisted on electronic verification before accepting their credit cards. Local banks also refused (initially) to cash checks for them, since they couldn't check the status of their accounts on-line. Eventually (and very grudgingly) local banks began allowing them to cash checks for not more than \$50-\$100, depending on the bank.



Figure 12 – First Aid Kit – Consider taking the first aid kit that you will use onsite with you in your BOB vehicle. Source: Internet – [file:\BUG-FirstAid.jpg]



Figure 13 – Cash is King – Caption: Assume there will be no electronic services. Cash is king. Use small bills since you may not get change. Source: author – [file:\BUG-Money[144].jpg]

Fortunately, I have a reasonable amount of cash available at all times, so I was able to help some of them. I'm now going to increase my cash on hand, I think... Another thing - don't bring only large bills. Many gas stations, convenience stores, etc. won't accept anything larger than a \$20 bill. Some of my guests had plenty of \$100 bills, but couldn't buy anything. (Source: FrFrog, 2008).

Tools – You might want to add to your bug-out bag a Leatherman ® or similar multi-tool device and a LED flashlight. A pliers, scissors, screw driver, bottle opener, and knife can be useful in time of a crisis. The same is true of a small tactical flashlight. However, some may prefer the five D-cell version of the Maglite ® which can also serve as a weapon if needed.

Summary

When thinking about bugging-out, people are really abandoning their homes and possessions. This is not an easy thing for people to do. Normally, leaving one's home is the last option. It doesn't matter what the pending disaster is. Upon returning to one's home after a disaster, a resident can assume their home was ransacked or destroyed. Neither is a comforting option. Bugging-out is a stressful situation.

Contrary to most of the bug-out literature, start with the end product or your destination. First, determine the situations for which you will most likely need to bug-out. Use the model to determine natural and man-made disasters. This “frames” your planning. Second, determine your destination or bug-out site. This requires preplanning. Third, once you know where you are going, the issue becomes how to get there and fourth, what to take with you. This requires a vehicle, most likely the one you normally use and a bug-out bag (suitcase) in the back seat. Pack for a bug-out situation much the same as packing for a normal trip.

There are two keys in the planning process. First, think of bugging-out as how you would normally plan for a trip. Most disasters give some pre-warning. Pack staples and as the event approaches, pack perishables and everyday items. The second key to planning is the checklist. As a practical matter for most people in their daily lives, planning for a bug-out situation is not normally a high priority item. It only becomes important in time of pending crisis. The check list is an instant refresher of what is needed, particularly when you are in a hurry and under pressure to pack and move. It reduces error and helps prevent omission.

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Appendix A: Bug-Out Checklist ^{1,2}

House, Bedroom and Bathroom

- _____ Tent, fly, trailer, shelter
- _____ Ground cloth
- _____ Air mattress
- _____ Ensolite or sleeping pad
- _____ Sleeping bag
- _____ Pillow
- _____ Toiletry bag (tooth brush, toothpaste, biodegradable soap, dental floss, shaver, etc.)

Clothes Closet

- _____ Sneakers
- _____ Socks
- _____ Sandals
- _____ Underpants
- _____ Undershirts
- _____ Poly underwear - pants
- _____ Poly underwear - top
- _____ Sweater
- _____ Shorts
- _____ Long pants
- _____ Belt
- _____ Jacket
- _____ Rain gear (rain pants, jacket, parka, poncho, paddling top & bottom, etc.)
- _____ Hat
- _____ Gloves
- _____ Bandanna(s)
- _____ Swimsuit
- _____ Towel

Kitchen (Food and Water)

- _____ Food (think meals if possible)
- _____ Condiments (salt, pepper, etc.)
- _____ Water purification tablets
- _____ Water pump or purifier
- _____ Canteen, water bottles
- _____ 2 liter or larger water containers for multi-day storage (1 gallon/day)
- _____ Mesh laundry bag for 2 liter bottles
- _____ Cooking pots and pans
- _____ Spatula, cooking spoon, etc.
- _____ Cup
- _____ Plates (Rubbermaid™ or Tupperware™ container)
- _____ Knife, fork, spoons
- _____ Large Knife
- _____ Matches
- _____ Waterproof matches

- _____ Fire starters
- _____ Can opener (or pocket knife)
- _____ Stove
- _____ Gas bottles
- _____ Funnel for gas
- _____ Stove windscreen
- _____ Packpacker oven
- _____ Dining fly

Sanitation

- _____ WAG bags
- _____ Pea bottle
- _____ Toilet gear (shovel or trowel, toilet paper, Purell™ hand cleaner, etc.)
- _____ _____
- _____ _____

Communications and Electronics

- _____ Cell phone
- _____ Satellite phone
- _____ CB radio (optional)
- _____ Walkie Talkies (good if traveling with more than one vehicle)
- _____ Portable radio (with emergency bands)
- _____ Signaling mirror
- _____ Whistle
- _____ Computer
- _____ Camera (computer cord, battery charger, storage card, case, tripod, etc.)
- _____ _____
- _____ _____

Navigation

- _____ Rand McNally™ maps
- _____ GPS
- _____ Google Maps
- _____ Compass
- _____ _____
- _____ _____

First Aid and Medications

- _____ First Aid Kit
- _____ Prescription medicine(s)
- _____ Lip salve
- _____ _____
- _____ _____

Protection

- _____ Guns (optional)
- _____ Ammunition
- _____ Pepper spray
- _____
- _____
- _____

Tools

- _____ Leatherman and/or pocket knife
- _____ Folding saw (or axe)
- _____ Duct tape
- _____ Watch
- _____ Thermometer
- _____ Shovel
- _____ Scissors
- _____ Can opener (included in kitchen also)

Accessories

- _____ Backpack(s)
- _____ Dry packs (Watersheds)
- _____ Flashlight
- _____ Spare batteries
- _____ Spare bulb for flashlight
- _____ Candle lantern (matches in Kitchen)
- _____ Candles
- _____ Sunglasses
- _____ Spare prescription glasses
- _____ Binoculars
- _____ Sun block or suntan lotion
- _____ Insect repellent
- _____ Fishing tackle (rod, reel, lures)
- _____ Rope(s)
- _____ Nylon twine
- _____ Nylon cord
- _____ Sewing Kit – Needle and Thread
- _____ Rubber bands
- _____ Spare plastic bags (Ziploc™)
- _____ Car keys
- _____ Vices (booze, smoking items, etc.) ⁴

Money and Valuables

- _____ Money (two weeks - small bills)
- _____ Credit cards
- _____ Check book
- _____ Copies of insurance policies
- _____ Valuable documents (assuming home is ransacked or destroyed)
- _____ Wallet
- _____
- _____

Recreation

- _____ Recreation (think creative activities)
- _____ Reading materials
- _____ Cards
- _____ Books (think creative recreation)
- _____ Notebook or journal
- _____ Pencils, pens, refills
- _____
- _____
- _____

Transportation⁴ - Bug-out Vehicle

- _____ vehicle manual
- _____ vehicle registration
- _____ vehicle insurance
- _____ spare tire
- _____ jumper cables
- _____ tool kit
- _____ flares or signaling devices
- _____ spare 5 gallon gas cans (depends on travel distance)
- _____ GPS
- _____ roof carrier (optional)
- _____ trailer hitch with ball
- _____ NRS straps (for tying roof rack items)
- _____ first aid kit (stays in car)
- _____ flashlight (stays in car)
- _____ shovel
- _____ fire extinguisher (stays in car)
- _____ paper maps of journey
- _____ sleeping bag (stays in car)
- _____ toilet kit (stays in car – razor, shaving cream, toothbrush, toothpaste (2-oz, toothpicks, etc.)
- _____
- _____
- _____
- _____

Notes:

¹ This checklist is much more comprehensive than most people need. It started as an eleven day Everglades camping trip checklist developed by the author for his personal and professional use. You will note some of the recreational items listed. It is recommended that you develop your own abbreviated list from this list and/or other sources. Generally, it is easy to delete items that are not relevant to your situation than it is to think of items to add. Feel free to make your own list, shorten it, and adapt it to your bug-out situation.

² From an organizational perspective, the original checklist used the classification system used by Colin Fletcher's *The Complete Walker* (e.g. kitchen, close closet). It looks at different functions (e.g. house (i.e. bed and bathroom), clothes closet, kitchen; bedroom, accessories, etc.). It has been morphed to include many of the topic headings in the text.

³ This is not the time to ignore your vices. Bugging-out has sufficient stress in and of itself. This is not a good time to go "cold turkey" on what might be considered vices such as smoking or alcohol.

⁴ Normally, transportation is not included as part of the bug-out bag. It is included here as a matter of convenience and inclusion.

Appendix B: Developing a Bug-Out Plan ²

The purpose of this inventory is to assist you in developing a bug-out plan. It asks basic questions in helping you determine potential bug-out sites. These questions address the potential need to bug-out and historically which situations have resulted to evacuations in the past. Next, it helps you determine potential sites, potential routes, and limitations associated with your vehicle.

Step 1: Review Disasters (i.e. natural and man-made) – The first step is to identify the disasters, both natural and man-made that I am likely to face where I am living.

- 1) Review the internet for major natural disasters that have hit your area within the last ten years. Which of these led to or could have led you to evacuate the area?

[Enter your response in the table following Question #2.]

- 2) Review the internet to determine if your area is area is prone to attack by terrorists, nuclear war or other man-made disaster.

List Natural/Man-made Disasters	Natural or Man-made Disaster	People Evacuated (Yes/No)
1)		
2)		
3)		
4)		
5)		
6)		

- 3) **Stay/Go Decision Criteria** – Determine the stay/go decision criteria for each of the disasters for which you are planning. It reduces hesitation and indecision when the moment to stay or go approaches (e.g. Go: If Weather Service reports a Type III or greater hurricane in direct path 12 hours prior to arrival, bug-out). List those criteria here.

² This instrument was developed by Robert B. Kauffman who is solely responsible for its content. This article is copyrighted © Robert B. Kauffman, 2015. Robert B. Kauffman, Professor of Recreation and Parks Management, Frostburg State University, Frostburg, MD 21532. e: rkauffman@frostburg.edu.

Step 2: Review Potential Bug-Out Sites – The second step is to identify potential bug-out sites.

- 1) For the major natural and man-made disasters in the previous question, what is the minimum safe distance that you would need to bug-out to be outside the sphere of its impact? _____

- 2) Identify friends relatives who live outside of the sphere of impact identified in the previous question. In your estimation, which of these people would you comfortable with at a bug-out site? In terms of facilities and services, which of these sites would serve as a good bug-out site?

Identify Potential Friends and Relatives Who Could be a Bug-Out Site	Personally Comfortable (Yes/No)	Good Bug-Out Site (Yes/No)
1)		
2)		
3)		
4)		
5)		
6)		

- 3) Rank in order your preference of potential bug-out sites.

Rank In Order Your Preference of Potential Bug-Out Sites	(Yes/No)	Contacted (Yes/No)
1)		
2)		
3)		
4)		
5)		
6)		

- 4) Have you contacted any of the above people and discussed the possibility of using them as a bug-out site?

Step 3: Bug-Out Routes – Examine the routes to the bug-out sites.

- 1) For your most likely bug-out site, how far is it from your home? _____
- 2) For your most likely bug-out site, how long would it take to drive (i.e. assuming you are driving) to that site under normal conditions? _____
- 3) Is there anything that might prevent you from reaching this destination? This might be a ferry that stops running, a large bridge that is closed, a tunnel that is closed, etc.

3) Identify alternative routes to the bug-out destination.

Step 4: Bug-Out Vehicle (BOV) – Examine your vehicle to determine if it is suitable for your bug-out.

- 1) Are there any special road or travel conditions that are required of your vehicle? (e.g. 4x4 terrain, etc.) If there are, identify modification to your vehicle that are needed.

_____ okay _____ need – Specify: _____

- 2) Are there any modifications that you need to make to your existing vehicle such as adding a trailer hitch and a small travel trailer?

_____ okay _____ need – Specify: _____

- 3) For your bug-out vehicle, can you drive to the bug-out site on one tank of gas? Will you need to carry gas with you to reach the bug-out site?

_____ okay _____ need – Specify: _____

Step 5: Bug-Out Bag (BOB) – Think *checklist* and *packing for a trip*. Tailor the checkoff list to your specific needs. Prepack your bug-out bag and store your checkoff list with it. As the disaster approaches, top-off the bug-out-bag and bug-out.

The purpose of this inventory was to self-identify the components that you need to address in developing a bug-out plan for yourself and your family. Its questions will provide you with a good start.

rbk