ESSENTIAL SURVIVAL SECTION OF THE SE



THE COMPLETE SYSTEM

Outdoor survival- what is it about

The Law of the Jungle...Survival of the Fittest...everyone has heard these expressions, but have you ever taken the time to examine what they really mean?

Nowadays, most of us seem to be happy with just watching a bunch of contestants on television competing to one up each other in a so-called reality wilderness survival show. Unfortunately, the only "survival skill" these people seem to know is how to stab each other in the back so they are eliminated from the competition.

With all of our technological advances and creature comforts, we have been lulled into a false sense of security, thinking we will never have to deal with struggling to survive.

Seriously, when was the last time you prepared an entire meal from scratch, without using the microwave? Better yet, when was the last time you spent some time with your family, or even just by yourself, without watching television? If we think that we will always be safe, we really do need to snap out of it! Just look at some of the horrendous storms and "natural" disasters that have occurred just this past decade.

Remember the tsunami that caused such devastation and loss in Thailand back in 2004? Or how about Hurricane Katrina and what happened down in New Orleans, Louisiana? If you were there, would you know what you would need to do to survive? Even more importantly, could you actually do what you would have to in order to come through such an ordeal? Why should we be bothered to learn how to build a fire without matches, or how to obtain safe water to drink when all we have to do is get up and go into the kitchen for either?

The answer is simple: natural disasters can strike at any time and deprive people of electricity and everything else they take for granted and assume will always be around to get them through each day.

Even less predictable than hurricanes are other natural disasters, such as earthquakes that strike without warning and tornadoes that can materialize in minutes; each of these can cause such total and devastating loss of lives and property in even less time than it took for them to appear. But there are also other types of disasters we need to gear up for.

Many experts have been saying that we are seriously at risk for a worldwide disease pandemic, like the Spanish flu that decimated populations across the globe in the first quarter of the 20th century. It is highly possible that a similarly wide reaching and horribly contagious disease epidemic of today's bird flu could put such a strain on community emergency services, such as hospitals, police, fire departments and ambulances that they could not be depended on and people would be forced to fend for themselves.

If that doesn't scare you, then look at the ever present risk of a terrorist attack: look at what happened to NYC back in 2001. What if these cowardly assassins targeted and destroyed area power stations, water reservoirs or even succeeded in an attack on our government? Don't just sit there, paralyzed by

fear: do something about it! You need to educate yourself, even if it's only the most basic survival skills, so that you can protect your loved ones and yourself.

This is why you need to invest at least a few hours to learn as many primary survival skills as you can: fire making, finding water, making shelter, finding food and preparing meals with just the most basic of tools would get you off to a good start. Look at this to be the penultimate in all those self help courses you keep taking: not only will you become more self-sufficient, if disaster strikes, these skills may very well prove to be more valuable than any insurance policy...they just may save your life, as well as your families.

Years ago, with the threat of nuclear warfare, many people took to building bomb shelters somewhere in or on their property. They were afraid that after such a disaster, the people who somehow made it through would also revert back to their basest level of conduct. People would be scavenging the countryside, trying to find any type of supplies, and using any force necessary to appropriate it, so that they could survive.

Playing up on those fears and concerns, many different companies, as well as the government, started advertising and recommending survival kits that would enable people to stay hidden in their shelters until law and order were established again. Mankind, in general, loves to implement any and all tools whether it is to help make life easier or even simpler yet, to just survive.

The typical survival kit includes not only supplies like water reconstitution gear; fire-starting tools like a flint (or better yet, also some matches!) and stone, first aid accessories, a hunting knife, eating implements and a shovel. It will also include instructions on how and what to do during a disaster. Even if your kit contains an inflatable mattress, there is one tool that is often overlooked, yet it is the single, solitary, most important item you will need to use to survive...your brain!

We have become so inundated with surrounding ourselves with our creature comforts, we forget that our species actually has the natural, and possibly inborn, capacity to survive at all costs. This is what helped us become the supposedly superior species here on this planet: the ability to think and to create is what set us apart and above all other members of the animal kingdom.

As with any tool, before you can start using it, you should know how it operates so that you can work it to its fullest capacity. Let's say that you need to do something, but you're not sure if you can. Here is how we, as humans, analyze things:

We see a problem and start examining it.

Once you realize that you cannot do something all on your own, you know that you need to find another means of accomplishing the task at hand.

You conceptualize as to the best way to resolve the problem and what tools you will need to use. If you don't already have it at hand, you design whatever tool is necessary to help you to fix your problem.

Okay, so the tool you designed isn't quite up to the job: you adapt the design so that it will work, possibly even better than your original concept.

PROBLEM SOLVED!

We are the only species that can conceptualize over and over again, until we get it right. Some may argue that other animal species also have ways to "think" things through, but it never was, and never will be, as advanced as our own innate abilities for rationalization. We are hotwired for survival. As with everything in life, if you don't "use" it, you lose it. We only get better with practice, and that also includes practicing your basic survival and life-saving skills. One of the best ways to do this is to go camping and/or backpacking. When you are isolated from everything else, you learn to listen to that "inner voice" of reason, especially if your health and well-being depend on it.

What do you need to carry?

Being as we are, we do love our creature comforts, so there is always the "latest and the greatest" in camping gear available. What we need to do here is to re-evaluate exactly what we do need to survive in the wild and then pare down our accourrements accordingly. These are some of the essentials you will need to survive:

Sleeping Mat (lightweight, of course!): you will need a place to sleep, but Mother Nature is not always accommodating in providing a nice soft berth for you, so this is one item you want to make sure you pack. Aside from providing a more comfortable place to sleep, it will also provide at least a minimal layer of insulation between that rock and a hard place you've chosen to sleep on.

Condiments: save those little packets of salt and pepper, sugar, mustard, ketchup and dipping sauces you get every time you visit a fast food establishment. Not only are they money saving, but they do not require refrigeration and are also lightweight and easy to carry. You may love the taste of that fresh trout you caught, but if you have to have a steady diet of that to survive, these little packets can become invaluable in helping to add a new dimension of taste for you. Remember, variety is the spice of life!

First Aid Kit: accidents happen, so be prepared for just about anything, whether it's as minor an issue as a mosquito bite or as major as a broken leg. Pack accordingly: make sure you have insect repellent, band aids and gauze bandages, instant ice packs, splints and tourniquets, just in case. If you have to take any medications on a daily basis, make sure you pack an extra supply in your kit to take along with you. If you're allergic to anything, make a note of this and include it in your kit and on your person. The first aid kit is a really important part of your survival kit, so don't leave home without it!

Clothing for All Seasons: even if it's in the middle of the summer, if you are up in the mountains, or even in the desert, it can get extremely cold at night. Pack one of those super insulating metallic "space blankets" to help protect you. You also need to wear clothing that won't restrict your movements, which in itself can add to your ability to protect yourself, whether it's from the elements or it's inhabitants. Having the right footwear is probably the most important part of this group. If your feet hurt, your whole body hurts and your survival may just boil down to your need to be able to walk and to walk as long and as comfortably as possible.

Other Backpack Basic Tools: whenever you are out in the "Great Outdoors", aside from certain food and drinking essentials, you should also include the following as part of your gear: a fire starter, a Swiss army knife, a flashlight, a plastic tarp, a compass and a reliable map. Use your common sense to include what you will need, but keep in mind that you will have to carry all of these supplies, so also pack what you can comfortably carry a long distance. Staying safe is paramount, so pack accordingly!

Many people think that in order to survive outdoors, you only need to learn only those basic skills and techniques necessary to stay alive. Others realize that it is also just as, if not more so, critical for you to have the will to survive. With that said, you must also learn how to properly prioritize what you will need to survive out in the wilderness. Knowing what to do is just as important as knowing how to do something, so make sure you prepare yourself mentally as well as physically. The following is great to use as a checklist to follow to ensure your safe arrival back home:

The Right Attitude: if you haven't already, do yourself a favor and read any survival stories where someone has come through an ordeal, seemingly miraculously, that they shouldn't have survived. Of course, they may have used some basic techniques, but the bottom line is that the only reason they pulled through seemingly insurmountable odds is because they not only had an incredible, burning desire to survive...in their minds, they convinced themselves that survival was not only possible, but probable. Think positive and amazing things can, and will, happen!

Maintain Your Body's Core Temperature: hypothermia is the single most cause of outdoor deaths, on land or by sea. You need to ensure that you stay as warm as possible in any emergency survival situation. Keep your clothes and gear as dry as possible and stay out of the wind. This is where that plastic tarp you packed can come in very handy, as both a rain barrier and windbreaker. If you're still cold and didn't have time to buy one of those new-fangled metallic "space blankets", stuff dried grass and leaves between layers of clothing you have on: it will act as insulation and help you to stay even warmer.

On the other end of the spectrum, if you're stranded in the desert, or wherever it's extremely hot and arid, you will need to conserve your energy and supplies by not moving around as much during the daytime. If you don't, you run an extremely high risk of becoming dehydrated and suffering from heat exhaustion. Rest when the sun is out and travel at night, when it is much cooler. Find someplace that offers shade, whether it's under a tree or rock outcropping, also being careful that you're not sharing that spot with any "native" inhabitants (like snakes, spiders or scorpions, oh my!).

If you do need to travel during the daytime, improvise some sort of an umbrella-like device and if you do happen to find some water, even if it's not drinkable, you can use it cool yourself down and to soak your clothes in. It's amazing how much just a wet cloth around your neck can help to prevent you from overheating.

Stay Hydrated: we can survive for a week, perhaps more, without food but not without water. At best, you may be able to survive several days. Your highest priority should be to always find a water source and a way to purify it. If you cannot find an immediate source of fresh water, conserve what you've got and reduce your need for water by resting in the shade when it's hot, as well as breathing through your

nose, rather than your mouth. You will lose a lot less moisture by doing so. It's also a smart idea to only use your limited water supply for drinking instead of washing yourself or anything else. You must always be careful to stay hydrated so that your body will continue to function, albeit on a much more reduced level. If you don't have enough to drink, you can become disoriented, even delusional. Not a good "state of mind" to be in when you are going to have to make risky, possibly even life-threatening decisions.

Don't Take Unnecessary Risks: we've all seen those "reality" shows where the host and the participants are out in the wilderness, supposedly risking all against the elements. Keep in mind that you are watching a television program and that the people you're watching are not alone: they have a full production staff all around them, so, in the event of serious illness or injury, there is someone there able to step right in and save them. You will not have that option, so, even if it may take you twice as long to do something or get somewhere, take your time and don't take any unnecessary chances. Out in the wild, a sprained ankle can have as devastating results as a broken ankle would. Rather than jumping over something in your way, walk around it. Better to be safe, than sorry.

Stay Put: your main objective in surviving your ordeal is to be found. If you're in a situation where you know people will be looking for you because you haven't checked in with them, the most important thing for you to do is to stay exactly where you are. If you've let someone know your intended route and timeline, they, and any search and rescue teams, should be able to approximate where you are. Set up a campsite and light a fire, not just for warmth, but as a signal as well. If you didn't have the foresight to let someone know where you were heading, then you will need to rely on yourself to get out on your own. Use your common sense now, and make sure to mark your trail as you go along, with a note if possible; this will make it much easier for someone who might happen along your path to find you and help you to get back to safety.

Find Food: you can do without food for a while, but eventually, you will need to find something to eat. Eating will help provide the "fuel" you will need to be able to continue to stay warm and to continue to travel. It is at a much lower priority level than finding water and/or shelter, but if you are in a situation where you are lost for more than a couple of days, this will eventually become an issue you will need to address. Unlike water, you can ration your food to an extreme, if necessary. You can actually survive without food for several weeks, but just as dehydration affects your body, so does hunger.

Finding edible food will depend greatly on your environment. If you're in the desert, you're a bit more limited, of course, but food is there if you need it and know where to find it. There are many succulent plants you can use as a source for both food and moisture, although contrary to what you may have been told, cactus is not a good source for either food or liquid: it's moisture is much too acidic. There are also many birds and snakes that can provide you with meat or even eggs if you're lucky enough to find them, but be careful with the snakes; knowing which ones are poisonous is a very good thing.

If you're in the woods, you have even more sources of food all around you. If you're near water, you can fish or even trap some of the smaller animals, like rabbits or squirrels. You are also surrounded by all types of plants and trees. Many of these have edible leaves, berries or even bark you can use. The trick here is to know what you can or cannot eat. Even though it may look inviting, there are many poisonous plants you need to know how to identify and to avoid at all costs!

If you want to increase your chances for survival, you need to develop and hone your survival skills. It's not just about finding your way back to civilization: it's also knowing what you need to do when

confronted with natural disasters, like an earthquake or avalanche, or being in a dangerous location, like the jungle or desert.

It also involves knowing how to find what you will need to survive, like knowing how to light a fire without matches. Learn (beforehand, if possible) how to find and identify things you can eat and drink in the precarious environment you suddenly find yourself in. If you left something you need back home, what can you use in its place? Most of us may take it for granted or even overlook it as such, but knowing how to swim is one of the first survival skills most of us are taught, and usually at a very young age.

Get Your Priorities Straight: Your Life Depends On It!

Should you find yourself in a dangerous situation, there are three things you need to immediately address:

Get Your Head On Straight: you will need not only every ounce of common sense you might muster...you also need to have the right mental attitude. Think positively about your situation and that you will make it through.

Give Me Shelter: whether you're in the woods or in the desert, you need protection from the elements. Too much sun or too much rain can lead to even more problems for you to deal with, so make sure you have a place to go where you can rest and will be comfortable and dry until it's okay to travel again.

Find Water: this cannot be stressed strongly enough. We can live for about three days without water, dependent on where we are as well as how much we have to exert ourselves. This is why finding a reliable and (hopefully) fresh water supply is not an option: this is a true necessity of survival.

There are many different hazards we can run across whenever we are outdoors, but you can break down the necessities of life in the wilderness into four, possibly five, categories:

Shelter: a shelter is necessary for protection and at least some sort of a sense of security. It will protect you from the elements and the havoc they can wreak on one's body. A shelter will also provide a place for you to sleep as restfully as possible, given your situation. A shelter can be a portable tent you have with you, or it can be as simple as using a plastic tarp to help you set up a lean-to. When you find a likely area, you will need to scout out the immediate vicinity. Make sure that you avoid setting up your temporary campsite near any animal caves or nests, or any other possible hazards that might only add more problems to your already precarious situation. Are you out of the direct wind, but facing in a southeast direction? Will you be dry/warm enough? If the weather gets cold or rainy or snowy, will you have enough protection to keep you as warm and as dry as possible? Are you away from any outcroppings of rock or anything else that might fall on top of you?

Here are some simple ways to provide you with at least a working knowledge to enable you to set up your shelter:

If you are in the mountains or woods, you can use the branches and dried leaves all around you to build what is known as a "debris shelter". Not only is this easy to build: it can be a lot of fun as well. Make sure the area you are using is level. Look around for a hip-level stump or rock or forked branch in a tree that you can lean a long branch against. Now, lie down on the ground and measure out an area about six inches away from the top of your head as well as your feet; do the same on either side of your body.

Now you know how long and how wide your shelter must be. Find a branch or pole long enough to go from where you marked by your feet to where it will easily lean against that stump or forked tree branch you selected earlier. Find more branches and lean them against your support pole, taking care not to crisscross them at the top: doing so creates a channel for rainwater to enter your shelter. Also make sure these branches are at a forty-five degree angle, to help protect you from snow or rain runoff.

Here's where the fun begins: if you have a tarp, you can use that to start collecting leaves to cover your shelter; if not, then use your jacket or even just start grabbing armfuls of leaves. Pile them all over the top and sides of your shelter until the leaves are as high as your armpit. The leaves serve as both a water barrier to keep you dry as well as providing a great source of insulation to keep you warm.

You will need to add another layer of branches on top of the leaves to ensure they won't blow away, but before you do that, go into your shelter, lie down and look up. If you can see any skylight, you need to add more leaves to block that area. Also, take more leaves (and anything else you can find that is soft enough to lie down on, like wild grass) and use them to cover the ground inside your shelter. This material will compress as you lie down on it, so make sure you overstuff your shelter: once you have a compressed layer about three to four inches deep, you are almost done.

Once you've decided to settle in for the night, you need to "close the door" to your shelter. If you have a jacket or tarp, you can hang that in the opening or you can weave some branches together and add leaves to that device. Worst case scenario, you just pile more leaves in the opening to help protect you from the elements. All told, the debris shelter should take you about three to four hours to construct.

Another type of shelter we mentioned before is a lean-to: this is probably the simplest shelter to build. You still need to find some branches to lean against whatever support you choose, whether it's a rock or another tree. Instead of leaves, you can use either fern or pine branches to cover your shelter. If you're in an area where you simply cannot find any branches or leaves, you can always use that plastic tarp you packed to make the lean-to.

Water: In ordinary conditions, we need two to three liters of water per day. If challenged, we can actually easily survive without water for about three days. In extreme conditions, however, and this is an exception to the rule, people have been able to survive about two weeks without any water. Conserving your water doesn't just mean that you need to be careful how much you are drinking; it also means watching how much you need to physically exert yourself. The less you move about, the less water you will need.

In very hot climates, it won't take much to over exert yourself: do that and you run the risk of dehydration. If you feel lethargic, dizzy, confused, have bad headaches or notice that your urine has become dark yellow or even brown, you need to find something to drink as soon as possible. Even mild dehydration can impair your judgment, which is something you need to avoid, as your life now depends on you thinking as clearly and as rationally as possible. Once you find water, you will need to make sure it is drinkable.

There could be unseen pollutants or pathogens, so you do need to be careful. Even if it's from a mountain stream, there are usually bacteria or other microorganisms present in any natural water supply; filtering the water through charcoal will remove any dirt or debris, but you need to make sure you kill those microscopic pests by boiling any water you intend on drinking. If you're near the ocean, although you can't directly drink the saltwater, if you go to the landward side of a sand dune, you can dig a hole down to where it starts filling up with water.

This water you can drink, although it will still taste salty; the sand acts as a filter and will remove enough of the salt from the seawater to allow you to drink it. If you can't find a direct source of water, you can collect rainwater, morning dew and evening condensation from the plant leaves or use a plastic bag to collect water through transpiration (this even works in the desert!). If you don't have a container to collect the water, tie some extra clothing, like a t-shirt, around your legs and walk all around the grass or vegetation. You can then gather the water by wringing out the shirt. If you're having trouble locating a water source, stop and look around you. Watch to see which direction any ants, bees or birds are heading towards. That is usually a good indication of where you might find some water.

Fire: Next to water, or perhaps equal to in importance, finding the way to make a fire is at the top of your survival "to do" list. You need a fire to help you boil water to make it safe to drink; to cook any food, especially any wild fish, animals or eggs you manage to snare; to help you stay warm, especially when the temperature drops at night; to keep dangerous animals away; to provide you with a sense of security and last but not least, to visibly signal any possible search and rescue teams as to your location.

Before you start, you want to make sure that the area you will use for your fire is away from any other dried leaves or underbrush that might ignite because they are so close to the fire. If you can find some large stones, it's also good to build a fire ring to help prevent any larger pieces of burning wood from possibly rolling out of the fire and onto you. You also want to gather what you will need to build your fire. Start by finding as much dry wood and branches as possible. Bring these back to your campsite.

Next you need to have a pile of smaller branches, twigs, leaves and dried grass to use as tinder to start your fire. Once you have these supplies gathered, you can start. The best and easiest way to ensure you can build a fire is to make sure you packed some matches, or better yet, a lighter, in a waterproof container. If you didn't, don't panic; they may not be as quick or easy, but there are other ways to light a fire. There are battery-operated electric lighters you can buy and carry with you. You can also use either a concave mirror or magnifying glass to focus the sun's rays on a pile of tinder (small leaves and twigs).

A flint stone can also be used: striking it against another stone will produce a spark that will help you get that fire started. There's also the compression method: this uses a tool called a fire piston, which is usually constructed from wood horn and plastic. It's similar to the method most Boy Scouts are taught to use, with the biggest difference being that the old scouting method relies on creating enough friction by rubbing one piece of wood against the other, to cause a spark to ignite the tinder. Using the fire piston, you slip the open end of a tube, that has a sealed end on the other, over a piston that is on the other piece of this equipment.

This piston is located in a depression you use to put tinder in. There is also a gasket set up as part of this tool: All you need to do is to start pushing the tube up and down, just like your engine piston works. This device uses compression to heat up the air within the tube, which in turn creates enough heat to spark and set fire to the tinder. Great, you've finally lit the tinder: you're not done yet. You will need to gently blow on it and add more tinder, dried grass, even leaves, to encourage it to grow from glowing embers to small flames. Once you've done that, you need to add some dried sticks and small branches to build up your fire to the point where you can add larger branches, even pieces of log you might find. Building a fire is a gradual process that you cannot skip steps on.

If you don't have enough of a flame or ember base before you add the larger pieces of wood, the only thing you will succeed in doing is killing your fire before it even gets started. Make sure that you have enough wood stockpiled each day so you can keep your fire going all night long, and keep checking the fire to make sure it does not go out on you: you worked too hard to start it to begin with!

Food: This is an important need, but not your most pressing matter in the event of a disaster. You can actually survive for several weeks without it. Long before you are in danger of dying from starvation, you will start noticing these symptoms, so you will still have time to find food:

- ? Weakness
- ? Irritability and low morale
- ? Confusion, disorientation and poor judgment
- ? Weakened immune system
- ? Inability or difficulty in maintaining normal body temperature

As long as you know where to look, and what to look for, it's fairly easy to find food no matter where you are. If you make sure you have a basic knowledge of hunting, fishing and trapping animals, you should do fine. You should also know what plants (lichens or fungi) you can and cannot eat. A good basic edibility test before you try to eat something that may be unfamiliar, is to make a minor fingernail scratch on your skin and then rub the plant over that area.

If you experience any kind of reaction, such as a rash or painful swelling, it's a really good idea to not eat that particular type of plant. There is also another test known as the "universal edibility" test that has you start by ingesting a very small amount of the questionable food and then gradually eating more and more of it to see if there are any adverse reactions (like severe gastrointestinal distress, vomiting and/or diarrhea).

The only problem with this test is that there are some food sources that are extremely poisonous to humans, even in small amounts, so you'd be taking more of a chance using this method of edibility testing. Once you've ascertained what you can eat, do your best to eat as balanced a diet as possible, especially if you are going to need to survive for a long period of time.

Oxygen/Breathable Air: If you are in an avalanche or landslide or flood or subterranean cave, you need to find breathable air as quickly as possible. In these type of emergency situations, you will need to put your other survival needs on the back burner for a bit, because without air, you will not need any of the others. If your boat overturns, go up under it: it traps a pocket of air that should buy you enough time to find a way to escape to safety. If you're in an avalanche or landslide, try to curl up as it hits: you create an air pocket underneath you by doing so. If you're underground, try and find some where you either see light or feel a draft. That means that fresh air is not far away.

First Aid: It's Not Just Band Aids, Anymore!

Although not one of your priorities like water or shelter, one of the other essential things you should always plan on packing is a first aid kit. The term "first aid" generally applies to whatever relief or assistance you can give to someone who is sick or hurt. The first aid kit is a collection of medical emergency supplies and equipment you can use in case of such illness or injury.

It is always a good idea to have some sort of first aid training. You can always contact your local hospital facility or Red Cross chapter and take a few courses. If you don't have time for that, you should invest in a good first aid instruction manual and make that an integral part of your first aid kit. Many outdoor outfitting stores sell first aid kits, but you can also set up your own and tailor it to any medical issues you may have: i.e., are you diabetic, allergic to beestings, bug bites, plants or have a heart condition? You might want to carry any medicinal antidotes or medications you might need. Another good thing is to also have some sort of medical alert information to let your rescuers know about your pre-existing condition as well as any medication allergies you have, in case you are unconscious or unable to speak when you are rescued.

Whether you buy one or you set up your own first aid kit, always check to make sure you at least have the basic supplies you will need to get you through whatever ordeal you may face. Make sure you have band aids and gauze bandages to cover any wound to keep it as clean as possible. Antibiotic ointment or spray is good to have to help ease the pain and prevent infection of any larger or more serious wounds or bites or burns. Keep in mind that burns are not only caused by fire: chemicals, slipping and sliding down rocks can also cause painful burns and abrasions. Splints are good to have on hand in case you sprain or break a bone, but if you forget these, you can improvise by finding straight branches and using them to help support the injured limb. Even a sprained ankle can turn deadly serious if it prevents you from being able to walk.

You Need More Than Breadcrumbs To Find Your Way Home!

If all else fails, there are some traditional and time-proven ways of ascertaining which direction you're moving in. Wake up early, and if you're facing the sun, you're facing east because the sun always rises in the east; when the sun sets, it always sets in the west. If it's at night, you can use the stars to guide you, so brush up on your astronomy a bit so you will recognize the main constellations to use. If it's overcast, but you're in a wooded area, look to see if there is any moss growing up the tree trunks: make it a point to remember that moss always grows on the north side of a tree. There are also many navigational aids you can buy and bring along with you. One of the most important would be a map of the area you're in.

It will let you know how far away you are from civilization, as well as highlighting any major bodies of water for you. Most cell phones, even if they don't have enough reception for you to just call someone, have a built in system that can help search and rescue teams in locating the area you're in; if you want to go a bit more high tech, you can always buy a GPS receiver that will pinpoint exactly where you are

via satellite so your rescuers won't have to waste additional time trying to cover a more generalized search area.

Another navigational device we use is a globe: this spherical version gives a perfect view of our earth and is a great tool to use when studying the different processes and relative phenomena in regards to our beautiful home planet. The earliest use of globes has been traced back to the fifteenth century. Most globe-makers use the highest quality research and cartographic tools to design globes. This ensures the most accurate directional, dimensional, distance as well as location information regarding any countries and their respective continents all over the world.

Thanks to technological advances, we now have digital globes that produce an even more accurate, sometimes almost life-like raised relief representation of the earth and all it's natural wonders. Using satellite images to relay the information requested, images appear on the screen, producing a television-like picture for the viewer. This device would be exceptionally handy to have along with you whenever you venture into the wilderness. There are even celestial digital globes for those of you who didn't have time for that astronomy class (ahem!).

If you just couldn't leave home without your laptop computer, there are also virtual digital globe interfaces that will help you to find your location, with some being extremely advanced in how exact they are. The great thing about these virtual globes is that they can be used if you're offline or logged in to the internet.

Just keep in mind, that although technology is great, unless you have solar powered cells, they do run on batteries and will eventually run out of juice, so don't completely depend on that latest gizmo of yours. It's always best to have at least a basic working knowledge of how to navigate yourself out of danger!

What A Grind!

Some of the other items you should include in your backpack survival kit are different types of tools, like a knife. This can be as simple as a hunting knife or more complex, and definitely multi-purpose, like a multi-tool. Most people are familiar with the multi-tool known as a Swiss army hunting "knife". This type of implement also incorporates eating utensils, such as a spoon and a fork, as well as a small scissors, screwdriver, corkscrew, even a small digging blade!

You should also carry the means to sharpen any of your blades. A dull blade will wind up making you do twice as much work, which is not something you want to do if you're trying to conserve your energy and time as much as possible. In the past, the only means of sharpening a knife was to use a large bench stone which is way too heavy and awkward to carry around anywhere. Nowadays, and dependent on what type of blade you need to sharpen, there is a wide variety of sharpening tools available to choose from.

A grinding wheel is great, but again, may be too difficult to transport. Usually, it is a solid piece of abrasive stone mounted so you can move the edge of the knife you need to sharpen back and forth so that as the grinding wheel turns, it will cut away some of the metal to reveal a sharper edge. It can be either a straight wheel, good for sharpening smaller items, or it can be a cylinder wheel, which is best

used for sharpening much larger items. Grinding wheels can be made up of several different materials, but the most commonly used is aluminum oxide. This is the best material to use when you need to sharpen hard metals like bronze, iron or steel.

Another effective grinding stone material is a combination of zirconium oxide and aluminum known as zircon alumina. This is best used when you need to sharpen anything made of steel and other metal alloys.

One of the newest developments in grinding stones is an incredibly strong material known as ceramic aluminum oxide. Don't let the name fool you, though; this material is not only super strong, it also allows you to make more precise sharpening cuts.

Another thing to remember when it comes to grinding wheels is the grit size. This is very important: the higher the number, the finer the grit. Coarser grits are perfect for starting to edge your blade; the finer grits will help you better finish the job by putting a nice, sharp finish on the edge.

Bench grinders are probably the oldest and most reliable way to sharpen anything. They are probably the most inexpensive as well. These can easily be mounted to a workbench and also come in a variety of sizes to use. They usually have a small motor to spin the grinding wheel; the best of these even has a place to rest the tool so it will remain as steady as possibly during the grinding process.

Some campers like to take their chainsaws along to make finding firewood a breeze. If you're one of these people, and you do a lot of camping, you might want to invest in a specialized sharpener for your saw. There are both manual as well as automatic powered chainsaw sharpeners that work very well and each has a safety feature that locks in each of the chain links as they are sharpened.

Keeping Your Distance is the Best Self Defense

Whether you're in an urban or other jungle, you need to be prepared to defend yourself against an attacker, either human or otherwise. The first thing to remember is that the best defense from someone armed with a knife is to run away. Of course, this same advice does not always work if you're being attacked by an animal.

If you can't run away from your human attacker because they are in your face with the knife, the first thing you need to do is to cover your face when someone first attacks: put your hands up and keep your elbows in. This is a very natural response to anything that comes towards you, so it should be very easy to do. By covering up in this way, you won't be able to prevent being cut, but this will actually help minimize your injuries. It will also buy you some time to figure out what your next move should be. Also, don't panic if you do get cut a couple of times: yes, you will bleed, but unless you're cut (and cut badly) over twenty times, you are not going to bleed to death.

Most martial arts teach you to intercept an attack: this works well during your lessons in the dojo, but out in the streets or in the jungle, it does not work as well as you'd think. What you need to do is find a way to put as much distance, and as many obstacles, between you and your attacker. Many law enforcement officers feel well armed because they have their revolver, Tasers, pepper spray and batons. But that is no guarantee against being attacked at knifepoint.

There is one extremely important rule taught in police and special self defense courses known as the Tueller drill and it is a good thing to remember: keep twenty-one feet in between yourself and the attacker and you will be safe. Keep your distance and make your escape!

Climb Every Mountain!

Many people are mistaken if they think that hiking through the mountains or woods is just a walk in the park. If you've done any type of backpacking, you know it's not, especially when you've had to climb up and down hills along the way. For those of you looking for more of a challenge, there are a couple of other activities you might like to try. But do not underestimate these activities: they are challenging both physically and mentally, so you do need to do a bit of specialized training first to prepare yourself.

One of these activities is known as mountaineering, and do not fool yourself: it is tough. You will need to do additional training to condition yourself to prepare for the physical challenges you will face. But you will also need to hone some of your other skills if you decide to participate. You will need to be able to easily read maps and use compasses to help you navigate through the mountains, sometimes enduring very harsh weather conditions. Your body needs to be in tip top shape to help you hike through whatever Mother Nature may throw at you. Harsh rain, sleet, snow and ice will challenge even the most physically (and mentally) it, so you need to be prepared to face anything that comes along.

You also need to have really great skills and instincts for this activity. You need to know how to keep yourself safe and what to do if there is an emergency situation. Do you know how to build an emergency shelter? Can you "read" the weather so you know what to expect? Do you know how to handle a rope, in case you need it to climb further along your route? Take a practice climb on a smaller mountain or two before you attempt the larger and harder mountain terrain.

Another skill you should develop before you go mountaineering is, in itself, just as much of a challenge. Rock climbing takes even more skill, strength and endurance than most would expect. You also need to be able to think quickly and almost instinctively know where to position your hands and feet. Obviously, this is also something that you need to practice before attempting in the great outdoors.

Luckily, rock climbing has become more and more popular. It is one of the newest sports that offers you great mental stimulation in conjunction with incredibly taxing physical exertion. It is one of the best ways to get yourself into superb physical (and mental) condition. You not only need to know where to place your hands and feet, you also need to have the physical strength in your arms and your legs to pull yourself up and along the rock face. There are many indoor climbing facilities you can go to and learn from the experts exactly what you need to know to scale the sheer rock walls you will face outdoors.

This is the best way to start learning this sport, as it is done safely and in a controlled setting, so if you make a mistake, you aren't hurt in the process.

Can You Tie It In A Knot?

Ropework is also a skill you need to develop, especially if you are planning on doing the more challenging mountaineering or rock climbing. What exactly is rope work? It is a series of skills and processes that are used to make, repair and to use rope. If you're stranded somewhere, this skill can come in very handy.

To make a rope, you'll need to take a long length of some twine or yarn and tie it to a strong rod or pole. Place a second rod away from the original rod a distance equal to three times as long as you want your rope to be. Take your twine and loop it around this second rod. Now go back and loop it once more around the first rod, loop it around and bring it back to the second rod. Now tie off the twine to the second rod. If you have someone to help, you each need to take one of the rods and start twisting the twine counterclockwise (if you don't have help, this may be a bit difficult, although not impossible to do).

When the twine is twisted, you each need to untie the securing knots. Take the twisted piece of twine and now attach one end of that to the rods. Repeat the looping process again, now using the twisted twine. When you get to the twisting step, you now need to twist the rods clockwise. Before you cut your new rope away from the rods, you'll need to make either a temporary constrictor knot or a permanent whipping knot and then you can cut the rope off of the rods. In a pinch, you can also use several layers adhesive tape to stop the rope from coming apart.

The simplest sort of proper whipping is known as common whipping. It is made by taking a two-foot or greater length of strong string, forming a loop with it, three or four diameters of the rope in length, and lying it on the rope near the frayed end. The rest of the length is then tightly wrapped without overlapping around the rope, moving up the loop. When the end of the loop is nearly covered, pull the remaining free length of the string through the loop and then pull on both ends, which will pull the end of the loop under the whipping. Cut off the end of the rope close to the edge of the whipping and then cut off the two free lengths of string.

If you use synthetic fibers, like nylon, to make your rope, you'll need to use fusion to prevent unraveling. Simply make a nice even cut at either end and then hold it a few inches above a flame until the material melts together. Allow it to cool before trying to use it or you might unwittingly burn yourself. If the material you're using won't melt (like cotton or Kevlar), an even simpler method of fusing is to just dip the ends into paint or glue; once it dries, it does a great job keeping your rope together.

Ready, Aim...

Another skill set you might want to develop, especially if you plan on staying out in the wilderness for any extended period of time, is learning how to handle and shoot a gun or a rifle. You may or may not enjoy hunting, but having a gun and knowing how to use it could be of paramount importance if you're ever in a desperate situation.

Trapping an animal for food may seem fun, but it can also be unpleasant when you have to actually kill the animal up close and personal. If you have a rifle, learning how to shoot to kill can actually be the more humane way to procure your next meal. There are many rifle ranges where you can go out to and learn how to shoot; if you opt to learn how to handle a gun, make sure to practice and hone your sharp

shooting skills, especially just prior to any outdoor adventure you have planned. Always remember to practice safe handling procedures with any firearms you handle.

You find yourself stranded out in the woods. You've set up your camp, found water and now, before you start your fire, you need to find something to eat; you were unable to find any edible vegetation, so now you have to go out and track down whatever game you can. Even if you're not used to hunting, there are several important things to remember:

Relax!

Feel the target's presence.

Try to *smell* the target (seriously, it works!).

Breathe normally, in and out, steady breaths. If the target is close, just open your mouth wide, your breathing will be silent.

Think of nothing -- Clear your mind -- Think only of what you must do. Control yourself: you will get this shot just once, so make it count.

You may not ever turn out to be an expert marksman, but having the right tool at the right time can not only save you a lot of time, aggravation and exertion you don't need at such a critical time, it could just possibly save your life.

The bottom line here is that the more you know, the more you can do. You may not have the time or the desires to learn every single skill set mentioned here, but do yourself a favor and at least learn the most rudimentary skills you think you will need to survive. If you can't find any appropriate classes to take, then start reading and educating yourself. Learn what is necessary and then make up a mental checklist to follow should you find yourself alone and at risk. Half the battle for survival is knowing what you will need to do and the order in which you need to follow through with. The other half is of the battle is in going ahead and doing what needs to be done to survive. By being proactive rather than reactive to your situation, you will accomplish so much more.

Above all, no matter what you are faced with, don't panic: keep telling yourself that you can do this and you will succeed. Keep your wits about you and figure out what you need to do and just go ahead and do it. By doing this, you will keep yourself way too busy to sit and cry "Woe is me!" Keep moving around and collecting what you need in order to get your survival camp set up. Once you've accomplished that, focus in on finding what you need to drink and/or eat and then concentrate on building that fire. You will be much too busy and too tired after all of that to do much more than just crawl into your shelter and fall fast asleep. So don't just sit there having a pity party for yourself...get busy and help keep yourself safe and warm. You can do this! And you will!

We all know that practice makes perfect...okay, well, maybe not always perfect, but at least it makes you better at whatever you're practicing. Maybe once a month, why not try shutting off the television and practicing some of your newfound skills? Get yourself in better physical shape by going hiking or backpacking for a couple of days and practice setting up your camp as if your life depended on it: someday it just might. Imagine how empowering it will be to know that you can handle whatever is

thrown your way. Always remember that a little imagination can usually help you go a long ways. Even if you're not sure how to do something, take a lesson from an old television show and become your own version of MacGyver: learn to improvise whenever and wherever you have to. You might just surprise yourself at what you actually can do!

Imagine the story you'll be able to tell your grandchildren when you recount the time you had to survive out in the wilderness. Sure beats that old "when I was a youngster, I used to have to walk ten miles to school in three feet of snow" yarn we used to hear, eh? Scouts all over the world have the best advice anyone can ever offer you, in anything you do, but especially when it could be a matter of life and death...always: "Be Prepared"....and Be Safe!

So above are the most important and basic skills that you need to learn in order to survive in the outdoors.

Keep all the above mentioned survival skills in mind. Lastly, the biggest survival skills in any situation would be – Never give up. Be patient, be strong, keep fighting and emerge a winner!