



Family Protection
ASSOCIATION

WHEN disaster STRIKES

*Ultimate Survival Techniques for
when You are Stranded*



WHEN DISASTER STRIKES

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WHEN DISASTER STRIKES

**Ultimate Survival Techniques
for when You are Stranded**

PREFACE

It takes a lot more than the skill and knowledge of building shelters, obtaining food, making fires, and traveling without the help of navigational devices, to survive when disaster strikes. There are some remarkable people who, when disaster struck, managed to survive with little to no survival know-how or skills, while others who were armed with essential knowledge, failed. That doesn't make sense, does it?

While as crucial and pertinent survival techniques can be to any survival situation, it all boils down to one thing – the mental attitude of the person. Or in other words, the “Will to Survive”; it is the key ingredient. Without the will to survive, all the acquired knowledge and skills go to waste. If you find yourself in a predicament where you have to fend for yourself, it will produce a lot of stressors that will have a significant impact on your mind. The resulting emotions and thoughts, if understood poorly can transform even the most even the most confident individual you've known into an ineffective, indecisive individual who can't pull themselves together enough to call upon a human's most basic instinct, to **Survive**.

In this handbook, we are going to take a close look at basic survival skills that are pertinent to most survival situations a person may find themselves in. The thought process they should cling too and what they would need to rise up to the occasion and make it through despite the odds. So without further ado, let's get you in the right mindset required for surviving.



INTRODUCTION TO SURVIVAL

Whenever you find yourself in a situation where you have to rely and fend for yourself, remember the word “SURVIVAL”. I will expand on each letter of the word in order to ingrain within you what it really means in essence. Originally designed for soldiers in combat situations, the practices, mindset and techniques herein are applicable to all types of survival situations; particularly the situations where endurance against natural elements is crucial until one is rescued or otherwise is able to return to safety on their own.

Remember what each letter of SURVIVAL signifies; this is the very thing that could someday mean the difference between hope and doom.

S – SIZING UP THE SITUATION

Should you find yourself in a situation where survival is the only option, what you need to do above all else is to find a secure location where you’ll be safe from immediate danger. A place where you can take a few moments to evaluate the situation you’re in and plan your route

and strategy to safety. Remember, whether you are in a hostile environment or stranded in a location where you have to create your own path, your senses are your best friend – sight, hearing, and smell.

SIZING UP THE SURROUNDINGS

Get a feel of where you are and what is happening around you; determine a pattern to raise your awareness and familiarity of the area. As nothing is more stressing than not knowing where you are, make use of the information that is readily available to you. Each type of environment you’ll face has its own patterns, whether you find yourself in a jungle, desert, or a forest. These patterns can encompass animal sounds, movements, and getting a sense of local ecosystem. It also includes noises generated by humans, equipment, and machinery.

SIZING UP YOUR PHYSICAL CONDITION

The trauma and pressure of the survival situation that you’ve suddenly been thrust in can cause one to disregard their injuries or wounds. When you reach a relatively secure location, give your-

self and those you are with a through onceover. Give yourself the necessary first aid treatment (more on that later) and try to prevent any further bodily harm. And whatever the climate you find yourself in, keep yourself hydrated. Similarly, if you find yourself in cool and wet environment guard yourself against hypothermia, which can occur in mild conditions.

U – USING ALL THE SENSES

Remember, Haste means Waste. You are more likely to make the wrong moves when you react impulsively without taking the time to think and plan. In a survival situation, this can be dangerous and perhaps even mean death. Don't do something just for sake of doing it; you need to consider all aspects of the situation you're in before making a decision. Being hasty can cause one to become disoriented and lose sight of what's truly important, that is, your survival. The key tool of survival is your ability reason and think, be observant and plan your moves accordingly.

R – REMEMBER WHERE YOU ARE

If you happen to have a map with you, find the location on the map and match it with your surrounding area to be sure. If there are others with you, ensure that they know where they are as well; a basic principle you would do well to stick to. Remember who in your group has the map and compass, and should misfortune befall the person who has the map and compass, remember to take it from them. Pay attention to exactly where you are and where you are going.

Don't rely on other to keep track of the route.

Always try to determine the following.

- The closest inhabited areas
- The location of water sources
- Areas that proved proper shelter against the elements

Having this information at hand will allow you to make good decisions in a survival situation.

V – VANQUISH PANIC AND FEAR

Your greatest enemy in any survival situation is panic and fear. If left to run rampant, they can cripple your ability to make decisions. Panic and fear causes one to react to their feeling rather than their situation. They can drain your much needed energy in a survival situation and fill you with negativity, and you end up making decisions that can have severe consequences. Your ability to stay hopeful is what is going to drive you to survive, and along with survival skills and self-confidence, you will have the tools to vanquish panic and fear.

I – IMPROVISING

Nowadays, we have products for everything we need. Most of these products are quite cheap and can be easily replaced when damaged. This 'easy come and easy go' lifestyle is what has made it unnecessary to improvise. Not being able to improvise and make the most of what you have at hand is your second enemy in a survival situation. Hone your ability to improvise

by using the natural objects around you to meet your different needs. No matter what equipment you have on you in a survival situation, it will eventually wear out. Use your imagination when that happens.

V – VALUE YOUR LIFE

Every human being is born kicking and fighting, but as we grow older, we become more and more used to the soft life, becoming creatures of comfort. We hate discomfort and inconveniences. If that sounds somewhat like you, what will you do in a situation when survival is all about bearing the discomfort and inconveniences and staying strong throughout? This is where your will to live is vital. The knowledge and experiences you have gained through life will matter and your stubbornness to give in to the obstacles and problems and you face will give you the strength, both physical and mental to endure the harshest of predicaments.

A – ACT LIKE NATIVES

When you find yourself in an unfamiliar area, the best source of survival techniques specific to that region can be learned from the natives. The people or wildlife of an area have learned to adapt to their surrounding environment. In a survival situation, you can observe the patterns and routines of natives to get valuable information. What and when do they eat? What are the sources of their food? From where do they procure water? What time do they sleep and wake up? Animals too, can provide clues to these

questions as they require water, food and shelter as well.

L - LIVE BY WITS, LEARN ESSENTIAL SKILLS

Without basic training and surviving skills, your chances of getting through a survival situation are scarce. Learn Now, and arm yourself with necessary knowledge and skills as you never know when you might have to fend for yourself. As you learn survival techniques, it will reduce your fear of the unknown and give you the much needed self confidence to live by your wits.

CREATE A SURVIVAL PATTERN

You never know when a disaster may strike; you may get lost hiking in the jungle, your yacht may capsize, etc. The survival situations you can find yourself in, are endless. Most people become confused and panic, but actually, what you need the most, then and there, is a game plan that will improve your chances of survival.

For this purpose, you need to make a mental map of how you will respond to the situation at hand. This map will include Fire, Food & Water, Shelter, First-Aid and Signaling. Once you've created a pattern and learned the necessary skills under each heading, you will then be able to adapt to different situations and shuffle the patterns to meet your immediate needs.

Let us now move on to the 5 essential survival techniques you will need when disaster strikes.

Procuring Essentials - Food & Water



In a survival situation, it's possible for a human being to live long periods of time with little or no food. Water on the other hand, is far more important. You will need about 2-3 cups of water a day to stay healthy. Research shows that a healthy person can survive for up to three weeks on just 500 calories per day with no side effects, provided they have an abundance of water and shelter. Meanwhile, without water, a person can only survive for a few days.

If you find yourself in a situation where food and water is scarce, it's wise to conserve the water you already have in your body by decreasing activities that cause water loss. During heightened activity or in areas with cold climates, you will need more food to maintain your body temperature.

When you find yourself stranded in the wild, procuring water is the top priority, while food is second in line. Both are important for maintaining your mental as well as emotional state. Here, we will discuss the methods of procuring Food & Water.

FINDING & PURIFYING WATER*

Knowing different methods to procure water is a very important skill in survival situations. In fact, there are many ways in which an individual can find water, whether you are in a forest or desert. The best place to start looking for water is on the surface. Sources of surface water include lakes, rivers, and streams. Running water like streams and springs are usually found in isolated areas at higher altitudes and are normally safe to consume. However, be wary of water that melts from glaciers and ice as it contains bacteria in abundance. If you find yourself in a completely unfamiliar region and the water's quality seems questionable, take measures to purify the water (discussed below). Take no risks.

INDICATORS OF DRINKABLE WATER SOURCES

Perhaps the best way to locate water sources is to find an area that's elevated from the rest of the surroundings. Once you reach an elevated surface, keep an eye out for indentations under

trees or within the earth. These indentations indicate that there's a gap or low area from surface to surface and shows a past water-way path. However, note that this could only be a ditch that drains all the rain water too.

Following are a list of key indicators that you need to remember:

- ▶ Valleys as well as low areas are locations where the water drains naturally.
- ▶ Look for crevices in rocks as rainwater is usually collected in them.
- ▶ Damp or muddy ground is a sure sign of water.
- ▶ Patches of vegetation is a strong indicator of a water source nearby.
- ▶ Keep an eye out for areas where animal tracks converge, as animals gather near a water source
- ▶ While you've got a keen eye on the ground before you, keep an on the sky as well, as birds often circle watering holes.
- ▶ Another strong indicator that water is present in an area is the presence of bugs like mosquitoes and flies. They are found in large numbers where water is located. Keep an ear out for buzzing sounds.

COLLECTING WATER

Another method of collecting water is digging for it. What you should be looking for, are dry creek beds and sandy bottom ravines or lands. They could have an abundant water source under the

surface. Simply dig a hole about 3 feet deep and wait for the water to start seeping into it. Gather the water with a make shift container or if you don't have that, a piece of cloth that can hold water will do. The water found is normally pure but it should be filtered and purified.

HOW TO MAKE A SIMPLE WATER FILTER

A makeshift water filter is quite easy to make. What you need are three pieces of stick and some cloth. Collect three sticks of roughly 2 feet each and tie them together in a teepee formation. Now take three pieces of cloth and tie them to the sticks one above the other. To catch the water, place a makeshift container beneath it. When ready, pour water from the top, and each layer of cloth will capture and filter out the sand and sediment.

WATER PURIFICATION METHODS

If the water you find seems questionable to you in terms of quality, there are three different ways you can use to purify the water.

- Note that simply filtering water does not purify it; it only reduces the sediment and other particle content, making the water taste better.
- Another method of purification is boiling the water, if you suspect the water contains bacteria, boiling is the certain way for killing the microorganisms.
- Water can also be purified with chemicals using a water purification table. If you happen to have a survival kit, it should be included in it.

PROCURING FOOD*

In a survival situation, one has to make the most of everything available to eat. Most wilderness areas are abundant with natural food, ranging from plant varieties to insects as well. The food source available to you in your particular situation depends on the type of habitat you find yourself in. The trick is to vary your diet to ensure you receive the appropriate nutrition that includes protein, fat, carbohydrates, vitamins, and minerals.

Fish and meat are great sources of fat and protein and provide nearly everything a survivor needs, but it's also the hardest food to find and catch. However, don't concern yourself with meat just yet, as in the first stage of survival, plants are the best source, due to being easily accessible, and they contain the required carbohydrates as well.

WILD EDIBLE PLANTS

Depending on the time of the year, you will certainly find edible plants unless of course, you're in the middle of the desert. Having the knowledge of just two or three wild edible plants can make the difference between survival and starvation. Wild plants, berries, fruits, and nuts are a survivor's most important food sources.

POISONOUS PLANTS

Nature has a lot of edible plants but it also has an equally large number of poisonous plants as well. To prepare yourself, you can find a book that details which types of plants to avoid



consumption of. For example, any plant that has white berries or milky sap is dangerous.

THE EDIBILITY TEST

The entire idea of the edibility test is testing a plant step by step. After each step, one has to watch and wait for an adverse reaction. The process is a rather lengthy one and in a survival situation, you probably won't have that kind of time. The step you need to be concerned with is the last one, and that is to swallow a small piece of the plant and wait for a few hours to see if you see any ill effects. The way to figure out which plants you should eat and which ones to stay away from is by learning about them beforehand.

EDIBLE INSECTS

Yes, I know what you're thinking, but sometimes, in a survival situation, you won't have any other options. As mentioned above, the most vital nutrition you need is protein and fat, and most insects happen to be rich in both. You might have to overlook your cultural bias against consuming insects in order to eat them. These insects can be found almost everywhere and are usually easy to catch. You will find them under barks of fallen

trees, in shaded moist spots in the forest or in rotten tree logs.

Note that most edible insects can be consumed raw, although boiling and roasting them is far safer. If you can't get rid of the queasy feeling, cooking them will make it easier to stomach them. Examples of the most common edible insects are ants, worms, grasshoppers, and crickets. Maggots make a tasty meal too.

FISHING

Fishes are a valuable source of food. If you find yourself near a stream or a river, you can use this alternative to catch food. In a survival situation, you won't have all the equipment required for fishing so you will have to use a spear or even your bare hands.



SURVIVAL SPEAR FISHING

Fishing with a spear takes a lot of time, practice and most importantly, patience. Spear fishing is best used in shallow waters where fishes are easily visible. Slowly creep towards the area where you can see them and spear the catch. It's best to make a forked spear rather than a single tipped spear.

FISHING HINTS

In order for you to succeed in this endeavor, it's best that you understand the behavior of a fish. You may need to spend a significant amount of time observing the fishes are different times throughout the day before you catch any.

Like all other animals, fishes too, choose places that are comfortable and probably places where they can find their prey. If the weather is hot and the water is shallow, you are likely to find fishes in areas shaded from the sun. In a cool weather, you are more likely to find a catch in shallow places where the sun provides warmth. Fishes also like to shelter themselves below rocks and under banks.

As far as the timing is concerned, the best time is just prior to dawn and after dusk or when the weather is likely to be bad.

TRAPPING

Unless you have past experience in hunting, catching animals for meat isn't recommended in survival situations. Not only is it difficult, but you might also use up a lot of your precious energy to catch your prey. So rather than hunting, you can consider setting traps as it requires far less skill and allows you free time that you can spend looking for other sources of food. You need only simple traps that are easy to make and remember.

SNARE TRAPS

Trapping small animals using snares is quite simple. If you don't have a snare wire, you can improvise using strings, ropes, lines, or even your

shoelaces. Create a noose using whatever you find and make it large enough to allow it to freely pass over the head of the animal you're hunting. Set it at the approximate height of your prey's head. Using small pieces of branches; ensure it's in the right position and securely anchor it.

BIRD EGGS

Bird eggs have high nutritional value, are safe, as well as convenient. You can boil, bake or fry them. The first place you should look for them is obviously, in a bird's nest. However, note that not all birds build nests, but some lay their eggs directly in a hole or on the ground.

COOKING METHODS IN SURVIVAL SITUATIONS

Cooking is a skill, the importance of which cannot be overstated. Not only will it allow you to stomach your food in survival situations but also make sure that all the bacteria and parasites are killed. Food poisoning isn't something you want to come down with when you're trying to survive.

Practically speaking, the best way to cook is by making a fire (more on that in the next section). As a skill of survival, one should be able to cook food without cooking utensils. A great way of cooking simply is hot-stone cooking.

HOT STONE COOKING

Start by creating a fire atop a layer of nonporous stones, as soft porous stones might explode on heating due to high moisture. This is the ideal method for cooking fish, frying eggs or thin slices of meat.

- Allow the fire to burn for about an hour or so. In the meantime, you can prepare your food for cooking.
- Brush away the embers using a handful of long grass.
- The food is directly cooked on top of the hot rocks. Consider them like a frying pan.

Alternatively (using fist sized stones):

- Dig out a pit about 1 to 2 feet between 30 and 60 cm deep. The diameter and depth of the hole should be equal.
- Properly pack the wall of the pit and the base.
- Cover the bottom layer with hot stones and then add a thin layer of soil.
- Wrap your fish or meat in a fresh green plant, like moss or leaves.
- Place the packed meat inside the pit.
- Add another layer of sand on top and hot stones.
- Cover the pit with another layer of sand or earth.

Leave this setting intact for as long as you want it to cook and then disassemble the makeshift oven to enjoy your meal.



King of Survival

- Fire

When one finds themselves in a survival situation, the ability to create a fire could mean the difference between having high chances of survival to practically being nil. Fire has multiple purposes and is one of the most crucial survival accessories.

Fire provides comfort and helps your body battle the elements. It is used for cooking and preserving food but it also provides your body with much needed warmth. In the form of cooked food, it allows your body to save the calories it uses to generate heat.

Another crucial use of fire is purifying the water you procure, sterilizing bandages for first aid, keeping animals and other wild life at bay, as well as creating an S.O.S for signaling a rescue. Fires can also be used to craft tools and weapons if you have the basic skill set required. It also provides a positive psychological boost by providing you with a much needed peace of mind.

Let's start with the basics.

MATERIALS FOR BUILDING A FIRE

There are three main types of materials that can be used to build a fire; tinder, kindling, and fuel. Depending on the type of survival situation you find yourself in, you will find many of these materials readily available; you just need to know what they are. Examples of materials in each of these categories are listed below.

Types of Tinder

- Birch or thin peeling bark
- Shredded inner bark from chestnut, cedar, or red elm trees.
- Shavings of fine wood.
- Ferns, moss, fungi, and dead grass
- Straw & Sawdust
- Fine Pitch wood scrapings
- Fallen evergreen needles
- Punk or portions of rotten trees and dead logs

- Dry cattails, bulrush, thistles or seed heads
- Dried fibers of vegetables
- Fallen palm leaves
- Skin-like and outer bamboo linings
- Lint and lint from seams and pockets
- Charred cloth
- Waxed paper & Cotton

Types of Kindling

- Small strips of twig and wood
- Split wood
- Heavy cardboard
- Pieces of removed from within larger piece of wood
- Wood doused with flammable materials like oil, gasoline, and wax

Types of Fuel

- Standing, dry wood and dead, dry branches
- Dry insides of fallen tree trunks as well as large pieces of branch.
- Finely split green wood
- Bunch of dry grass twisted together
- Peat dried enough so it can burn, these can be found atop undercut banks
- Animal fat and dried dung
- Oil shale and Coals

METHODS OF BUILDING FIRES

There are several ways you can build fires in a survival situation and each has its own advantages. Depending on the situation you find yourself in and the material you have available and can procure, bellow are four ways to build a fire.

TEPEE FIRE

To build a tepee fire, gather sticks of kindling and a bunch of tinder and arrange them in a shape of a cone or a tepee. Leave some room in between the sticks so you can light the fire right in the center of the arrangement. As the fire begins to burn, the kindling and tinder on the inside of the tepee will begin to fall inward, feeding the fire until it reaches the logs on the outside. A tepee fire burns quite well, and can even burn with damp or wet wood.

LEAN-TO FIRE

To start this type of fire, find a green stick, preferably a bamboo, and stick it firmly into the ground at the angle of 30-degrees. This part is important; the end of the stick you push into the ground should be facing the direction the wind is blowing from. Now find pieces of kindling and lean them against the green stick. Now light the fire at the base of the green stick. As the fire begins to burn and consume the kindling, add more when needed.

CROSS DITCH FIRE

This method is an effective one if the fire burns itself out repeatedly. Dig a cross where each line is 30 centimeters in length and at least 8

centimeters deep. Place a bunch of tinder in the center of the cross and build a pyramid made of kindling above it. The cross you dug will allow the air to pass freely under the fire, providing the much need draft to keep the fire burning.

PYRAMID FIRE

This fire is large and a long burning one. To create this type, start by placing two small pieces of logs and/or branches parallel to each other on the ground. Now place another layer of branches across the parallel logs, now continue to add about 3 to 4 more layers. Note that each layer would be smaller and at right angle to the layer beneath it. Start a fire on top of the pyramid. As the fire burns, it will gradually ignite the logs below it, giving you a fire that burns in a downward fashion that needs no tending to, until morning.

LIGHTING A FIRE

Know that you know how to arrange the fire wood, kindle and tinder, let's move to the next step; lighting a fire in a survival situation. Remember to always light the fire on the upwind side. Ensure you've laid the kindling, tinder and fuel so that the fire burns as long as you want. Igniters will provide the initial spark needed to get the tinder burning. They fall into two main categories, modern and primitive methods.

MODERN METHODS OF STARTING A FIRE

This category includes modern igniters, such as:

MATCHES

Survival matches are normally waterproof and if you were stranded and managed to procure a survival pack from the wreckage, you are likely to find one within. Remember to store them in waterproof containers along with a striker pad you can depend on.

CONVEX LENS

This method is quite useful on bright and sunny days. The lens you're going to use for this method of igniting a fire can come from a camera, binoculars, telescopic sights, or the traditional magnifying glass. Take the lens and hold it at an angle that concentrates the rays of the sun on the tinder. Hold the lens at this angle on the same spot until the piece of tinder begins to smolder. Now gently blow on this spot or use a fan to start the fire.

GUNPOWDER

If you happen to have ammunition on you, start by carefully extracting the bullet from its shell casing, and then use the gunpowder inside as tinder. Even the smallest spark will ignite the powder, which will ignite the fire in the tinder or kindling you've gathered.

PRIMITIVE METHODS OF STARTING A FIRE

As the name suggests, primitive methods of starting fires are about using items found naturally in the environment and crafting contraptions that aid in igniting a fire.

FIRE-PLOW

This method of lighting a fire basically uses friction. In this method, a hardwood shaft is used for rubbing against a base of softer wood. Start by cutting a straight groove in the soft base wood, then using a hardwood stick; plow the tip up and down the groove. The plowing of the shaft creates small wood fiber particles, and as you continue to apply pressure with each stroke, the friction created ignites the wood fibers to ignite the kindling or tinder.

BOW AND DRILL TECHNIQUE

This technique is slightly more difficult than Fire-Plow and requires a bit of patience, but once you figure it out, it's perhaps the best primitive way to start a fire. This particular method uses a bow and drills. The items you need are as follows.

- **SOCKET:** A socket is a piece of hardwood or stone you can easily grasp in one hand, and has a concave depression on the other side which holds the drill in its place, along with allowing the holder to apply downward pressure.
- **DRILL:** The drill needs to be a seasoned, straight hardwood stick that's about 2cm in diameter and about a foot long. Ideally, the top end of the stick, which will fit in the socket, should be round and the lower end should be a blunt uneven surface, so it can produce the appropriate friction needed to start a fire.
- **FIRE BOARD:** The size of this board is up

to you, but the wood should be seasoned softwood no thinner than 2.5 cm. Create a depression of 2 cm on one side of the board's edge, using whatever tools you have available. The depression should preferably be of V-shape from the edge.

- **BOW:** Lastly, the bow is a green stick about 2.5 cm in diameter and about 1.5 feet long. Take a piece of string and bend the stick in a bow-like fashion and firmly tie the string on both ends to create a bow.

Once you've accumulated the items required, first prepare a fire lay. Then place the v-shaped end of the fire board on top of a bundle of tinder. Now put one of your feet on top of the fire board, loop the bowstring with the drill and place the blunt end on the depression you created on the fire board. Use the socket to hold the drill in place and press down on it. Now use the bow just as you'd use a saw, back and forth to twirl the drill. Once the drill gets in a smooth motion, apply more pressure on the socket to create a downward pressure and move the bow faster.

This action will create a hot black powder in the tinder which will cause it to catch a spark. As soon as that happens, blow on the spark until the tinder ignites.

This concludes the chapters of how one can gather, create, and ignite a fire. Hone your skill in these techniques to best prepare yourself when disaster strikes.



Protection from Excess Exposure – Shelter

In a survival situation, shelter is important as well. It protects you from natural elements, prolonged exposure to which can harm your wellbeing. Shelter protects you from the sun, rain, wind, snow, hot & cold temperatures and even insects. It will offer a sense of well being and aid you in maintaining your will to live.

Depending on the type of survival situation you are in, shelter may take precedence over your need for water and food. For instance, if you are in cold environment, prolonged exposure in this weather can cause excessive weakening and fatigue, which will result in the person, developing a passive outlook; thus losing their will to live.

The most common mistake in creating a shelter is making it too big. A shelter needs to only be large enough to house and protect you, along with being small enough so it can contain body heat, particularly in cold climates.

Before we can discuss how one can make shelters in a survival situation, one must first choose an appropriate location.

SELECTING A SITE * FOR SHELTER

When you realize that shelter has become a high priority, you should start looking for one ASAP. Just remember that there are two main requisites of the ideal site. They are:

- It must contain the materials you need to make a shelter.
- It should be large enough to house you and leveled enough for you to comfortably lie down in.

However, one cannot ignore other aspects that will contribute to their safety. Other important considerations include:

- If the site is suitable enough for signaling rescuers
- Does it provide proper protection against wild life?

Whether the area is free of poisonous plants, insects, or reptiles

TYPES OF SHELTERS*

When in a survival situation, you have to pay close attention to the environment you are in as well as the weather of that particular area, and closely monitor how it is affecting you from the moment you arrived here. Your body needs different types of protection in different weather conditions. In order to make the best possible decision, you have to be completely present. Observe your surroundings, think about the materials you have at hand, what you can salvage, and the tools you can create.

While you can easily create a make-shift shelter from using natural materials, it will not provide the optimal protection. What you need to keep any eye out for are pieces of rope, canvas, pieces of wood that can be used as a stake you can drive into the ground, and possibly a knife or sharp edged rock to fulfill the purpose of a knife.

Below, we are going to discuss various types of shelters you can use in different weather conditions and the minimum materials you will need to create them. The season of the year plays an important role in determining the type of shelter you choose, but first, let's discuss shelters that occur naturally around your area.

Natural Shelters

Never underestimate the area around you, and that doesn't only mean in terms of danger, but for your wellbeing as well. There are many naturally occurring formations that provided the perfect shelter. For instance, clumps of bushes,



rocky crevices, caves, small depressions, leeward hillsides with large rocks, low-hanging limbs and fallen trees.

However, when you find a natural shelter, you might have to work on it to make it into a proper shelter. Also, when selecting the shelter:

- Keep away from lower ground, such as narrow valleys, ravines, and creek beds. Lower areas tend to collect cold air during the night and can be significantly colder than higher ground. Not to mention, brushy, thick lower ground harbors the most insects.
- Remember to check for dangerous wildlife, such as ticks, mites, snakes, scorpions, and even stinging ants.
- Lookout for dead limbs, loose rocks, or coconuts that can fall on the shelter you build.

Poncho Lean-to Forest Shelter

This type of shelter works best in a weather that is not too taxing on your energy and wellbeing; ideally when the weather isn't very hot, nor is it too cold. This type of shelter is perhaps the easiest to build, and takes minimal time and equipment as well. What you need is a poncho,

about 2 – 3 meters of rope or a suspension line, three wooden stakes about 30 cm long and two trees 2 to 3 meters apart (depending on the size of rope you have available). Check the direction of the wind and make sure the back of your lean-to is facing the wind.

Making the Lean-to

- Tie the rope between two trees tightly so when you tie the poncho, it doesn't move a lot due to the wind.
- Now fold the poncho and tie the top two ends on to the rope firmly, while making sure that the poncho leans in at 30 degrees from the ground and is long enough to shelter you completely when lying down.
- Drive the stakes into ground, pull the poncho down and lean-to at a 30 degree angle and tie the bottom two ends firmly.

Your poncho lean to is now ready, just ensure that you follow the aforementioned guidelines in selecting the appropriate location for your shelter.

Beach Shade Shelter

This shelter is good for protecting you from the wind, sun, rain, and heat. It too, is easy to make using only naturally found materials.

Making the Beach Shade Shelter

- The first thing you need to do is to collect driftwood and other materials you can find to use as support beams, and something else that you can use as a digging tool.



- Choose a location that is well above the high-water mark.
- Scrape away or dig a trench that runs north to south, as this way, the shelter will receive the least amount of sunlight.
- The size of the trench should be long and wide enough for you to lie in comfortably.
- Now create a mound on all three sides. The higher the mound, the more space you'll have within the shelter.
- Now lay support beams that span the entirety of the trench on top of the mound to create a firm base for the roof.
- Dig out more sand from the front of the trench to increase the size of the entrance.
- Use natural materials like leaves and grass to create a bed within the shelter.

Tree Pit Snow Shelter

If you find yourself in a survival situation where you are in a cold, snow covered region where evergreen trees can be found, you can easily make a tree pit shelter to protect yourself from the extremely cold environment.

Making a Tree Pit Snow Shelter

- In order to make this shelter, you first have to find a tree with bushy branches that can provide you with an overhead cover.
- Now, to make this shelter, you have to dig around the trunk of the tree until you reach the diameter and depth required to house you comfortably, or until you reach the ground.
- Properly pack the snow in and around the top and on the inside of the hold to provide adequate support as well as to prevent a cave in.
- If the overhead cover isn't sufficient, you can cut evergreen boughs from around the area to find more cover.
- You should also put boughs in the bottom for insulation.

Shelter for a Desert



If the survival situation you find yourself in is a desert, consider the effort, time, as well as the materials needed to create a shelter before expending any valuable energy or resources. After all, the environment is very arid. Ensure that you have salvaged as much as you could

have from the mishap that happened to you.

If you have materials like a canvas or a poncho, you can use it with terrains that have outcroppings of rocks, depression between dunes, or mounds of sand to make the shelter.

Making shelter with rock outcroppings

- Take one end of your canvas, poncho or other material and anchor it to the edge of the rocky outcrops using stone weights.
- Take the second end of the canvas, extend it and anchor so it provides optimal shade.

Making shelter in a Sandy area

- For this shelter, you can do two things. You can either expend valuable energy to create a mound of sand to build one side of the shelter or you can use a sand dune for that. Work with what you have available.
- Anchor one end of the canvas atop the mound using stone weights or the sand itself.
- Take the other end of the canvas and extend it just as in the previous shelter guide, so it provides the optimal shade and anchor it in that position.

Note: If you have more than enough canvas or other material, fold it into two layers and create an air space in between the two layers of about 40 cm. Doing this will significantly reduce the temperature in the shelter.

Health & Survival – Emergency First Aid

In a survival situation, among the many crucial problems, there is also health and first aid that must be made a priority. In order to return to safety, an individual must be able to look after their personal well being. The issues that occur in this regard can include physical injuries, affects of extreme climates, and illnesses that one can contract in the wilderness.

Failure to treat injuries and even the most common illnesses can prove to be fatal, and even more so with the lack of proper medical training and supplies. This is why emergency first aid is an important survival skill. When you find yourself in a survival situation, the first thing you need to do is find or salvage a first aid kit from the wreckage.

Here are a few basic steps of emergency first aid you should observe in the wilderness.

1. First of all, remain calm in order to stay efficient.
2. Keep yourself or any other survivors warm.
3. Stop any bleeding and check for other cuts,

injuries to the head, spine or neck and fractures.

4. If you haven't already found a suitable shelter and if you're not the one injured, create a shelter in which the injured person can stay warm.

EMERGENCY FIRST AID TECHNIQUES FOR SPECIFIC SITUATIONS

BLEEDING



The best way to control bleeding is to elevate the area that is wounded above the heart and to apply pressure on it. You can either use a clean piece of cloth, gauze, sphagnum moss or dried sea weed. If the bleeding fails to stop,

apply pressure on the area that is pulsating between the heart and the wound. If it persists, use a tourniquet at the pulsating area to stop the bleeding. However, use this method only if there is no other option available. After the bleeding is under control, wash the wounded area and apply bandages or if you don't have them, make them from pieces of cloth.

DISLOCATION

Joints dislocate when ligaments around a joint tear, allowing the joint to move out of the socket. Under normal circumstances, it's unwise to treat it unless you're trained to do so. In the meantime, the affected area should be supported using slings and the pain can be controlled with an aspirin or other drugs. If you don't have medicines, then you or the patient will have to endure the pain for the time being.

SPRAINS

Sprains can be treated by applying cool items to the affected area for the initial 24 hours. The swelling will then subside soon. Leave the area as it is for a day and don't move or put further stress on it. Then apply heat on the sprain to hasten the healing process.



SUNSTROKE

Sunstrokes occur when a body is excessively exposed to the sun. The body overheats and provides more blood than necessary to your circulatory system that results in a rapid pulse, hot face, flushed face, dizziness and headache. Treat it by resting in a cool and shadowy place, and by consuming and applying cold liquids. Covering your head can prevent sunstroke as well, if you notice the initial symptoms.

FROSTBITE

Frostbite generally occurs due to two reasons, either from direct exposure to cold weather or from high speed winds. In a frostbite, the tissues of a particular part of the body freeze, commonly the face, fingers and toes. The severity of frostbites can vary, from being easily treated with heat to causing irreparable damage.

If you find yourself in a survival situation where the weather is cold, the best way to avoid frostbite is to cover yourself appropriately with many layers of clothing. If you have a scarcity of clothing, build a snow shelter as mentioned in the previous section to avoid excess exposure. If the frostbite is in its initial stages, cup your hands and keep blowing on the affected areas.

The list of first aid procedures is extensive, and the ones discussed here are just some of the most common issues you'll face in survival situations. It is highly recommended that you take a first aid training course; you never know when you might need one.

S.O.S – Signaling



Signaling is among the important survival techniques that allow you to alert any potential rescuers that you need HELP.

When stranded on an island with no way off, with miles of water in every direction, creating signals may very well be the only way you can attract attention to your location and hopefully, get rescued in time.

There are many ways to create signals for SOS purposes and most signals are self explanatory.

TYPES OF S.O.S SIGNALS

FIRE

This type of signal involves building a fire large enough to be spotted from either the sea or the air. Start the fire in a location that is on elevated ground, close to the beach. Light three fires in a triangular fashion as it is universally recognized as a distress signal. Carefully start the fire so that the surrounding area doesn't catch fire.

FLASHING LIGHTS

Flashing lights are generally used at night to attract attention of those who may be in the vicinity. It involves flashing either a flash light or

an emergency strobe.

MARKERS

To create a signal for planes flying over the area, spell out S.O.S using colored clothing, rocks and logs; anything that stands out from the rest of the place.

MIRRORS

If you have mirrors, they can be extremely effective in signaling aircrafts, but aiming sunlight at a plane or a ship that is passing by, is tricky.

Note: Most search and rescue parties utilize aircrafts as the primary method of finding people that go MIA.

This concludes the handbook on surviving when a disaster strikes. The techniques of survival found herein are absolute basics; you can further improve your chances of survival in an event of a disaster by taking professional courses in each area discussed above. We hope you never find yourself in such a situation, but you never know when the skills you learn might come in handy. Good Luck!