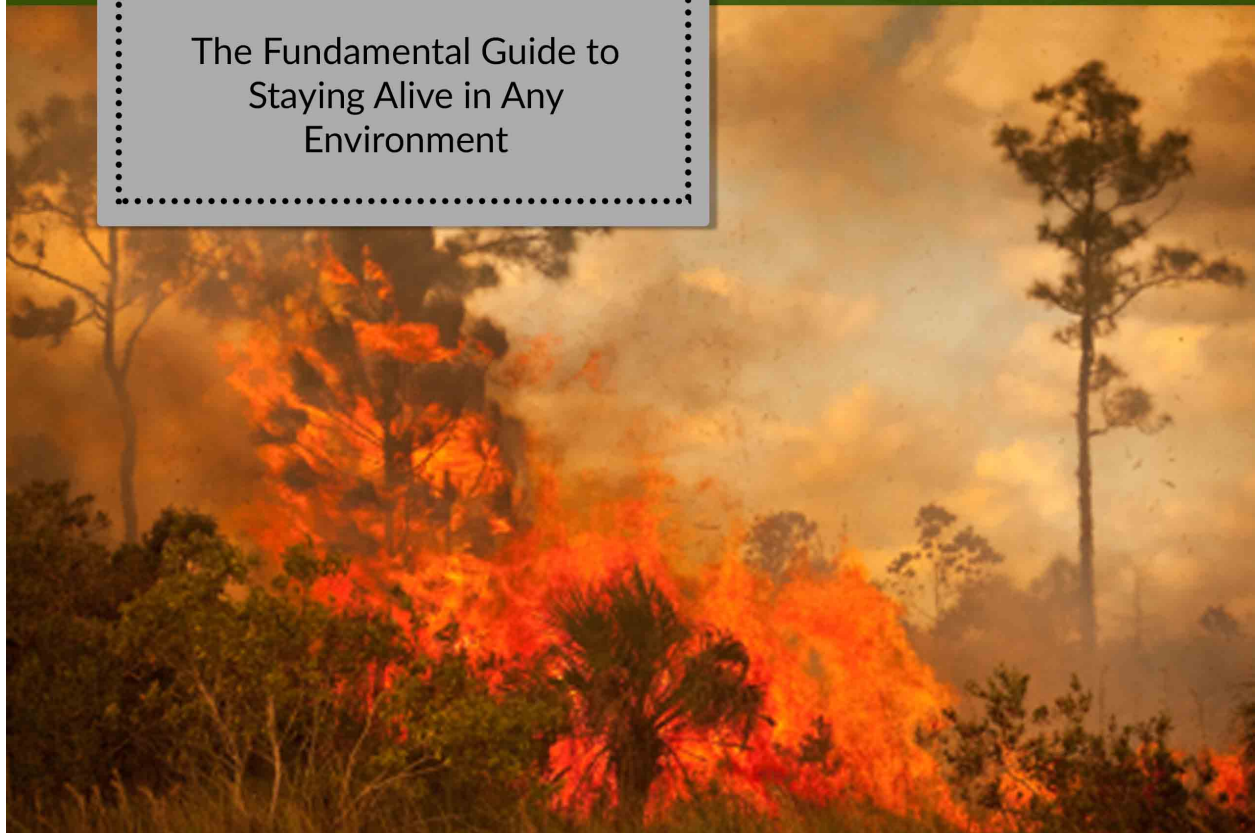


Fundamental Wilderness Survival

The Fundamental Guide to
Staying Alive in Any
Environment



SurvivalMedicMD.com

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Introduction

Often, after a long week, people joke to their friends that they're going to run away into the wilderness and never look back. Some people even do just that, spending their weekends hiking and camping, or restructuring their lives entirely so that they can live, work, and play in the wildest parts of the world.



It's no wonder that the un-settled areas of our planet are often what we picture when we think about "getting away"; more research has been done into the calming effects of nature on the human mental and physical systems than almost any other natural method of stress relief. As it turns out, leaving behind our own creations, and stepping into a place we do not control, can save our lives – literally.

But nature isn't always the idyllic wonderland full of cozy fishing holes and butterfly fields. In fact, going into the wilderness with those images in mind can quickly turn a stress-relieving vacation into a deadly nightmare. Just as the urban world is full of perils and pitfalls that humans must watch out for, so too does nature present unique challenges and dangers that travelers need to be able to face head on.

The worst thing you can do is to find yourself in the wilderness, with no survival skills, in the middle of a true emergency.

By emergency, we're not talking about running out of toilet paper. "Emergency" means a real, life-threatening situation that will require you to stay levelheaded and focused. In this book, we'll look at three main categories of emergencies that can happen in the wild, and the types of skills you'll need to address them.

First, we'll discuss general wilderness survival skills, things you will need to know if you get lost or stranded away from civilization, and need to protect yourself. This will include finding and storing food, identifying fresh water, creating or finding a shelter, and protecting that shelter adequately.

Next, we'll examine the emergency medical survival techniques and tools that you can use if you get wounded in the wilderness. Of course, the best course of action any time there is a medical emergency is to seek out a town or city with professional medical services; but in the event that you won't make it that far, or need medical attention immediately, these things can help save your life. They include identifying the most common illness and injuries that happen in the wild; treating wounds and injuries; common items in your pack, as well as things you can forage from nature, to use as first aid; and information on how you can get more training in wilderness first aid.

Finally, we'll look at how to act when you come into contact with a wild animal. We'll discuss how to recognize typical animal behavior, so that you can tell when an animal is acting aggressively; what types of illnesses and diseases wild animals can carry, and how to identify some of the signs that an animal may be a carrier; and how to treat animal bites in the instance that unwelcome contact couldn't be avoided.

By studying the information in this book, and applying some practical common sense to any outing you go on, you'll be able to enjoy the great outdoors with the confidence to take care of yourself, or your fellow travelers, should the need ever arise.

Chapter 1: Fundamental Survival Skills

Before you ever get into an emergency situation in the wild, it's important to take stock of what you know, and fill in any gaps in your basic survival skills. While working around your weaknesses and knowledge gaps can be done when things are going well, it's much harder to do that when you are lost, stranded, or in the middle of some other emergency and cannot contact help right away.

In this chapter, we'll look at some of the most common mistakes people make when in the wild, particularly when they find themselves lost or stranded. Learn how to avoid these mistakes, and how to survive in the wilderness or when camping no matter what your circumstances.

Get in the Right Mindset

Choosing to Survive

While knowledge is truly the key to surviving in any environment, one of the main differences between a smart person with all the right gear who fails to keep a level head in an emergency situation, and a person with very little gear who not only survives, but thrives, in a wilderness setting, is an inner attitude that says *"I can. I will."*



Choosing to survive, and even choosing to enjoy the journey along the way, is a very important part of making it through any emergency in the wilderness. Choosing to survive involves these things: taking the situation seriously, choosing not to despair, and preparing for the worst. You must find a balance between maintaining confidence and hope, while being smart and preparing for what could happen. Additionally, you must give everything that comes your way your full attention: anything or situation could be valuable to your survival. Only by keeping yourself in this mindset can you follow through on choosing to survive.

Maintaining the right mindset is even more important if you are with a group or another person. Group morale is incredibly important for group survival, and mindsets are contagious. If one person in the group isn't taking the danger seriously, doesn't care about what's going on, or has given up hope and begun to despair, the rest of the group will be quickly affected by the same feelings and attitudes.

If you are with a group, find a balance between using what you know, and having a cocky attitude. The former will save you all; the latter will give the impression that you aren't taking the dangers of being lost in the wild seriously, and will quickly lead to low morale.

Doing Your Part

Laziness has no place in an emergency survival situation. People who feel "stuck in a rut" in their lives, and are unwilling to take initiative and pitch in with the work, can be a major danger for the rest of the group. These individuals are usually easy to spot: they do anything they are assigned to do slowly, and spend more time procrastinating, or finding reasons to get out of work, than it would have taken to simply do the job correctly and efficiently.

By taking short cuts, or not following a standard set of survival procedures, these people put the whole group in danger of starvation, dehydration, exposure, wild animal attacks, injuries, and more.

Any time you are in the wilderness with any group – whether it's your family, a group you are guiding, friends, or a club or organization – you must think of the group as a team. Everyone on the team has to have a specific job.

They must all understand their job, and they must also understand how their specific job fits in to the overall picture. Without that knowledge, they won't give their small job the serious attention it deserves as part of an overall survival plan.

Additionally, any team must have a captain; ideally, there should be at least one main group leader, and at least a few secondary team leaders that can help shoulder some of the decision-making and motivating responsibilities. Everyone on the team must understand that in order to survive, the team leaders' instructions are the final judgment on matters as they are happening, and must be abided by until safety can be reached and decisions can be discussed.

By allowing team members to question decisions in the moment, you set the entire team up for failure – and in the wild, failure can be life or death.

Fundamental Wilderness Survival Skills

When you are faced with surviving in a wild area overnight, or for any extended length of time, there are three key things you'll need to tackle: food, water, and shelter.

Finding Food

Food is one of the top concerns when you are cut off from the ease of grocery stores and



restaurants. Without it, of course, you would eventually die; but even before then, being hungry can lead you to make bad decisions later that result in injuries or even worse living conditions. If you can't keep your blood sugar steady, and your stomach settled, you won't be able to concentrate on surviving.

When you are in the wild without many or any food, there are three ways to find it: hunting, fishing, and foraging for edible plants and insects. If you have the ability to learn any of these, focus on foraging first; hunting and fishing can often be impossible without also knowing how to craft your own tools, and if you are wounded, or stranded in a place that doesn't offer materials to make hunting tools, you might not be able to hunt or fish at all. Hunting and fishing offer additional challenges as well: the food must be skinned, cleaned, and cooked before it is eaten.

But even a wounded person can forage for food, and edible plants only require, at the most, a little rinsing off. It's far easier to store plants without attracting the attention of other predators, as well. For all of these reasons, choosing to spend your time learning to identify edible plants and insects is a great choice when preparing yourself to survive in any situation.

With that being said, just because foraging for plants is easier overall, doesn't mean that it can't present its own unique dangers. Many plants that grow in the wild are extremely poisonous, and often times, edible plants disguise themselves as poisonous plants to prevent birds and other animals (like you) from eating their fruit. If you aren't well versed in how to identify an edible plant, and accidentally consume a toxic plant, the reactions you face could include anything from mild vomiting, to organ failure or even a coma.

To avoid that, you'll want to test any plant for edibility before you eat it. Luckily, the U.S. Army developed a Universal Edibility Test that can be used to determine if something is safe. Before you attempt a test, keep these things in mind:

- Don't test plants for edibility unless there are plenty of specimens nearby. You need to be sure that you're going to get at least a full meal out of all this trouble. There's likely a better, more bountiful option you can find with a little more foraging.
- Unless you absolutely know 100% that it is edible, and are willing to stake your life on it, just say no to mushrooms and fungi. Mushrooms have some of the most toxic poisons in the entire plant kingdom, and can cause fatal illness in a matter of moments. Other mushrooms have slow-acting poison that won't cause fatal illness for days, and there are no known treatments for mushroom poisoning.
- Don't eat anything that is growing on a spot that has been polluted by a chemical spill or on a roadside. Additionally, don't eat any water plants that grow in a polluted water source. If the water is not safe to drink (it's brackish, stagnant, or murky), the plants that grow in and around it are not safe to eat.
- Don't eat any plant that shows signs of rot or mold. If it has soft spots, like fruit that has gone overripe just before molding, don't eat any of the plant. Mold in the wild is not at all like the mold that creates cheese, and is never safe to eat.
- Do not eat anything that has a milky sap, or a sap that isn't even in color. If the sap of a plant is dark in some places and clear or light-colored in other places, avoid it.
- Avoid eating anything that grows inside a pod. Beans, or seeds, may seem like a familiar, friendly food, but many wild beans are toxic. The beans we eat today are cultivated and specially bred for edibility.

- If a plant has a soapy or milky flavor, do not eat it. Additionally, if it smells or tastes like almonds, but is clearly not an almond, do not eat it – it likely contains cyanide.
- If a plant has spines, thorns, or tiny, fine hairs, do not eat it. All of these things are methods for transferring poisons to animals who attempt to eat the plant.
- If the plant has shiny leaves that grow in groups of three, it's poisonous (likely poison ivy). Not only should you not eat it, be sure you don't touch it or brush against it.



- Surprisingly, unless you happen to come across a clearly recognizable patch of blackberries, raspberries, or blueberries, it's best to avoid berries altogether. Some old wives' tales talk about boiling wild berries to make them more palatable, but hot water won't remove toxins from a poisonous plant.

So with all of that in mind, you may be asking yourself what in the world you can eat. You'd be surprised just how much is left after eliminating all of the above. Many species of grasses, tree leaves, bushes, flowers, and other types of plants are edible, and most even offer other health and first aid benefits.

If you've found a plant that hasn't been eliminated by the list above, the next step is to put it to the Army's Universal Edibility Test. As you'll soon see, this test won't feed you fast; at this stage, you're gathering food for tomorrow. So it's important to do this before you get hungry, or before you run out of rations.

Begin with the contact test. Any skin reaction indicates that a plant is not safe to eat. Crush part of the plant and rub it on the wrist or inside of your elbow for at least 15 minutes. Now you must wait for at least eight hours, or overnight, watching for any itching, burning, redness, swelling, numbness, or rash. Any of these are an indicator that the plant is not safe.

If the plant passes this test, it's on to step two: prepare a small portion of the plant in whatever way you intend to prepare your meal. Boiling is usually the safest bet, but if you don't have the ability to do that, you may be forced to consider other cooking methods, or eating it raw. Before you consume the plant sample, touch it to your lips and wait for 15 minutes, watching for the same signs as the skin test. If the plant doesn't cause a reaction, chew and hold it in your mouth for 15 minutes without swallowing. Remember to watch for anything that tastes milky or soapy.

If there is no reaction from that test, it's time to swallow and wait. If after several hours, you don't feel ill in any way, you are probably safe to eat the plant. Be sure that you perform the entire test for different parts of the plant; some plants have edible flowers but poisonous leaves, or edible stalks with poisonous flowers. Only eat the part of the plant that has passed the test in full.

Storing Food

In the wilderness, there is no refrigerator, so any food you do hunt, fish, or forage will have to be stored in another way. It doesn't matter how you get your food; storage is just as important. If you eat spoiled food, it can cause just as many ill effects as eating poisonous or ill-prepared food. And the longer you are lost or stranded in the wilderness, the more you will need to store.

Sometimes food is abundant, and other times it will be scarce. For this reason, it's important to store food where you can – but as you'll see, you also need to store only what you can easily move or carry, so be careful not to overdo it.

One of the most effective methods for preserving food is to smoke it. Even vegetables (plants) can be smoked, but this method is primarily for preserving meat. It's not a modern method of preservation by any means, but it is a very reliable way to keep meat from spoiling for up to several months.

All you need is fire, wood, and some kind of container. A cave, a hole in the ground, a barrel, a constructed shack, a metal container, or any kind of enclosed space that can hold both the fire and the meat, can be used as a “smoker”.

Hang the meat or food inside whatever you're using as a smoker, and fill the space or container with smoke. You can do this by transferring smoldering coals into the container with the meat, or by keeping a low, smoky fire going directly under the food (for a situation in a cave or larger space).



It takes several hours, or even multiple days, for food to fully smoke. It will be most effective if you have the ability to coat the food in salt or brine before you smoke it, but that is not necessary for emergency storage.

Drying is another method that can be used, and is probably better for edible plants than smoking. If it's cold out, allow the food to freeze – this dries it because all water content in the food becomes solid. If it's warm out, you'll need to use the power of the sun.

Sun-dried foods can take up to two or three days to fully dry out. Use a flat spot that receives as much direct sunlight as you can find, and keep a close eye out for birds during the days the food is drying.

After you've preserved your food, you'll need to store it in a way that doesn't attract wild animals to your campsite. Keep in mind that bears have a sense of smell that is 100 times stronger than a dog's. Raccoons are some of the cleverest wild animals there are, and are very good at unzipping, unsnapping, and untying closures. And manufactured human food is just as addictive to animals like squirrels and chipmunks as it is to humans.

Even if you don't have packaged food on you, animals don't unlearn very easily. All of these animals will be drawn to you, simply because they've learned that humans are an easy source of food.

In order to keep your food, yourself, and the animals safe, follow these guidelines:

- Never leave food unattended during the day. Not even if it is well packaged and hidden.
- Food should be stored at least 100-200 feet away from where you sleep at night. Anything you have with you that has a strong smell, such as toothpaste or sunscreen, or anything that is used to eat or prepare food, should be kept with the food.

- At night, do not leave anything inside of your pack. Leave all of the zippers unzipped as well. This keeps your gear from getting ruined by eager visitors.
- Store your food in closed sacks, and hang in trees, high enough off the ground to discourage wandering bears. You may have to get creative if you don't have sacks. Extra clothing, large leaves that can be tied into sacks, or tarp can be used in place of sacks.
- Keeping food off the ground also protects from mice and other small animals. If you are in an area without trees, try to find some way to hoist your food. A camera tripod would work. Dangling food by a rope over the side of a ledge would work.
- Finally, never leave any food scraps behind, because it could lead an animal to follow you, hoping for more such rewards.

Identifying Safe Drinking Water

Finding safe water to drink is another major survival aspect that you will have to address, the sooner the better. Dehydration is one of the biggest reasons people become ill or die while stranded in the wild. Drinking water that isn't safe can lead to even faster dehydration, so it's best to treat all water as unsafe until you purify it. Even if water looks clear, is running, and doesn't appear to have plants or fish in it, it could still contain dangerous microorganisms.

On the plus side, however, even water from a muddy, stagnant puddle that looks unfit for any



creature can be purified for drinking. There are several ways to purify water. If you had time to prepare for your wilderness adventure, water purifying tablets should be one of the first things you put in your pack. They are the easiest way to quickly purify any water you come across.

However, if you didn't have the ability to prepare, or have run out of tablets and are lost or stranded, you may have to improvise. A DIY water filtration system needs three steps:

- A step that removes large and small debris and sediment
- A step that removes heavy metals and toxins
- A step that removes bacteria and other microorganisms

Here is an easy way to create a water filtration system with items that you should have in your pack, or should be able to find: find a container of some sort with an opening at one end (like an empty water bottle); cut the closed end open.

Then fill with the following layers in the order listed:

- a bit of clean cloth that covers the original opening
- ground bits of charcoal from your fire
- a layer of fine sand; a layer of coarse sand
- a layer of fine rocks
- a layer of coarse rocks

Now you must pour water carefully through the filtration system, allowing it to filter through all of the layers in the container, and trickle out the opening into another container. Do not drink it yet! There's still a final step.

This filtration system takes care of the debris, and the heavy metals and toxins in the water. In order to get rid of bacteria and microorganisms, the final step is to boil the

water, or to let it sit under the sun in a clear plastic bottle for several hours. Boiling is by far the safest method.

A person can live without water for up to three days, but when you are surviving on less food, and being required to partake in more physical activity, you will need to drink more water than normal. Be sure you get your water filtration system set up quickly, and refill your clean water supply often.

Choosing a Safe Shelter

After your food and water needs have been provided for, the next step is to choose a safe shelter. Truly, if you or a member of your party is wounded, ill, or exhausted, finding a shelter may rank above even food and water. Protection is vital against the elements and wild animals, and choosing the safest shelter isn't as easy as simply finding a vacant cave and waltzing right in.

Always camp on high ground if you can. This provides you with the ability to see farther, and thus defend your camp better. No one or nothing can hide from you from a higher vantage point, and your camp will be in control of the areas below simply by having the best view. If your camp is attacked in any way, you have the advantage. This is vital.

Camping on high ground does bring one major downside: if you are camping during a rainy season (usually late spring or summer), you do run the risk of lightning strikes. In order to maintain the advantages of a high spot, be sure that you have nearby safety zones that campers can evacuate to in the event that a storm picks up. Caves, dugouts in the side of a hill, or simply the lowest point between two hills, would work just fine.

Another thing you need to watch for when setting up your campsite is an area that is known to flood. If you are in the wilderness during the rainy season, or there is a storm coming in, you should camp elsewhere. Never underestimate how devastating a flash flood can be. In most cases, you cannot outrun it; you will be swept up by the current,

and most likely you will be injured during the experience. This can happen even if you are in a vehicle. Avoid flooding areas when the weather threatens rain altogether.

Here are a few other things to watch out for when choosing a shelter site:

- **Widowmakers:** These are tall, dead trees that could fall over at any time. Trees often fall in unpredictable directions.
- **Water:** Try to find a spot that is close to water.
- **Insects:** Try not to build your shelter under a fruit tree, or near any major ant hills. Insects can make a survival experience much worse, through simple irritation or through poisonous bites and stings.
- **Wind:** Even when you're searching for a high spot for safety, try to find a place that has some coverage from the wind. Wind can get very cold at night, making it impossible to sleep without being in danger of hypothermia.
- **Wood:** Be sure that you're near some kind of fuel source for a fire, typically wood.

After you've chosen a safe spot for your shelter, you need to create it. In some cases, you may get lucky enough to find a vacant cave or natural dugout that doesn't need much fortifying. However, don't forget that any naturally occurring shelter is probably used by wild animals, even if they aren't present when you show up. It's probably safer to consider building your own.

One of the first mistakes that many wilderness survivalists make is to build a shelter that is too big. Your body heat will have to keep the entire space warm at night. The smaller your shelter is, the easier it will be to keep warm, not to mention hide and defend.

Use sturdy materials for the skeleton of the structure, such as strong branches or whatever the equivalent is in the environment you are in. Then you need to insulate the structure with mud, leaves, grass, ferns, pine needles, or any other type of vegetation. Be sure you don't use anything poisonous!



The more insulation you can pack onto the structure, the better. Try to use vegetation and materials that blend in with your immediate surroundings.

Why and How to Set Up Perimeter Defense for Your Shelter

Of course, your shelter is largely to keep you protected from the elements, but that doesn't mean it isn't also in place to protect you from other dangers. One of the most important safety features you can put in place after creating your shelter is perimeter defenses. These act as a first line of warning and defense against wild animals, or, in worst case scenarios, against raiding parties of violent people.

Most wild animals are driven away by the scent of humans, but improperly storing your food, or in the event of a lean season where food is scarce, animals can be driven to desperation. The same is true for other humans; in catastrophic times, desperation can drive people to attack or raid other campsites for supplies.

A perimeter defense is a scout rotation that sets up eyes and ears pointed in every key direction. Sometimes you can focus on a few directions if your campsite is protected by natural rock formations or other natural features on one side. If you are alone, and are forced to stay in one campsite for an extended period of time while you heal from

injuries, you should take every precaution you can to set up alarms that will alert you to incoming company. Anything that makes noise, and can be tied or hung in such a way that it won't be easily avoided, is a good idea. Large logs or branches, tied or hung in a way that they will fall when passed by, are another idea.

Remember that there is nothing wrong with defending your own camp. If you are faced with a party of humans that mean you, or your group, harm, you do not violate any ethical or legal code by protecting yourself and your team.

The Danger of Wildfires

One of the many dangers that can occur in the wild is an uncontained fire.

These wildfires can spread extremely quickly, often laying waste to miles of forested land before authorities are even fully aware of its existence.



Ignoring the danger of a wildfire is one of the most dangerous things you could do. Even during the earliest signs of an unchecked fire, you should evacuate the area immediately. If you are lost, you may have to get more lost to get to safety – but this is far better than losing your life due to fire. Take everything that you can hold with you and flee immediately.

Despite what Smokey the Bear told us as kids, wildfires aren't always caused by humans, and we can't always prevent them either. Fires can also be caused by lightning striking a tree, especially if you are in a woodland area that hasn't seen much rain recently. Even a tiny breeze during a lightning storm can create an unmanageable spark.

Nearby power equipment can sometimes spark and cause trees to catch on fire. Even if you are miles away from civilization, a fire started by an old utility pole can spread very easily.

Campfires and burning debris only make up a small part of what causes wildfires. In order to keep your campfire safe, be sure that you know how to completely put out a fire. Water and dirt aren't enough to get rid of a live fire. In fact, embers can keep smoldering, even underground, for days; and if the right weather conditions happen along, they can reignite whatever material is closest.

The U.S. Forest Service recommends these steps when building a fire:

- When available, use an existing fire ring that has already been cleared. If there is no ring available, be sure to surround your cleared area with a ring of rocks.
- Clear all vegetation away from your ring as far as you can. You don't want the wind to blow twigs, leaves, needles, vegetation, or anything else into your fire.
- Keep your campfire as small as you can, and don't place it directly under low-hanging branches.
- Never, ever leave a campfire unattended.
- Be sure you have water handy in case the fire starts to get out of control.

They also recommend following these steps for properly putting out a fire:

- Drown the campfire with water first.

- Mix the ashes and embers with soil, and make sure that you scrape off any sticks or fuel that is half burnt, so that all the actively burning embers aren't still feeding on fuel.
- Stir the soil-ash-ember mixture with more water, making sure that everything is soaked.
- Feel the coals, embers, and any partially burnt wood with your hands to ensure that it is not still hot enough to burn.
- When you are absolutely sure that the fire is gone, add more water.
- Do a final sweep of the campsite to be sure that there are no sparks or embers anywhere that could re-ignite.



By following these steps religiously every time, and keeping a watchful eye out for heavy smoke or lightning storms, you can avoid the devastating effects of wildfires.

These are the essential survival skills that you will need to keep yourself alive in a wilderness situation. Of course, more information could fill many, many more books, and it's always a great idea to dig deeper into these topics.

But, be sure you are balancing any knowledge you gain through books with real-world experience from time to time. Having experience in the wild, through controlled camping

trips where you aren't that far from society, will give you the confidence you need in the event that you do face a real wilderness emergency.

Next, let's discuss how to handle first aid in the wild.

Chapter 2: Surviving When Injured

It wasn't that long ago that first aid, even that administered by doctors, was as simple as "ABC": Airways, Breathing, and Circulation. As long as those three areas were working as they should, medical care was fairly lax. In today's modern world, we have drugs, physical therapy, surgery, and ongoing outpatient care programs that care for our every medical need.

While this is a great thing when you are in society and in need of medical treatment, you may not be able to access immediate medical facilities in the wild. And while you should always seek medical treatment for any injuries or illnesses, there may come a time when you have to rely on your first aid knowledge, at least until you can reach professional medical help.

It doesn't matter if you are trying to treat only yourself, or dozens of members of your team; knowing how to evaluate medical emergencies, and how to use basic first aid, can be the most important thing you ever do for your wilderness survival preparedness.

In this chapter, we'll learn how to identify the most common types of injuries and illnesses that you will see in wilderness survival situations; how to give the basic, immediate care for each situation; how to stock a first aid kit, and how to use things found in the wild as first aid substitutes; and finally, where you can go to learn more and even gain certifications in wilderness first aid.

Identifying Common Injuries and Illnesses

Dehydration

Dehydration can be seen fairly easily by a person monitoring someone else; in your own self, it may be harder to see, because by the time you feel thirsty, it is often too late. At

the beginning of dehydration, you may sweat heavily and then stop sweating, even though you are still moving. You may feel dry mouth, cramps (which are caused by losing body salt), thirst, dizziness, and a feeling of nausea.

Your thirst may come and go; in later stages of dehydration, you may not feel thirsty at all. If your urine is dark in color, you are either already dehydrated, or are getting there. You should see clear urine if you are drinking an adequate amount of water.

In order to help a person suffering from dehydration, learn how to provide safe, clean water by using filtration tablets, or by creating your own filtration system as discussed in chapter one. It may also be helpful to reduce body temperature by pausing physical activity, swimming in cool water, or finding a shady place to rest.

Heat exhaustion

Heat exhaustion often manifests with symptoms that are similar to dehydration, and often the two go hand in hand. Headaches, pale clammy skin, dizziness, tiredness, nausea, and dark urine are all signs of heat exhaustion.



Follow the same instructions for dehydration to help ward off heat exhaustion. Get out of the sun, cease physical activity, and be sure that the sufferer is drinking plenty of water.

Heatstroke

Heatstroke is caused when the body's temperature rises out of its normal temperature range, anywhere from 97.8 to 100.4. Heatstroke symptoms can be similar to those of heat exhaustion, but they are generally far more severe. A sufferer may experience shallow breathing, rapid and weak pulse, confusion, hot and dry skin, or even bouts of lost consciousness. If left unchecked, heatstroke could lead to serious problems like a coma.

If you are suffering from heatstroke yourself, it can be very hard to treat yourself, especially if you are growing confused. The best way to treat it, is to avoid it altogether. Be sure that you aren't getting overheated by resting during the hottest part of the day, keeping your head covered, and drinking plenty of water.

If someone in your group is suffering from heatstroke, the best thing you can do is get them to drink water, rest, and stay out of the direct sun during the hottest part of the day. Their confusion is likely to be the most difficult thing you have to deal with.

Trench Foot

Trench foot happens when your feet are wet for long periods of time in cold weather. The feet will turn pale and clammy, and then become red and swollen. The feet need to be warmed up in stages to reduce chance of tissue damage.

Remove wet socks, and slowly begin to massage the feet between your hands. Once they have lost the initial redness and feelings of cold, you can eventually move them closer to a fire for more warmth. Be careful not to go through this process too quickly.

Keeping extra socks on hand, and being sure to change socks whenever they get wet, is the best way to avoid trench foot altogether.

Frostbite

Frostbite means that some of your body parts are actually freezing. The most vulnerable parts of the body are the hands, feet, nose, ears, and any other parts that are routinely exposed to cold. You'll know you are experiencing the early stages of frostbite when you feel pins and needles in an appendage, followed by numbness.

Your skin will appear white and feel cold, and then turn blue and develop blisters. Later stages of frostbite include appendages turning black and hard.

You need to treat frostbite early, before the appendages begin to change color, in order to keep them healthy. Just as with trench foot, you can't go through the warming process too quickly, or you risk tissue damage.

Slowly warm your appendages up every time you stop moving, and be sure that you always change out wet socks, mittens, hats, etc. Even if you haven't walked through water, check your socks for wetness – your feet sweat more than you realize, even in the cold.

Hypothermia

Hypothermia is a condition that occurs when the body core drops below 95 degrees Fahrenheit. The early symptoms of hypothermia include mood swings, an inability to concentrate, and clumsiness. As hypothermia continues to develop, drowsiness, shallow breathing, a slowing heart rate, and later unconsciousness and death can all occur.



In the early stages of hypothermia, the best choice is to keep yourself (or the afflicted party) warm and dry. If hypothermia has advanced to feelings of drowsiness, you must do all that you can to stay awake until you are completely warm and dry. This can be difficult, because one of the final stages of hypothermia is a feeling of uncomfortable heat. You may think that you have warmed up, only to slip into unconsciousness. If you suspect that you are at risk of hypothermia, forcing yourself to move – pace, do pushups, do jumping jacks, anything – is the best way to get yourself warm and dry, and stay awake until it's done.

Poisoning

Poisoning is a major concern in a survival situation; you may be coming into contact with, eating, or drinking things that aren't safe, even if you take every precaution you can. Depending on how the poison enters the body, symptoms and treatments will differ, but it's important to be aware that if you ingest something poisonous, you need to get to professional medical help as soon as possible.

In case of ingested poisons, through food or water, the symptoms can start mildly: stomachache, diarrhea, or vomiting are common. These are good symptoms, because they mean your body is pushing out the toxins.

If you feel sleepy, confused, mentally distressed, or notice what appear to be burn marks around or in the mouth, you're probably dealing with a more toxic poison.

The first thing you must do is identify what substances caused the reaction. If you have recently consumed the substance, inducing vomiting is the best first step to take. Activated charcoal, Ipecac syrup, or simply activating your gag reflex with your fingers can all work.

If possible, get in touch with a poison control hotline. In the meantime, if you ingested the substance too long ago, or can't induce vomiting, begin flushing your system with as much water as you can.

Another type of poisoning you may experience in the wild is contact poisoning, such as brushing against poison ivy. You may experience redness, swelling, and blisters at the contact site. Most of the time, simply flushing the area with water, and avoiding the urge to scratch, will be enough to allow the skin to heal over time; however, rubbing aloe vera on the reaction can help, as can the inside of a banana peel.

If you experience an injection of poison, such as from the sting or bite of an insect or animal, you may experience redness, itching, and irritation; or you may experience more severe symptoms such as confusion, shallow breathing, erratic heartbeat, nausea, heavy sweating, or a loss of motor skills and muscle coordination. Most of the time, insect stings or bites will heal on their own; however, in the event that you are allergic to a particular type of insect sting, you may need an injection of epinephrine to survive. If you have allergies to certain insects, always be sure you are carrying your epi-pen with you when headed into the wilderness.

Fractures and Dislocations

Dislocating a joint or fracturing a bone can be painful experiences even with modern medicine. If you are stuck dealing with these injuries in the wild, there is little you'll be able to do dull the pain, unless you have painkillers in your first aid kit. The biggest thing you'll need to focus on is stabilizing the injured area. If the injury is left "loose", it can do more damage to the surrounding areas.



The first thing you should do for a fracture is stop any bleeding by applying pressure to the wound. If you can see the bone, do not touch it, or try to push it back into place unless you are a trained medical professional.

Then you will need to splint the area. Remove all clothing from around the area, and tape the area as tightly as you can stand. This can be achieved with clothing, compression bandages, bandanas, or even newspaper or duct tape, and the use of a stick that is the length of or longer than the limb.

If you don't have access to ice or clean, cold water to reduce swelling, try to keep the area above your heart, and don't move or twist it as much as can be helped. Following these steps are only temporary measures to help you until you can reach medical attention.

Signs of a dislocation include a joint that is displaced from its normal position, swelling of the joint, and severe pain in the joint. You need to know how to restore normal joint placement, and how to immobilize a joint.

For a dislocated joint, you are best served by leaving the area alone, and attempting to keep the swelling down. Trying to put the bone back into place can cause severe muscle, ligament, and nerve damage.

Drowning

If you or someone in your party is forced to cross deep or moving water during your time in the wilderness, you could experience or witness drowning. It's much easier than you think to drown; humans have been known to die



of drowning simply by falling face-first into a puddle after being injured or falling unconscious.

Signs of drowning do not resemble the wild thrashing and yelling that you see on movies. When a person is drowning, their bodily systems actually shut down. You'll see their body stiffen up, with their arms held tightly against their sides. They won't be able to float on their own; instead, their body will bob up and down like a buoy, going under the water for several seconds at a time. They won't be able to speak or ask for help. You may also see them floating either face down or on their back, not making any progress as they attempt to swim.

In order to save a person that is drowning, you need to identify the fastest way to get them out of the water. If the other person is conscious, you may be able to throw a rope or use a long branch to pull them to safety without having to enter the water yourself. Only swim out to them as a last resort; your odds of drowning increase exponentially if you are attempting to pull another person with you while you swim.

Another basic survival skill that is valuable in many emergencies, but especially drowning, is the ability to administer CPR and clear airways of water. It's important to realize that CPR is not at all like you see on the television or in movies. You have to press incredibly hard on the chest, using a large portion of your body weight, during chest compressions. Nearly 80% of people who have nearly drowned will vomit during CPR, because the stomach doesn't discriminate between water and half-digested food when being forced to expel its contents.

While it's going to be one of the more unpleasant things you must do in your life, near-drowning victims require mouth-to-mouth most of the time, because they are in dire risk of dying from oxygen deprivation. If it's possible to do without endangering yourself, it's never too early to begin mouth-to-mouth, even while still in the water.

When giving CPR, be sure that you always keep the victim's head and neck as still as possible. A neck or head injury can quickly become fatal if jarred or exacerbated.

If you are the person who is drowning, the first thing you should do is relax. Trust your body to float, and try to shield your head from any rocks that you may be dragged into. If you had a party with you, allow them to come to you, and be as cooperative as possible when they tow you to safety.

If you are alone, you will need to find a way to stop yourself from moving with the current – often there are rocks or logs that you can brace yourself against until you regain your footing. If you are in a still body of water, allow yourself to float until you get your breath, and then begin working in slow and steady movements to backstroke your way to shore.

Pain Management

Dealing with pain when you are in the wilderness may tax all of your knowledge and resources. The fact is that for our modern lifestyles, in which we are so used to the fast and superior results offered by pain medication, the relief offered by emergency substitutes will not be as effective. In order to survive in the wild, you'll have to simply steel yourself to deal with a little – or even a lot – of pain the old-fashioned way.

However, basic pain management tips can be found. If you are experiencing pain due to an injury, exhaustion, a headache, or for any other reason in any area of the body, here are a few things you can try:

- **Massage and Reflexology:** Massage therapy feels good, but it also releases endorphins and serotonin in our systems, which are natural pain relievers. Reflexology is a type of massage that focuses on certain pressure points in the feet, hands, or ears. The feet are the most common. Each area of the foot, when

massaged or pressed firmly, acts as a conduit to the area of the body that it is aligned with, helping that area to relax and heal.

- **Yoga and Stretching:** If you are feeling pain simply because you aren't used to so much activity, you need to stretch more. Your muscles are likely being overworked, and stretching allows them to limber up. Doing a few basic yoga poses in the mornings and evenings can help keep your body moving longer, and relieve pain.
- **Herbal tea:** There are several types of herbs that, when steeped in boiling water, can be used for pain relief. These include mint, the California poppy, sage, feverfew, and sweet violet. Any of these plants, when found in the wild, can be consumed as a tea for pain relief. Be sure that you know how to identify these plants so that you don't consume a poisonous look-alike.

Treating an Injured Party: Basic Skills

No matter what type of injury you may find yourself facing, there are some basic skills that can help you in almost any situation. If you don't have the time or ability to learn how to address every possible situation (and really, other than a professional wilderness guide or emergency service person, who would?), here is a short list of skills to focus on as you prepare for a wilderness adventure:

- Applying pressure bandages and tourniquets
- Recognizing signs of blood loss and shock
- Recognizing when to give salt, sugar, or electrolyte fluids
- Identifying the types of bandaging and dressing, and their best uses
- Cleaning and debriding wounds and ulcers
- Preventing and/or managing signs of infection, such as: redness, discoloration, change in wound odor, soreness, heat, and inflammation

- Transporting victims with internal wounds in a way that doesn't cause the wound to become worse

By becoming versed in these things, you should be able to face the most common types of injuries and sicknesses that you may face in the wild. You'll have, at the very least, a good head start.

Using Common Items for First Aid

If you were able to prepare properly for your trip, a well-stocked first aid kit should have been included in your pack. However, there may come a time when you are separated from your gear, or find yourself lost or stranded, and running out of first aid materials quickly. When you



are forced to survive, it is crucial to make the most of anything you have in your bag, as well as anything you can find around you, for first aid purposes. Keep an open mind, and remember that most items in the world can have far more uses than just what they were designed for.

Duct tape can be used in a variety of ways for first aid. Place it over a bandage to make it waterproof; place a strip over a blister for a slip-proof emergency bandage; use it to keep a wound sealed together in a pinch.

A bandana is an important first aid item. It can be used as a sling for an injured arm, to tie up a bleeding wound to help staunch the bleeding, or to keep a splint in place for a

fracture. A bandana can also help prevent heat stroke by offering protection for your head against the sun.

Sugar can be used for disinfecting wounds in a pinch. Plastic wrap can be used to cover burns for a short time. If you have mustard in your food supplies, put a small amount on the burn, and wrap in plastic wrap for ten to twenty minutes immediately after it occurs; the vinegar and natural mustard seed ingredients help keep a burn from blistering.

Aloe plants are extremely useful. The gel-like sap inside the leaves can be used to treat burns, wounds, blisters, and dry, cracked skin. If you see any aloe plants as you travel, be sure to harvest a leaf or two for later use. Don't take too many, as the sap will leak out over time; better to mark the location and come back for more if you need it.

Other natural items around you, such as sturdy sticks, large-leafed plants, and other natural herbs, can all be helpful in maintaining a stocked first aid kit.

Resources for First Aid Training

The best course of action for wilderness first aid is to receive training before you ever get into the wild. There are many first aid courses available to the public. Aside from training offered by the Red Cross and other non-profit organizations, you may want to look into the following:

- Basic Cardiac Life Support training – Offered by the American Heart Association and the Red Cross Program.
- CNA training – You may be able to find this for free or discounted rates at local community colleges or senior homes. You will learn basic nursing abilities, as well as how to identify injuries and illnesses very quickly.

- Hospice volunteer training. You can almost always find this for free, and you'll learn a ton about pain management and comforting injured or ill patients when no treatment options are left.
- Reiki, Acupressure, and Reflexology: None of these fields are fully recognized in conventional medicine, but all have been used in China and other cultures for decades as effective methods of pain relief and stress management. You can often find classes available in most areas for a wide range of fees. Try reaching out to a local yoga studio for resources, as the practices are often closely linked.

Even if you are confident in your first aid skills, take some time to study up in any area that could come in handy for surviving in the wild. Start by updating your first aid kit, and then make a list of things you have never studied or been trained to do.

Preparation is truly the key to medical survival in wilderness environments. The more you prepare now, getting training and creating a well-rounded first aid kit, the better chance you will have at surviving in any situation.

In the final chapter, we'll discuss how to handle wild animal encounters.

Chapter 3: Surviving Around Wild Animals

If you are going to be spending any extended amounts of time in the wild, you will eventually come into contact with animals. These instances may be completely harmless and fascinating; pesky or potentially harmful to your gear; or dangerous for both your bodily safety and that



of the animal. For this last reason, it's important to understand how to act when you come into contact with wild animals.

In this chapter, we'll look at normal wild animal behavior, which is important because you'll need to understand when an animal is threatening you, or when it's simply acting in a typical curious manner. We'll also discuss the most common illnesses that can be spread by wild animals, and how to recognize the signs of each.

Finally, we'll discuss how to treat animal bites in the wild, including information on modern day medicines that are used to treat the particular infections that can be present in wild animal bites. By understanding all of this information, you'll be able to keep a level head and follow the correct course of action when facing any situation involving a wild animal.

Wild Animal Behavior

As any wildlife survival book will tell you, wild animals are by and large going to avoid you. Animals that have not ever, or have only very rarely, come into contact with humans, are not likely to approach you.

The types of animals that you will meet largely depends upon the area you are in. Forested areas will be home to a lot of birds, squirrels, chipmunks, raccoons, and other such animals. You may also come into contact with bears, deer, wolves, foxes, moose, cougars, and other large mammals. If the environment is desert-like, you're likely to run into reptiles and snakes more often, as well as coyotes, rabbits, and other small mammals. Tropical areas also host snakes, as well as more insects, wild cats, and perhaps even monkeys.

Before you leave behind civilization, you need to research the wildlife in your area, so you can know what to expect. While large mammals can be very dangerous, they are generally easy to avoid.

They can be very territorial, so it's a good idea to watch for signs of a large animal, such as lots of broken brush creating a path, or "leftovers" from previous meals (such as bones, empty shrubbery that should have berries, or excrement). If you see any of these signs, you should leave the area immediately the way you came from.

Smaller animals, like raccoons and foxes, can often be more of an annoyance than real danger. Raccoons are incredibly intelligent, and often will figure out how to unzip or untie your gear in minutes.

For this reason, it's best to keep your gear stored in hanging packages over night, and leave your bag unzipped and empty. It will deter an animal from ruining your bag with their curiosity. It's also important to follow proper food storage procedures, to keep animals out of your supplies and away from your sleeping area.

Finally, creatures like insects and reptiles tend to only initiate contact when they are directly attacked or threatened. So long as you keep your food stored correctly, and don't camp right on top of an ant hill, you can avoid these types of animals. Birds can sometimes be inquisitive, but for the most part will stay away if you don't threaten their nests.

The exception is wild geese and swans, which can both be very aggressive if they feel cornered, or if they have eggs or young nearby. Steer clear of these birds altogether.

These are the ways that animals typically act when they are healthy, and going about their business as usual. Things can be different when an animal is sick or injured. In those cases, animal behavior can be very unpredictable. For this reason, if you come across an animal clearly wounded, or suffering from some kind of illness, it is probably safer for you to leave the area.



Animal lovers may find it hard to walk away from a suffering animal, but approaching a wild creature when it is vulnerable could very well be the last thing you do. When they feel as though they are in danger, animals can attack with remarkable speed and strength, even animals that are typically not aggressive.

If you feel as though you must end the animal's suffering, do so from a distance, and only if you are positive you won't miss.

Illnesses Spread by Wild Animals

Wild animals can often carry diseases that can cause them to act in bizarre ways; these same diseases can be deadly for humans, so it's important to know how to identify them in animals, and how to react if you come into contact with any of them. Here are some of the most common diseases that wild animals can carry:

Rabies

Rabies is a disease caused by a virus. It causes inflammation in the brain, and is usually fatal. An animal or a person who is infected might go for months without showing any of the symptoms while the brain slowly deteriorates.



Sometimes animals suffering from rabies will display aggressive behavior; this is not caused by the virus itself, but rather because the animal knows instinctively that it is vulnerable, and is reacting to the fear of vulnerability by doubling down on aggression.

Rabies is transmitted when an infected animal bites another animal or a person. It can be passed on by both humans or animals. There are four main stages of rabies that can help you identify the disease:

During the first stage, the infected person or animal can appear normal for several days, or months. They might not display any symptoms for up to a full year. During that time, the virus is traveling through muscle tissue in their body, eventually reaching the nervous system and brain.

After the infection reaches the brain, the symptoms will set in quickly. During the first three days, the infected party will begin acting differently; they might make unusual sounds, or change their sleeping schedule drastically. A nocturnal animal that is out during full daylight could be in this stage of rabies.

During the next 24 hours, the animal might become hyperactive and extremely aggressive, attempting to bite or attack anything nearby. Alternatively, the animal could go to the opposite extreme, laying very still and avoiding contact with anything that comes near.

In the final stage of rabies, the infected party will show visible signs of brain damage. This stage involves the uncontrollable drooling that is often pictured when imagining rabies. They will have difficulty swallowing, and paralysis of the face and throat muscles. It's during this stage that the animal will eventually die from respiratory failure, once the muscles and organs stop responding to the brain's signals.

If you have been bitten or scratched by an animal that shows signs of rabies, you need to seek medical attention. Modern vaccines are the only known method for treating rabies. In the meantime, be sure that you wash the wound thoroughly with soap or whatever antibiotic you have in your first aid kit. Ethanol or another antiseptic ointment will keep the wound from developing any further infections.

It's critical that you seek out vaccines immediately. Once the symptoms begin showing up, starting with the confused behavior, it is almost impossible to save a person's life. For this reason, preventing yourself from getting bitten in the first place is the best medicine you have in the wild.

Distemper

Distemper is another contagious and deadly disease that is caused by a virus. It is called Canine Distemper, because it largely affects dogs; however, it also affects any

kind of wild meat-eating animal. This includes a number of small mammals that you may come into contact with, such as foxes, wolves, raccoons, coyotes, ferrets, and skunks.

This disease cannot be passed on to humans yet; however, recent studies have shown that distemper is quickly evolving. There is now a strain that also affects cats. For this reason, you should be prepared to identify and avoid the disease.

Distemper affects many of the body's systems, including the respiratory, nervous, and intestinal systems. The symptoms can include diarrhea, fever, eye discharge, labored breathing, nose discharge, and vomiting. Death from distemper is caused by muscle spasms, deterioration of mental ability, muscle incoordination, and seizures.



Many times, wild animals with distemper can be hard to spot. They are often found wandering, confused or seemingly aimless. Because they appear to be unafraid of humans, and their bumbling wandering can come across as “cute”, many people may fail to realize that the animal is sick at first glance. Even if an animal appears to be friendly, you should never approach or touch them. Distemper can cause aggression just like rabies.

Anthrax

You might be surprised to learn that anthrax is not just a poisonous spore used in terrorist attacks through the mail; it is actually a bacterial disease that can affect wild animals. Most forms of the disease are lethal to both humans and animals.

Anthrax can infect any wild and domestic herbivorous mammals (sheep, goats, cattle, deer, etc) that ingest or inhale the spores while they are grazing. When carnivorous animals (wolves, foxes, bears, humans) eat an infected animal, they in turn become infected.

Once an animal is infected with anthrax, it can spread the disease to humans by direct contact, such as through bites or scratches, or when the human eats the animal. This means that if a wild goat ingested some spores years ago, and was killed and eaten by a wolf months ago, who then bit a deer that happened to get away and heal up, that you just killed and ate – you could get infected with anthrax. That's how easily it can spread.

It's important to note that it's not the disease itself that is being spread, but rather the spores. In the winding example given above, the goat ingested the spores, which stayed alive for years inside the goat's system. They then spread to the mouth of the wolf as it ate; the spores in the wolf's mouth attached to the deer it bit, who inhaled the spores from where they clung to its body; and you inhaled or ingested the spores when you were cleaning, cooking, or eating the deer.

This may sound like a bit of a far-fetched example, but anthrax has been breaking out with alarming regularity in the wild animal population. It's no longer unreasonable to believe that such a situation couldn't happen.

Anthrax affects the bodies of humans, domestic animals, and wild animals, in three ways:

Skin Anthrax: When the spores come into contact with the skin, they can cause itchy sores that look like insect bites. The sores can eventually blister and form a black ulcer. The sore may be painless, but almost always involve swelling. It will scab over and heal on its own, but it takes some time to heal completely.

Inhalation of Spores: If human or animal inhales spores and they get into the lungs and respiratory system, several things can happen. The symptoms usually begin with a fever and a headache. You may then experience a cough, shortness of breath, and chest pain. Later stages involve going into shock, or experiencing a very high fever. This type of anthrax infection can cause swelling, bleeding internally, tissue damage, and eventually, death.

Ingesting Spores: If humans, wild animals, or domestic animals eat the flesh of a contaminated animal, spores can be transferred through the meat into their own body. Symptoms will usually occur within a single week, and may include abdominal pain, bloody diarrhea, fever, mouth sores, nausea and vomiting, and eventually, death.

There is only one treatment for anthrax infection: antibiotics and IV fluids. The antibiotics most commonly used are penicillin, or doxycycline. You will need to seek out medical treatment immediately if you suspect you have come into contact with anthrax; even if you haven't eaten any wild animals, you may have ingested spores if you were near an infected creature.

Mosquitoes

Rather than list all the individual diseases that mosquitoes can carry, it's easiest to just treat the insects themselves as a disease. Mosquitoes can infect both humans and animals with malaria, West Nile virus, yellow fever, and many other types of illnesses.



Most of these types of infections are contained to the geographic region where that illness is common; but there have been cases of mosquitoes carrying rare diseases like elephantiasis, into continents where such diseases do not naturally occur.

The best way to avoid these illnesses (most of which can be extremely dangerous) is to keep yourself from getting bitten by mosquitoes. Stay away from stagnant watering holes; never camp too near to a swampy, wet area, and try not to store uncovered water in your campsite.

Bug spray is the best protection, but there are natural plants you can use to keep insects away, such as citronella, lavender, basil, lemon balm, and catnip. Sleeping with a net over your sleeping space is a great idea as well.

Treating Animal Bites

Most people who spend a lot of time in the wild will eventually run afoul of a wild animal at least once. Although the most cited data regards domestic animals like cats and dogs, the grand majority of bite cases in the United States, and in many other countries, involves wild animals.

Wildlife such as raccoons, opossums, skunks, foxes, coyotes, and bats are the usual suspects. Though you would expect to see cougars and bears on that list, those animals are typically not as willing to come near humans.

It is estimated that over 40,000 people in the United States alone must receive rabies treatment each year after being bitten by one of the animals mentioned above. These bites can also cause tetanus and other types of infections. For these reasons, it's important to know what to do in case you get bitten.

Animals bite the closest part of the body to their mouth. For adult humans, this almost always means the hands, because it is the act of reaching out that usually drives an

animal to bite. The legs may be another common area. For children, the face, neck, and arms are the most common areas that bites occur.

The first thing you should do when administering first aid for a bite (on yourself or on another person) is to cover your hands with gloves, extra socks, or whatever you have. Then clean the wound thoroughly with water and soap, or whatever antibiotic substance you have. Flush the wound with a lot of clean, filtered water, to get rid of dirt and any bacteria or other chances of infection in the wound itself.

The next thing you need to do is control any bleeding with firm pressure on the wound, and apply an antiseptic. Betadine or benzalkonium chloride (BZK) are good choices to keep in your first aid kit.

Some experts suggest bandaging the wound to keep it clean, but in a survival setting, many would disagree. Animal bites are considered a “dirty” wound, and that means that in general, it should not be shut off from air. Don’t tape, staple, or suture it. The bite area is going to swell, so be sure you remove rings, watches, or anything else that could become painful when that occurs.

The best thing that you can do for a bite wound is to keep it clean and watch it for signs of infection. Apply antibiotic ointment to the area, and watch out for redness, swelling, skin that is hot to the touch, or oozing.

Children who suffer animal bites need special attention. Because the animal attack happened at “eye level”, it was likely a much more frightening experience. They may develop some form of PTSD, which can cause irrational behaviors.

If you have children with you when you are in the wild, you need to be sure that they are well-informed about the risks of getting too close to a wild animal, and be taught to avoid any animal, whether it’s a friendly-looking dog or a harmless little rabbit.

While it's not something that we often think about, keep in mind that humans are animals, too. In a catastrophic survival situation, there may come a time when human bites must be treated as well. There are over 100 million bacteria per milliliter in human saliva, and because of this, nearly 10 to 15% of human bites become infected. Treat human bites the same way you would any other animal bite.

The biggest thing to keep in mind when faced with a wild animal is to leave it alone. In almost all situations, this will result in a peaceful wilderness experience. Nevertheless, should you find yourself faced with an aggressive animal; the best defense is, as always, preparation. Be sure you research what types of animals you may face before heading out into the wilderness, and educate yourself in the best methods for dealing with each.

Armed with the knowledge in this book, as well as many other great wilderness resources, you will be able to enjoy the solace of nature, and survive no matter what the wilderness throws your way.

Summary

Through this book, you've now learned how to perform most of the basic survival skills you will need in the wild. You know how to deal with first aid in the wilderness, and you also know how to react when faced with a wild animal.

While we can't go into

depth on everything, you now have a basic outline of the skills that you need to develop in order to survive in the wilderness.



This summary can be used as a quick guide to the skills discussed in this book. Use it to help you find more information in each area, as you prepare yourself further for your outdoor adventures.

Fundamental Survival Skills

- Any time you are faced with an emergency in the wild, get your head in the right mindset. Choose to survive.
- Always do your part when surviving with a group. Laziness has no place in the wilderness.
- Foraging is vital to wilderness survival, often easier and more bountiful than hunting or fishing.

- Just say no to mushrooms, unknown berries, mold, spoiled fruit, anything with a milky flavor or appearance, wild beans, any plants with thorns, spikes, or thin hairs.
- Use a slow, graduated process to check food for edibility. Start with a skin test, then slowly work your way up to eating a small amount.
- Smoke or dry food to keep it preserved, and be sure to store it somewhere high and away from your sleeping area to deter animals.
- All water should be purified when in the wild, even if it looks safe. Bring water purifying tablets, or make your own water purifications system.
- Choose a shelter that is easy to defend, protected from the wind, near a source of water and fire fuel, and don't build your shelter under or near a dead tree.
- Don't make your shelter too large. Your body heat has to warm the entire space.
- Be sure to set up a perimeter defense for your campsite if you plan to stay put for any length of time.
- Leave an area any time you see signs of an unchecked fire or an incoming flash flood.
- Be sure that you put out all fires completely. This involves multiple steps of water, mixing the dying embers with dirt, more water, and repeat. Always feel the embers with your hands to be sure they aren't going to reignite before you leave.

Surviving When Injured

- Dehydration is best treated by avoiding it in the first place. Stay hydrated and keep your body temperature at an adequate level.
- Heatstroke can be deadly. Stay out of the sun during the hottest part of the day, stay hydrated, and keep your head covered.
- When dealing with trench foot or frostbite, always warm the affected body part up in slow stages. Too fast, and you risk tissue damage.
- Hypothermia can be deadly. Keep your body warm and dry, and be sure that you do not fall asleep until your mind is clear and your body is fully dry and warm again.
- If you accidentally ingest poison, the best thing you can do is induce vomiting. If you are allergic to insect stings or bites, be sure you carry an epi-pen with you into the wild.
- Never try to reset a bone that is fractured, or push a dislocated joint back into place. Instead, wrap or splint the area to immobilize it, and seek medical treatment.
- If someone else is drowning, get them out of the water, and begin CPR immediately. Drowning victims require mouth-to-mouth because their brain lacks oxygen.
- If you are drowning, allow your body to relax and float until you can calmly assess the situation and react properly.
- Pain management in the wild comes in many forms. Research massage therapy, reflexology, yoga, and how to identify herbs in order to brew pain-killing teas.

Here is a short list of skills that any wilderness enthusiast should cultivate for wilderness survival:

- Applying pressure bandages and tourniquets
- Recognizing signs of blood loss and shock
- Recognizing when to give salt, sugar, or electrolyte fluids
- Identifying the types of bandaging and dressing, and their best uses
- Cleaning and debriding wounds and ulcers
- Preventing and/or managing signs of infection, such as: redness, discoloration, change in wound odor, soreness, heat, and inflammation
- Transporting victims with internal wounds in a way that doesn't cause the wound to become worse

Here are items that serve multiple purposes that should always be in your first aid kit:

- Duct tape
- A bandana
- Sugar
- Aloe vera

Other types of training to consider besides a basic Red Cross first aid course include:

- CNA training
- Hospice volunteer training
- Reiki, Acupressure, or Reflexology

Surviving Around Wild Animals

- Wild animals will almost always avoid contact. Any animal that appears friendly is likely suffering from an illness, and should be avoided.
- Rabies can be spread by and to both animals and humans. It is deadly if not treated by modern medicine.
- Distemper affects only animals, but can cause them to become aggressive.
- Anthrax can spread in a variety of ways through animals and humans, and can be deadly if not treated with antibiotics such as penicillin.
- Mosquitoes can carry deadly diseases, and should be avoided as much as possible. Sleep with a net over your body or sleeping area, and don't camp near stagnant water or swampy areas.
- Animal bites should be thoroughly cleaned and left open to heal. Wash and treat with antibiotic regularly.
- Human bites should be treated in the same way as animal bites.
- Always research what types of animals are native to the area you will be in, and learn how to react if you meet each type.

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