

**Making Everything Easier!™**

# **Wilderness Survival**

FOR  
**DUMMIES®**

## **Learn to:**

- Use survival techniques to stay alive on land or at sea
- Understand basic navigation
- Find enough water and food
- Signal for help and get rescued

**John Haslett**

*Expedition leader and adventure writer*

**Cameron M. Smith**

*Arctic explorer*





***Wilderness Survival***  
FOR  
**DUMMIES®**

**by John Haslett and  
Cameron M. Smith, PhD**



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## About the Authors

**John Haslett** is a veteran expedition leader and adventure writer. He is the author of various adventure books, magazine articles, and academic papers, and his work has been featured in *National Geographic Adventure*, *Archaeology*, *QST*, and other magazines. He has spent decades catching unpleasant tropical diseases, explaining himself to local authorities, fleeing from various misguided animals, and putting into practice many of the tenets of this book.

In the 1990s, with the help of an isolated community of Ecuadorian mariners, John built four 30,000-pound wooden rafts and then voyaged on the Pacific Ocean aboard those primitive vessels for hundreds of days. He and Cameron are now preparing their most extensive expeditions to date.

John lives in Los Angeles with his wife, film director Annie Biggs.

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Cameron has written for *Scientific American Mind*, *Hang Gliding & Paragliding*, *Archaeology*, and *Spaceflight* magazines and in the books *The Best Travel Writing (2008, 2009)*, *Science under Siege*, *They Lived to Tell the Tale*, *The Top 10 Myths about Evolution*, and *Anthropology For Dummies*.

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## *Dedication*

**John Haslett:** This book is dedicated to Annie Biggs, Cameron Smith, Alejandro Martinez, Cesar Alarcon, and Dower Medina — five extraordinary people who know a thing or two about surviving in bad conditions.

And to the boys and men of Troop 100, BSA, wherever you are . . .

**Cameron M. Smith:** Like John, I dedicate this book to my companions in adventure: namely, John himself; my mountaineering partners, Dr. Chiu Liang Kuo, W. McRee Anderson III, and Jamie Anderson; my flight instructors, Larry Pindar and George McPherson; my diving partner, Todd Olson; Arctic Expedition Coordinator Chuck Sullivan; and Dr. Evan T. Davies. Thank you all for throwing your dice with me. I also dedicate this book to the indigenous people across the globe — the Samburu of East Africa, the fisher-folk of West Ecuador, and the Inupiat of Alaska — who taught me how to survive in places where suburbanites like me would otherwise just vanish.

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# Introduction

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**W**elcome to the realm of the extraordinary. Survival situations can bring out greatness in some people, and they can also bring out foolishness or terror or spiritual renewal or changes in perspective or sometimes, just enormous gratitude for being alive. We, your friendly authors, have crawled like fleas in the face of enormous winds and waves, and we, too, have experienced these extraordinary states of mind — and many more.

But more often than not, survival situations aren't so romantic: You're on a day hike, 5 miles from a major city — hopelessly lost — and even though you can hear and see signs of civilization, you're still in danger of dying from hypothermia in the next hour. Unfortunately, this situation can kill you just as fast as being lost on an expedition to the North Pole. Perhaps even worse, when you do finally make it out, you don't get an ounce of respect for it from the folks back home! Well, we wrote this book with sympathy for *both* — those involved in exotic adventures and those who just got a little turned-around while taking pictures.

You may worry, understandably, that wilderness survival requires you to bite off the heads of snakes and eat them raw or perhaps leap from a cliff into a raging river. Nothing could be further from the truth. Many survival skills are much more mundane. For example, you can extend the life of your batteries by taking them out of your flashlight and putting them inside your shirt (or better yet, in a plastic bag taped to your armpit) — against your skin. Keeping batteries warm makes your flashlight run much, much longer during the cold and dark night. There. That wasn't so bad, was it? You picked up a basic survival skill and you didn't have to shiver or go hungry. You're already rolling.

## About This Book

This book is designed to thoroughly cover the basics of wilderness survival. To compile the information, we've used the most tried-and-true sources, such as *The U.S. Army Survival Manual* and *Essentials of Sea Survival*, by Frank Golden and Michael Tipton (Human Kinetics), but we've called upon our own practical experiences as well. We give you much of this information in a cheerful voice, but we also interject a more serious tone when we have to give you grim news. You can find both voices in these pages.

## Conventions Used in This Book

Throughout this book, we use the word *we* when we, Cameron and John, both want to say something personal to you, our reader. This book comes from the combined experiences of two people who've been through a lot of misadventures and who are very close friends. We've been in enough trouble — and scared enough — that we think alike, basically, and therefore we speak with the same voice.

We define the *wilderness* as just about any place out-of-doors. We know from bitter experience that it's easy to freeze to death in places that a geographer wouldn't necessarily think of as "wilderness areas." With that in mind, you should know that this isn't a camping book; it's a book for anyone at risk of perishing from exposure to the elements, whether camping or off on a harmless stroll.

We try not to use too much technical terminology in this book, but when we do offer new vocab, we *italicize* the term the first time we use it. Shortly after giving you the new term, we always define it.

## Foolish Assumptions

Although we know that you don't fit every description in this list of assumptions we make about you, our reader, we do assume that you have a least a few of the following characteristics:

- ✔ You want a basic survival book that gives practical, tried-and-tested advice, whether you're solo or with a group.
- ✔ You've tried other manuals, but they seem just a little too, well, *dry*.
- ✔ You want a comprehensive survival manual that you can throw in your car or backpack (or carry-on luggage), just in case.
- ✔ You're already in a wilderness survival situation and you have this handbook nearby.
- ✔ You've seen a survival show on television and it has intrigued you.
- ✔ You're not someone who is into *bushcraft* (at least not yet), which is the art of being completely self-sufficient in the wilderness. You can find numerous, excellent books if you want to live off the land, long term. We simply want to help you survive so you can find your way back to civilization or signal a search and rescue team.

## *What You're Not to Read*

Although we hope you enjoy reading every word that we've written, we also realize that you're a busy person, juggling a career, family, and friends and handling ten other responsibilities. If you just want the bare essentials of surviving in the wild, feel free to skip the sidebars that appear in the gray shaded boxes. The information in the sidebars is additional information, purely for the curious. You can also skip over any paragraphs marked with the Technical Stuff icon, which marks info that's fun or useful but not essential. We hope you read them, but if you don't, you won't miss any vital information.

## *How This Book Is Organized*

Though you can turn to any section in this book and start reading, we've organized the information so that we start with the most basic needs and then work up to the extremes. Whenever we talk about a basic idea that we think has an

exception in an extreme situation, we tell you where to look for that exception. We also try to do the reverse: In extreme environments, we frequently send you back to the basics to help you review the foundations of survival. Here's what you can find in the various parts of this book.

## ***Part I: Stayin' Alive: Basic Wilderness Survival Principles***

In this part, we start with basic survival protocol — what you should do and in what order you should do it. We show you how to make improvised clothing, how to make fire, how to make shelters, and how to find water and food. We also spend some time showing you how to prepare for the wilderness — what to carry and what to keep an eye out for.

## ***Part II: Eyeing Advanced Survival Techniques***

This is the part that we hope gives you the upper hand over your surroundings. In this part, you discover how to navigate, trek through trails and the bush, make sure someone sees you so you can be rescued, handle a bleeding wound, and tie knots and make tools from wood and stone.

## ***Part III: Surviving in Extreme Land Environments***

In this part, we address all the special problems (and miseries, frankly) that jungle, desert, and polar environments can present to you, the survivor. We delve into topics such as tropical disease prevention, snake avoidance, cactus eating, and avalanche safety.

## *Part IV: Surviving on the Seas, Oceans, and Great Lakes*

This part takes you from the moment your vessel begins to sink to the moment you make it back to shore and every place in between. It shows you how to abandon a ship safely, how to float for extended periods of time, how to inflate a life raft, and hopefully, how to catch a fish — without accidentally deflating the raft!

## *Part V: The Part of Tens*

In this part, we give you ten fun exercises that you can do to improve your survival skills in the field. We also show you ten scenarios that aren't so much about survival as escape.

## *Icons Used in This Book*

In this book, we place icons, little pictures in the margins, next to some of the paragraphs that we feel need a little extra emphasis.



This symbol gives you a little added info that (hopefully) makes the survival skill we've just explained a little easier. Sometimes, a tip is also a small qualification — a little explanation that tells you when you should use another method.



This symbol is a reminder to do a particular action that makes a survival skill successful, or it makes you think about common sense before you rush out and try something!



This symbol means danger. When we use this symbol, we're trying to emphasize some aspect of a survival situation that can really get you into trouble.



This symbol tells you that we're giving you some background info on the topic, but you don't necessarily need to know the info to be able to execute the actions outlined in the text.



This symbol marks true stories of survival and some of our own accounts of close calls, foolish mistakes, and improvised solutions.

## *Where to Go From Here*

Feel free to start reading this book anywhere you like. The five parts are completely modular, so you don't have to read them in order. However, Chapter 1 is certainly a good place to start because it tells you exactly what to do first if you find yourself lost in the woods.

Part I is a great place to start to get a good foundation for all things wilderness survival. If you're planning on a trip to an extreme environment, you may want to start with Part III. On the other hand, if you're looking for adventures on the sea, you can go straight to Part IV.

Of course, when you're in a survival situation, you can check out the index or table of contents and simply flip to the information you need. If you're bleeding, or if you've twisted your ankle, or if you've been bitten by a snake, check out Chapter 13. Or if your ship has gone under and you find yourself in a life raft, go to Chapter 19.

# Part I

# Stayin' Alive: Basic Wilderness Survival Principles

The 5<sup>th</sup> Wave

By Rich Tennant



"Well, that's just great! We're stuck in the middle of nowhere and all we have to survive on is a rubber chicken, a bunch of balloons, and a squirting daisy?"

## *In this part . . .*

**W**hether you're adrift at sea or lost on a day hike, survival situations throw the same basic questions at you: How can you stay warm overnight? How are you going to prevent dehydration or get something to eat?

In this part, we show you how to prioritize your actions. For instance, we let you know that while you're waiting for rescue or planning your escape, your first priorities are to keep warm (or cool), find water, and take shelter — only then do you start looking for food. We also give advice on psychological preparedness, talk about improvising clothing, and name some practical methods for making fire, building shelter, finding water, and harvesting food from the wilderness.



## Chapter 1

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# Surviving the Wilderness

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### *In This Chapter*

- ▶ Being prepared for common wilderness survival situations
  - ▶ Having the right attitude and being proactive
  - ▶ Taking care of basic needs and signaling for rescue
  - ▶ Navigating and avoiding mistakes
- .....

**K**nowing the threats you face in the wilderness and the wisest courses of action to take to counter those threats can go a long way toward keeping you alive in a bad situation. If you know in advance what the real problems are, then as soon as you find yourself lost or adrift, you can go to work immediately — and that changes you from victim to survivor.

This chapter serves as a jumping-off point to wilderness survival. Here, we give you an overview of the basics you need to know in practically any wilderness survival situation. We show what the threats are and how to take care of them in the right order. Finally, we take a minute to show you how so many people go wrong and how you can prevent your situation from getting worse — or perhaps how to stay out of trouble altogether!

## *Being Prepared and Proactive*

Every piece of knowledge or equipment you carry with you makes you stronger in the wild. Preparation gives you staying power, and it frequently gives you that little extra advantage you need to stay out of a crisis. Chapter 2 discusses what you can do to be prepared.

Being proactive usually means stopping and getting control — such as slowing your swimming stroke or even floating to conserve your energy. If you're lost, don't react and don't speed up. Stop, sit, and think carefully about your situation for a long time. Take control of the situation instead of letting it take control of you.

## *Keeping the Right Attitude*

Real survival situations feel enormously unfair. Almost all survivors face the feeling of injustice — it's as though the world is conspiring against you or the odds are simply beyond your abilities. To survive this situation, you can't let these feelings take over. You need to have your head on straight and keep a positive outlook. Chapter 3 gives more info on survival psychology.

To keep a positive attitude, the first thing you have to do is size up your situation. Take it all in. This can be very difficult for some people, and it can stand in the way of clear thinking. The truth is that most survival situations are so unexpected that they leave you a little stunned. You have to master disbelief. Many people perish simply because they can't go beyond denial.

The following suggestions can help you keep your spirits up:

- ✔ **Be resourceful.** Resources and options that you've never considered are available to you. Use rocks as hammers, nails as fishhooks, and belt buckles as reflectors for signaling. Then think of new options and work out more plans. Think of a way.
- ✔ **Be patient.** Consider that being rescued or working your way out of the problem may take time, but never assume that no one will come looking for you.
- ✔ **Never say die.** Misery and fear can fool you into thinking you're finished. Don't let your mind play tricks on you. You can keep going long after you feel like you can't. A *lot* longer. Don't give up. Keep a positive attitude, or grit your teeth in grim determination. If you slip into a negative attitude, you'll melt like a candle.

## Identifying Survival Basics

When you find yourself in a survival situation, the immediate decisions you make can significantly impact what happens to you. Make sure you address your basic needs in the order they appear in this section.

You may also face a medical situation, which may take precedence over the ones we mention here, depending on its severity. For first aid procedures, see Chapter 13.

## Regulating your body temperature

*Thermoregulation* is the management of your body temperature. It's the highest priority because being too cold (*hypothermia*) or being too hot (*hyperthermia*) are the fastest killers in the wilderness. You have to stay warm in cold environments and cool in hot environments. Here's how:

- ✓ **Cool or cold environments:** Don't allow yourself to get wet. Be careful near streams and rivers, shelter yourself from rain, and keep sweating to a minimum. If night is coming, realize that hypothermia is a threat and construct an insulating shelter.
- ✓ **Hot environments:** You need liquid and shade to cool the body. If your temperature is rising, recognize this and rest or find shade. Waiting too long is the biggest contributor to heat exhaustion. Always stay well hydrated in all situations but especially in hot environments.

The four components that govern thermoregulation are clothing, fire, shelter, and your own actions. The following sections give an overview of them.

### *Your first line of defense: Clothing*

In a survival situation, you have to cope with the entire temperature range of a particular environment, as well as the changes in your own body's temperature. The best way to do this is to dress in layers or to improvise layers. You want to be able to add or subtract clothing. For more on clothing, see Chapter 4.



In many survival situations, people discard clothing that they don't think they need (it's true, honest). Never discard any clothing, under any circumstances. If you take off a shirt or jacket, tie it around your waist or jam it in your belt. Be prepared to carry the layers that aren't currently in use.

If you're in a cold environment, strip off layers of clothing if you start to sweat. You must stay dry. If you're facing a cold night, add insulating layers by stuffing grass, leaves, or moss inside your clothing. You can use other materials, including debris, trash bags, cardboard, or anything that you can attach to or wrap around your body, to make layers and insulation. Remember, trapped air is an excellent insulator, so you can use anything that traps a layer of air next to your body.



In all environments, cover your head. If you don't have a hat, improvise one that covers your head and neck thoroughly. In the cold, a head and neck covering deters hypothermia, especially if you've fallen into cold water, and in the sun, it deters heat stroke.

### ***Warming up to the fire***

Starting a fire is crucial because it prevents hypothermia, it boosts morale, and it can be used to send a distress signal. Think overkill when preparing your first fire in a survival situation. Don't rush things. Plan it out and have lots of backups to keep the flame going after it ignites. For info on how to make fire, see Chapter 5.

### ***Gimme shelter***

Like a fire, a shelter can help you maintain a sufficient body temperature, which is your first priority. And just like fire, shelter can really boost your morale. Even if you're not a do-it-yourselfer around your home, you should know that anybody can make an insulating shelter, regardless of how much experience he or she has had in the woods.

Chapter 6 discusses how to build general shelters. But if you find yourself in a specific wilderness setting, such as a wintry tundra or a hot desert, check out the specialized shelters in the chapters in Part III.

### ***Regulating temperature in oceans, seas, and lakes***

If you're in a water environment, thermoregulation is especially important. Take the following measures to stay warm:

- ✔ **Stay as still as you possibly can.** Don't tread water if you can help it. That just makes you colder.
- ✔ **Cover your head.** If you have access to anything that can act as a hat, use it.
- ✔ **Try to keep your armpits closed by holding your elbows at your side, and keep your crotch closed by crossing your legs.** These areas leak a lot of body heat.
- ✔ **Don't take any heat-saving measure that causes your head to go under the water.** You lose more heat from your head than from any other body part.



Check out Chapter 18 for a discussion of staying warm at sea.

## *Signaling for rescue*

The sooner you help others figure out where you are, the better. You need to be ready to signal for rescue at all times. Begin thinking about signaling for help the moment trouble starts. Don't ever believe that no one will come looking for you — someone usually does.



To get potential rescuers' attention, your distress signals need to be huge. Shouting is fine if that's all you can do, but just know that shouting is a very poor signal because the human voice doesn't travel very far. To be seen or heard, signals have to be big — choose large symbols, loud noises, bright colors, or large clusters of objects, such as debris fields or people in groups. Even if you believe rescuers are nearby, make sure your signals are big. Chapter 12 provides info on signaling for help.

## *Avoiding dehydration*

In a hot environment, water can become a life-threatening problem within hours, but in most temperate environments, you usually have roughly three days before the lack of water completely incapacitates you. The minute you think you're in trouble, start practicing *water discipline*, which means you're minimizing your usage in everything you do.

To practice water discipline, no matter where you are, take immediate action in these ways:

- ✔ **Stop consuming diuretics immediately.** These are liquids that make you urinate a lot, like coffee, tea, soda, and alcohol.
- ✔ **Minimize your physical exertion if you can.** Even if you can't feel it, you're losing water through perspiration and heavy breathing.
- ✔ **Don't eat or smoke.** These activities use up your body's water reserves. Try to enforce this measure as long as possible.
- ✔ **Limit your water intake as much as you can.** If you're in temperate conditions or at sea, don't drink anything for the first 24 hours — you'll just lose it through urination. The only exception to this rule is if you're in very hot conditions on land. In these conditions, you have to drink as soon as you feel yourself becoming incapacitated.

Check out Chapter 7 for a discussion of catching water, finding water, treating water, and drinking water in the wilderness.

## *Staying nourished*

Food is the last on the list, by far, because in most cases, you're rescued before it becomes a real factor. You can go a week or more before a lack of food begins to incapacitate you. Nevertheless, finding and eating something can really boost your energy and morale.



Many plants and animals are poisonous. If you're in any way uncertain about a food source, don't eat it — becoming incapacitated is the worst thing that can happen to you in the wild. For more on finding food in the wilderness, see Chapter 8.

## *Navigating in the Wild*

The first and most basic rule of navigation is to know exactly where you are as often as you can. Now, you can't stop every two minutes to look at the map — certainly not all day — but that's not necessary to maintain good navigational awareness.

Make sure you don't allow yourself to get more lost. If you're disoriented, stop and take a moment to remember where