

A Guide to

CANADIAN WILDERNESS SURVIVAL

Bruce Zawalsky





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Introduction:

Modern Wilderness Survival

"It will never happen to me"

We can survive in the wilderness only by discarding old wives' tales, truly understanding the science of survival and using of our brains. This requires us to practice minimum investment for maximum return and to control the psychological factors of our emotions, fears and our often unrealistic expectations of life in the wilderness. Welcome to Canadian Wilderness Survival.

The purpose of this book is to help you prepare to mitigate or avoid a life-threatening survival situation. It provides a realistic approach to wilderness survival by

teaching lifesaving survival skills as well as what critical survival items you need to carry.

I wrote this book for two reasons: first, it is a thorough standalone



"My comfort depends on what I can do for myself and how much I know about using the bush materials around me."

— Mors L. Kochanski

Part 1 The Science of Survival



Chapter One

Introduction to Survival

"Facing the Survival Environment"

Every time we travel in, through or over the wilderness, we must assume there is a chance of being stranded. Statistically there is a greater chance

MTPs

(Main Teaching Points)

- 1. Principles of Modern Wilderness Survival
- 2. The Survival Environment
- 3. The Canadian Survival Environment
- 4. Wilderness Offers No Guarantees

the more often we travel into the wilderness.

If we can think of a survival incident or situation as a challenge that will eventually occur instead of simply hoping that it will never happen to us, we can better prepare ourselves to travel, work or live in the Canadian wilderness.

The wilderness is neither for us nor against us. It is just another component of the survival environment that we face when unexpectedly stranded. In this chapter we will look at what we may face in the survival environment and how we can learn to survive these obstacles while stranded in the Canadian Wilderness.



Approaching Rain

Chapter Two

Physiology of Survival

"Elementary Survival"

Survival in the wilderness is rarely an accident. It's a matter of physical rules, which individuals either ignore or attempt to break. The suffering caused by a lack of understanding of the physical rules creates or governs many of the worst survival situations. These same simple rules are

MTPs

(Main Teaching Points)

- 1. Air and Altitude
- 2. Body Fluid Balance
- 3. Constant Body Temperature
- 4. Decent Sleep
- 5. Feed or Fast
- 6. Medium- and Long-Term Survival
- 7. Vision
- 8. Fitness

broken repeatedly. We must have an understanding of how our bodies work and how they react to the environment if we want to survive in the wilderness.

Understanding survival physiology is elementary and as simple as ABC. In this chapter, we will discuss air, body fluids and constant body temperature first. These three factors are vital to our short-term survival. To survive, our bodies must have oxygen, balanced fluids and a constant temperature. Without these, we will quickly die.

We will then cover the five other factors and how they can help to mitigate damage to our bodies in a survival situation

Chapter Three

Psychology of Survival

"Building the Will to Live"

How we prepare our minds for a survival situation is as important as how we prepare our route card or where we pack critical items of equipment. The psychology of survival is a complicated area, but also an area of-

MTPs

(Main Teaching Points)

- 1. The Survival Mindset
- 2. Creating a Positive Mindset
- 3. Survival Immediate Actions
- 4. Before You Go

ten left out of survival texts and instruction. If we do not deal with it, group dissidence often becomes extreme or the group simply fails to look at all its options and makes increasingly critical errors, compounding mistakes.

On numerous occasions poor weather, sickness or the drive for success has clouded my own or my companions' judgment. I have constantly struggled with the decision of whether to push on in spite of the conditions or to stop short of the objective. Usually, the only factor pushing me to continue was my ego and my stubborn resistance to quitting.

The critical difference between a cold, wet group that sets up camp and a similar group that decides to

"I thought you'd rather have a live donkey than a dead lion." 1

Ernest Shackleton to his wife

Part 2 Learning the Right Skills



Chapter Four

Clothing & Sleeping Bags

"Dressing to Survive"

Clothing is one of the most underrated tools for surviving in the wilderness and the first Critical Item. Survival situations rarely happen when expected. Dressing for the worst conditions possible every time you venture out is the best bet for your survival.

The basic rule of thumb for cold weather survival is to dress in loose-layered garments made of quality materials that dry quickly. Following this basic rule helps prepare us for a survival situation. Clothing is normally your number-one priority when choosing your equipment. Even when unconscious it works to keep you alive and, if brightly coloured, to be rescued quicker.

MTPs

(Main Teaching Points)

- 1. Basics of Wilderness Clothing
- 2. Layering of Clothing
- 3. Sleeping Bags and Bivy Bags
- 4. Insulated Mattresses



"There is no such thing as bad weather, only bad clothing."

— Norwegian Proverb

Chapter Five

Fire Lighting

"The Great Equalizer"

Fire is the great equalizer. It provides us with warmth, gives us the ability to dry our clothing and makes up for many of the mistakes we may have made in terms of equipment selection or travel choices. Its second most important ability is that it is a great morale lifter to the lone survivor and to groups in less-than-ideal situations.

The ability to make a fire in a cold or wet survival environment is a fundamental survival skill. Therefore, anyone wishing to survive comfortably in the Canadian wilderness must take fire

MTPs

(Main Teaching Points)

- 1. Properties of Fire
- 2. Principles of Fire Lighting
- 3. Fire Lighting Equipment
- 4. Lighting a Fire
- 5. Cooking Over a Fire
- 6. Fire Safety



lighting gear with them at all times, understand type and amount of wood to collect for a proper fire and have developed the ability to light a fire in cold or wet conditions.

Chapter Six

Shelter Building

"The Great Civilizer"

Shelter is the great civilizer. It is a creation that allows us to not just survive, but to survive comfortably. It provides protection from the wind, rain, snow, sun, insects, animals or even other humans. It is a structure or area that helps to insulate you from the survival environment. A well-built

MTPs

(Main Teaching Points)

- 1. Shelter Considerations
- 2. Siting of Shelters
- 3. Tool Requirements
- 4. Improvised Shelters
- 5. Survival Shelters
- 6. Raised Beds and Bough Beds
- 7. Snow Shelters

shelter provides a microclimate that can be made warm and dry in a harsh environment.



Chapter Seven

Emergency Signals

"Becoming a Giant"

First thing we need to understand to get rescued quicker is that real Search and Rescue is not like TV, you do not get rescued at the end of the episode. It takes time to initiate a Search and Rescue (SAR) operation. It takes time, energy and

MTPs

(Main Teaching Points)

- 1. Principles of Signalling
- 2. Basic Signalling
- 3. Modern Signalling Devices

many people to conduct a proper Search and Rescue to come out and actually find you. You are a very small object in the vast northern wilderness. The more remote your location, the longer it will take to get the Search and Rescue started.

You need to understand that search is very hard and rescue is relativity easy. Certain technical rescues may be dangerous if you have trapped yourself in a very bad or hard-to reach location, but those are rare and normally are only

"Survival often depends on others, and therefore you must be able to signal your location."

— Xavier Maniguet

Chapter Eight

Wilderness Survival Equipment

"Carrying the Proper Equipment"

What we carry into the wilderness represents the physical items we can use to supplement the natural materials and resources we find in the survival environment. The harsher the envi-

MTPs

(Main Teaching Points)

- 1. Survival Kits vs. Critical Items
- 2. 15 Critical Items
- 3. Building a Real Survival Kit

ronment and or the more injured or exhausted you or your group are, the more need you have of these critical items.

Choosing what possessions to take with you into the wilderness may mean the difference between life and death. When choosing survival tools and equipment, I always think how resistant is this piece of equipment to damage and what is its chance of failure in poor conditions?

In the face of a survival situation, you need to have robust, reliable and redundant tools and equipment. Critical items such as fire lighting gear require redundancy due to

"There is no reason why a person cannot live comfortable in the northern forest with a few simple, well-chosen possessions..."

— Mors L. Kochanski

Part 3 The Path to Survival



Chapter Nine

Dealing with Nature

"Safely Living in the Wilderness"

We may have to deal with a number of hazards as we move through or are stranded in the wilderness. These include fauna, weather and various travelrelated hazards. Many of these factors will relate to why we become stranded in a wilderness survival situation.

MTPs

(Main Teaching Points)

- 1. Dealing with Fauna
- 2. Weather Hazards
- 3. Summer Hazards
- 4. Winter Hazards
- 5. Should I Travel Homeward

The survival environment has various factors that are reactive and many that are beyond our control. Often these hazards are only encountered as we travel or may be the reason we wisely decide not to travel, deciding instead to set up camp and await rescue.

This is not a backpacking, wilderness travel or wildlife awareness book, it is a survival book. Instead of covering every aspect of wilderness travel or wildlife awareness in this chapter, I will cover only the most important aspects that really relate to the most likely wilderness survival situations or how to avoid them. This means that, if you need to learn more, and I believe you do if you are travelling in Canada's

Chapter Ten

Preparing to Survive

"Before You Go"

Every time we travel, planning and preparation should be paramount in our thinking. Time and time again, survival situations have been avoided or miti-

MTPs

(Main Teaching Points)

- 1. Preparation and Planning
- 2. How to Pack and Prepare

gated by proper planning and good equipment selection. The reverse is also true: countless individuals and groups have entered the wilderness unprepared and ill-equipped.

It is up to us as wilderness travelers to prepare in advance. No one will do this for us even in national parks and other more regulated wilderness areas. Let's face the reality: those who prepare survive. You cannot know why you may get lost, but proper preparation should limit this from occurring.

"Any of a multitude of unforeseeable occurrences or circumstances can induce a sense of being lost even in the most experienced bush walkers."

Mors L. Kochanski

Chapter Eleven

Learning from Others

"Analysis of Survival Situations"

Part of the process of learning about modern wilderness survival is to make the most of other people's mistakes, challenges and victories. If we want to survive, we cannot afford to simply make

MTPs

(Main Teaching Points)

- 1. Short-Term Survival Situations
- 2. Medium-Term Survival Situations
- 3. Long-Term Survival Situations

not afford to simply make the same mistakes other people have made again and again.

We need learn from what happens to people in real survival situations when they are stranded. Don't bother trying to learn from how people react in books, movies or to get better TV ratings. Very little of what makes it through to a TV audience is actually the useful skills you need.

To properly analyze a survival situation, you must look at what factors came into play in the situation. Break it down into four areas: the **situation**, the **problems**, the **results** and any **mitigative actions**.

In each survival situation, look closely at what problems were encountered. Look at how the Survival Environment; the environment, resources, human factor, time and the unknown affected the situation. How were these factors signifi-

The Author: Bruce Zawalsky, CD

Bruce teaches professional instructor-led field safety training in modern wilderness survival, bushcraft, navigation, wildlife and bear awareness for field workers and the general public. He has worked full-time for over 23 years as a professional wilderness survival instructor while running his own company, the Boreal Wilderness Institute. He guided his first backpacking group in the Rocky Mountains in 1981. Since then, he has developed his skills in navigation, survival, wilderness travel. teaching, leading groups and team building at the University of Alberta, Augustana University College, PADI College, the Nordic Ski Institute, and



through over 34 years of military service in the Loyal Edmonton Regiment.

In 1989 as part of a small six-person group in three canoes, he completed a 92 day 3,600 km canoe expedition between Rocky Mountain House, Alberta and Thunder Bay, Ontario. This canoe expedition involved over 60 portages and 200 km of upstream river paddling, lining and poling. This trip was the highlight of his Outdoor Education training at the University of Alberta and gave him a real long-term attitude about wilderness travel.

Bruce studied with Mors Kochanski and developed his teaching skills through years of instruction and practice. He is a true believer in building synergy in the outdoor education community. He has cooperated with, shared knowledge, and learned from hundreds of other instructors and outdoor enthusiasts. His writing, speaking and teaching expertise has allowed him to easily pass on his wealth of knowledge about modern wilderness survival, wilderness navigation, wildlife awareness and wilderness travel to a wide audience.

"It deals with modern wilderness survival in an up-to-date, lively and easy to understand way."

— Mors L. Kochanski, Author of Bushcraft

What if you had to Survive?

In Canada, the wilderness is all around us: we live in it, we travel through it, we need to learn to survive in it. A Guide to Canadian Wilderness Survival answers the question, what if you had to survive being stranded in the Canadian wilderness? It teaches you how to survive comfortably in the northern forests by understanding the science of survival, controlling your fears and our often unrealistic expectations of life in the wilderness. This is the book you need to read before you accidently get stranded.



"With Bruce, students not only learn the how of survival but the why as well. His scientific approach to survival training is the best. If you are looking for real world modern survival skills that are both preventative and life-saving, look no further."



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— Dr. Marius Steyl, M.D.

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