WALKING THE WORLD
THE DAYHIKER’S GUIDE
TO ADVENTURE TRAVEL

By Ward Luthi

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Always consult your physician before beginning any exercise program.

Walking The World has been designing and leading walking vacations and hiking tours in more than 30 destinations around the world since 1987. If you love to actively explore the great outdoors, please join us on a trip to your favorite destination in Canada, the United States, Central and South America, Europe, Thailand or New Zealand. You’ll sample some of the world’s finest food and drink, meet the local people and experience breathtaking beauty. Visit us at www.walkingtheworld.com.
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About the Author – Ward Luthi

Ward Luthi

After completing an undergraduate degree in Recreation and Park Administration and a Master’s in Urban and Regional Planning, I took a job as a county planner with Kane County, just outside of Chicago, Illinois. My job was to help preserve prime agricultural land that was under pressure from a massive exodus of people wanting to live in a rural Kane County but work in Chicago.

The difficulty was that my desk faced a huge picture window that looked out on the Fox River and a recreation trail. Every day I would watch people, on my breaks of course, swim, canoe, bike, hike, run and roller blade while I drafted plans wearing my three piece suit.

I had always been drawn to the outdoors, which is one reason I did my undergraduate degree in Recreation and Parks. Sitting at my desk every day got progressively worse for me. More and more I wanted to go out and join those paddling the river and hiking the trails. Well, one day it happened. The wilderness called and I had to go.

So I enrolled in the Semester in the Rockies program at the National Outdoor Leadership School in Lander, Wyoming. For the next 100 days I, and 16 other adventurous souls, trained in the basics of wilderness travel. Our instructors taught us about mountaineering, climbing, caving, backpacking, fly fishing, group leadership, first-aid, natural history and outdoor cooking.

During our first five weeks, we hiked through the Wind River Range in Wyoming, one of the most beautiful ranges in the U.S. Our packs were heavy. Mine weighed 110 pounds while I weighed 140. It was a struggle at times to go...
one more mile much less climb another hill. But it felt good to be walking, all the while surrounded by breathtakingly beautiful wilderness.

We spent time learning about desert travel in the Canyons of SE Utah, caving and climbing in South Dakota, and winter ski touring in the Absarokas back in Wyoming.

At the end of that trip I felt better physically, mentally, emotionally, psychologically and spiritually than at any other time in my life.

Why?

Because I had just spent the best part of three months being fully alive in every moment.

I had just spent every day walking through some of the most beautiful outdoor areas on the planet, learning more about myself, those I was traveling with and our natural environment. Life was a challenge on some days but there was a beauty in the simplicity of hiking and camping, hiking and camping.

After my training at N.O.L.S., I went on to work as an outdoor guide with a number of organizations including as an instructor and Course Director at Hurricane Island Outward Bound. At Outward Bound we used active travel in the outdoors to help build self-esteem in challenged teens. Over the course of 23 days we would paddle our canoes for 350 miles and run for more than 150 miles.

At one point I traded in my hiking boots for a position as a staff member for the President’s Commission On Americans Outdoors in Washington, D.C. Our charge was to look ahead for the next 25 years and recommend policy on outdoor recreation and natural resources to the President and Congress.

There is a power and beauty in active travel in the great outdoors. My time training with N.O.L.S. and my work as a guide was powerful, inspiring and life changing, and I wanted to share what I had learned with others. So in 1987 I started Walking The World. Since then I’ve been designing adventure travel programs, primarily walking trips, in more than 30 destinations worldwide. While we continue to offer a few camping adventures, most of our nights are spent in B&B’s, country inns or small hotels. Our goal though is still the same, to actively explore some of the most beautiful destinations this planet has to offer.
I invite you to join us at Walking The World on the adventure of a lifetime. Until then, if I can help with any questions you have about active travel in the great outdoors, please drop me a note or give me a call.

I look forward to seeing you on the trails!

In Adventure,

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INTRODUCTION

“Adventure is not in the guidebook and Beauty is not on the map. Seek and ye shall find.”  Terry and Renny Russell  ON THE LOOSE

Have you ever wondered why travel is so enticing?  Why people risk their lives to reach the summit of Mt. Everest?  Why the sound of ocean waves crashing against the shore makes us feel relaxed and at home?  Why people run marathons and triathlons, scuba dive, trek to the North Pole and compete in the Tour de France?


I’ve thought about these questions often and always return to the same conclusion:  Adventure Travel is a reflection of who we are and what we were born to do, indeed, what we need to do.  The urge to roam freely, to explore new frontiers, to experience and see ourselves through the eyes of different cultures, to challenge and test ourselves, are all a part of who we are as human beings.
We’ve been nomads from way back, roaming from place to place, yearning to see what’s over the next rise. Maybe the answer to the question asked of Sir Edmund Hillary as to why he climbed Mt. Everest, and to which he replied - ‘because it’s there’, is also the answer to why we love to travel. Because it’s out there, because we’re innately curious, and because it’s in our nature to want to test ourselves, to see what we can see and to do what we can do.

Our genetic heritage from our early days on this planet is based in the outdoors, hunting and fishing and wandering by day and sitting around a campfire at night with family and friends. Since those early days when our social and physical needs were met simply by living each day, technology has stampeded ahead. Now we spend less of our day outside and more time racing to complete tasks unrelated to who we are physically, emotionally, psychologically, and spiritually.

The growing popularity of Adventure Travel, and other adventure activities, proves that to maintain our overall state of wellness, we need to return on a regular basis to our connection with life in the great outdoors.

Adventure Travel is one of the best ways to combine getting back to our own nature while exploring this magical planet we live on. And dayhiking is one of my favorite forms of adventure.

I wrote Walking The World – A Dayhiker’s Guide to Adventure Travel - with several goals in mind.

First, I hope you’ll be inspired to head out for adventures of your own, in all parts of the world for years to come.

Second, I want you to have as many adventures as you can for as long as possible. And I want your adventures to be safe and wildly enjoyable. Walking The World – A Dayhiker’s Guide to Adventure Travel - is an illustrated guide to the skills, equipment and resources you’ll need to travel safely and enjoyably in the outdoors. Adventure is the goal, but doing so safely so you can return again and again for more adventures is the key.

Being safe doesn’t mean that you can’t challenge yourself, sometimes to extreme limits. What it does mean is that in every adventure you have the skills, training, guides, equipment, food and judgment to give yourself the very best opportunity to safely achieve your goal, whether it be a mountain summit, a long day hike in the desert, a raft trip or dog sledding in the arctic.
I believe there’s something in our souls that longs for the physical exertion and the raw stark beauty that travel in the great outdoors can offer. I believe our wild inner fires need to be stoked from time to time for us to remain in touch with who we are as human beings and who we are as a part of this great tapestry of life on Earth.

I’m here to suggest that you heed the call of the wild that’s resonating in your own heart and soul and get up and go out. Head for the hills, desserts, mountains, oceans or wherever your heart and soul will be refreshed, renewed and reborn into the heart of your youth.

In Adventure…

Ward Luthi
Founder and President – Walking The World, Inc.
own skin and through your own veins. Fibers multiply and valves enlarge and walls thicken. A miracle.” “At least if the species has lost its animal strength its individual members can have the fun of finding it again.” ON THE LOOSE

CHAPTER ONE

What I Want You to get from This Book

“One of the gladdest moments of human life, me thinks, is the departure upon a distant journey into unknown lands. Shaking off with one mighty effort the fetters of habit, the leaden weight of routine, the cloak of many cares and the slavery of home, man feels once more happy.” --Sir Richard Burton

1. That adventure travel is life itself. Well, pretty close. And that if you lace up your boots and spend as much time as you can exploring our magical outdoor world, you’ll feel better, smile more, meet new friends, enjoy life to a higher degree and wake up each morning raring to go.

That it doesn’t matter if your adventures are close to home or at the farthest ends of the earth. What matters is that you have them and that you head out as often as possible.

2. That you can do almost anything you set your mind to and can have almost any adventure you can imagine.

That you can do it! It doesn’t matter if you’re 5, 50 or 150. You absolutely can go out and enjoy some of the best this planet has to offer.

3. That safety is your number one priority. In the outdoors, there is a fine line between being safe and finding yourself at serious risk. Safe adventures require the right kind of clothing and equipment and a strong understanding of safe trail techniques.

Since 1987 I’ve been designing and leading groups of adventurers in destinations around the world. During this time, I’ve learned that many who come on our trips at Walking The World do not have a complete understanding of the best kind of clothing and equipment to have, how to use and care for their gear and what safe outdoor travel techniques are.
There are numerous excellent books available on backpacking and camping and on any specific issue one can imagine. The focus of this book is on dayhiking and my goal is to illustrate the basics you’ll need to have safe and enjoyable adventures once you decide on your destination.

4. How to travel through the deserts, mountains and forests and leave no trace that you were ever there. And, indeed, how you can leave the areas you visit better than when you first arrived.

5. How to physically and mentally prepare for your adventures, including the importance of appreciating and being respectful of the different cultures and the local people you meet.

6. That we’re all in this together. Our natural environment, our wildlife and our ability to continue to enjoy adventures all require us to actively work to protect our wild, untrammeled areas.

7. That you are unique on this planet. No one else is just like you. That you are beautiful. And that within you resides an adventurous soul just waiting for the okay to step out into a world of fabulous adventures.

This book is not a super technical treatise on every piece of equipment on the market today. There are already numerous books available that go into the smallest detail of how socks are made or how to tie a knot. This book is a guide to the world of adventure travel through day hikes, one-day excursions regardless of the difficulty or geographic location.

I’ve set this book up to illustrate the basic clothing, equipment and trail skills you’ll need to have safe and enjoyable outings. As an outdoor guide for the past 30 years I’ve developed a set of skills and beliefs that form the basis of my recommendations to you. I hope you’ll use these recommendations as guidelines and draw from your own experience to refine these ideas to best fit your adventures.

I’ve also included a variety of what I consider to be fascinating natural history tips, inspiring quotes about the outdoors and some great photographs I hope you’ll enjoy.

This book is one way of looking at the world. Each of you has your own unique and individual way of doing things. We can all learn from each other. I hope
you will share your outdoor tips and experiences with us at

So lace up those boots, grab your pack with all of that great clothing and gear
that will keep you safe and happy on the trail, and head out for those
adventures you’ve always dreamed about.

As always, don’t wait. Start now. Time keeps inexorably moving on whether
we’re moving or not. I challenge you, right now, to take that first step on your
next adventure, big or small. The first step is the way forward, the way of the
adventurer!

Chapter Two

Are You Mentally and Physically Ready for Adventure?

Whether you’re 5, 50 or 150, and want to expand your horizons, I contend you
can have almost any adventure you set your mind to.

Since 1987 I’ve been designing and leading Adventure Travel trips, primarily
walking and hiking, for those who are 50 years of age and better. My company,
Walking The World, http://www.walkingtheworld.com was the first in the U.S. to
offer active outdoor programs for those 50 and better. I’ve also worked with
travelers of all age groups, notably teenagers with Outward Bound. Regardless
of age, probably one of the most consistent beliefs I hear is that there are limits
to the kinds of adventures we can attempt.

Whatever our age, for too long we’ve been told that our options, particularly in
terms of what we can do physically, are limited. Adventures, we’re told, are
best left to the elite athletes and the young. And for those over 50, the message
has been that life was pretty much a downhill trend, that the only things to look
forward to were loss of muscles mass, strength, endurance and the ability to
walk on the wild side. Right?

WRONG! The truth, as evidenced by studies out of Harvard and many other
research institutions, is that physically our limits are mostly defined by our
mental beliefs of what we’re capable of. With a little effort, we don’t have to lose
much in the way of strength, muscles mass or endurance.
I’m here to suggest you that you decide what it is that you’d like to do in the world of Adventure Travel…and then go out and do it!

Of course, to keep our endurance, muscle mass, and of course good looks, we have to do a little bit of work, sometimes called exercise, to maintain it all. Life’s opportunities are endless if we put consistent effort into maintaining our health and fitness.

Many travelers have worked for most of their lives, either in an office or raising a family and have not have time to test themselves in a variety of outdoor situations. So when they’re on the trail for the first time and come to a point beyond their belief system or comfort level, they often hesitate or stop all together. They’re not confident in their physical abilities. They want to take that next step, but their internal belief system just will not cooperate.

So, what does one do? On trips at Walking The World, I encourage each person to push past whatever their perceived limits are. I’m not talking about roping someone up and making them walk backwards over a cliff to prove that they have no fear. But I am talking about pushing past the limits that have been hanging around in our minds and bodies since we were little kids.

**Example – Delicate Arch Trail in Arches National Park, Utah.**

*One of the trips we do at Walking The World takes place in Arches National Park near Moab, Utah. The Delicate Arch trail is one of my all-time favorites because it’s a perfect setting for helping people discover that perceived limits are just that, ones of perception.*

The first 1.5 miles of the trail to Delicate Arch is a gradual uphill that reaches a viewpoint just before the arch itself. Between this natural viewpoint and Delicate Arch is a natural depression, that looks daunting. Often, a fair number of our hikers, upon reaching this natural viewpoint, are intimidated by the downhill slope and decide they don’t want to walk all the way to the arch. It’s not that the walk to the Arch is actually dangerous, but it’s perceived as such. It’s at this point that the mental block, the perceived limits on what one can do steps in and sends a message to our hiker to sit down, take a break and let others go explore while they sit things out.
At Walking The World we encourage our walkers to move past the fear and take the short walk to Delicate Arch. To help in this process, our guides will walk along with clients or walk down slope of them to provide a bit of assurance. With this help, most of our guests do eventually walk to the arch. And once they do, a whole new world of possibilities opens to them. Almost immediately their perception of what’s possible in the world of adventure expands exponentially.

The focus of this book is to encourage you to shuck off old limiting beliefs about what’s possible in the world of adventure travel and to show you clothing, equipment and trail techniques you’ll need to have the adventures you’ve always dreamed about.

Risk, Challenge and Memories. Good memories are an important part of life. Think of a time when you were on a trip in the outdoors and had a unique, exciting and awe-inspiring experience that you still remember today. My guess is those fondly remembered experiences involved times when you had to push past perceived limits and challenge yourself beyond normal comfort zones. When we challenge ourselves, even just a little bit past our normal comfort...
zones, we feel more alive, more confident and more connected to ourselves, others and the world around us.

Conversely, it’s when we reduce challenge and risk in our lives and expect less from ourselves that we experience a decline in health and a downturn in our happiness.

In other words, the more we stretch ourselves, the more we enjoy ourselves. Now we don’t have to go to extremes to have great memories or to stretch ourselves. Climbing to the top of Mt. Everest may stretch us, but it also has the potential to be a bit too stressful. There are many experiences that will provide a stretching experience that can be done close to home and without danger to life and limb.

"Once a journey is designed, equipped, and put in process; a new factor enters and takes over. A trip, a safari, an exploration, is an entity, different from all other journeys...A journey is a person in itself; no two are alike. And all plans safeguards, policing, and coercion are fruitless. We find after years of struggle that we do not take a trip; a trip takes us." --John Steinbeck, Travels with Charley (1962)
How to Prepare for Your Adventure.

“I learned early that the richness of life is adventure. Adventure calls on all faculties of mind and spirit. It develops self-reliance and independence. Life then teems with excitement. But man is not ready for adventure unless he is rid of fear. For fear confines him and limits his scope. He stays tethered by strings of doubt and indecision and has only a small narrow world to explore.”

William O. Douglas

Before heading out on any adventure I recommend you prepare yourself mentally and physically. Both are important to having a successful adventure. Make no mistake about it, the better prepared you are the more you’ll enjoy your experience.

Of course, you should check with your physician before embarking on any program of physical activity.

For most walking adventures I recommend that travelers start with a basic walking program, walking at a comfortable pace and distance initially, then gradually adding additional distance until you can comfortably walk 4-5 miles a day, 4 to 5 times a week.

Simply walking though, is not enough to adequately prepare for most adventures. Walking on flat surfaces will help build some strength and conditioning but even on trips that would appear to take place in relatively flat areas, there will be uphill sections at some point.

Going uphill requires a certain amount of conditioning and leg strength. A regular program of walking, with some uphill from time to time, combined with a regular program of strength training, can provide an excellent foundation of fitness for your travel experiences.

I would also invite you to purchase a heart rate monitor if you don’t already have one to help you gauge more accurately the progress of your conditioning program. Walking is a great exercise to start with but it’s easy to plateau in your conditioning program after a very short period of time. It’s also easy to get comfortable doing a set routine. A heart rate monitor will tell you if you’re
getting your heart rate up to your training zone. Again, make sure you check with you physician before beginning any fitness program.

Resistance training, or weight training, is an excellent way to prepare for any adventure. It used to be a widely held belief that after a certain age we were not able to gain muscle mass or strength. Not true. Studies at Harvard have shown conclusively that we can continue to increase muscle mass and strength through resistance training. You don’t need to use heavy weights to improve your strength, balance, and ability to do more on the trail. But you must be consistent and you must do each exercise with correct form. I would strongly suggest working with a personal trainer who can help you develop a program specific to your level of fitness as well as your particular adventure activity.

Mental preparation is also important. Traveling in new places, meeting new people, eating exotic foods, experiencing different kinds of weather and adjusting to new schedules can be stressful. People in different parts of the world live their lives differently. Rejoice in those differences and learn from them. Bathrooms may be smaller, the food may be different, and how people relate to you and one another may challenge your own beliefs. But it’s these differences that we travel to experience in the first place.

Example: The importance of honoring the differences in cultures became strikingly clear to me early on in my tenure as a guide. On one of my first trips to Ireland, I had a group of eighteen excited and adventurous travelers from various parts of the U.S. The B&B we were using looked out over Dingle Bay and our group filled their beautiful establishment.

The B&B owner had been in Dublin, on the opposite side of Ireland, taking care of her seriously ill mother. But, because of her commitment to her business and to our group, she traveled all night by train so she could be there with her husband to prepare breakfast for our group at 7:00 am.

As was her custom, the B&B proprietress would come out, say hi to a few of our guests, take breakfast orders and head back to the kitchen to prepare the food. That’s how B&B’s normally serve breakfast. Most visitors are singles and couples rather than large groups.

Several of our participants were offended that they weren’t served right away and were quite rude to our host. I reminded them that we were staying in one of the nicest B&B’s in Dingle, that the host had taken the train all night just to serve
us breakfast and that her mother was ill. Still, these individuals were used to demanding immediate service in America without regard to local customs.

As you can imagine, the B&B owner, tired from no sleep and emotionally distraught from her mother’s illness, broke down in tears. I asked her to wait in the kitchen while I tactfully reminded the group that we were guests not only in Ireland but in the B&B. That our role as travelers was to observe and learn from the customs and lives of those whose country we were visiting. Not to demand that the Irish do things the same way we might in the U.S.

Fortunately things worked out well, everyone got a fabulous breakfast, our host received a round of applause and we went on to have a fine day.

Whether in the woods or a village, adventure travel is a journey of discovery. The adventure is in the learning. We expand who we are because we experience new ways of doing things and incorporate some or parts of this new learning into our own life framework. If we demand that everything remain the same, then we will cease to grow. So, whenever and wherever you travel, I invite you to open your eyes, your mind and your heart and see the joy in each and every experience.

“How shall I talk of the sea to the frog who has never left its pond?” Chaung Tzu

“I met a lot of people in Europe. I even encountered myself.” ~James Baldwin

Chapter Three

Boots, Socks and Foot Care

“The most natural form of locomotion, walking, has been in use since before the invention of the wheel and discovery of fire. Reliable and totally non-polluting, it offers convenience, no parking, no cost. Invigorating, it promotes health and gives you the chance to think.” Paul Swatek

Okay. Let’s get going. After all, your boots are made for walking, so let’s get started on finding the right pair of boots for your feet.
Since we’re going to start from the ground up in this outfitting process, the very first item of equipment you should think about is your boots.

Boots are one of the most important pieces of equipment you’ll need. Since our feet are our transportation on most of our adventures, we need a boot that can successfully perform a wide range of functions. They need to protect and cushion our feet from the roots, rocks and uneven surfaces we’ll encounter on our travels. When going off-trail they need to provide enough support for the weight we’re carrying, our own body weight as well as that in our packs. Boots should protect our ankles from major sprains and strains, protect our feet from the weather, and provide traction to the surfaces we’re walking on.

The two areas where I want the absolute best gear possible are boots and rain gear. If you have comfortable, supportive, good fitting boots and quality rain gear that will keep you dry, you’re off to a good start.

Since Canyon Country in Utah is one of my favorite places, I’ll make reference from time to time to conditions there. In this case, the slick rock, a reference to a type of sandstone, can have a fine layer of grit on the surface. The soles of your boots must provide enough traction to allow you to walk safely, not just on level surfaces, but when going up or down or even sideways on a variety of surfaces. Add a situation where you may need to brace yourself to help a friend up a steep section along the trail and you’ll really need to make sure the soles of your boots have great traction.

To provide some perspective on why the right pair of boots is so important, consider your car. Good tires that are the right size for your vehicle are crucial if you’re going to get your car moving and if you want to keep it moving. Tires that aren’t the right size will cause your trip to be less comfortable and your gas mileage to be less than optimal. In addition, it’s possible that the wrong size tires might even lead to an accident. The same holds for having the right pair of boots. If your boots don’t fit properly, blisters are almost sure to be a part of your hiking experience. Boots lacking soles with good traction may not keep you firmly anchored to the walking surface. If your boots are causing you to shift your walking gait in order to reduce some type of irritation, you may subconsciously shift your entire body alignment to compensate. This can cause problems with your ankles, knees, hips and back.
Happy feet are crucial to happy adventures so it’s good to understand a bit about these truly amazing parts of our anatomy.

Not that we would choose this, but as we age, our feet change. They lengthen, flatten and we lose some of the padding on the bottoms, especially in our heels. These changes can have significant impact on our travels. In fact, our shoe size in general gradually increases as we age and illustrates why we should have our feet measured each and every time we go to purchase a pair of boots.

Physiologically our feet are complex works of art. They contain 25% of all the bones in our body, more than 100 ligaments, muscles and tendons, and 33 joints. That’s a lot of machinery in two small packages. Our feet have a lot of moving parts and need the right pair of boots for comfort and for easy travel on the trail.

Add to this the fact that our feet also have about 250,000 sweat glands and produce, on average, about four to six ounces of perspiration each and every day. Conservatively, this equals about 25 gallons of sweat from your little feet each year. All of that moisture, and heat, can cause problems if not taken care of. Wearing socks that can wick this moisture away from your feet is important.
and one reason why cotton socks are not good for hiking. Cotton does not wick like wool or synthetics and cannot adequately move sweat away from your feet.

**Choosing the Right Boot.**

For this discussion, I'll going to refer to three categories of boots: low-top, mid-top, and high-top boots.

I use these descriptive terms primarily because of the increasing popularity and availability of low-top boots on the market today. People are using low-tops for anything from walking in town to climbing 14,000 foot peaks.

**Low-Top Boots**

Today when you visit many larger outdoor stores, you’ll find a large selection of lightweight, low-top hiking boots. This class of footwear is what I call a *low-top* boot or shoe and was designed for hiking on relatively flat or easy terrain. (I use the term *shoe* here as well as boot, because many of these low-top boots look more like a sturdy running shoe or trail shoe than what one might traditionally call a hiking *boot*). This category of footwear, because they are generally made of lighter materials like nylon or lightweight leather, are not designed for
mountain climbing, carrying heavy packs or serious backpacking, although they’re often used as such.

Even though this category of boot tends to be lightweight, many have sturdy soles with good tread and provide decent traction as well as fairly good lateral and longitudinal stability.

There are some major advantages to low-top boots. They generally break in quickly and easily, weigh less than mid-top or high-top boots, and for their weight, still offer a wide range of stability and support.

The major disadvantage is that there is little or no ankle protection. This is not a problem until that one time when you do twist your ankle. If you’re like me and you like to look at the scenery as you walk rather than down at your feet all the time, occasionally you’ll step awkwardly on a root or rock and bang, your ankle twists. With low-top boots, there is no material to help hold the ankle in place. Some companies claim the design of their footwear helps reduce ankle twisting, but in reality, if you step on something on enough of an angle, your ankle is going to twist and you’ll probably have some pain and swelling to deal with.

I like low-top boots for flat and easy terrain with very light loads but not for off-trail situations where I could sprain an ankle or steep areas where I need a stiffer boot.

**Note:** My experience leading groups of 50+ hikers in a variety of outdoor environments is that low-top boots are the choice of many. Feet that have seen more than 50 years of life on this planet might also have corns, bunions, arthritis and other types of ailments that call for a lighter, more flexible boot. When I have queried hikers on why they prefer a low-top boot, comfort is the almost unanimous answer. Boots that are made of heavier leather, have higher tops or are more rigid in design do not as comfortably accommodate the various foot ailments and aches and pains that may exist for many older hikers.

**Mid-Top Boots**

Over the past several years a greater variety of mid-top boots have made their way into the market. A cross between Low and High-top boots, this category is lighter in weight than high-tops, usually have excellent tread on the soles, can be either waterproof or non-waterproof, provide significantly more protection for the ankles than low-tops, but less than high-tops, and generally have good stability and more rigidity than low-tops (but this is not always the case).
Personally I don’t wear mid-top boots because they rarely fit my feet well. The cut of many mid-top boots around the ankles just doesn’t fit my anatomy and is uncomfortable. Always choose the boot that fits your feet the best.

**High-Top Boots**

High-top boots are what I generally consider the more traditional type of hiking boot. High-tops are my personal preference. I’ve usually been able to find a relatively “light” high-top boot that’s flexible and waterproof, has a good sole and breaks in fairly easily. Compared to low-tops and mid-tops, high-tops are generally heavier and more rigid, provide more lateral and longitudinal stability, can be waterproof or non-waterproof, provide significantly more ankle protection, allow for heavier packs and often can be used for some levels of rock climbing and even mountaineering.

There are a lot of technical things to know about boots but for now, the most important thing in choosing a boot is to choose a pair that fits the kind of hiking you’ll be doing and then, regardless of all the other bells and whistles, choose boots that FIT your feet. It doesn’t matter what brand you choose, but they should fit your feet exceptionally well.

**My Bias.** I have a particular bias when it comes to hiking boots. I have always preferred high-top boots for almost any trail situation. Why? Because the higher boot provides more protection against turning an ankle on uneven terrain or at least protection from turning the ankle as severe as might happen with low or mid-top boots. That being said, individuals sometimes have foot conditions like bunions, low-top, Mid-top, and High-top Boots  Ward Luthi – Walking The World
corns or arthritis that make wearing a high top boot somewhat painful but can fairly easily tolerate a low-top hiking boot or tennis shoe. As long as you feel comfortable with this lack of ankle support, it’s a choice you’ll have to make. Boots with high tops are also hotter in general than low-top boots or tennis shoes for obvious reasons. Still, for years I have been happy wearing my high-top hiking boots and have suffered only one sprain in over 30 years of outdoor walking/hiking/travel. This is remarkable to me because of the many ankle sprains I endured from years of playing basketball and tennis.
Where to Buy Your Boots.

I highly recommend purchasing your boots from a reputable outdoor retailer. It doesn’t matter how big the store is, just that they specialize in outdoor gear and that their salespeople are knowledgeable about hiking boots and how to fit them to your feet. Also, check to see if the store stands behind their products. Boots can be expensive. If for some reason you find after a week or two on the trail that your boots just aren’t working, it’s nice to be able to return them without losing the full purchase price. Some larger outdoor retailers have a 100% guarantee on all of their products. Many smaller retailers can’t make this same guarantee so you want your salesperson to be knowledgeable about how to choose the right boot in the first place.

If you’re new to the world of hiking and not sure where to start in choosing a pair of boots, magazines like Backpacker and Outside regularly provide excellent reviews of the latest boots to hit the market. Check their recommendations to get a feel for what’s out there. You can usually find these and other outdoor magazines at your local library as well as online.

However, after you’ve read all the reviews, choose the boot that fits your foot the best even if it’s not rated as one of the top boots in the reviews.

NOTE: As mentioned earlier, boots are probably your most important item of outdoor gear. My experience is that people rarely schedule enough time when shopping for boots. They tend to be impatient and often take home a pair of boots that fit pretty well but not great. You don’t want to make this mistake!

No other piece of equipment can affect your entire body, including your skeletal system and how you feel overall during your hikes, than your boots. Think about it this way. You go to your local outdoor retailer and choose a boot that fits pretty well. However, there’s one little area of the boot that doesn’t fit quite right. You hike in the boot and try to ignore the irritation. Subconsciously though, to accommodate that irritation, you change the way you walk. Often, this slight change in your gait negatively impacts your ankles, knees, hips and back. All because you didn’t take time to get a pair of boots that felt great on your feet.

Recommendation. If it takes trying on ten different pairs of boots to find the one pair that fits great, take the time and do it. When looking for the boot that fits
best, don’t try to go by the size of your normal street or running shoes. I’ve found that my hiking boots can run a full size larger than my running shoes.

**Things to Consider When Shopping for Boots.**

*Note: Since our feet tend to flatten and spread as we age, it’s probably a good idea to visit a podiatrist if you’re considering doing any amount of serious hiking. Your podiatrist can alert you to any potential problems.*

*Note on Sizing: When you go to purchase a new pair of boots, have both your feet measured and do so when standing upright. Every pair of boots, regardless of whether they’re made by the same company and are the same brand as you now wear, can vary in size. So try every pair of boots on before purchasing them.*

1. Go shopping for boots late in the day. Over the course of a day your feet will undergo a certain amount of swelling and you need to account for this when purchasing a pair of boots. If at all possible, go for a walk before shopping for your boots. If you shop too early in the day, you run the risk of purchasing boots that are too small and then when you hit the trail find that after a few hours your feet are not happy puppies!

2. Take the socks you would normally wear with your boots to the store when you’re trying on boots. Different types of socks can affect the size of a boot by a half size or more.

3. After you’ve found the perfect boot, take them home for a week and wear them around the house on a clean or carpeted surface to make sure that as they adjust to your feet they still fit the way you want them to.

4. Many outdoor stores now have an incline box so you can mimic the act of walking down a steep slope. You want to do this to see if your toes will crunch up against the front of your boot. If they do, your boots are too small.

**How to Make Sure Your Boots Fit.**

First, slip your feet into your boots, without lacing them up, and slide your foot all the forward in the boot. There should be enough room at the heel of the boot to put an index finger in between the boot and your heel.
When your boots are fully laced, you should have room in the toe box, the front part of your boot where your toes live, to freely move your toes. If any part of the toe box is pinching your feet, either on the top or sides, the boot is probably too small. Your toes should also not touch the front of your boot. Again, if they do, your boots are too small. Try to leave a thumb’s width of space between the front of the boot and your longest toe. And remember, your big toe is not always your longest toe.

In the heel, your foot should not slip up and down in your boot more than a very small amount, maybe one-fourth inch or so. Too much slippage in the heel can quickly cause painful, irritating and uncomfortable blisters.

And remember, for many of us, our feet are not the same size. One foot is often longer than the other. My right foot is longer than my left, so I always have to choose a pair of boots that best fit my right foot. I can then adjust my insoles or socks to accommodate my shorter left foot. Even a small difference in length can mean the difference between comfort and a history of blisters.

To give yourself the best chance of finding that perfect boot, once your feet have been measured, also try on boots that are a half size smaller and a half size larger than your measured size. You’ll be surprised at how much difference a half size can make.

**Insoles or Footbeds.**

Insoles are the first layer of material your feet come into contact on the bottom inside of your boot. Most boots will have a removable insole and these have a very important role to play in the comfort of your feet. Insoles should absorb shock, insulate and stabilize and support your feet. Unfortunately many insoles sold today act only to make your boot feel comfortable when you first try them on in the store.

Try this experiment. When considering a pair of boots, remove the insole and, holding it with both hands, use your thumbs to push down on the edges of the heels. If the footbed flattens out, it’s a good guess it won’t do much to absorb shock, stabilize your foot or provide much cushioning at all.

Ideally, your boot should have a footbed with a semi-rigid heel cup that doesn’t deform under pressure. This semi-rigid heel cup also keeps the fatty tissue of your heel from spreading out. When the fatty tissue of your heel doesn’t spread out, it provides more cushioning and can absorb more shock.
My experience: Several years ago when I was hiking significant mileage on a daily basis, I noticed that my feet were starting to hurt and actually sting at the end of my hikes. My local outfitter quickly looked at the insoles in my boots and told me I’d worn them nearly flat. Because of that I was getting no cushioning and my feet were feeling the results.

NOTE: Don’t assume that your boots will eventually break in. Some leather boots will give a little but there’s no guarantee. Choose a pair of boots that feel great on your feet! Have I said that enough yet?!

Insoles/Footbeds can help boots fit better. Ward Luthi – Walking The World

Waterproof Boots. What’s it all About? Now is as good a time as any to discuss the different types of waterproofing for your boots.

Waterproofing is usually divided into two camps; waterproofing as a coating on the outer fabric of your boots and waterproofing that comes from having a membrane type material, a laminate, like Gore-Tex, in your boots.
Waterproof Coatings.

With boot leather that is coated, a waterproof coating is applied to the outside of the boot fabric, sealing the underneath layer against moisture penetration from the outside. Of course, this also keeps heat and sweat from escaping. There are many different types of coatings that can be used to waterproof boots and you’ll want to choose the right material for your boots. The staff in your local outdoor equipment store should be able to help you with this decision. For this discussion, know that waterproof coatings applied to the outside of your boot will eventually wear off and need to be reapplied.

Gore-Tex.

The other major type of waterproofing used in boots uses Gore-Tex or a Gore-Tex type laminate. Since Gore-Tex lost their patent some years ago a variety of other similar materials have hit the market.

Gore-Tex itself could be described as a thin, fragile piece of Teflon that’s been heated and stretched and then bonded between two other pieces of fabric. This thin Teflon “sheet” is fairly fragile and has billions of microscopic pores per square inch, 9 billion per square inch to be somewhat exact, that make it waterproof and breathable.

In order to be waterproof, the pores on the outside of the Gore-Tex have to be smaller than water droplets so those droplets can’t pass through to your socks or feet. And indeed, the pores on the outer surface of Gore-Tex are 20,000 times smaller than water droplets. Not bad!

To be breathable, the pores on the inner surface of Gore-Tex, that closest to your skin, need to be larger than water vapor molecules that are formed when sweat from your feet turns to vapor. In order for your feet to stay as dry as possible, this water vapor needs to move through the Gore-Tex to the outside layers of your boot. Not surprisingly, these pores in the Gore-Tex are 700 times larger than a water vapor molecule.

Since the surface of your boot is the exchange layer between the water vapor and heat from your foot and the outside air, this surface needs to be as clean and as dry as possible. If the surface of your boot is caked with mud or saturated with water, even though your Gore-Tex fabric is working, there is no way for the water vapor and heat to escape. Thus, your feet will be wet and probably cold.
DWR – Durable Waterproof Coating

Another crucial component to a waterproof boot that uses a Gore-Tex laminate is a DWR (durable water repellent) coating that is applied to the outside of the boot. This DWR, like the wax on your car, encourages any water that hits the surface of your boot to bead up and roll off. If this DWR was not applied, water would remain on the surface of the boot and limit the ability of your boot to “breathe”. Again, even though the Gore-Tex itself might be working, because there is no place for the moisture to escape to, your foot remains wet.

As you know if you’ve ever applied wax to a car, the wax eventually wears off and you need to reapply it. It’s the same story with DWR coatings. Eventually, the DWR wears off and you need to reapply it.

After every hike, you should use a brush and/or a damp cloth to clean any dirt or other substances from your boot. Anything that sits on the surface, including water, will make that boot less breathable.

How to Reapply DWR.

There are a variety of products on the market to use when reapplying the DWR. One I particularly like is Nikwax. Nikwax is also water based and non-toxic.

First, you’ll want to clean your boots well prior to applying a DWR or you’ll just seal in any dirt that’s on the surface of the boot. You also want to lightly dampen the surface of your boots prior to applying a DWR, particularly if the DWR is a water based product.

The DWR does not wear off all at the same time, so there will be places on your boots that still have a good coating of DWR. The Nikwax will stick to those areas that have lost their DWR coating and just roll off the other areas.

Your Boots are Your Support System

Your boots need to provide some type of support for the kinds of hiking you’ll be doing.

Boots need to provide lateral support to prevent your feet from twisting under loads on uneven surfaces. They also need to provide arch support that will
prevent flattening of your feet under heavy weight while still mimicking the action of the foot’s arch.

Sandals. While wearing sandals on the trail is fairly common, there are some drawbacks to consider. Most sandals have openings that will allow debris to either attack your foot or catch a ride on your sock and then proceed to irritate some part of your foot until you stop and find the offending hitchhiker. Also, with open toed sandals, bumping into a rock, root or sharp object on the trail can be painful and impact the rest of your hike.

Sandals are certainly comfortable and lightweight but for these same reasons are not always the best choice for the trail. With a pack, even a light one, you want a pair of shoes that will support your weight on all types of trails, particularly if you’re doing any side-to-side or up-and-down movements where you’ll want your foot to stay anchored in your footwear. Most sandals cannot provide that kind of stability or support.

Running Shoes. Again, most running shoes do not provide enough stability to anchor your foot. This can cause undue side-to-side motion and be potentially dangerous in certain situations where it’s crucial you maintain tight balance.

Do Your Boots Have Good Soul/Sole?

Well, actually I mean sole, as in the bottom of your boot. Having good soles on your boots is crucial. Let me repeat, CRUCIAL. If we go back to the fact that most of us are probably only going to purchase one pair of boots at a time, this one pair has to accommodate our entire range of travel, including mud, gravel, ice, wet rock, loose rock, snow and a number of other types of terrain. With this in mind, the soles of our boots must be good and must be in good shape, meaning they should be deep-lugged and made of a rugged rubber and not be overly worn down. As the soles of your boots wear, your traction on travel surfaces diminishes. Going back to my favorite stomping grounds in southeastern Utah, I can easily tell when my soles are starting to wear because my traction on the surface of the sandstone starts to diminish and that’s one place you don’t want to find yourself slipping.
Lacing.

It used to be that all one had to worry about were boot laces that didn’t break. Now, there are a large variety of ways to lace up your boots. However, if you stick with the tried and true one that you know, you’ll be fine. One note. To help when your boot is feeling too tight on the front part of your foot, loosen the lower laces and pull your top laces tighter to provide a snug fit for your foot. Conversely, if you’re having trouble with a tender spot near the top of your foot or ankle, or maybe the tongue of your boot is giving you problems, loosen the top laces a bit to provide some relief. You may not be able to keep this new lacing system in place for the entire day but you might find it brings some relief until you reach your destination or finally, and wisely, decide to stop and fix whatever’s ailing that foot!

I rarely have a pair of laces break, but I carry a spare pair anyway. The additional weight is minimal and should a lace break it’s better than trying to jury rig a lace.
Tongue

The tongue of your boot plays several important roles, including keeping water and debris out as well as keeping heat in.

Tips on the Care and Cleaning of Boots

*Always check the box your boots came in for a tag or insert that recommends the best way to treat your new pair of boots.*

After a hard day on the trail, it’s important to make sure you immediately do a little preventative maintenance on your boots. I recommend the following process.

1. Remove the laces from your boots, if wet, and Pull out the removable liners to dry.

2. Remove any dirt, mud or other debris from the boot using a soft brush. Wash any remaining dirt from the outside of the boot with a damp sponge or cloth. Too much water isn’t good for your boots, so don’t use the garden hose.

3. Let your boots dry completely, away from any heat source or direct sunlight. Too much heat and sun can cause cracks in the leather. And don’t put your boots over or next to a fire to dry. This is almost guaranteed to shrink the leather, dry out the leather too much or even burn the leather or boot fabric.

If you’re anxious to speed up the drying process, stuff newspaper or old rags in your boots, replacing the newspaper as it becomes soaked.

4. Apply a waterproof coating to the outside of the leather boots once they’re thoroughly dry. Most outdoor retailers and shoe stores will carry the waterproof coating made for your particular kind of boots. If you don’t know what coating to apply, go to your boot company’s website for detailed instructions. When you apply the waterproof coating, use light applications and reapply as necessary.

5. Once you’ve applied the waterproof coating, you store your boots in an area that is dry and cool and has adequate ventilation.

Socks

So, you have a great pair of boots and they fit perfectly. But if you head out on the trail without the appropriate type of socks, you could be defeating a primary purpose for purchasing a good pair of boots.
Recommendation. When hiking, stay away from cotton socks. Cotton does not have the ability to wick moisture away from your feet as well as either synthetics or wool. As mentioned in chapter 3, our feet produce from four to six ounces of perspiration a day. If that moisture stays on our feet, it’s easy for blisters to form and in cold weather for our feet to get very, very cold. You need socks that can wick, or move, the moisture from your feet to an outer layer of sock if you’re wearing liner socks, or if not, out to your boot. Keeping your feet dry, and warm when appropriate, will do wonders for keeping you and your feet happy.

What should you look for in a good pair of hiking socks?

A good pair of socks should have fibers that cushion your feet, wick moisture well, have enough elastic to keep your socks from constantly falling down, fit well without wrinkling, and be of a thickness that fit comfortably in the boots you wear without constricting any part of your feet.

Socks made from Merino wool do a good job of wicking moisture away from your feet and still do a reasonable job of insulating your feet across a wide range of temperatures. I prefer wool socks made of at least 85% Merino wool.

Socks made from synthetics also do a good job of wicking moisture away from your feet. While I prefer a blend of wool and synthetic materials for hiking, I've worn socks made of 100% synthetic materials in warmer months and had good success.

Some people prefer to wear a liner sock of a synthetic material and an outer sock of a wool and synthetic blend. The liner sock is designed to wick moisture from your foot to an outer absorbent wool sock, leaving your feet and liner sock mostly dry. Liner socks can be found in a variety of materials including wool, silk, or synthetic.

Banishing Blisters and Caring for Your Feet.

We’ve fitted ourselves with the proper boots, determined our choice of socks, our pack feels comfortable and we’re having a great time on the trail. After hiking for less than an hour, we feel a little irritation on our right heel. It’s nothing serious but our mind is certainly aware that there’s a little something rubbing on the back of our foot. However, we’ve only been on the trail a short while, our hiking buddies are really into the day and we don’t want to slow them down. Besides, we’ll stop for lunch in a couple hours or so and we can take a look at what’s bothering that foot.
This is a typical scenario for many hikers. Have you ever thought the same thing, only to get to lunch and find you’ve already got a nice blister forming? If this hasn’t ever happened to you, I can assure you it’s a very common occurrence.

When I’m leading a group, one of the first things I advise hikers is to stop at the VERY FIRST sign of any kind of irritation or “hot spot” on one or both of your feet. Irritation can come from a variety of things rubbing against some part of the foot: a small pebble, a piece of bark from the trail, a small seed or maybe a bunched sock. Whatever the cause, it’s enough to cause a hot spot and then a full blown blister. If it’s just a hot spot, or a reddening and irritation of the skin, you need to isolate this area from further irritation or pressure from your boot. If the hot spot has progressed to a blister, you still need to isolate the area. If the blister still has fluid in it you may need to drain the fluid before applying a dressing.

The goal for any hiker should be able to hike blister free. As a guide, I’ve heard people state that no matter what they try, blisters are still a part of their life. More often than not, their boots were never fitted right in the first place and blisters are a consequence. One of my more telling experiences involved a gentleman whose podiatrist recommended buying inserts for his boots because his big toes were always hurting. He was wearing were a size 12 boot and said his big toes were rubbing up against the front of his boots. When I measured his foot, it measured a 13, a full size larger than the boots he was wearing. With boots that actually fit, his big toes didn’t hurt anymore.

Your first goal should be to choose footwear that actually fit. That will help alleviate many of your blister problems. Remember, when choosing a pair of boots, go for fit, fit, fit!

**Hot Spots and Blisters.** For years, Moleskin was the choice of many hikers when treating blisters. It’s still a good alternative if you don’t have something along like Molefoam or Second Skin. Molefoam is a thicker version of MoleSkin and Second Skin is a combination of a breathable gel composed of 4% polyethylene oxide and 96% water.

First, to isolate the hot spot, or blister, from further irritation, cut a doughnut of Moleskin, with a hole in the middle (just like a doughnut) that is large enough to extend just beyond the edges of the hot spot or blister. You don’t want the Moleskin to touch the edges of the hot spot or blister because the pressure will
continue to irritate that area and cause an even larger hot spot or blister. So make sure the doughnut is large enough to completely encircle the hot spot and carefully apply it to the affected area. Then tape the Moleskin down to keep it in place. Carefully slip your sock back over your foot, position your foot back in your boot and test things to make sure everything feels comfortable. If it doesn’t, you need to recheck the area to make sure everything is how you want it.

If you do have Second Skin, congratulations. From my experience, I always include Second Skin in my first-aid supplies. There’s nothing quite as comforting as the gel component of Second Skin to help sooth an irritated area. Second Skin is applied directly to the hot spot or blister and then covered with some type of adhesive material to keep it in place. The gel of Second Skin helps remove all friction, has a cooling affect on the affected area and helps clean the area if it’s an open wound. If you like, you can still use Moleskin or Molefoam in the same way as before while applying Second Skin directly on the hot spot or blister.

Molefoam is the thicker version of Moleskin and I prefer it to Moleskin. However, in every case, you have to determine how much material you’re going to place between your foot and your boot. If you apply too much material in this space, it’s possible that you’ll be creating another pressure point in the same area.

To Lance or not to Lance a Blister. There are a variety of opinions on what works best. After more than 30 years of hiking, I find using a sterilized needle to drain the fluid from a blister works the best in most cases. One exception is if there is blood in the blister. That may increase the chance of infection if you lance the blister. In this instance you may be better off just isolating the area with Moleskin or Second Skin. The irony of this approach though is that if you continue hiking, it’s likely the blister will break anyway. So, you’ll still need to cleanse the area and protect it from infection the best way you can.

If you lance: Okay, this is where you get to play surgeon and it helps if your eye sight is good and your hands are steady. If you need to ask for assistance from someone, definitely do so. You don’t want the added irritation of an errant prick from a needle from a shaky hand or less than perfect eyesight.

After sterilizing a needle by holding it in the flame of a match or submerging it in alcohol for several minutes, gently pierce the base of the blister until fluid starts to drain. Then gently apply pressure to the blister with a finger or gauze pad to
drain as much fluid as possible. You might want to pierce different areas of the blister if you don’t seem to be getting all of the fluid out. It happens sometimes that several layers of blisters form under the skin and you’ll need to pierce each layer for the most fluid to drain.

Note: If you don’t drain the fluid from a blister and continue to walk on it, the pressure of each step pressing down forces fluid under the undamaged skin surrounding the blister and you simply keep increasing the size of the blister. So unless blood or a cloudy fluid (which could signal an infection) is present in the blister, my recommendation is to lance it.

Of course, you'll want to clean the area around the blister prior to lancing and you’ll want to thoroughly cleanse the area after lancing and before applying any antibiotic ointment or dressing. All in all, once you’ve lanced the blister I think you'll find that there’s a lot less irritation and pain than before.

**What Causes Blisters?**

Blisters form primarily from the friction between your skin and either your sock or something that gets in your boot or sock that causes friction. This foreign body can be anything from a small pebble, a piece of dirt or bark, a seed, pilling from your sock or even the bunching of your socks. Moisture is also a major contributor to the formation of blisters.

Hot Spots. A hot spot is an area of skin that is irritated and will usually be brighter and redder than the skin around it as well as being tender to the touch.

**Ten Tips for Happy Feet**

1. Stop on a regular basis during your hikes to air your feet out. Take your socks off, turn them inside out and remove any hitchhikers that have joined you. It’s always nice to let your feet breathe a bit. Plus, it will give you an excuse to rest or grab a snack and a drink of water. Remember – Drink! Drink! Drink!

Also, from time to time during your hiking day, adjust your boot laces. Sometimes you’ll find that you’ve laced your boots a little bit too snug in one area, applying excess pressure to one area of your foot. A simple adjustment of laces can make all the difference.

2. Trim your toenails to help stop blisters from forming. Untrimmed toenails are in fact the major cause of toe blisters. The best method for trimming your nails
is to trim straight across the nail and not to round the nails at the corners. After you’ve finished trimming, use a file to smooth the top of the nail down toward the front of the toe and remove any rough edges. Toenail polish is entirely up to you!

3. Don’t let calluses on your feet get too thick. Blisters can form under these calluses and cause more serious problems.

4. When applying dressing to any hot spot or blister, be careful not to put too much additional material between your foot and your boots. Too much additional material could cause additional friction points and even more blisters.

5. Help keep your feet dry and avoid blisters by applying foot powder to your feet. Powder is quite effective in reducing moisture on the feet which in turn reduces friction and helps prevent blisters. To be most effective, lightly apply powder at regular intervals. Even better, after applying powder, massage the powder between your toes. Not only will this feel good, but it gets the powder to areas that really need it. Before putting your socks on, roll socks on to the level of your heel, pour some powder down into your sock and then gently roll the sock on to your foot. You’ll be glad you did.

6. Buy boots that fit! Don’t settle for footwear that feels okay. When you have both boots on, your feet should feel happy!

7. Carry an extra pair of socks in your pack and change socks about half way through your hike. Since the more than 250,000 pores in your feet release up to a pint of sweat each day, your feet will be ready for a dry pair of socks.

8. Wear socks that are the right size and try a liner sock to help reduce friction. Liner socks come in synthetic materials, silk and wool. NO COTTON! Cotton is not good at wicking moisture away from your feet. Check your socks for raised areas or seams that might cause friction and hot spots and lead to blisters.

9. Wear gaiters. Gaiters can help keep debris out of your boots and reduce the chance for developing blisters.

10. On breaks, dip your feet into a cold stream or lake if time permits. This will help cool your feet and reduce blisters.
Chapter Four

Clothing

“Climb the mountains and get their good tidings, Nature’s peace will flow into you as sunshine flows into trees. The winds will blow their own freshness into you, and storms Their energy…and cares will drop off like autumn leaves.”

John Muir

Let’s go back to my major premise about dayhiking or traveling in the outdoors in general. Do you remember what our first rule of thumb is? Safety! Right! Almost everything we do should be planned around having a safe, enjoyable trip in the outdoors. Safety is also the key ingredient in choosing the clothing we’ll take on the trail. Over the years, the various items of clothing available to us have steadily improved in quality, durability and function. Whether you’re heading out for several hours or a long day, the basic thought behind what kind of clothing to carry is the same.

The Art of Layering

In order to stay as comfortable, dry and safe as possible in the outdoors, you need to have multiple layers of clothing that will work together to keep you safe, comfortable and dry in as many different conditions as possible. All this while still being lightweight, durable and easy to get on and off.

Layering is the foundation for our entire clothing system. Traveling in the outdoors provides a never ending variety of weather conditions, terrain, temperatures and unforeseen circumstances. With this in mind, we need to choose our clothing based on a system that will allow us to hike comfortably in as many situations as possible while carrying the fewest possible items with the least amount of weight.

How many layers should you have? In reality, you get to choose the layering system that works best for you as you experiment with the different types and weights of clothing you have. However, in general, the different layers can be divided into three major categories both by weight and by what order they appear in the layers: base, middle and outer.
Don’t get bogged down in the names of the different layers. Remember that the goal is to keep comfortable and dry. If one layer works on a hot day, perfect. If the weather changes and you need two or even three layers, that’s fine as well. I’ve been in situations where I’ve had five layers on and felt great. I was dry and could still move effectively.

Ideally you want your range of clothing to breathe, insulate, dry rapidly, wick moisture, be wind and rain resistant or wind and waterproof (depending on your activity) lightweight, and allow for freedom of movement in just a few layers.

**Layering Basics.** Basically, you want to put on and take off layers of clothing as often as conditions warrant, in order to keep yourself comfortable and dry. As often happens on the trail, you sweat and cool down, sweat and cool down. In some circumstances, this may mean putting on and taking off items of clothing every several minutes or maybe you’ll hike for hours without any changes. Again, think safety and comfort first. When we’re on the trail, the clothing and equipment we have with us will help determine our safety. And in order to maintain our clothing and our body in as good and safe condition as possible, it’s imperative that we monitor how much moisture and heat we’re putting out and how this moisture and heat are affecting what we’re wearing, and in turn whether we’re feeling dry, happy and warm or damp, cold and grumpy.

*Like the character Miaga in the movie Karate Kid who taught “Wax On –Wax Off” as a way to learn the basics of karate, layering teaches Clothes On – Clothes Off as a way to stay comfortable and safe in the outdoors. I’m not talking about skinny dipping here when I say Clothes On – Clothes Off. I’m talking about the layering principle. So keep your attention where it should be! We’ve still got some points to cover.*

Consider one possible day on the trail. One moment you’re hiking early in the morning along a trail that is fairly flat and outside temperatures are cool. You’ve got several layers of clothing on to keep warm, maybe a synthetic base layer, a long-sleeved shirt, a fleece vest and a pair of lightweight, zip-off quick-dry nylon pants. Soon though, the trail you’re following starts to ascend a steep hill and you find yourself breathing more heavily, building up heat under your clothes and starting to sweat. External conditions have changed and consequently your internal conditions have changed. Your body is responding to the greater energy requirements you’ve placed on it.
If you continue to hike uphill without adjusting your clothing, perspiration will soon migrate from your skin to your clothing and you’ll feel uncomfortable not only from the amount of heat your body is producing but from having damp clothing. The evaporative cooling when damp clothes start to dry can cause rapid chilling of your body, something that on a cool or cloudy day is not advisable.

Recommendation. As soon as you feel your body starting to heat up and perspire, remove as many articles of clothing necessary to keep yourself from overheating or perspiring too heavily and soaking your layers. The key here is to stop and remove clothing as soon as you start to sweat, not after your clothing is damp. Many people, from my experience, find it inconvenient to stop and adjust their layers because they don’t want to take the time or they don’t want to inconvenience their hiking partners. The truth is that if you’re sweating and needing to strip down to cool off, so too are your friends. So, stop along the trail, remove one or more articles of clothing until you feel comfortable, and then be on your way again. During a rest break or stop for lunch, you might want to add a layer to prevent too great a loss of body heat.

In addition to the actual putting on and taking off of clothing, many clothing items have an array of buttons, zippers, Velcro closings, etc. that can be buttoned, unbuttoned, zipped, unzipped, velcroed, unvelcroed, etc. to help regulate the build-up of sweat and/or body heat.

Base Layer. We want our base layer to do two things: dissipate moisture from perspiration and trap body heat. Since the base layer goes on first and is next to your skin, it should also be as comfortable to the touch as possible. After all it will be next to some of the most sensitive skin on your body! Today’s fabrics have come a long way from the scratchy woolen undergarments that were at one time the mainstay of any outdoor endeavor. The different types of synthetic materials usually feel soft to the touch even when there is an open weave or a waffle like structure to the fabric. Add in fast drying and lightweight and you’ve got a pretty good base layer.

Your base layer should fit closely but still allow for easy movement.

Many of the top synthetics used in base layers today absorb less than 1% of their weight in moisture, so you can see why they dry quickly. This is important. Wet clothing draws heat away from the body 25 times faster than dry clothing.
Most of you have probably had the experience of finding yourself chilled not too long after finishing some type of exercise. The evaporation of moisture from wet clothing causes the cooling you feel. If you happen to be in the safe, warm confines of your home, where you can luxuriate in a nice long hot shower, no problem. Out on the trail though, this can be a potential problem.

While base layer clothing comes in a variety of fabric weights, from lightweight to expedition weight, my recommendation is to have as lightweight a layer as possible next to your skin. If you need to add an extra layer, do so, but you don’t want to find yourself in a situation where the only base layer you have available is expedition weight if you increase your exertion or temperatures warm up considerably.

Base layers can be made from a variety of materials but my favorites are those made from polyester, merino wool or hemp. Most synthetic base layers are made from polyester.

Hemp is a relative newcomer to the base layer market. It’s a natural fiber that is becoming more popular, can actually wick moisture as well as or better than synthetics and is easy on the environment. Growing hemp requires no pesticides or fertilizers, requires very little water, if any, and can be grown in many environments.

Underwear is a base layer. Stylish or not, we want our underwear to wick perspiration away from our skin to the air or our next layer of clothing. Cotton underwear just will not do a good job of this, and you’ll find that after extended exertion you’ll have damp, or even wet, underwear. I’m pretty sure you know the feeling! Once you stop, even for a short break, this moisture will tend to provide a wet, clammy and cool sensation. To add insult to being chilled, cotton also tends to chafe. In most cases this is simply uncomfortable and an inconvenience, but if the weather brings cooler temperatures and windy conditions or if you hike for an extended period in a shaded area, what was once just a minor inconvenience can act to significantly cool your body.

Having cotton underwear as a base layer defeats the entire layering system. If your underwear, or undershirt, can’t wick moisture to your outer layers, you’ll stay damp and cold no matter how great your insulation and shell layers are.

Polypropylene and polyester synthetics and hemp are good base layer materials for underwear and perform significantly better than cotton. Merino wool is another option although it doesn’t wick quite as well as either polyester.
or polypropylene. Silk is another option for a base layer but I’m personally not a huge fan. While silk feels nice, I don’t think it wicks as well as a synthetic, it snags easily and I never seem to feel as warm in silk as I do in polyester, polypro or wool.

**Middle Layer.** This layer is responsible for wicking moisture away from the base layer and providing insulation, or dead air space, around our body to slow the loss of body heat. The middle layer can consist of more than one garment and should also be efficient at transferring moisture to the outer layer or shell.

Since air is one of the best insulators, many fabrics are designed to have an open weave to trap as much air as possible. Our body heat provides the furnace to heat this trapped air, providing thermal insulation.

Down, because of the structure of the feathers, is one of the best and lightest insulating materials and offers a high warmth to weight ratio. Synthetics like Primaloft are also quite efficient at trapping air and providing a high insulation value. One drawback to down is that it doesn’t wick moisture well. In fact, when down gets wet, it loses its ability to provide insulation. Synthetics, on the other hand, usually wick moisture well and if wet, can be wrung out and still worn for warmth. Primaloft, when wet, can retain up to 90% of its ability to insulate.

The middle layer is sometimes an enigma. While this layer is usually considered an insulation layer, if conditions are windy or wet and the middle layer is used as an outer shell, it needs to be wind resistant, or windproof, and waterproof. If not, the wind and rain will simply penetrate the garment and reduce any insulative value.

In reality, any number of synthetic or wool or wool blend items can serve as a middle or insulation layer. I often wear a synthetic full-zip layer that looks more like a light jacket than a shirt but works extremely well and in some cases is more comfortable for general all around hiking. However the more traditional long-sleeve shirt, with its looser cut, has advantages in warmer weather. A number of companies have come out with microfiber shirts that serve well as a middle layer, have a stylish cut, built-in vents and mesh panels to help vent heat and allow more air circulation around your torso. Of course, as you now know, synthetic fibers are better than pure cotton at wicking moisture and drying faster. As is hemp.
I love vests as a middle layer. They provide insulation to your core but leave your arms unrestricted for better movement. If I wear too many layers with sleeves, I find that my arms feel constricted, another reason why a vest is a favorite middle layer for me.

_Some companies have introduced shirts and other layers that have SPF (Sun Protection Factor) and insect repellent built in._

**Outer Layer or Shell.** Basically, your outer layer is the one you put on last and is critical to the entire layering system functioning properly. Your shell should protect against rain, wind and snow and is the protective layer that allows your base and middle layers to work most effectively.

Your shell could actually be your only layer if your T-shirt is all you need for hiking. In this instance your base layer and outer layer would be the same.

Sometimes you’ll want a shell that is waterproof and windproof. Sometimes though, if it’s somewhat mild outside, you may want an outer layer that allows some wind to penetrate as a way to release heat build up. In extremely cold weather you may not want to lose any body heat at all to the outside air.

Shells often have pit zips and front zips built in to help vent heat during periods of intense exertion. Pit zips are zippers located beneath your armpits and are designed to vent heat from your body and armpit area.

When deciding on a shell, you should choose one that will easily fit over any and all of your other layers. When shopping, either have your other layers with you or use layers from the store to size your shell.

**Pants**

Zippppppppp. What? If I had to recommend one type of pant for most warm weather hiking, it would be convertible pants. These are pants that can be converted from regular pants to shorts and back again simply by zipping sections of the pant legs on and off.

The advantages of convertible pants are numerous. When the temperatures are cool, when bugs are numerous, when the terrain is rough to walk through or sit on or when there is damp vegetation to move through, the full pant legs provide great protection. When the day gets warmer, you start going uphill, it starts to rain or you just feel like showing off your legs, being able to convert
your pants to shorts is almost magical. The sections of pants you zip off can easily be stored in your pack or your pockets.

It’s best to wear pants that are made from synthetic fabrics in case it rains or you get soaked for some reason. Cotton pants don’t wick moisture well, take longer to dry, are uncomfortably heavy when wet, can be uncomfortable on cold days, and at the worst cause hypothermia.

**What About Hands and Head?** These body areas, particularly the head, can play major roles in regulating body temperature and keeping you safe and comfortable.

You’ve probably heard that significant amounts of heat can be lost through the top of your head. It’s true. The simple act of putting on or taking off a hat can help conserve heat or help cool you. If this isn’t already apparent, try it sometime.

When you’re outfitting yourself for a day on the trail, keep in mind that you should always carry some type of headwear with you. Depending on the temperature and other conditions, you might prefer baseball type hats, fleece hats, wide brimmed hats, a bandana, or for colder weather, a balaclava.

And while I hate to admit it, for those men and women who might have a few less hairs gracing the top of their head, hats are a necessary precaution against the sun.

Carrying a pair of gloves and an extra pair of socks in your daypack isn’t a bad idea either. Your hands, particularly around your wrists, and feet, when covered and dry, can help keep your core warm.

Spring or summer storms in the mountains, or deserts, can bring cold temperatures, rain, sleet and snow. Having gloves and extra socks along can make a positive difference in your safety and comfort. If needed, your extra pair of socks can serve as gloves.

**Gloves.** I always carry, at minimum, a lightweight pair of gloves in my pack. When the weather turns cool in the mountains, it’s important to keep your hands warm. Often, when hiking at higher elevations, even in the middle of summer, there can be sleet, snow and freezing rain, and high winds are common. Being able to provide some protection for your hands, which are often exposed, is
important. Sometimes a pair of lightweight leather work gloves can come in handy if you’re in an area that requires significant contact with rocky surfaces.

**Bandanas.** Usually made from cotton, bandanas come in a variety of colors and have a variety of uses including napkin, dishcloth, washcloth, towel, emergency headgear or neck protector to name a few. Be sure to wash your bandana frequently, particularly during periods of warmer weather when sweat build up might cause problems. A great way to dry a bandana when hiking is to tie it to the outside of your pack.

“Look here!” (said the water rat), “If you’re really nothing else on hand this morning, supposing we drop down the river together, and have a long day of it?” The mole waggled his toes from sheer happiness, spread his chest with a sigh of full contentment, and leaned back blissfully into the soft cushion. “What a day I’m having!, he said. “Let us start at once!”

Kenneth Grahame - *The Wind in the Willows.*

**Rain Gear.**

There is probably more confusion about rain gear, what it really does and what kind to purchase, than almost any other item of outdoor clothing.

*The two areas where I want the absolute best gear possible are boots and rain gear. If you have comfortable, supportive, good fitting boots and quality rain gear that will keep you dry, you’re off to a good start.*

Rain gear would be your outer shell in our layering example and is primarily for safety. Raingear keeps out the rain, keeping you and your inner clothing layers dry. As a windproof layer, raingear helps keep you warm. (Gear that is waterproof is also windproof.) And raingear can also be an insulating layer because it traps body heat.

Water Repellent. Fabric that is *water repellent* will repel moisture for a time but will eventually allow it to pass through to you or your clothing. If you’re in a critical situation in the outdoors, you want a *waterproof* fabric that is going to keep water out, period.

Waterproof. Waterproof means the fabric will shed water completely. The fabric is either coated to stop water droplets from getting through the fabric or the fabric is a Gore-Tex type material, a membrane, that doesn’t allow water
droplets through to your skin. In other words the micropores of the fabric are smaller than any water droplet and therefore block these from entering your personal space.

*Always carry Rain gear in your pack. Even if it looks like it’s going to be clear and sunny for the next two weeks, take your rain gear. I know, I know, there are those of you who will say that 90% of the time you’re just not going to need the protection that rain gear will provide, and besides it just adds needless weight. I’ll concede that carrying rain gear will add weight to your pack, but not much.*

The advantage of having raingear in the event it does rain or snow far outweighs any extra weight you might have to carry.

*Raingear will make for a more comfortable and safer day, and in certain conditions, even mean the difference between life and death.*

Weather can be, and is, unpredictable, especially in mountainous terrain. If there is one item people resist carrying more than any other, it has to be rain gear. At the beginning of a hiking day when the sun is out, there’s not a cloud
in the sky and the temperature is fine, there is a tendency to go light and leave the rain gear behind. If we always knew in advance what the weather was going to be like, or what odd things might happen on the trail to throw a wrench into our plans, we could always pack the right gear for every situation. Obviously that doesn’t happen so it’s important to have the right gear to meet most unexpected situations.

**Example #1.** On the equipment/clothing lists we send to clients, rain gear is a mandatory item. The equipment list clearly states that rain gear is an item that each person must have and carry on a daily basis. On one trip in Ireland, a fairly rainy part of the world, after meeting the group at the airport and heading to our first destination, I asked if everyone had brought adequate rain gear. Four people said they had not and weren’t going to use any on the trip. When I said they would have to purchase some before hiking with the group, there were a few pointed remarks about my competency. All four stated that their Irish friends had told them that they didn’t use rain gear and didn’t see any reason why our folks should. The Irish friends though did not tell my clients that they were not out on the hiking trails for 4-6 hours at a time either. Of course, it was one of those days that started out bright and sunny, so my demand to purchase rain gear was doubly irritating. Under protest though the clients did purchase four sets of quality rain gear. It just so happened that about 45 minutes later the clouds opened up and it rained so hard we had to pull our van off the road because visibility was so poor. There was some embarrassed mumbling in the back of the van, but the need for rain gear during our hikes was suddenly quite apparent.

**Example #2.** On a trip in Arches National Park in southeast Utah, there were two brothers with our group who up until the third day were having a grand time. On day three we had sunny skies and temperatures in the 80’s. Now, hiking on slickrock, red colored sandstone, when the temperatures are in the 80’s, can be warm. On this particular day there was a young couple hiking near us that had on only skimpy tank tops, sandals and short shorts. Clothing that for the conditions seemed more than appropriate. The brothers were adamant in their opinions that requiring them to carry rain gear, and a sweater or some type of warm long-sleeved shirt, was beyond ridiculous. This same colorful and descriptive discussion went on through the rest of the day as well as dinner that night. However, even with their heated disagreement about having to carry these extra items, they followed my request and schlepped the extra gear on the trail the next day. As it happened, this day provided one of the best examples of how fickle the weather can be and why carrying the proper gear is important. After several hours of hiking, the winds picked up, dark clouds rolled
in and the temperature dropped about 20 degrees in a very short period of time. Then came rain followed by snow. As my job was sweep for the day, walking at the end of the group to make sure no gear or person got lost, I was the last to reach the group that had found some shelter from the wind and snow under a rock overhang. As the two brothers were standing next to each other, outfitted from head to toe in their extra long-sleeved shirt and rain gear, I silently walked up and stood between them without saying a word. But when I did glance at each of them, in unison they just looked at me and said “Don’t say a word! We get your point!”

Okay. I think you get the point, too! Rain Gear is a safety item that you might rarely use. However, when you need it, it can be a life saver!

Rain Gear Options

Rain jacket and rain pants – the best option.

While everyone has their own preference in raingear, time and time again, the combination of a rain jacket and rain pants offers the best option for keeping you dry, warm and safe.

Rain Jackets. There is a wide variety of rain jackets on the market. Some of the differences in price relate to quality, some to whether jackets are made from coated nylon or incorporate a laminate type material that breathes, and some because of the brand name. Taped seams, an important item for helping ensure a rain jacket is waterproof, are also important.

Please note that perfect rain gear might not exist. There are a lot of factors that determine how dry you actually stay. How well a fabric breathes, the level of your exertion, the amount of heat and sweat you produce, whether you have pit zips and how effective those pit zips are, and how clean your raingear is, all help determine how dry you actually stay.

Remember that waterproof raingear is also windproof. So, your raingear can serve two purposes at the same time. Even if it’s not raining your raingear can shelter you from cold or strong winds.

Bottom line is that as long as you have a jacket that keeps you mostly dry, meaning you might get a bit damp from condensation inside your jacket, you’ll do fine. Having a rain jacket that keeps the rain out AND breathes is a plus.
And your jacket should definitely have taped seams and pit zips, zippers under your arms to vent heat from your arm pits and from exertion in general.

**Rain Pants.** Do you need them? Yes! Again, safety is our number one priority and although the need may arise only infrequently, there are times, particularly in mountainous areas, where rain pants can play a crucial role in keeping you dry, warm and safe.

Rain pants don’t really have pit zips like rain jackets do but some pants have partial or full length zippers up the leg that allow venting of heat during hikes. You’ll pay more for pants with zippers.

The same information about fabrics, breathability and pricing are true for rain pants as well.

**Ponchos.** People often resist purchasing quality rain gear because they think they won’t really need it or that any kind of outer jacket will work just as well. Not true. And many choose ponchos because they usually cost significantly less than a good quality rain jacket and rain pants.

Ponchos are usually made from plastic or nylon, have a hood and are open at the bottom. There are flimsy, inexpensive ponchos as well as more durable types. While ponchos may work well for short, gentle rains, the less expensive and lighter weight ponchos usually tear easily, billow up around your body during any type of wind and in many cases are water resistant, not waterproof. The more durable ponchos sometimes have extra material to go over your daypack and sometimes have snaps to keep the poncho from blowing too much in windy conditions.

In a sub-tropical or tropical climates where the rain and temperatures are usually warm, a lightweight poncho might work well. Because ponchos are looser fitting than most raingear, they allow more air circulation, keeping you from sweating as much as you would in full rain gear.

Ponchos, because of the type of nylon used, also tend to be brittle in the cold, not a good thing if you’re relying on your gear to keep you dry.

**Coated Raingear.**

This is basically nylon coated with a waterproof substance. As long as the seams in the garment are sealed, the coating is still intact after use and you’re
not too active, this type of raingear works well and is generally less expensive than Gore-Tex type materials. The problem with coated fabrics is that they don’t breathe. When you’re active, hiking uphill, carrying a heavy pack, or moving quickly along the trail, sweat builds up inside your rain gear. Not only do your insulating layers get wet, so do you. While the rain doesn’t get in, you still feel cold and clammy because your sweat can’t escape. Moisture from sweat condenses on the inside of your raingear and you will definitely feel it.

**Waterproof/Breathable Garments, or Gore-Tex Type Raingear.**

Gore-Tex was the first fabric to make the claim of being waterproof and breathable. Okay, so how does it work?

The original Gore-Tex, from 1976, had 9 billion pores per square inch, which turns out to be about 20,000 times smaller than a drop of water. So raindrops, being much larger than the outer pores in Gore-Tex, cannot penetrate to you or your clothing. From the inside out, on the inside layer of fabric, Gore-Tex pores are 700 times larger than a water vapor molecule, allowing moisture to escape from your skin, or inner layers of clothing, to the outside surface of your raingear.

Sounds good doesn’t it? For the most part it is.

For Gore-Tex to be the most effective, there has to be a significant difference in the humidity levels between us and the environment. Our body temperature is usually around 98.6 degrees Fahrenheit. Depending on how active one is on the trail, a certain amount of sweat and water vapor builds up next to the skin. Because the pores in Gore-Tex on the inner surface of the fabric are 700 times larger than water vapor molecules, water vapor theoretically moves from your skin and inner layers of clothing to the outer surface of the Gore-Tex garment where they can be dissipated to the outside air.

However, let’s say you’re in Costa Rica or the southeast U.S. where the outside humidity is high. If the outside humidity and the humidity inside your raingear are similar, water vapor will not move from your skin through the Gore-Tex fabric very effectively. Consequently, while your raingear protects you from the rain, you can remain sweaty and damp on the inside.

**Tip.** When I’m traveling where the climate is warm and moist, I carry my raingear, but I also carry a compact umbrella. With raingear or a poncho, my view is limited by my hood if I choose to wear it up for protection from the rain.
If I don’t wear the hood up, I quickly get rain down my back. And in warm, tropical climates I also usually hike in shorts since the warm rain doesn’t bother my legs. The compact umbrella allows me to still look around and stay mostly dry on top. And I don’t have to worry about constantly putting on and taking off my rain jacket. I usually stay drier than if I were wearing rain gear.

Another important part of ensuring that your waterproof/breathable raingear continues to work as it should is to keep it clean. People often complain that their Gore-Tex is leaking when in actuality they simply haven’t kept their Gore-Tex garments clean. Waterproof/breathable jackets come from the factory coated with a durable water-repellent finish, commonly called DWR. Think about applying a coat of wax to your car. When water hits the wax on the surface of the car, it beads up and runs off. This principle works exactly the same for DWR finishes. The DWR causes water to bead up and roll off the fabric, helping ensure the Gore-Tex like material can breathe and transfer moisture from you to the outside environment.

How well the DWR coating works is affected by dirt, oils from your skin, smoke from your campfire, insect repellent and sunscreen for example. One way to refresh the DWR coating is to wash your garment with a mild detergent and send it through the drier on a low heat setting. This process is usually effective in reactivating the beading properties of the DWR. Before washing any of your raingear though, check the manufacturer’s recommendations. DWR coatings can eventually just wear off. There are products on the market that you can use to restore this coating.

**Fitting Your Raingear.** Remember to fit your raingear so you can easily wear additional layers of clothing underneath. Most people hike in a variety of climate areas so you need to fit your raingear to allow at least one additional layer and probably several layers of clothing under your raingear. Make sure you can easily and comfortably move your arms as well when you have your raingear on.

Full length front zipper. My preference is a rain jacket with a full length front zipper for easy on and off, a detachable hood, enough jacket length to protect as much of my upper legs as possible and one with large pit zips. Pit zips are zippered sections under your arm pits that can be opened to allow more air circulation.

**Emergency Rain Gear.** Large plastic trash bags make great emergency raingear. My equipment lists require clients to carry at least one large plastic
trash bag, just in case. If you cut a hole in the bottom of a large trash bag and two holes in the sides, one for each arm, you have imperfect but workable rain gear at least for the upper part of your body.

Chapter Five

Packs

"Own only what you can carry with you; know language, know countries, know people. Let your memory be your travel bag." --Alexander Solzhenitsyn

What’s the difference in daypacks, waist packs, packs with built-in hydration systems and backpacks? What’s the best choice for dayhiking?

Daypacks.

This is the term I use to describe the type of “pack” that I recommend for dayhikes. It’s important to have enough room to carry all of the gear, clothing, water, snacks and first-aid materials, etc., you’ll need even for a short day out on the trail. Consider that you might also be carrying a camera, binoculars, a compass or GPS, maps, insect repellent, sunscreen, etc., when deciding how large of a pack to carry. Once you’re on the trail, the reality is that you never know what might happen. Most of the time everything turns out fine. It’s that other ten percent of the time and those unforeseen emergencies that you need to be prepared for. So choose a pack that’s large enough for the basics and those extra items you might need to stay safe and comfortable when the unexpected occurs.

You might also consider choosing a pack that’s large enough to carry a few extra items of clothing in case you meet someone on the trail that didn’t bring enough of their own gear for extreme weather.

Often when I’m hiking in the mountains, I come across those who start a hike with only minimum clothing and equipment because the day starts out clear and sunny. And after all, what could go wrong on a warm, sunny day with no clouds in the sky? The line between safety and danger in the outdoors can be only a few short minutes.
It wasn’t that long ago that I was hiking a trail in Rocky Mountain National Park, on one of those beautifully clear and sunny August days. At an elevation around ten thousand feet, our elevation, it’s not uncommon to be hit with afternoon storms with rain, sleet and even snow. This was one of those days. At one point, the wind picked up and dark, ominous looking clouds came spilling over a ridge. The temperature dropped precipitously, and sure enough, cold rain, sleet and snow followed. This shift in weather happened in a relatively short period of time and it wasn’t long before the trail was covered in about two inches of snow.

A family of two adults and three kids, all under the age of twelve, had passed by earlier and as they detoured around us I was aware that they were lightly dressed for a hike in the mountains. They were all wearing lightweight shorts, tank tops and tennis shoes. Only one person, a nine-year old girl, was carrying a pack and that was a plastic kid’s pack that had little room for anything more than one water bottle.

Just as I had finished putting on my fleece vest, rain jacket and rain pants, fleece hat and fleece gloves and cinched everything up, I looked up to see the same three kids walking back towards us. Their parents had found shelter for themselves and sent the kids on to fend for themselves. (I must admit that I still don’t understand that bit of psychology.) At this point, all three of the kids were soaked to the skin, were shivering and could have easily slipped into hypothermia. Because I and my hiking partner always carry extra gear, we were able to exchange the kid’s wet clothing with warmer gear and get them safely down to the ranger’s station. (Obviously we don’t carry full extra sets of kid’s clothing in our packs, but with some of the gear we were wearing ourselves and some from our packs we were able to provide enough to keep the kids warm.)

**Capacity.** What size of a daypack should you look for?

My answer is one that would seem like I’m running for political office: purchase the pack that will comfortably fit all the gear you would normally carry.

Size is not the only concern though. The pack must also fit your torso length and the general shape of your body. If you purchase a pack that doesn’t fit, you’ll soon find hiking not to your liking.

I’ve seen reviews for daypacks that recommend pack sizes for dayhiking that range from 500 cubic inches all the way up to 3,000 cubic inches. At the larger
end, you’ll have room to carry those items you might need if you’re planning on staying out one night. The real test though, is to get a pack you like, that fits your frame and that comfortably carries all the gear you’ll need.

**Cubic Inches or Liters?** When looking for a pack, you’ll notice the volume, or internal space of the pack, is listed in either liters or cubic inches. To convert liters to cubic inches, multiply the number of liters by 60. So a 50 liter pack has about 3,000 cubic inches of capacity. (50 liters times 60 equals 3,000 cubic inches.)

**Adjusting Your Pack.**

Adjusting a pack is relatively simple. However, far too many hikers either don’t seem to know how to adjust their pack so it rides comfortably and efficiently on their frame.

Here are some steps to follow when adjusting your pack.

- Before you swing your pack on to your back, loosen the shoulder straps so there is no strain on your shoulders when trying to get both arms into the shoulder straps.

- To loosen the shoulder straps, simply lift up on the buckles on the shoulder straps. The straps will loosen easily and you can open the straps enough so your arms will easy slide in the hole made by the loop. Then to tighten, just pull down and back on the straps. Tip. The straps run at a backward angle. And they do so for a reason. If you pull in the same direction as the angle of the strap, it’s a very easy process to tighten the straps. On the other hand, if you pull straight down toward the ground, it will be harder to tighten the straps. Try it. Get your daypack and try this simple procedure. Easy isn’t it?

- Okay. You’ve got your pack on your back. You want to adjust it so it rides on your frame comfortably. How do you do that? First, buckle your hip belt. And you definitely should have a hip belt. A good padded hip belt will shift some of the weight of your pack from your shoulders to your hips and make your hiking experience a lot more enjoyable. Then adjust your shoulder straps so the weight is evenly distributed on each shoulder. Then tighten, or adjust your hip belt, so that you have a snug fit. You don’t want to cut off your breathing, just help transfer the weight of the
pack to your hips so your weight load is balanced between shoulders and hips.

Great. Now what? I think we’d better go back and talk about how to load the pack in the first place.

When you’re thinking about how to load your pack, think in terms of balance and convenience.

Let’s take balance first. Your daypack is hanging from your shoulders, on your back. So when you move in any direction you have a weight that you need to keep balanced as much as possible to avoid being thrown off balance. So how do we accomplish this?

First, we’re going to want to pack heavier weights like water bottles, your hydration system, like Geigerrig or Camelbak, heavy food, etc., close to your body and anywhere from the middle of the pack on up. You want the weight close to your back so it isn’t hanging out and away from your center of gravity and pulling you back and off balance, or as I tend to see so many people doing, having the weight at the bottom of their pack and toward the outside. What this does is tire your upper legs out much more quickly than if the weight were placed higher and closer to the body. Rain gear, extra clothing, etc., should be placed toward the outside of the pack and help maintain the heavier items closer to your body.

Convenience. Think about what you’re going to need to get to the quickest in most situations. Rain gear for one, any snacks or food you might plan on eating, toilet paper for the necessary stops and anything else that you want easy access to. (If you’re using a Camelbak, Geigerrig or other hydration system, obviously you don’t need to get to it but still try to balance it well inside your pack rather than having it off to one side. Consider that if you’re carrying a two liter Geigerrig, that’s a weight of about four pounds that can shift if you don’t anchor it well in your pack.

Okay, we’ve done our best to balance and adjust our pack for a perfect fit. Remember that as you walk, your shoulder or hip muscles may tire. You can relieve pressure on you shoulder muscles for a period by loosening your shoulder straps and tightening your hip belt. Conversely, to give your hips a break, loosen the hip belt and tighten your shoulder straps.
Chest Straps. We’ve gone over shoulder straps and hip belts. There’s one more, the chest strap. This strap is usually attached to the vertical front part of your shoulder straps and is, again, usually located above the nipple line. In this position, and when buckled, the chest strap helps spread the pack load among three rather than two locations. Most packs today come with all three, padded shoulder straps, a padded hip belt and a chest strap. Having all three on your pack makes carrying a weighted pack that much easier.

Accessory Pockets. Some daypacks are now made with accessory pockets, primarily for convenience. The pockets are great for carrying small items like chapstick, lens tissue for your camera, sunscreen, an energy bar or some GORP. If your pack doesn’t have pockets, you can usually purchase accessory pockets at your local outfitter or online.

Okay, we’re loaded, adjusted and ready to go. What else can we use our handy daypack for?

As a marker. If you’re with a group and you need to step off trail to use the bathroom, leave your daypack just off the trail so, should you get lost, someone will know where you left the trail. Those searching will have a place to start their search.

What to Carry in Your Daypack.

1. Headlamp
2. First-aid kit.
3. Water
4. Map and compass and GPS
5. Food
6. Rain Gear
7. Emergency Shelter
8. Hat.
10. Whistle or signal mirror.
11. Sunscreen.
12. Sunglasses.
13. Water treatment
14. Note telling people where you’re going and when you’ll be back (leave the note in your car so potential search and rescue folks will have a basic idea where you might be headed).

Chapter Six

Staying Hydrated on the Trail

Drinking your way to Nirvana or Water, hydration systems, water bottles and everything you need to know about staying hydrated on the trail.

Eat! Eat! Eat! And Drink! Drink! Drink!

These are probably the seven most important words on staying healthy on the trail you’ll ever hear. If your body is properly hydrated and nourished, meaning you’ve been imbibing plenty of water and munching on nutritious snacks on a regular basis throughout your hike, you’ll consistently feel better and perform better. Without question!

Our bodies are almost 70% water. Think about it. If we’re primarily water, it would make sense to maintain optimum levels of water in our system. Consider too that our organs and tissues are mostly water: muscle is 75%, fat is 20%, blood is 83%, bones are 22%, our heart is 80-90%, lungs are 80-90% and our BRAIN is 75% water. It goes without saying that if your brain is drying out, your decision making process will be affected!

Our energy level is greatly affected by the amount of water we drink. It has been medically proven that just a 5% drop in body fluids will cause a 25% to 30% loss of energy in the average person... a 15% drop in body fluids can cause death! Water is what our liver uses to metabolize fat into useable energy. It is estimated that over 80% of our population suffers energy loss due to minor dehydration.

An increased intake of healthy water will help metabolize and shed stored fat... resulting in more energy and less fat.

Think of a car. A car’s engine and major parts are lubricated by oil. What happens when the oil level gets low? A warning light comes on to tell you that you need to add more oil or engine damage could occur. If the oil level gets too
low, engine damage can occur and everything could come to a screeching, or maybe even flaming, halt! With the human body it’s not just our engine but every aspect of our body that is dependent on staying hydrated. Every one of our cells needs the right amount of water to function properly.

Low water levels in our body can cause a number of problems including poor concentration, constipation and an increased risk of developing kidney infections.

Now, I don’t know about you but if I’m hiking along the rim of the Grand Canyon I want my concentration to be at 100%! It’s a long way down to the Colorado River and I’d just as soon get there slowly. Being constipated on the trail doesn’t sound like all that much fun either. Kidney Infections? No thanks. I’ll have that extra glass of water please!

There is no dispute that water, and plenty of it, is necessary not only to the ideal functioning of our body, our mind and our emotions, but to our very survival. Experts would agree that we should drink a minimum of 64 ounces, or 1.8 liters per day, and more appropriately, 96 ounces each day. This amount will increase with exercise, heat and humidity. By the way, one U.S. gallon equals 128 fluid ounces so 64 ounces is one-half gallon or two quarts of liquid, preferably water.

When I’m leading a group, particularly in a hot, dry environment, I ask people to drink before and during breakfast, just prior to heading out on the trail, at regular intervals during the day, at dinner, and before going to sleep. I know that drinking prior to sleep will increase the likelihood that you’ll need to get up in the night to pee, but it helps keep you hydrated.

Hopefully, you’re convinced that drinking plenty of water is crucial to a healthy hiking experience. It’s ironic that one of my greatest challenges as a guide is to motivate my groups to carry and actually drink enough water throughout each day.

To Pee or not to Pee! That is the question! People have many reasons for not wanting to drink water on the trail including: “I don’t need water like everyone else”, “I don’t like the taste of water”, “I hate going to the bathroom outside”, “I drank enough at breakfast”, “It’s too heavy to carry.” or “I’ll drink when we get back from our hike.” Bottom line. Every one of us must drink on a regular basis throughout the day to stay healthy and maintain optimum energy levels.
No one is immune to becoming dehydrated. If you do get dehydrated, your body will let you know in a number of ways including nausea, headaches, feeling lightheaded and tired, and irritability. In extreme cases of course, severe dehydration can contribute to heat exhaustion, heat stroke and even death.

Proactive consumption. One of my strongest recommendations is to NOT wait until you feel “thirsty” before hydrating. Drink at regular intervals throughout the day. Once your thirst mechanism actually signals you to drink, you’re already dehydrated. So keep ahead of the curve and make it a point to drink at least every 15 minutes or so during the day. On exceptionally warm or humid days, you might want to shorten the interval between drinks.

**The Caffeine Myth – True or False?**

You’ve probably heard that drinks containing caffeine, like tea and coffee, are diuretics and actually cause you to urinate more frequently, eliminating valuable water from your body. For years I told my travelers not to count their morning coffee as part of their morning fluid intake. Well, so much for that theory. It turns out that moderate intake of caffeine isn’t that bad. A researcher out of the University of Connecticut, Lawrence E. Armstrong, in a paper published in the International Journal of Sport Nutrition and Exercise Metabolism, concluded that a moderate intake of caffeine, defined by Armstrong as one to four cups of coffee per day, was no greater a diuretic than water.

So, when you’re enjoying those croissants covered with wild berry jam and sipping your favorite espresso prior to your daily hike, your coffee does count, a bit, toward your fluid requirements.

Still, good old plain water is still my drink of choice as a leader.
Now that I’ve finally provided sufficient evidence for you to believe that drinking water while traveling in the outdoors is important, how do you carry all of the water? Isn’t it heavy?

Yes. But it’s about the same weight as coffee. Every gallon of water weighs about eight pounds so each quart you carry will weigh about two pounds. The minimum that I require hikers in my groups to carry is two quarts and I always request that they carry more. Many studies suggest that we lose about three quarts a day through normal activities. So it makes sense that if we increase our energy output by throwing on a pack and hitting the trail, and if the temperatures are high or we’re hiking uphill, we’re going to need more than the minimum of three quarts per day. Please keep this in mind when considering how much water you’re going to need for the trail.

For years, the standard container for carrying water in the outdoors was the plastic Nalgene quart water bottle. The standard design came in wide mouth and narrow mouth versions. People had their personal preferences, depending on whether they were doing mostly dayhiking or backpacking. The narrow
mouth bottle made drinking easier while the wide mouth bottle allowed water filtering equipment to be used on the lip of the bottle.

Today, we have the option to use a “hydration” system, as they've come to be called, which simply is a sturdy plastic bladder with a plastic tube and mouthpiece that fits in your daypack or rides on your back.

The primary advantage of this hydration system is that because the mouthpiece can be attached to the outside of your pack, you don’t have to stop, open your pack, get your water bottle out, open it, take a drink, put the cap back on the water bottle and then put it back in your pack, just to get a drink of water. Often this short but time-consuming process would be enough to discourage folks from drinking as much as they should. When the mouthpiece is always available to you, there are few excuses to not drink.

Camelbak was the first to introduce the hands-free hydration system. Mike Edison, a passionate bicycle rider out of Texas, way back in 1988, found that the typical two bike bottles for water just weren’t enough. So being inventive, and being tired of not having enough water, he joined an IV bag with a plastic
tube, sewed the new invention into his jersey and off he went, happy and well hydrated.

Physiologically, taking small sips of water at regular intervals is better than taking huge slugs of water all at once. Less water is absorbed with Big Slugs, meaning more is peed out. So get a hydration system, sip all day long and stay hydrated and happy.

Geigerrig has developed a pressurized hydration pack that allows the user to spray water to drink rather than sucking on a bite valve. Having a pressurized system also allows the user to spray off dirt from wounds and to provide water to hiking partners or pets without contaminating the bite valve. The Geigerrig also comes with an in-line 5-ounce water filter, allowing one to carry less water on the trail as well as filter out 99.99% of cryptosporidium and giardia.

**Example: Dehydration in Canyonlands National Park, Utah  Season: Mid-May**

*In the Needles District of Canyonlands National Park the Green and Colorado Rivers come together in a meeting of the waters. The Confluence Trail, eleven miles round trip, takes one to the lip of a cliff overlooking the melding of these two rivers.*

*Mid-May in Utah’s Canyon Country can be warm, sometimes in the 90’s. On this particular trip, the heat was noticeable, there was no water along the trail and little breeze, but the scenery was fabulous. The claret cup cactus were in full bloom, clusters of strong, deep claret colored blooms erupted from the buff colored sandstone and crypto covered earth at regular intervals along the trail.*

*We were in our fourth day of a ten-day exploration of southeastern Utah and by this point each group member usually had the routine down. Carry all the required gear, drink plenty of water the night before, plenty of water at breakfast and more water just before hitting the trail. AND always have a minimum of two quarts of water for the day.*

*I'm all for democracy on the trail with two exceptions. Carry all the required gear, as found on the equipment list sent to each traveler AND carry two quarts of water, minimum, when we’re doing anything except a short ten to fifteen minute walk to see a specific point of interest. No exceptions. (I'm well aware that many will think two quarts excessive and too much additional weight. From experience, having this additional margin of safety is important.)*
As the morning headed toward noon, and our expected arrival at the Confluence Overlook, I was well aware that people were going through water rapidly. I felt okay since I always have one additional guide with me and we both carry significant amounts of additional water. If I have other agreeable hikers in the group I also ask them to carry additional water on long hiking days. On warm days I also carry spray bottles filled with water and mist hikers along the way.

At lunch though, I noticed that one of the hikers was not engaging with everyone as much as usual. In explanation to my question about how she was doing she admitted that she had only brought one small water bottle, about a pint, and had not been drinking much.

We were able to provide more water for this hiker and get her back to camp safely but only because the guides happened to carry extra water. At the end of the day every hiker had gone through their two quarts of water and two additional gallons the guides had carried. One hiker, in an attempt to save weight, had left behind something more valuable than gold, their water.

Safety should be your number one priority. Carrying the proper gear and food won't take away from your full enjoyment of the experience. Not having the proper gear and food though can sometimes be the difference between life and death. Heat exhaustion and heat stroke can come on rapidly. Don't take that chance. Make sure you carry plenty of water, always!

Chapter Seven

Food for the Trail

“I think”, said Christopher Robin, “that we ought to eat all our provisions now, so we won’t have so much to carry.”

A.A. Milne

Nutrition is an important concept for all of us. On hikes, making sure we eat enough and often enough to maintain energy levels is a priority. On very short hikes obviously we don’t have much to worry about, but if we’re carrying a heavy pack or doing a lot of uphill or hiking for long stretches, we need to be
vigilant about our caloric intake. The basic premise here is that you need to have adequate caloric intake during the day for best hiking efficiency and so you don’t “bonk” at some point along the trail. “Bonking” is a somewhat common term for running low on glycogen, or blood sugar in your cells, that makes one feel shaky and hungry.

Let’s do a little in-depth thinking about why it’s important to maintain adequate blood sugar levels. Our brains are fueled by blood sugar and need adequate levels to function properly. When blood sugar levels get too low, we start to feel tired, we don’t think clearly and if levels drop far enough, we can pass out. Our blood carries only enough sugar to keep our thinking cap functioning efficiently for about three minutes. So we need to keep the blood’s supply of sugar replenished. Fortunately we have a liver which releases sugar on a regular basis. But even this magical organ only stores enough sugar for about twelve hours at rest. Intense activity requires significant amounts of blood sugar to fuel our muscles. If our activity is too intense for too long of a period without adequate replenishment of blood sugars, we can bonk.

How do we prevent bonking? One of the best ways is to snack on something about every fifteen minutes during our adventures. I’ve found that keeping a small bag of GORP in a side pocket or munching on peanuts or a piece of fruit on a regular basis does wonders for my energy levels during a hike.

Okay, let’s try and make this as simple as possible. Our muscles need glycogen, blood sugar, to operate. And remember, our brain is a muscle too. In some studies, it’s been shown that when our legs are telling us they’re depleted and need to stop, it’s not always our legs that are tired. It’s our brain that, after monitoring everything we’ve been doing, decides to shut things down. In reality, it’s been found that often our legs still have adequate glycogen to keep going.

So we need to keep our bloodstream full of glycogen, not only for our hiking muscles but for our brains as well. Some studies show that a combination of carbohydrates and protein do a much better job of keeping us from bonking than just carbohydrates alone. Whether this actually turns out to be true, it doesn’t hurt to carry an energy bar along that has both carbs and protein.

Now let’s consider one other very important fact about how our bodies work. Remember our chapter on drinking lots of water and the importance of staying adequately hydrated? I hope so, because even if you think you’ve got every excuse in the world for not drinking water on a regular basis, you’re going to stop short on this point.
Water is a key component in delivering blood sugar and protein to our cells. Even if we’re only slightly dehydrated, the process of getting blood sugar to our muscles is slowed down. Possible result? Bonking, or at the very least, feeling tired, lethargic and maybe cranky. Ever had that feeling on the trail?

So…eat, eat, eat, and drink, drink, drink!

Note: You may be the best trained, strongest, smartest hiker on the planet, but you can never anticipate what might happen on the trail. A storm might come in and strand you on the trail, you might meet a hiker or hikers who have been injured and you need to stay through the night with them, or you may injure yourself and need to wait until the next day for help. Whatever the situation, if you have to stay longer on the trail than planned, you’ll need to have extra food with you. So safety requires that all times you carry extra energy bars or other foods that will keep over time. Even if you’ve packed a bountiful lunch, always have something extra available should the need arise. And remember, it might be someone else that has the need, either someone in your own group who didn’t bring adequate food supplies or someone you meet on the trail who needs more nourishment. To repeat, our goal is to be well prepared for every situation, helping to ensure a safe experience on the trail.

Okay. What kinds of snacks are good to bring on the trail? To repeat, you need to have adequate food along for your hike, and you should start your day out with a good breakfast. You want your blood to have adequate amounts of glucose to feed your muscles and brain from the very start. Then at frequent intervals throughout the day you’ll want to replenish those energy stores. A mix of carbohydrates, protein and fats is best, but you definitely need to have an adequate store of carbohydrates for your day’s trip.

Some of my favorites are:

Energy Bars. When I visit my local Whole Foods Market or REI these days, I have my pick from numerous brands of energy bars. It used to be that one or two companies dominated this market, but not today. These bars range in their ingredients and pricing. My recommendation would be to find a bar you like, both in taste and texture, that contains good amounts of carbohydrates and protein.

Navel Oranges - This is my favorite fresh fruit for the trail. It’s usually sweet, peels easily, it’s available year round in many stores, and it travels well in my pack.
Apples – Gala and Fuji remain my favorite at this point because they tend to stay sweeter and crisper throughout the year than many brands. Apples, like oranges, tend to travel well in a pack.

Cookies. Limiting the amount of sugar in our diet is a good thing. However, enjoying a tasty chocolate chip, ginger snap, fig bar, or other tasty cookie along the trail is not an entirely bad thing. They taste great, usually travel well packed in a sandwich bag and make for a great snack when nothing else sounds good.

Hard Cheeses. When I trained with the National Outdoor Leadership School and we were out for five weeks in the Wind River Range in Wyoming, our 5 pound block of sharp cheddar cheese was our favorite food. Cheddar cheese and some others keep amazingly well when not refrigerated, even in warm weather, travels well in a pack when packaged well, is loaded with carbohydrates, protein and fats and can be used in a variety of ways both for meals and for trailside snacks. Sharp cheddar is my favorite.

GORP. If you didn’t already know, for years GORP was thought to stand for good ole’ raisins and peanuts. It depends on who you talk to or what book you read because some references say GORP, or scroggin, stands for sultanas, currants, raisins, orange (peel), ginger and nuts. A 1913 edition of the Oxford English Dictionary defines GORP as a verb that means “to eat greedily.” This works for me because it goes along with the adage to Eat, Eat, Eat and Drink, Drink, Drink!

Whatever you choose to believe GORP means, it’s one of my favorite trail foods. It’s easy to make, you get to choose what to put in it, it travels well in a plastic bag, preferably a zip lock bag, you can munch on it throughout the day, and it’s tasty, a prime reason to eat anything. At NOLS our protocol was to walk for 50 minutes and then take a ten minute break. During breaks we snacked, but we also snacked as we walked and GORP was our first choice.

Besides good ole’ raisins and peanuts in your GORP, one can add chocolate chips, carob chips, butterscotch chips, coconut, cereals and granolas, walnuts, almonds, sunflower seeds, pumpkin seeds, M&M’s, dried fruit, pretzels, corn nuts or any other combination that suits your GORP fancy.

Crackers. I prefer low fat Triscuits and low fat Wheat Thins but there is quite a variety of crackers that taste good and make a good snack.

Peanut Butter. You can now buy peanut butter in plastic squeeze tubes.
Sandwiches. Over time I’ve found that bagels hold up better than regular bread. Either way it’s best to leave the tomatoes and mayonnaise off until ready to eat. Sliced full length dill pickles are also a great addition to sandwiches.

Hard Candies. Again, I don’t necessarily recommend these for the health of your teeth, but they do taste good, they travel well, people love them and they come in almost any flavor you want. Sometimes, when you know you’re going to have a long day on the trail, it’s nice to have a small hard candy as a treat.

Group Snacks. If you’re traveling with a group on a warm day and want to be very popular, fill up a gallon zip lock bag with fresh cantaloupe or watermelon slices and offer them at a rest stop.

Baby Carrots are also great.

What do you like best as a snack or lunch on the trail? Send us your ideas. We’d love to hear from you!

EAT! EAT! EAT and DRINK! DRINK! DRINK!

Chapter 8

Trail Techniques that Will Keep a Smile on Your Face.

"For my part, I travel not to go anywhere, but to go. I travel for travel’s sake. The great affair is to move; to feel the needs and hitches of our life more nearly; to come down off this feather-bed of civilization, and find the globe granite underfoot and strewn with cutting flints." --Robert Louis Stevenson, Travels with a Donkey in the Cevennes

Okay, so you’ve found the perfect boots, you’re dressed for any occasion and you’ve got all the food and water you’ll need for a great day in the outdoors. You’ve also managed to get yourself to the trailhead on time.

Before you take that first step on the trail, I invite you to consider that there are a few trail techniques, time tested and proven in the field, that will help you and your companions have a safer and more enjoyable experience.
1. **Leave No Trace.** We’ll talk about the Leave No Trace philosophy of hiking in another section of this book, so I’ll only briefly touch on some topics dear to my heart.

Be conscious of your hiking. What do I mean? Let’s go back to one of my favorite examples: Canyon country in southeastern Utah. The desert is held in place by a fragile crust of living organisms called Cryptogamic Soil. (There are actually several names for this desert crust, the most being Biological Soil.) This community of organisms can sometimes take more than 50 years to grow to maturity and in actuality it’s this crust on the sandy soil that holds much of the desert in place and allows other larger plants to take hold and further anchor the entire ecosystem. This Cryptogamic soil usually grows no more than 2-3” high and is easy to ignore or forget. In most national parks there are numerous signs posted that talk about the importance of not stepping on this soil.

My point is to be sensitive about where you walk. Whether it’s Cryptogamic soil or fragile plants of the alpine tundra in mountain areas, your weight pressing down on these living organisms can cause significant damage.
It’s not that you can’t explore, but please give consideration to where and how you walk. With the Cryptogamic soil, because it’s a desert area, there are usually enough rocks to use as stepping stones so that you don’t have to walk on the Crypto. Or, if you see an area where the water naturally drains after a storm, use those runoff areas to go off trail. These clean areas where the regular flushing from runoff doesn’t allow Crypto to grow anyway are great places to walk without doing damage.

Also, when walking along a designated trail in canyon country be aware of where you step when you stop for a break, when you’re passing other hikers or just when you’re looking at the beautiful desert surroundings. Often, people will gradually make a trail wider, killing the Crypto, for no other reason than they’re not paying attention to where their feet are falling.

I often see people notice a beautiful flower or other captivating scene they just have to take a photo of. They hurry over to take a photograph not realizing that they’ve just destroyed an entire area of Crypto to get that one shot. It’s likely they could have gotten their photograph without destroying the Crypto if they had taken a moment to look at their surroundings before heading off. Remember, our outdoor environment is a living environment and everything we do has an impact.

DO NOT WALK IN POTHOLES. Even dry potholes, that are so prevalent in Canyon Country, are home to many life forms and are often the beginning environment for future plants, including trees.

Cryptogamic Soil often has its beginning in potholes. At first the crypto may look like little more than a dark smudge on the rock rather than something one might identify as a plant. Slowly though, if it’s not disturbed, the Crypto gets taller and starts to do its job as the super hero of the desert. As it grows it traps dust, sand and other debris and various seeds now have a place to take root. Gradually, as the crypto does its magic, trapping more windblown particles of soil, sand and organic matter, an environment develops that is favorable to larger plants and even trees. If, through careless walking we don’t allow the Crypto to take hold and do its thing, we’ll be stunting the growth of the desert. From a seemingly barren pothole, a mature biological community can develop that eventually anchors the entire desert ecosystem.

Naturally, you can’t always control what other people in your group are doing, but sometimes it’s okay to drop a subtle hint. Like, HEY, GET OFF THE
CRYPTOGAMIC SOIL!!! YOU’RE KILLING IT! Sometime light and tactful like that.

The same holds true for high alpine treks. The fragile plants that grow at high altitude have a very short growing season and need every advantage they have to grow, flower, and reproduce in a very short period of time in a very harsh environment. If we walk too much on these plants, the stress can injure and even kill them, changing the area’s natural ecology. Again, you can still explore, just do so with great care and concern for the other species of life around you.

Trekking Poles. If you use trekking poles, consider that placement of your poles extends beyond the trail into the Crypto. So, while doing your best not to walk on the Crypto, each time you place your poles you place holes in the Crypto on each side of the trail. Some people will say no big deal; the crypto will grow back. True, it might. HOWEVER, it might take the crypto over 50 years to reach its mature stage again.

The impact we’re having on the outdoor environment, even by those of us who consider ourselves to be “treading lightly” is increasing simply because our numbers are increasing.

2. Walk Like a Cow. Now that’s a nice thought! If you watch a cow walk through an area where the ground isn’t completely flat, most of the time the cow will step over something like a fallen tree rather than first stepping up on the tree and then continuing over. The safety issue here is that if the log, or other object, happens to be slippery, it’s possible to find oneself losing balance and ending up on the ground, possibly with an injury.

So, my suggestion is to imagine your favorite breed of cow as you hike and then emulate that behavior. Note to those whose imagination tends to run wild. I’m only referring to the act of stepping over trail obstructions. I’m not suggesting that you try chewing your cud or anything like that and I take no responsibility for that if you do!

3. First one through. When traveling through dense brush or trees and need to move through ahead of a companion, each of us is responsible for our own travel and safety. Your primary responsibility is getting through the vegetation safely and without damage to you or your equipment, or for that matter, to bush or tree. It’s a nice gesture to try and control a limb or bush that’s blocking the trail so the person behind you isn’t slapped in the nose, but your first job is to make sure you get through okay. Each of your companions needs to make their
own way safely. There’s nothing to say that you, as the first, or second or third person, can’t hold the branches for everyone else. But it’s not your responsibility.

4. Breathing Room. Speaking of following too closely, give the person hiking in front of you enough room so that their primary thoughts aren’t worrying about whether you’re going to step on their heels or run into them if they have to stop for some reason. Traveling through the incredible beauty of the outdoors should allow for one’s mind to just wander, absorbing the scenes, scents and sounds as you travel, not continually wondering if your hiking partner is about to step on your heels.

5. Walk Softly and Quietly. The natural sounds of the outdoors, the wind, the birds and the streams are wonderful and we accept this natural background noise as part of the environment, part of what we come outdoors to experience. Keep this in mind as you head down the trail. Too often we’re so caught up in our conversations that we forget to experience nature’s natural soundtracks. When I’m by myself, I’m sometimes so overcome with joy for the scenery around me that I want to whoop and holler and sing at the top of my lungs. However, if I meet other hikers, I want to give them the option to hike in silence if they so choose and not to be subjected to whatever sounds I’m making, even if I was able to carry a tune and sing like a robin.

6. Cell Phones. Turn them off! I wouldn’t argue that a cell phone can’t play a role for safety, but it’s unlikely that any of us are so important that we need to be in regular contact with the outside world while hiking in our favorite place. Even hearing the ring tones of a phone brings the urban environment smack dab into the middle of our experience. We go out to get away from the hustle and bustle of everyday living, not to continue the same grind in a beautiful outdoor setting. If you must make a call, please go off trail and away from the rest of the group to talk. Some trail guides now list places on the trail where cell coverage is available. Again, for safety’s sake, it’s always good to know where one can reach out for help, but please limit your cell phone use to emergency situations.

7. Pressure Breathing. Have you noticed that when you go uphill your breathing and heart rate increase? If not, you need to send me your secret for how you do this? However, if you have noticed, it’s because you’re using the large muscles in your legs to help move up the slope. Our leg muscles are some of the largest in our body. In the act of propelling us uphill, they consume vast quantities of oxygen. Consequently we breathe faster and our heart rate increases in an effort to bring in more oxygen.
One way to help regulate these increases in respiration and heart rate, because ideally you’d like to keep these two measurements as steady as possible, is to use the pressure breathing technique.

Here’s what you do. Remember when you used to try to swim the length of the swimming pool underwater? You’d fill your lungs with a lot of air, hyperventilating in a sense, so you’d have enough oxygen to reach the other end of the pool. On the trail, you’re not going to hold your breath, but you are going to take a deep breath and then forcefully expel it. When you expel your breath, you want to purse your lips almost like you would when you whistle. You then forcefully expel the air. You want to make a solid sound, almost like a small windstorm passing next to you. Whewwwwwwwuuuuuuu! (It would sound something like that.) It’s okay to practice this right now if you’d like and if you do, don’t worry if there are people around. They’ll just think you’re practicing for the next Reality TV show.

Here’s another way to think of pressure breathing. While sitting right where you are, make an “O” with your lips and blow out while making a loud noise. That was excellent! And that’s the idea. Now take a deep breath and do the same thing, but this time forcefully expel the air, continuing to make that large storm-like sound. As you’re hiking uphill, if you do this on a regular basis, and take short slow steps as you ascend, you’ll actually regulate your breathing and heart rate, hopefully slowing both down a bit. You’ll also have more energy when you do reach the top.
The other part of successfully hiking up a long, or for that matter, short uphill section of trail, is to take it slow, use short steps, pressure breathe and don’t worry about getting to the top faster than anyone else. Those who start off quickly, stop after a few minutes, then take off like rabbits again, then stop, then take off again, tire easily and find going uphill isn’t that much fun. Now, there’s one more technique you can add to make going uphill more enjoyable. It’s called…

8. The Rest Step. And no this is not a new kind of dance done in the outdoors. It’s a technique for regulating your breathing and heart rate particularly when going uphill and for giving the large muscles in your legs a bit of a breather. If you’re ascending a long uphill, your legs will always be in a bent position and never get a chance to rest. Without a break once in a while, even for a very brief moment, your legs will tire and so will you. So as you ascend, let each leg in turn completely straighten, if only for a fraction of a second. Actually stand completely upright on each leg for a short moment. This brief pause allows the leg muscles a moment of rest and allows you to go uphill without tiring as much. Your legs will thank you.
9. Where to Stop for Breaks. In some outdoor areas, some sections of trail can be quite narrow. Narrow is good because it creates as little disturbance in the natural environment as possible. The trouble comes when one or more persons or groups are using the same trail and one party has taken a rest break or lunch on the trail. While it may seem like the trail is the best place for a break, please be courteous and step off trail for these activities. Be careful to impact the surrounding terrain as little as possible when moving off trail. If you’re going for a lunch break, send one person off to scout a suitable location for the size of your group. Get far enough off trail, when at all possible, so that others passing through the same area aren’t even aware you’re there. There’s something special about thinking you’re the only people hiking in an area. It may not be true, but psychologically it provides us a unique feeling of solitude.

10. Orange Peels are Beautiful. NOT! Leave absolutely nothing in the outdoors. Well, I suppose a fingernail or two might be okay, but in terms of food, band aids, cigarette butts, apple cores, banana peels, plastic bags, pop cans, beer cans, baked bean cans, etc. pack out. You carried it all in and you can carry it all out.

I know. I know. I’ve heard all of the arguments. Apples and oranges will eventually decompose. Sure, almost everything will decompose given enough time and the right environment. But think about this. It takes on average 2-10 days for a banana peel, 6 months for an orange peel, 1-12 years for a cigarette filter, 1-100 years for a Styrofoam cup, 10-20 years for plastic bags, 80-100 years for an aluminum can, 450 years for a six-pack holder ring and 500-800 years for diapers and sanitary pads to fully decompose.

Okay, some of you might say, what’s 2-10 days for a banana peel to decompose? Big deal. “I’ll just throw the banana peel behind a bush and no one will ever know.” Maybe, maybe not.

There’s another point I’d like you to consider, one that I think is important. When I travel to an outdoor area, I usually do so to get back to a pristine environment and away from the clutter and trash that one usually finds in urban areas. If I’m walking along, even if I’m hiking with others, and come across a banana peel or orange peel lying on the ground, I’m immediately aware that someone else has been there. It’s an invasion of my own private outdoor experience. And even though I always know that someone else might have passed through the area, as long as I see no real evidence of their passing, it’s like I’m an explorer discovering the area for the first time. That’s my own personal way of looking at things, but I’m sure you’ll agree that it’s much nicer to stop for lunch or a break.
or to be just hiking along without seeing visible evidence that other hikers have recently been there too.

There seem to be fewer and fewer places we can get away to these days without some type of interruption: cell phones, pagers, horns, sirens, planes, trash and who knows what else. So when I go to the outdoors, I actively seek a place and environment that’s free from the intrusions and accoutrements that go with our urban society. Seeing a dried up orange peel lying next to the trail intrudes on my outdoor experience. Pack it in, pack it out!

11. Break Time. If you’re contemplating a long hike, you’ll want to plan your breaks wisely. If your breaks are too long, you might not make your destination or make it back to the trailhead before dark. In addition, any time you break for more than 10-15 minutes your muscles start to cool down and it will take you more energy to rev back up and get started again. If breaks are too short, you’ll tire more easily and might find you’re not enjoying your experience as much as you had hoped. When you stop for a break, add a warm layer to avoid chilling. As you’ve been hiking, you’ve probably been sweating as well. Adding an extra layer, unless the temperature is quite warm, will keep your body from cooling too rapidly and causing you to chill.

12. Walking Uphill. With the rest step and pressure breathing we’ve talked about, we’ve covered some of the techniques for walking uphill. Some other methods to consider include angling your steps back and forth across the trail, or traversing, to cut the steep angle. This sometimes is more of a psychological advantage rather than an actual physical advantage. However, if it works to make the ascent easier, why not?!

13. Walking Downhill. Take short steps when possible and be very careful to watch out for loose pebbles and rocks on the trail. If you get up on enough of these loose pebbles, your feet can fly out from under you, and the result can be a painful experience. I’ve learned from long experience, that when coming down a steep, heavily used trail, I need to be constantly aware of my foot placement so I don’t wind up unintentionally kissing the trail. Hiking poles help immensely in this kind of situation.
Chapter Nine
Sanitation – An Adventure in Itself!

If a bear pees in the woods and there’s no other bear there to hear, does…?

Or How to Get Rid of Water and other items in the Woods, or mountains or deserts, etc!

Question. Which would you choose? Going to the bathroom in the woods and any supposed discomfort that might entail or getting heat exhaustion or heat stroke and possibly dying?

I know it sounds like a ridiculous choice, but it’s far more accurate than you might think. Our bodies are mostly water. Our organs are mostly water. Our blood is mostly water. So each day we need to keep our fluid levels topped off at full.

Some people are not used to, or comfortable, going to the bathroom in the woods. However, if we go back in time a bit, the outdoors was our primary place for our personal priorities.

There are entire books now that are about well, taking care of your bodily functions in the woods. In reality, it’s not that complex and can actually be somewhat entertaining.

Different people also have different ideas about what techniques are the best not only for us but for the environment as well. So, let’s get started…

#1. If you simply have to do #1, or take a leak or pee or whatever your favorite term for emptying your bladder is, here are my recommendations.

First, since it’s important to stay well hydrated, you’re probably going to find yourself going to the bathroom on a frequent basis. That’s a good thing. And since you’re well hydrated, you’ll avoid unnecessary headaches, lethargy, irritability and other things that come from being dehydrated. So, don’t worry, be happy, stay hydrated and take a leak often.

Second, change your mind set. Enjoy the process of peeing in the great outdoors! It’s actually an enjoyable experience to be away from the maddening crowds, surrounded by beautiful scenery, silent and alone (well, hopefully alone.) Make the experience an enjoyable one. Take time to look around and
enjoy discovering things you might not see while you’re moving along the trail. Just watch where you’re going!

Third. Protect the environment. Urine usually has some salts in it and can be caustic to plants and small creatures. Be polite. Try to avoid watering the plants or other living creatures.

Fourth. Step AWAY from the trail. If you’ve ever been walking down the trail and caught a whiff of urine, it’s probably because someone decided to just let go right there on or close to the trail. There’s really no excuse for this. In most cases it should be relatively easy to find a private place well off from the trail. It’s just common trail etiquette.

Fifth. Face away from the wind! If you’re a guy, this is probably more important than if you’re female. I’m assuming that most females squat to pee, but hey, if you’re female and choose to stand up to pee, this suggestion goes for you as well. It doesn’t take much of a breeze to change the course of your watering effort and bring it right back to you personally. So face downwind.

Sixth. Avoid watering streams, lakes, ponds, rivers, etc and any water source that wildlife or humans may have to use for drinking. Stay at least 100 feet from any water sources. Exceptions to the rule. In desert areas, dry streambeds are recommended by some as the place to do your thing. Personally, I agree with this, at least for taking a leak. Many dry streambeds rarely see water, in the form of rain, so are generally okay to use as a pit stop for peeing. Dry streambeds are also usually mostly free from Cryptogamic soil. They also usually have some vegetation and offer some protection from sun and fellow travelers and allow you to move freely as opposed to trying to avoid fragile areas.

Seventh. If you’re female and you’re just doing some watering, make sure you have some toilet paper and a zip lock bag along. The old wisdom was that it was best for females to just “drip dry” after finishing with their watering. Current wisdom says this isn’t the best idea. It also used to be standard practice to bury or burn toilet paper after use. Not so anymore. Today, it’s recommended to carry ALL toilet paper out whether you’re going #1 or #2. It’s really not that difficult and it’s not that bad. If you’re worried about odor, cut a small piece of sponge or paper towel, soak it in bleach or other cleaner, wring it out until it’s just moist, and leave it in the zip lock bag you carry your used toilet paper in. And when you get back to the trailhead or your camp, dispose of your used paper.
Eighth. Avoid watering your boots. It’s easy to forget what you’re doing while meditating on all the beautiful scenery surrounding you and mistakenly water your boots as well. Nuff said!

Ninth. The Big One. Okay, I know, I’m just trying to make this subject a little lighter for those who are still a bit squeamish. Again, staying hydrated helps with regularity as well, so remember to eat, eat, eat and drink, drink, drink. Constipation on the trail is no fun!

Admittedly, doing the Big One takes a little more preparation than a simple watering. However, this experience can be just as enjoyable, so settle in and let’s talk about how to find utter bliss in the experience.

1. You’re going to need some toilet paper and a zip lock bag, preferably gallon size, to carry your used toilet paper back to the trailhead for disposal. Yes, you do need to do this. As more and more people head to the outdoors for recreation and adventure, we’re having an impact on these areas. And one of those impacts is leaving numerous pieces of toilet paper all over the place. This is absolutely not good outdoor etiquette and quite frankly it’s unacceptable. No one wants to be walking through an area enjoying the good life only to come across someones used toilet paper. So PACK IT OUT! ALWAYS!

2. Go away from the trail. It’s the same with watering, but in this case, not only do you not want to go directly into a water source or even close to it, you don’t want to go in any damp areas that might drain into a water source. It’s recommended that you go at least 100 feet from any body of water or drainage area. You’ll be able to tell if it’s a drainage area because it will be damp to the step or feel.

3. And this is important, choose a location with a view. Hopefully, you won’t be there that long anyway, but still, it’s better to have something inspiring to look at.

4. There are several options on what to do with the Big One. I prefer to dig a cat hole. You know, just like cats do. You’re probably going to want to have a small shovel or trowel along to dig this hole. Lightweight trowels can be found at many outdoor or garden stores. Just make sure it’s sturdy though. In some areas, the soil can be rocky and hard and tough on a plastic trowel. Dig a hole at least six inches deep and 4-6 inches wide and keep the material from the hole close and consolidated. (I like to cut a rectangular section out of the soil, lift the entire 4” X 6” plug up as one piece and keep it near. If there’s vegetation covering the plug you’ve just dug out of the Earth, keep it moist so the vegetation doesn’t die.) Deposit the Big One. Remember, you’re packing the
used toilet paper out with you so there won’t be any left in the hole. Take the 
plug you’ve dug from the Earth and replace it in the hole, tamping it down lightly 
with your foot. Hopefully, you’ve dug your hole deep enough or you’ll need to 
jump back quickly if you tamp down too hard! Okay, now to make the area look 
as natural as when you found it, feather the edge of the plug with your shovel or 
trowel, and replace any sticks, pine cones, etc. that may have been on the 
surface of the plug in the first place. The area should look just like it did when 
you found it. No one should be able to tell you were there.

Exceptions. There are always exceptions. At high altitude, usually over about 
12,000 feet, some suggest that because there is so little bacteria in the soil to 
break down organic matter, and because of the high levels of ultraviolet 
radiation from the sun, it’s better to just do the Big One on the ground, behind 
some bushes or other covering and let the elements dry out and break 
everything down. It seems to work pretty well.

Ass Backwards. In one particular case, you actually want your ass backwards, 
backwards to the top of the hill that is. Oh, yes, if the only place you can find is 
on the side of a hill, face downhill. I know it may seem obvious, but there have 
been cases where people have faced uphill, squatted to deposit the Big One 
and rolled downhill. Not funny!

Okay. That should about cover most of what you’ll need to know about watering 
and depositing the Big One.

More Sanitation Secrets. Staying healthy in the outdoors involves more than 
just staying hydrated and one of the most important things you can do, as often 
as possible, is to wash your hands. You should wash or sanitize your hands 
after using the bathroom and whenever you have the opportunity. If you’re 
snacking on a regular basis, you’re going to want clean hands while you’re 
eating. Carry along some packaged alcohol swabs or handy wipes that you can 
easily clean up with and then pack out to the trailhead. Remember: pack it in – 
pack it out – Everything!

Water and Sanitation. First, don’t drink the water in the outdoors without 
filtering it. I know some people say they’re immune to any parasites, bacteria 
etc., but you never know what’s been in the water you’re taking your drink from. 
One of the most common parasites in water is a protozoan called Giardia 
Lamblia. This little creature can cause serious havoc with your intestines. 
Many water sources in the US, urban and rural, are now infected with Giardia. 
There are only a few medications that work on Giardia so it’s best to avoid it in
the first place. If you can’t carry enough water for your hike, make sure you have a reliable water filter with you and that you know how to use it.

**Sharing Spit.** Okay, I know it sounds kind of gross, but here’s the point. When you’re hiking in a group of people, don’t share your water bottle unless you already share spit with that person, meaning you’re in a relationship with them. You never know who might be incubating a stomach flu. Sharing your water bottle would be a sure way to spread the flu among the group. Or it might just be that one person’s particular internal flora and fauna is different enough from yours to cause your system problems. Passing water bottles around, even if someone is thirsty, isn’t a healthy thing to do. So when you’re with a group, make sure you have enough water of your own and stress the importance of everyone bringing their own adequate supplies of water.

If you have a Geigerrig hydration system, because it’s pressurized, you can squirt water into other’s mouths without getting their saliva on your mouthpiece! I highly recommend this type of hydration pack.

So, now that you know how enjoyable peeing in the woods can be, head out, give it a try and enjoy the scenery!

### Chapter Ten

**Trekking Poles**

Or, if you feel more comfortable with the original name given to these trail aids...walking sticks. Basically, today’s modern trekking poles are modified versions of the early hickory, agave or pine walking stick, which most of us usually found lying on the side of the trail. Actually, walking poles have probably been in use for as long as man has been walking, picked up to help with balance, warding off bothersome critters, pushing around the embers of a fire, knocking an apple from a high branch or just having something along while hiking alone on the trail. Of course, today’s versions come with telescopic adjustments to adjust the length of the poles, little shock absorbers, referred to as anti-shock systems, to help absorb the shock of the pole as it strikes the ground, a range of grips from hard rubber to cork and some that are ergonomically correct, different baskets to limit the depth the pole sinks in either wet ground or snow and different tips, some of rubber for harder, rockier places and some with metal tips for softer surfaces.
To Carry or Not to Carry – that is the question!

Whether you choose to use trekking poles on your hikes or not is a matter of personal choice. Some people absolutely love them and can’t do without them and some find them more a nuisance than helpful. With that in mind, let me offer some thoughts from my own experience.

Benefits of Trekking Poles.

1. Stability. Poles provide extra stability for difficult or challenging terrain. River crossings are a good example. With even a slow current, river or stream bottoms can be rocky or slippery, or both, and uneven. Having a second or even third point of balance can be very helpful in such situations or if you’re hiking on a trail with a lot of exposed roots, scree or other loose material. Having the added stability that poles provide is great insurance against falls. (Note: When crossing a stream or a technical part of the trail where taking a fall is possible, take your hands out of the straps in case you need to let the poles go.)

2. Uphill and Downhill: Stability and Your Joints.

Uphill. When I’m leading a group along an uphill section of trail, I often hear a lot of heavy breathing and side comments about making it to the top. Having poles along, particularly ones with an anti-shock system, can help to lessen the strain of walking uphill. Since the poles “give” with each plant, there is less force on the joints. Of course, remember that you’re expending energy just carrying poles, so the total amount of energy used is not necessarily less. And, rather than having your two legs doing all of the pushing to get you uphill, poles allow for your arms to do some of the work. Also, having one or two extra points of balance on steep terrain can be a lifesaver. You’ve probably been on sections of trail that are steep and rocky and make standing up a challenge. Poles are wonderful friends in these situations.

Downhill. While people tend to grouse about the difficulty of hiking uphill, I find it’s more taxing on the joints, especially for those of a more advanced age,
when going downhill. The constant pressure on the joints can mean a nighttime of sore and complaining joints and muscles. Trekking poles can lessen the force on joints on downhill sections significantly to the tune of thousands of pounds of pressure per day. That’s a lot that your joints don’t have to endure on downhill sections. This alone might make carrying poles worthwhile.

Poles also offer added balance on downhill sections. If you’ve ever had the experience of walking down even a moderately steep slope with loose dirt or gravel underfoot, only to have your feet suddenly slide out from underneath you for a not so gracious landing on your bum, you’ll know why poles and their extra points of contact with terra firma might be valuable.

3. **Poles can Reduce Fatigue.** Because you’re using more of your body to do your hike, employing your arms as well as your legs, you may actually feel less fatigued.
4. **Reduced Stress on your Knees, Hips, Ankles, Legs, Feet, and Back.** I’m going to be a bit repetitious here, but I do so because I think this is such an important point. Many people say they don’t walk as much as they would like simply because their joints hurt. Using poles can help reduce the stress on joints and the pain that comes with that stress.

5. **Breathing Easier!** Many of us tend to slouch a bit when we walk. For our breathing to be as efficient as possible, the more upright we stand, the easier it is for our lungs and diaphragm to do the work of getting air in and out of us as efficiently. Walking with poles tends to require us to stand more upright so our breathing is more efficient.

6. **Shelters.** If for some reason you find yourself needing to erect a shelter, possibly using your rain gear and any other articles of clothing, your poles can act as supports for the shelter.

**Downside of Using Trekking Poles**

1. **On the Level.** When I’m walking on a level or nearly level trail, I don’t find much advantage in carrying poles. I feel like they’re in my way. If you have adjustable poles, you can simply adjust them down to their lowest length and store them in or on the outside of your pack. On the other hand, some people claim that by using their poles throughout the day they have more endurance and can actually hike longer than normal.

2. **Trekking Trips.** If you’ve used trekking poles, you can probably remember a time when the poles got tangled up with your feet and you went down to meet Mother Earth on her terms, and in rather quick fashion! Be careful. It takes a little bit of time to get used to walking with poles. I’ve found that I get tangled up most often when the pole tip bounces off a rock or hard object and then somehow gets between my two feet, causing me to trip. So be vigilant!

3. **Handholds.** On steep sections of the trail where you may need your hands for balance, having poles strapped to your wrists can be maddening. In a group situation, I usually wind up collecting the poles as people are making their way up or down a demanding area of the trail and handing them back when it’s convenient.
Hands Required in Some Areas  Ward Luthi – Walking The World

4. Over-Reliance. This point may well fall into several of the others I’ve mentioned, but I want to stress how important it is to not become over reliant on your poles as your primary base of support. One of the best examples I can think of is coming down a trail that has long stretches of rock on both sides. People can sometimes start to think that the pole is an actual extension of their arm and can hold to the rock as well as one’s hands can. Absolutely not true. The metal tip on a trekking pole does not have much holding power on rock. In situations like this, pack your poles away and use your hands to help you get up or down the trail. You’ll be much safer.

5. Fellow Hikers Beware! When people are strapped into their poles and walking in a group, there is a tendency to forget that poles, with their metal tips, can be fairly lethal weapons. I haven’t seen a major injury from using trekking poles, but often someone will forget they’re strapped into their poles and start waving their arms around to illustrate a point or point out a landmark. Having a four foot long pole, with a sharp tip, at the end of your arm can cause concern among or damage to your hiking partners if you’re not careful.
Packing your Trekking Poles  Ward Luthi – Walking The World

How to Adjust Your Poles for Your Height

Adjusting trekking poles for your height. What seems to work well is to adjust the height of my poles so that my forearm is parallel with the ground. For general purpose hiking, this seems to work well. In reality, as with most things you do in the outdoors, you should experiment with different pole lengths to see which feels best and which gives you the most traction and balance while hiking.

What to Look for in Trekking Poles

Telescopic Poles

I prefer trekking poles that can be adjusted. I can collapse them to fit in my luggage for travel, loan them to a hiking buddy if they need additional support or balance on the trail, adjust them for either uphill or downhill travel, and I can collapse them to fit in my pack if necessary.

Going Up? In general you'll want to shorten your poles to allow for better purchase as you ascend. Shorter poles should also give you better control as
you move upwards. How you choose to plant your pole in relation to your feet is an individual matter, but in general, if you’re on moderately steep terrain, you’ll want to plant your pole and step with the opposite leg. This tends to provide a greater platform between your body and your poles and therefore greater balance. At some point, the terrain may become so steep that it will be more beneficial to plant your pole and step on the same side, i.e. right hand pole plant while you step with your right leg.

Going Down? When descending, in general, you’ll want to lengthen your poles and place your hands on top of the poles. Place your poles in front of you and transfer some of your weight to the poles as you step.

**Baskets** While not crucial, baskets, those small plastic rings near the bottom of the pole, help support the pole from sinking in soft earth or snow.

**One Pole or Two?** If I’m going to carry poles, I prefer two poles to provide better balance and to have an extra available to loan to a hiking buddy if needed.

## Chapter Eleven

**Sunscreen and Skin Protection**

“Sunshine on my shoulders makes me happy.” is a line from one of singer John Denver’s hit recordings and for me at least, describes my love of a sunny day in the great outdoors. Hiking along a trail, enjoying the warmth and light of the sun all around me is as close to heaven as I can imagine. At the same time, those sunny rays can cause serious damage to our skin.

I was born with red hair and blue eyes, not the best skin combination for spending most of my life as an outdoor guide. In addition, during my younger years, the only sun protection that was available was a thick, white, metallic smelling ointment called zinc oxide. Most of us used zinc oxide for one primary purpose, protecting our noses from sunburn. I don’t know why, but we all seemed to understand that we needed to protect our noses, even though the rest of us burned just as easily as our noses. The zinc oxide actually worked quite well. Probably the only drawbacks were 1) if you absently scratched your nose and then touched some other part of your body without realizing it, and 2) the zinc oxide acted just like those fly paper traps you see hanging down from
the ceilings of certain bars and restaurants, trapping unsuspecting flies, mosquitoes and other small winged creatures.

Safety: I’m going to give you more information on ultraviolet radiation than you probably want, or need, to know. The bottom line is to make sure you protect your skin from the potentially harmful rays of the sun. Protecting your skin is not just for appearances sake, dry and wrinkled skin, brown spots, etc., that are a result of too much exposure to the sun, but about the potentially life threatening effects from several types of cancer.

Bottom Line Safety: Wear enough of an approved sunscreen to protect your skin from the damaging rays of the sun. Some of you may have that beautiful dark glow from inheriting great skin genes. However, even with that beautifully tanned look, you’re susceptible to the same damaging effects and cancers from the sun as the rest of us, even if to a lesser degree.

_Ultraviolet Radiation_. Sun damage to our skin comes primarily from Ultraviolet (UVR) radiation. There are two lengths of UV rays we’re primarily concerned with, UVA and UVB. Each length differs in how deep they penetrate the skin and the kind of damage they cause, although both damage the skin. (In reality, the ultraviolet spectrum is continuous but we’re most concerned with these two wavelengths. Okay, before we get too much exposure here…

**UVA Rays.** Ninety five percent of all Ultraviolet radiation that reaches the earth’s surface is UVA, or long wavelength radiation. These longer wavelengths can penetrate the deeper layers of skin, and while not as intense as the shorter UVB rays, are thought to be primarily responsible for aging and wrinkling in our skin. More importantly, it’s these longer UVA rays that are thought to be most responsible for skin cancers.

Note: UVA rays are present during all hours of the day, can penetrate clouds and glass and are with us even during the winter months. So, even when you think you’re safe, the long arms (rays) of UVA can damage the skin. Basically, as long as it’s light outside, even on a cold, cloudy day, UVA rays can be damaging your skin. In fact, consider this: up to 80% of all UVA rays can get through to us on cloudy days. That’s a lot! What this means is that even on cloudy days you need to apply sunscreen that protects against UVA and UVB rays.

And keep in mind that snow can reflect up to 80% of the sun’s rays and sand up to 25%. When you’re applying sunscreen, don’t forget the underside of your nose and under your chin.
**UVB Rays** are shorter than UVA rays and are considered mid-range in length. It’s these UVB rays that are primarily responsible for sunburn, tanning and to some degree skin aging and skin cancer. While the long arms of UVA tend to be with us throughout the day and throughout the year, the shorter UVB rays are most intense, and do the most damage in the U.S., during our warmer months, April to October, and during the warmest parts of the day, between 10 AM and 4 PM. UVB rays do not penetrate glass like UVA rays do.

**UVC Rays.** Okay, I know I said we would primarily be concerned with only UVA and UVB rays. However, I think it’s important for us to keep in mind that a third type of ultraviolet radiation, UVC rays, are the most intense. It’s only because UVC rays also have the shortest length that our ozone layer effectively blocks these rays from reaching our skin and causing damage. We might consider this fact when we’re making decisions that affect our ozone layer.

*While the differences between UVA and UVB may seem confusing, the effects of exposure to ultraviolet radiation are clear. Exposure can cause not only sunburn but premature aging and wrinkling of the skin and without question is the primary factor responsible for skin cancers.*

**Tanning.** Just what is it and why do we tan? When your skin turns darker from exposure to the sun, your busy little skin cells are basically just producing darker pigment (melanin) in your skin as a way to block radiation from penetrating your skin.

**Sunscreens, SPF ratings and Ultraviolet Radiation.**

The SPF (Sun Protection Factor) rating you see on sunscreens primarily relates to how effective that particular sunscreen is in preventing sunburn from the mid range UVB rays.

To help understand the differences in SPF ratings, consider the following examples from the Skin Cancer Foundation website.

If it takes someone’s unprotected skin 20 minutes to sunburn, a sunscreen with an SPF rating of 15 will, in theory, lengthen that 20 minute window to sunburn to five hours, or about 15 times longer than if you applied no sunscreen. Or, if you like percentages instead, a sunscreen with an SPF of 15 will block close to 93 percent of all UVB rays, a sunscreen with a rating of 30 will block 97 percent of UVB rays and a sunscreen with an SPF rating of 50 will block nearly 99 percent of all UVB rays reaching your skin.
NOTE: There is no sunscreen that can block ALL the ultraviolet rays reaching your skin, so theoretically, even with a sunscreen with an SPF of 50 being applied every two hours, some ultraviolet rays can be penetrating your skin. Moral? Apply high SPF sunscreen at regular intervals each time you go out. Remember, those pesky, long UVA rays can penetrate clouds and are at work trying to penetrate your skin as soon as it gets light in the morning and stay at work until the last rays of sun disappear over the horizon in the evening.

Also, please remember the following. Research suggests that no sunscreen is effective for more than two hours so you need to reapply sunscreen at least every two hours, and more if you’re swimming or sweating a lot. Also, remember what we said about those longer UVA rays penetrating to the inner layers of skin. Even if you don’t notice significant reddening of the skin, you can still be experiencing significant damage to those fragile collagen fibers underneath.

Note: Since today we understand that the longer UVA rays can also do serious damage to our skin, we want a sunscreen that provides protection from both UVA and UVB rays, not just one with a high SPF, or UVB, rating.

So, on every hike make sure you wear a sunscreen that blocks both UVA and UVB rays, has a SPF of at least 30 and remember to apply sunscreen to your lips as well.

**Wrinkles are simply “Mistakes”.** As we age, our skin naturally loses some of its elasticity and thickness, or as one might say, it’s “youthful” appearance. However, much of the skin damage we’re seeing today is a result of too much exposure to the sun, not just the normal aging process. The middle layer of our skin, called the dermis, has a number of fibers that support the skin’s structure, including collagen and others. It’s these fibers, particularly collagen, that are damaged by ultraviolet radiation, particularly the longer UVA rays. As the body tries to repair some of the damage done to the collagen fibers, it sometimes makes mistakes putting everything back in its right place. It’s these “mistakes” the body makes that causes wrinkles in our skin and gives that leathery appearance.

The best protection against premature aging of the skin from the sun is through daily use of sunscreens with an SPF of 30 or higher. Not only can the use of sunscreen help prevent damage in the first place, but some studies suggest that it can even reverse signs of aging that already exist in your skin.
Is Sunscreen for Everyone?

Absolutely. Again, research shows that sunscreen should be used as early as six months of age. Before six months of age, don’t even think about going out in the sun. Your skin is just too young and too sensitive. Give it time to toughen up a bit. And once again, those longer UVA rays are not blocked by most windows so don’t think that you can sit in your favorite bay window and not apply some sunscreen.

How Much Sunscreen Should You Use? I like this part because it should be easy for most people to remember. You should use a minimum of one ounce of sunscreen per application. Here’s the easy part to remember. One ounce of sunscreen is equal to the amount of sunscreen it would take to fill a shot glass. Think about this now. Let’s say you’re planning for a fabulous day at the beach and plan to stay at least eight hours. Theoretically, if you follow the recommended guidelines of using a minimum of one ounce of sunscreen per application and that for sunscreen to remain effective, you need to reapply it every two hours. That means you’re going to need to use 4 ounces of sunscreen during the day or about half of an eight ounce bottle. Now ask yourself whether you’ve been using enough sunscreen on your jaunts to the beach or on your favorite trail!

Doing shots for sunburn protection! Wow! All Right! One shot glass = one ounce = two tablespoons = happier skin.

Timing is also important. To get the most benefit from your sunscreen, you should apply it at least 30 minutes before exposure to the sun.

Men Beware! First, let’s talk about the idea that most of the sun exposure we get occurs before we reach the age of 18. Not true says the research. In fact, it looks like we get only about 25 percent of our total sun exposure by the time we reach 18. Okay guys, here’s the scary part. It seems that those men who are 40 years of age and better get the highest doses of ultraviolet rays because they spend the most time outdoors of any age group. In fact, white men over the age of 50 are the most susceptible to skin cancer, being the group most diagnosed with melanoma, a deadly form of skin cancer. If that’s not enough to convince you to lather up with sunscreen whenever you venture outdoors, add to this the fact that skin cancer is now the leading form of cancer for men over 50, ahead of even prostate cancer.
UPF? You probably thought we were just about done going on about protecting our skin from the sun. Not yet! UPF, like SPF, is a measure of ultraviolet radiation, only this time it stands for Ultraviolet Protection Factor and refers to the amount of UVR that is absorbed by the clothes you wear rather than the sunscreens you apply to your skin.

As an example, a fabric with a UPF of 50 will absorb all but about $1/50^{th}$ of the sun’s UV rays. To help this make more sense, $1/50^{th}$ of the total amount of UV radiation reaching your skin will equal about 2% of the UV radiation reaching you.

Can clothes help protect us from sun damage? Yes is the obvious answer, but then again some commonly held beliefs about wearing clothes for sun protection have been shown to be not quite so true. To illustrate, did you ever wear a white T-shirt at the beach or pool as protection against sunburn? Well, if you did, you probably felt the effects of the sun if you stayed out long enough. Remember that the UPF relates to the amount of radiation reaching your skin through your clothing. A white T-shirt has an UPF of 7, which means that about $1/7^{th}$ of the UV hitting your clothing will get pass through to your skin. One-seventh, in percentages equals about 14 percent. That’s still quite a bit when talking about the damage UVA rays can do to your skin, including causing skin cancer.

Instead of a white T-shirt, a dark, tightly knit T-shirt would provide significantly more sun protection. One rather ingenious test to see if a particular fabric will do the job against the harmful ray’s of the sun is to hold the piece of clothing up to the light. UV radiation will get to your skin if you can see through the fabric.

Okay, now let’s complicate things a bit. If you stretch the fabric that you’re counting on to protect you from the sun, you’ve just lost some of your protection. And, if that piece of fabric gets wet, your skin won’t be happy because you’ve just reduced the effectiveness of the fabric by about 50%! A white T-shirt that’s wet has a UPF of about 3, which means that about 33 percent of the UV radiation is reaching your skin.

You can purchase clothing that has been treated with a chemical sunscreen to give the article of clothing a greater level of protection against the sun. To be considered protective against the sun, clothing should have a UPF in the range of 15-50, although the Skin Cancer Foundation recommends a minimum UPF of 30 while recommending a UPF of 50 for best results. Keep in mind, that like regular clothing, if you stretch your treated clothing, get it wet or wash and wear
it repeatedly, it can lose some of its protective qualities. The good news is that you can replenish the protective factor of your clothing simply by throwing in it your washing machine along with your regular detergent and adding a product called Sun Guard which contains a sunscreen. This should give you added protection for about 20 washings.

A few Last Tips. Guys, after you shave, put your sunscreen on first before you apply lotion and then if you can, use a lotion that already has sunscreen in it. And women, and men too possibly, wearing fragrances can make you more sensitive to the sun. Also, certain medications can also increase sun sensitivity. Check with your doctor about any medications they may prescribe.

Whew! Okay, now go outside and have some fun!

Chapter Twelve

Leave No Trace

What exactly does Leave No Trace mean? Just exactly what it says. Don’t leave behind any trace of your visit to an area. Many think this relates primarily to not leaving trash behind. That’s an important component of this philosophy, but only one part. There are actually seven principles that make up the Leave No Trace philosophy.

Stewardship of our outdoor environment probably dates back to our early ancestors, but the current Leave No Travel philosophy started with the U.S. Forest Service in the 1960’s. Then in the 1980’s the Forest Service, the National Park Service and the Bureau of Land Management put out a pamphlet called “Leave No Trace Land Ethics” to provide a guiding set of principles for the increasing number of visitors to our country’s natural areas. Collaboration among a number of outdoor groups, equipment manufacturers and land management agencies in the mid-1990’s was instrumental in the establishment of an official nonprofit organization dedicated to promoting the Leave No Trace Philosophy. Appropriately this new organization was called the Leave No Trace Center for Outdoor Ethics.

The seven guiding principles, as listed by the Leave No Trace organization are:

1. Plan Ahead and Prepare
2. Travel and Camp on Durable Surfaces
3. Dispose of Waste Properly
4. Leave What You Find
5. Minimize Campfire Impacts
6. Respect Wildlife
7. Be Considerate of Other Visitors

The Leave No Trace website, in describing their philosophy and set of principles, talks about encouraging people to act voluntarily to observe the guidelines for protecting sensitive outdoor areas. If people always acted responsibly or always understood and appreciated the fragile nature of many of our protected natural areas, voluntary observance might be appropriate.

*However, I believe that in specific areas we need to develop stronger enforcement policies to help ensure those destinations are protected.*

Take for example certain areas of the desert southwest in the U.S. where Cryptogamic ground cover, or brown sugar soil, protects the fragile desert ecosystem. A conglomeration of algae, fungi, lichens, mosses and other organisms, this botanical community is actually alive and can be severely damaged or killed by carelessly placed feet, trekking poles or bicycle tires.
Cryptogamic soil is the superhero of the desert. It acts as a spongy surface to absorb moisture, its raised ridges act as a windbreak to stop soil erosion and capture windblown seeds that can then sprout and grow, provides nutrients young plants need and provides shelter for various small insects and other life.

In places like Arches and Canyonlands National Parks in Utah, careless travel by thousands of visitors, millions in the case of Arches National Park, has destroyed large areas of this Cryptogamic carpet. Where this crust has been overly disturbed, loose sand is the only ground cover, not a conducive environment for wildflower, grass or other seeds to sprout.

Unfortunately, budget cuts have meant fewer backcountry rangers and educational materials in many natural areas to help educate hikers and bikers about the importance of this crust. The visual difference in an area that has been untrammeled and one that hasn’t is striking.

If a visitor to a museum were to deface or destroy museum pieces, the visitor would be held responsible. Visitors to museums are also required to follow certain guidelines established by the museum. For example, visitors cannot
touch, walk on, or paint over certain delicate works of art. To do so would 
damage these priceless pieces. Why should we be any less vigilant of priceless 
works of art in our natural areas?

Let’s take a more detailed look at some of the more important points of each of 
these seven principles.

**Plan Ahead and Prepare.**

It’s important to always understand the nature of the area you’re visiting. On a 
broad scale, visitors to outdoor areas should understand that nature and wild 
animals, while interesting and fun, can be dangerous and even deadly. 
Regardless of the area you visit, always be prepared for the unknown. Things 
can happen quickly in the outdoors. Because these areas can often be some 
distance from a town or medical facility, it’s important to carry the proper 
clothing and equipment and use common sense.

Specific areas have specific concerns to be aware of. In the canyon country of 
the southwest United States, groups have become trapped and killed by flash 
floods when local weather conditions seemed benign. Storms occurring many 
miles away can produce flash floods that travel quickly to distant canyon 
systems, trapping unaware travelers.

In high altitude mountainous areas, it’s common to see visitors take to the trail 
with little more than t-shirts, shorts and tennis shoes, often carrying little or no 
water. Whether it’s an afternoon storm that brings dropping temperatures, rain, 
sleet and even snow, altitude sickness, dehydration from the altitude and heat 
or being struck by lightning, people should always understand the potential 
hazards of any areas they visit.

Small groups are preferable to larger groups in sensitive areas. Smaller groups 
are generally quieter than larger groups. This has several benefits. The 
individual members of the group can enjoy a more peaceful experience, wildlife 
is disturbed to a lesser degree and other groups or individuals traveling in the 
same area are also less aware of the group’s presence.

Leave No Trace recommends the use of map and compass to reduce the use of 
“marking paint, rock cairns or flagging.”

**CONCEPT.** Here’s a way to grasp why it’s important to have guidelines for 
visitor use of our natural areas. Imagine one person, maybe yourself, traveling
through an area and leaving an orange peel on the trail, picking a wildflower, picking up an arrowhead or painting a marking on a rock. This behavior by one may not impact anyone but that one person. Now imagine thousands or even millions of individuals leaving orange peels on the trail, picking wildflowers, pocketing arrowheads or marking rocks with paint. Now the impact becomes obvious and can severely lessen the quality of the experience.

**Travel and Camp on Durable Surfaces.**

In this book, we’re talking primarily about dayhiking so we won’t go into detail about issues specific to camping. Try to imagine what’s under your feet as you walk. In the outdoors, many areas we walk through are thriving with a variety of organisms and are affected by our travel. Let’s consider a few examples.

Let’s go back to our superhero Cryptogamic Soil for a bit. When in an area of Cryptogamic soil, try to avoid walking on it at all times. If you need to go off trail for any reason, try to do so where you can stay on rocky surfaces or find an area clear of this crust. This is usually possible even if it requires a bit of work on your part. In most areas, it’s usually possible to find a path to your destination using rocks or drainage paths left by rain runoff.

Desert puddles. Many types of wildlife are dependent on water holes for their survival. Just as you would prefer to have water that’s as free from contaminants as possible, so do wildlife. Avoid walking through water sources. Think of the coating on your boots as one example. If you’ve recently waterproofed your boots, you may be leaving some of that coating behind if you walk through a waterhole. Or maybe you picked up some oil from the parking lot at the trailhead and it’s now polluted the water source for wildlife in the area.

Potholes, or if you want to impress your friends, ephemeral pools, are amazing places, and they play a major role in many desert ecosystems. Not only do these potholes, sometimes no more than shallow depressions, trap wind-blown sediment and collect rainwater, but they serve as home for a variety of life forms, including snails, mites and brine shrimp. Stepping in these potholes when dry or disturbing them when they’re filled with water, can damage the residing organisms as well as the ability of the pothole to develop and serve as anchor for the desert sands. What may look like a simple depression in the sandstone, either empty or filled with small amounts of soil and debris, is really a functioning ecosystem.
Avoid walking through these potholes. It’s easy to walk around them, so please make the small effort required and help save a pothole!

**Use Existing Trails.** If you’ve ever walked in hilly or mountainous terrain, you’ve probably seen the shortcuts that people take from time to time as a way to shorten the distance from one point to another. These shortcuts not only leave visual scars but contribute to heavier erosion in the area.

Switchbacks are designed to even the elevation gain for hikers as well as to reduce trail erosion. A more gradual slope to a trail lessens the speed of runoff from rains, reducing erosion.

So, take your time, enjoy your surroundings and stay on the trail unless there is some compelling reason not to.

**Walking Single File in the Middle of the Trail.** Here’s the scenario. You’re walking along the trail and you come to an area where there is standing water or mud on the trail. Do you continue walking down the middle of the trail, possibly getting your boots muddy or wet or do you go around the mud or water? If you decide to go around, you may keep your boots cleaner but you will also enlarge...
the trail, leave a larger visual scar on the area and contribute to even more pooling of water after future rains.

If you’ve hiked much at all, I’m sure you’ve encountered this situation. I’m always amused that people don’t want to get their boots either wet or muddy. Hiking boots are made to be used outdoors. Mud or water will either dry or can be easily cleaned off when you’re back from your hike. Cutting a larger trail takes years to heal.

Have fun. Walk through the water and mud on the trails, get your boots dirty, splash some on your friends and help others appreciate the value of single track trails.

Dispose of Waste Properly.

This is probably one of the most contentious and most uncomfortable topics for travelers. The reality is that as more and more people head to the outdoors, disposal of waste becomes a significant issue that must be addressed.
Waste refers to what we consider trash, including orange and banana peels, apple cores, gum wrappers, cigarettes, toilette paper, etc., as well as human waste.

I’ve already mentioned that we should leave absolutely nothing but our footprints when we travel through an area. If you can pack it in, you can pack it out. Again, orange and banana peels, apple cores and other things do biodegrade eventually but it’s important to leave an area as pristine as possible. There’s nothing I enjoy less during a relaxing hike than coming across trash left by others. For more information on disposing of human waste, please see the chapter on Sanitation.

**Leave What You Find.**

This is difficult for many people, and I include myself here. I observe this principle, always, but I must admit there are times when I’ve found a particularly nice piece of driftwood or arrowhead or rock that I want to take home.

However, remember that there are a great many of us now enjoying our outdoor environment. If every person, or even a small proportion of travelers, picked a flower or took an arrowhead or pretty rock, the impact would be enormous.

Enjoy what you find while you’re out and then put it back where you found it. Capture the beauty in your mind and keep that with you rather than storing the arrowhead in a drawer somewhere.

You don’t always have to remove something from an area to cause damage. In the desert southwest, most of us have admired the beauty and mystery of rock art left by the Anasazi and others. Petroglyphs, made by chipping scenes into sandstone and pictographs, made by painting on the surface of the sandstone, are both damaged by touching them. The oils in the sweat on our fingertips can damage these delicate pieces of rock art. In this case, look but don’t touch.

There are other activities, while they may seem harmless, that can actually do serious damage to rock art. Several years ago industrious individuals came up with the idea of replicating rock art on pieces of sandstone that could then be sold to tourists. To replicate the designs made by the Anasazi, Fremont and others, these entrepreneurs would find a choice petroglyph panel in the wild and coat it with a plastic gel. They would also press the gel over the surface of the petroglyph, picking up the design of the petroglyph in the gel. It’s a creative idea, but the process also removes part of the rock and slowly degrades the petroglyph, ruining the rock art for everyone.
Go out and discover the wonders of nature, but then leave them intact for all to enjoy.

Ruins from many cultures can still be found in many parts of the world. In the U.S., the desert southwest is particularly rich in ancient structures. Some of the Anasazi structures still standing are 700-1000 years old and logically somewhat fragile. When you find one of these structures, again, it's great to look and enjoy, but be careful not to damage these precious reminders of civilizations past. Refrain from leaning against the walls, walking on top of structures, defacing any of the structures or removing any artifacts from the area. Archaeologists who visit these areas to reconstruct the history need the area left as it was when last inhabited in order to draw the most accurate conclusions.
As an interesting note, much of the damage done to many of the Anasazi structures in the southwest U.S. was caused by cattle that used the structures as shelter from the sun.

Wildflowers. Wildflowers in nature offer beauty beyond compare. And their beauty is best viewed just as they grow. Resist the temptation to pick just one to put behind your ear, to give to a friend or to collect a whole bouquet for your campsite or pack. Again, look, enjoy and remember, but leave them exactly as you found them. We’ll all be glad you did.
Minimize Campfire Impacts. Since we’re talking primarily about dayhiking, I’m going to assume that you’re not building fires and won’t go into this in depth.

Respect Wildlife. Have you ever been to a national park and noticed a group of visitors feeding the chipmunks and ground squirrels – right in front of a sign saying “Don’t Feed the Wildlife”?

We are naturally drawn to wildlife, particularly those cute little trail scavengers called chipmunks or ground squirrels. Elk, bison, birds, coyotes, deer, raccoons and many other types of wildlife also may seem like they would enjoy some of your food. BUT, the sign saying Don’t Feed the Wildlife is there for a reason. In Grand Canyon National Park, the Park Service has had to put down thousands of deer because visitors throw food at the deer, complete with the plastic wrappers still on. The deer eat the food, wrapper and all, and wind up with large non-digestible balls of plastic in their stomachs. Some balls of plastic found in deer have weighed more than two pounds. The plastic interferes with the ability of the deer to digest and absorb food so they slowly starve to death. Feeding wildlife, while fun and seemingly helpful, can actually be deadly for many animals.
Similarly, in Rocky Mountain National Park, coyotes have been put down because they became too habituated to humans as a result of being fed by us. Again, what may seem like an act of kindness can be deadly to wildlife.

Please Don’t Feed the Wildlife! Period!

Observe wildlife from a distance. This makes more sense than you can imagine. If you don’t already know that wildlife are wild and unpredictable, they are. They’re…wild…animals…and should be treated as such!

In eagerness to capture the best photo possible, I often see people walk right up to elk, deer and even moose to get a better photo. Most of the time nothing happens, but the potential for danger, severe injury and even death, is always there.

**True Story:** Consider the case of father, daughter and full grown male bison in Yellowstone National Park. The father noticed a male bison reclining on the grass and decided a photo of his daughter sitting next to the bison would make the perfect shot. So, he placed his daughter next to the head of the bison and prepared to take some photos. The bison though would not turn his head to look into the camera. Probably lulled into complacency by watching too many Disney movies, the father smacked the bison in the side of the head to get him to look toward the camera. As you can imagine, this didn’t please the bison, whose weight probably approached 2000 pounds. The bison got up and seriously gored the little girl and the father.

Keep your distance from wildlife and certainly refrain from smacking male bison in the head!

Another reason to not leave food behind on your travels is to keep wildlife from associating food with humans. Wildlife need to fend for themselves and retain a healthy distrust of humans. A classic example of how wildlife can become habituated to humans has taken place in Glacier National Park. Visitors used to be told to wear bear bells when walking in grizzly country. Now though, visitors are advised not to wear bear bells. Why? Because visitors would be walking down a path, happily jingling their bear bells and would encounter a grizzly. In addition to taking all the other precautions recommended if one encounters a bear, visitors would throw their packs filled with food at the bear. After a short
time the bears began to associate the sound of bear bells with lunch and so would aggressively seek out anyone wearing bear bells. Talk about a dinner bell!

It’s also important to avoid causing stress to wildlife when they’re nesting, mating, raising their young or during winter. Some natural areas across the U.S. now rope off areas where certain raptors are raising their young. Wildlife can be very sensitive to being interrupted during their courtship, mating or nesting periods and can abandon a nest, even with young, if they feel threatened. So, observe from a distance but avoid too much close contact with wildlife during these seasons.

**Be Considerate of Other Visitors.** Consider your reasons for heading to the great outdoors in the first place. Maybe it’s to get away from the masses of people in urban areas, to find some quiet and solitude, or to walk down a path enjoying nature without being reminded of the pressures and pulls of work. If so, then it would also make sense that we should pay close attention to how we affect the experience of others in the outdoors.

I submit that the sounds of nature should be foremost in the scheme of things when we’re traveling outdoors. Unless you know there is no one else around, keep your voices, whistling and singing to a reasonable level. Express your joy and excitement of being outdoors but make sure you’re not disturbing the experience of others when you do.

When you meet others on the trail, make room for them to pass easily. If you have to step off the trail to do so, make sure you’re not doing damage to trailside vegetation. If you see hikers approaching from the opposite direction, anticipate the need to let them pass and find a suitable place to do so rather than waiting until they’re upon you.

If you encounter pack stock, including horses, llamas and goats, move to the downhill side of the trail. Pack stock can spook easily and may bolt if you approach too suddenly or too closely. There have been cases where stock have been spooked by the approach of hikers and bolted over the edge in steep terrain, causing injury and even death to stock and riders as well. It’s not a game of King of the Hill in the wilderness. It’s okay to yield. You won’t lose your kingdom, your pride or anything else. Indeed, you might save yourself from injury and you’ll certainly help ensure that pack stock aren’t injured.
When it’s time for a break or lunch, find a place off the trail to do so. Too often I find myself walking down the trail only to encounter a group having lunch right smack in the middle of the trail, often not bothering to move in order for me to pass. Again, respect the desire of others to assume that there they’re alone in their travels and move off trail for your breaks or lunch.

In the same spirit of courteousness, leave your cell phones, iPods, and other electronic gear at home or keep them turned off when in the presence of other travelers.

Chapter Thirteen

Group Travel: The Joys and Challenges

Joining a group for your next outdoor excursion can be an adventure in itself, most of the time good, but sometimes a challenge.

There are advantages of course to both group and solo travel. Going on your own offers complete flexibility, you only have to deal with your own idiosyncrasies and habits, and in general you can travel for less than what you would pay signing up with a group.

On the other hand, while you may pay less doing your own travel, the better group travel programs have spent considerable time and money scouting out the best trails, searching out the most authentic and interesting cultural and natural history experiences and finding local guides who can give a flavor to the experience that’s hard to match when on your own.

Arguing both sides here, sometimes it’s nice to discover your own adventures and your own local flavor regardless of the cost or time involved.

Anyway, if you do decide to travel with a group, I invite you to consider the following ten tips for making your experience more enjoyable, both for yourself and other members of the group. After all, sometimes it’s not just the habits of others that need scrutiny.
Top Ten Tips for a Successful Group Travel Experience

"One of the best-paying professions is getting ahold of pieces of country in your mind, learning their smell and their moods, sorting out the pieces of a view, deciding what grows there and there and why, how many steps that hill will take, where this creek winds and where it meets the other one below, what elevation timberline is now, whether you can walk this reef at low tide or have to climb around, which contour lines on a map mean better cliffs or mountains. This is the best kind of ownership, and the most permanent...It feels good to say "I know the Sierra" or "I know Point Reyes." But of course you don't--what you know better is yourself, and Point Reyes and the Sierra have helped." --Terry & Renny Russell, from On the Loose (1969)

Norway    Ward Luthi – Walking The World

1. Be totally prepared when you join the group for the day’s activities. If the appointed meeting time is 8 a.m., then be there, on time, with everything you’ll need for the day packed and ready to go. This may mean getting up a bit earlier or staying up a bit later the night before in order to accomplish the necessary tasks.
One way to help ensure that you’re always ready at the appointed time is to make a checklist of things to do. If you’re traveling with a group, ask the leader for a list of things you should have for each day’s program and then make sure you have everything ready before meeting the group.

2. Prepare your feet. If you have blisters or other foot problems from the day before, fix them prior to meeting the group. Usually the time to deal with any serious blister problems is the night before. Adding moleskin, putting on a band-aid or trimming your toenails takes time. Do these things on your own time so the group isn’t waiting for you.

3. Water. Fill all of your water bottles or hydration systems the night before or prior to meeting the group. Make sure you’ve added any flavoring or electrolytes to your water or that you’ve purchased the bottled water you’ll need for the day.

4. Snacks and lunch. Make sure you’ve brought the snack and lunch items you’re going to want for the day. Don’t wait till the last moment to find food or mix up a special GORP concoction. Always carry an extra energy bar in your pack just in case. And of course, eat breakfast at the times suggested by your group leader. Breakfast is one of the most important meals of the day in any situation but particularly if you’re going to have an active day on the trail.

5. Sunscreen. Apply sunscreen to all appropriate parts before meeting the group. And remember to include sunscreen on your ears, your nose, and under your nose if you’ll be on snow or ice, your feet if you’re rafting, canoeing or kayaking, the back of your neck, and the back of your legs.

6. Daypack and clothing. Make sure you’ve packed your daypack with everything you’re going to want and need for the day. Raingear and layers for warmth are important to always include. When I lead trips, raingear is required to be in everyone’s pack on all hikes. Just leave it in.

7. The necessary room. Do you sanitation chores prior to meeting the group. I know that the urge to go one more time may hit just before starting off and that’s okay. Do what you have to do obviously, but I’ve seen times when the same person would always wait until the group was just ready to hit the trail before doing their morning duties. Respect the time of others.
8. If you’re traveling in a foreign country, make sure you have your passport or other travel documents. Also, make sure you have all the money you need for the day and that if you need to change currency, you’ve done so.

9. Make sure your camera battery is charged and you have enough room on your memory chip if you’re using digital.

10. Make sure you have your sunglasses, that you’ve locked your room or zipped up your tent and that you’ve sent any laundry out to be cleaned. And if you enjoy journaling, don’t forget your journal and writing materials.

Chapter Fourteen

Thirteen Questions to Ask a Potential Tour Operator.

"That is the charm of a map. It represents the other side of the horizon where everything is possible. It has the magic of anticipation without the toil and sweat
of realization. The greatest romance ever written pales before the possibilities of adventure that lie in the faint blue trails from sea to sea. The perfect journey is never finished, the goal is always just across the next river, round the shoulder of the next mountain. There is always one more track to follow, one more mirage to explore. Achievement is the price which the wanderer pays for the right to venture." --Rosita Forbes, From Red Sea to Blue Nile (1925)

1. How long have the tour company been in business? Years in business don't always guarantee a quality program, but it will tell you whether people enjoy the adventures with the company.

2. Does the tour company operate its own trips or does it contract out part or all of their trips to others? Contracting out to others isn’t necessarily good or bad. Sometimes it’s necessary to contract out to another operator. As an example, when I include rafting or horseback riding as part of a trip, I contract out to an operator I know and trust. Rafting and horseback riding require different types of liability insurance and a different set of skills. I will travel with this outside operator first to make sure the experience is worthwhile and safe and that the operator is clued in to the needs and safety of my clients.

3. Has the guide for your trip been on all of the trails and personally experienced each part of the trip? If not, this is an easy recipe for either an unsafe or not so memorable experience. Not only should an operator understand the needs, wants and experience level of his clients, he should also understand the demands of the trails and experiences offered. Without a clear understanding of both, there is no way to judge whether the experience is worthwhile, appropriate or safe.

4. For those who have special dietary requirements, does the operator offer vegetarian or other alternatives? Sometimes operators contract for a specific menu that might work well for some but not for others. Be clear about what your options are and whether there are additional costs involved if you ask for an alternative menu.

5. What first-aid qualifications do the guides have and when were they last certified, if at all? Also, what kind of first-aid kits are carried on the trail and in the vehicles? Are the contents, including any pain medications or other drugs, up-to-date and is there a master list of the contents of the first-aid kits?
6. Does the operator have an evacuation plan in case of any emergency? And is there a town-by-town current list of medical facilities and personnel with current contact numbers?

7. What is the driving record of those who operate the vehicles?

8. How long has the guide been with the company or been doing this particular trip?

9. How much experience does the guide have working with different age groups?

10. Will the operator provide a list of references from former clients?

11. What is the maximum number of participants in the group?

12. Are the guides fluent in the language/s of the country you’ll be visiting?

13. Are any guides local to the area you’re visiting on the trip? How much of the trip are the local guides included? In Italy as an example, our local guide is with us during the entire trip. He knows our population, he’s intimately familiar with all of the trails, towns, local people, food and wine and he’s fluent in the local language. Local guides add significantly to the overall experience.

Chapter Fifteen

How to Get the Hotel Room You Want.

If you’re traveling solo or with a friend, finding the best hotel room possible can sometimes be a challenge. The following 12 tips will guide you in finding the best room for your needs.

1. Ask how quiet the room is. In other words, does the room face a busy road or highway? Is it next to the elevator or laundry room? Is it in a location where there will be a lot of foot traffic? Try to choose a room that faces toward the middle of the hotel complex where it should be quieter, unless of course you’re right next to a pool that gets a lot of use by youngsters or rowdy guests. Or, choose a room with a fabulous view looking out and away from the complex as long as there are no other noise problems.
2. What floor is the room on and is there an elevator? In some countries multi-story hotels have no elevators and getting to and from your room can be an effort, especially if you have a lot of luggage.

3. Does the room have a shower, bath or combination of the two? What is your preference?

4. Does the room have good lighting? I’ve been in rooms where the light was so poor that it was difficult to read a book after dark.

5. What are the beds like? Are they new? Do they sag in the middle? Can you feel the springs in the mattress?

6. Are the rooms secure? Is there a lock and a deadbolt? Does the room have a safe for valuables?

7. If there are bottles of water in the room are they complimentary or will using them cause a charge to be added to your bill?

8. What is the phone system like? Can you make toll-free, local and credit card calls without a fee? Some facilities still charge a connection fee and very high per minute charges on top of the regular phone charges. Be very clear about what you will be paying if you use the room phone.

9. What time is checkout, and if needed, can that time be extended at no charge?

10. Finally, ask to see the room. This is your right. Some hotels are reluctant to allow this because the room they’re offering might not be acceptable to you. Go check the room out. If you’re not happy with it, ask for a different room and go see it as well. You don’t have to take any room that’s offered. You’re paying and you get to choose the room you prefer. While you’re in the room, check out the beds, how clean the room is, whether it’s fully stocked, whether it looks safe, whether there are any obvious potential noise issues, where the room is located in relation to roads, pools or heavy traffic areas and whether you like the room in general.

11. You also always have the right to attempt to negotiate the price of a room, especially if you’re staying more than one night. Hotels routinely offer a range of prices depending on a number of factors. Ask for the best price available. If you know prices in the area are competitive and the offered price doesn’t seem
reasonable, suggest your own price. It’s often accepted, particularly if it’s late at night or it’s a slow time of the year. If the price is still not acceptable, search for another property if you have time and energy. When I’m in a large metropolitan area at a property that might serve groups, I always ask for the group rate and usually get a better rate than originally offered.

12. Ask if your room rate includes breakfast. Some rates do and you can sometimes get the desk personnel to include breakfast at no additional charge.

“…and so there ain’t nothing more to write about, and I am rotten glad of it, because if I’d aknowled what a trouble it was to make a book I wouldn’t a tackled it and I ain’t going to no more. But I reckon I got to light out for the Territory ahead of the rest, because Aunt Sally who’s going to adopt me and sivilize me and I can’t stand it. I been there before.”

Mark Twain…and Ward Luthi seconds that!

Summit of Mt. Quandry, Colorado  Ward Luthi- Walking The World
Final Words from Ward

Congratulations! If you’ve made it to this point, you’ve taken the first steps on the road to a lifetime of adventure. You’re a Rockstar – or maybe I should say – a Trailstar! I know I’ve provided you with a lot of information in this eBook, but now you have the foundations to chart and achieve the adventures you’ve always dreamed of. And Remember…

GET UP! In order to have any adventure, to achieve any dream, you first have to GET UP from wherever you are or whatever you’re doing. Slip on those boots and take that first step on your way to a lifetime of adventure. Remember that you can do so much more than you ever believed possible. All you need to do is open your heart to that wild passion for exploration that resides deep inside.

GO WILD! Head out to the great outdoors, to that untamed, pulsing wilderness of mountains, rivers, deserts, oceans, wild weather, untold beauty and uplifting experiences. Express your own wild nature.

“Doesn’t the crane whoop in celebration, the honker honk in celebration, the otter dive and slide in celebration, the coyote bark in celebration, the buffalo paw and grunt in celebration? We aim a black box and scratch on beaten wood pulp.” ON THE LOOSE

Question? When you stand next to a towering redwood, watch an eagle soar, take that last step to reach the summit, or watch the sun set in a brilliant lightshow of color, how do you celebrate? Do you jump with joy, let loose with song, laugh uproariously or dance with abandon?

It’s true that there are times when it’s right and natural to sit quietly, to gently appreciate the beauty around us or to softly smile as the moon rises over the horizon.

Still, I would encourage you the next time you strike out for the great outdoors and come face-to-face with something that excites your soul, to start tapping into that natural wildness that resides deep in your heart. When feelings of joy, happiness, love, passion, appreciation and desire start to well up, practice letting them bubble up, surface and see the light of day. Try yelping, howling, roaring or hooting. Move your feet, touch the trees, and let your heart sing. Smile expansively, open your arms and embrace your fellow explorers as you embrace and revel in the joy of being alive.
GO NOW!
There is no time like the present. Time rushes by way too quickly. Don’t wait. Cancel any excuses. This is your time. Grab life and embrace it. Live Fully! Smile with Abandon!

GO OFTEN!
Some say moderation is the key. Not so. Not for a life of living fully. Stretch yourself. Go out as often as possible. There is never too much beauty, too many inspiring sunsets, or too much of a joyful heart. Go out as often as you can.

GIVE BACK.
On Walking The World trips, we specialize in meeting and spending time with the local people in the areas we visit. The locals I’ve met in my travels have enriched my life beyond belief. I hope this is as true for you as it is for me.

At the same time, many of these same people often lack access to many of the basic amenities of life that we often take for granted. Like schools, cooking stoves that don’t produce toxic smoke and healthy forests.

We started a nonprofit organization called 1Stove, at www.1stove.org, to plant trees, build schools and provide clean cook stoves to as many people as we can in Central America.

I hope you’ll join us in this effort!

Thank You So Much!

I appreciate each and every one of you for taking the time to read this. If you have a free moment, I would love to know what you think about this eBook. Please feel free at any time to shoot me an email at info@walkingtheworld.com, visit me at www.walkingtheworld.com, or give me a call at 970-498-0500. I personally answer every email and will give you a call back if you’d like to talk.

I look forward to seeing you on the trails!

In Adventure,

Ward Luthi
Walking The World
Thoughts, Suggestions and Questions…

If you have any questions about adventure travel, dayhiking or travel in general, I hope you’ll get in touch. I want this guide be as interactive as possible.

Each one of us has special knowledge and experience that others can learn and benefit from. I would love to hear about your experiences and your adventures. And if you have some great photos or video to share, please send them my way.

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SAMPLE CLOTHING AND EQUIPMENT LIST

EQUIPMENT
1 daypack - with waist belt if possible
1 sunglasses (dark)
2 water bottles---quart size, preferably Nalgene or a hydration system like Geigerrig, Camelbak, MSR or Platypus
1pr trekking poles (highly recommended)
1 flashlight or headlamp with extra batteries
Binoculars / telescopes. If anyone has either, it would be a positive addition to the trip.

CLOTHING
(1) rain gear (waterproof jacket and pants or poncho)
(1-2) slacks: zip-off slacks work well (synthetic material – no cotton)
(2) hiking shorts- again those made of synthetic material are excellent underwear
T-shirts
(1) Bandana (optional)
(1) lightweight long sleeve shirt for hiking and sun protection
(2) sweaters (wool) or fleece layers.
(1) hat--with wide brim
(1) belt (if needed)
(1) gloves (wool or synthetic)
(1) hat (wool or synthetic)

FOOTWEAR
(1) pr. hiking boots NOTE: You must have hiking boots - tennis shoes are not satisfactory.
(1) tennis shoes or other light weight for camp
(4) socks (wool or other synthetic type, not cotton--for boots)
(4) socks (liner for boots if you use these) not cotton
(1) water shoes or waterproof sandals (optional) for stream crossings
INCIDENTALS

(1) pocket knife (Optional)
(1) sunscreen lotion and lip sunscreen
(1) ditty bag with toiletry items
(1) camera extra batteries, etc.
(1) insect repellent
(1) steno notebook or journal
(1) moleskin and Blisterblock for blisters and their prevention
(1) personal first-aid supplies
(2-3) garbage bags for inside daypack for rain protection, or a pack cover
(2-3) zip-lock bags... gallon size freezer quality
health insurance card

NOTE. The following are guidelines on equipment required or recommended for this trip. Please remember that these are guidelines, and that your personal preferences will dictate what you finally bring. If you have any questions, please call and ask before arriving for the trip.

HIKING BOOTS. One of your most important items will be a good pair of hiking boots. "Walking" shoes or tennis shoes are not OK for this trip. You need hiking boots to ensure against stone bruises to the bottom of your feet as well as to provide adequate support to your ankles. Your boots can be "lightweight" boots as they are called today, but you should be able to waterproof them if they are leather or they should have a Gore-Tex inner bootie to provide a waterproof layer.

SOCKS are also important. If you can't stand wool, you need to have equivalent synthetic socks or wool/synthetic blends that will retain warmth even when wet. Cotton socks are not satisfactory. Cotton cannot wick moisture away from your feet and once wet, they stay wet and will not keep your feet warm.

RAIN GEAR. This is mandatory and should be of high quality. Please do not buy low priced plastic rain gear. It tears easily and cannot provide the kind of protection you will need in a rainstorm. There are two types of high quality rain gear we recommend. One is coated nylon, and although it does not breathe as well as Gore-Tex or similar fabrics, it is sturdy and lower priced than Gore-Tex. To find good quality coated nylon items, check at an outdoor/backpacking outlet and explain that you need high quality sturdy rain gear that will keep you dry. (You do not want rubberized rain gear either. It will be too heavy, certainly does
not breathe and will feel like a sauna if we find ourselves hiking in the rain). If you don't mind paying more, purchase rain gear made of Gore-Tex or other special fabrics that allow the material to shed water and "breathe" at the same time. We also recommend that you purchase both rain jacket and rain pants.

**DAY PACK PROTECTION.** To keep the items in your daypack dry the easiest solution is an inexpensive pack cover. Or it helps to bring several small plastic garbage bags to stuff inside your daypack. Try them out for size before joining the trip. They need to be large enough so that you can easily pack items without tearing or forcing the plastic. You might also bring several gallon-size, freezer grade, zip-lock bags to double protect any valuables you might carry in your daypack while on a hike.

**WATER BOTTLES.** For this trip, a minimum of two water bottles of at least 1 QUART each are required. Preferred are NALGENE brand bottles. They tend to hold up better than most others. You may also choose to use a Geigerrig, Camelback or similar type hydration system. PLEASE NOTE THAT WATER CARRIERS OF SOME TYPE ARE MANDATORY. IF WE HIT A HOT WEATHER SYSTEM, YOU WILL NEED PLENTY OF WATER WHILE ON THE TRAIL.
Walking The World – The Dayhiker’s Guide to Adventure Travel - is a blueprint for having safe and enjoyable adventures in the great outdoors. Written by Ward Luthi, noted adventure guide, world traveler and founder of Walking The World, this informative and detailed resource guide outlines the clothing, gear and trail techniques you’ll need to have the adventures you’ve always dreamed about.

Whether it’s hiking to a hidden mountain lake, going on Safari, exploring hilltop villages in the wine country, or trekking through rainforests, Ward shares the information you’ll need to follow your dreams.