

**SURVIVE**

**ANYTHING!**



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The outdoors is every man's playground. It's also a booby-trapped obstacle course. But with our help, you can safely hike, climb, or kayak through the wilderness—and back again.

**FOLLOW HIS LEAD**  
No, Travis Stork, M.D., of *The Doctors* can't go on your camping trip. He can, however, help you come out alive.

# A

**AH, THE GREAT outdoors.** It's where men morph into testosterone-fueled animals, taking summits by storm, conquering raging rivers, and flying down trails. At least that was the fantasy while you were loading up your gear. What happens instead: You fall out of your kayak, a slick rock leads to an ankle twist, or a tree branch spears you in your sleep.

But don't pull up the tent stakes just yet. You don't have to be Bear Grylls to hack it in the backwoods. All you need is this field guide, created with the help of Travis Stork, M.D., the *Men's Health* emergency-medicine advisor and host of *The Doctors*. After you've read it, go ahead and use the paper as kindling or as tear-out TP.

ILLUSTRATIONS BY MATT HUYNH / ICONS BY OLIVER MUNDAY

## STAKE OUT A SAFE CAMPSITE

Seeking shade should not be your priority.

► Worry less about bears and more about a tree limb impaling your ass. If you camp under a tree with large, broken overhanging branches and a storm blows in, these "widowmakers" could fall and turn your sleeping bag into a body bag, says Craig Morgan, host of the Outdoor Channel's *All Access Outdoors*. Ideally, set up camp close to a meadow but away from tall grass, where ticks thrive.



### MY WORST INJURY / HANS REY, 46, EXPEDITION MOUNTAIN BIKER

"I earned my nickname 'No Way' because I ride down trails that defy belief. My worst injury happened after a trip to Kenya—I was on malaria meds, which carry a 'don't operate machinery' warning. But I needed to practice a course. So I did. I lost control on a jump and fractured my tibia and fibula. That's when I learned the best riders know their limits. I always visualize my path down the trail, noting obstacles and escape paths. And during a ride, I switch between scanning 5 and 50 feet in front of me, and I hover over the back wheel for the gnarliest sections. Never sit on the top tube or lean your body forward—you'll fly over the handlebar."



### DROP LOGS IN THE FOREST

Extend the "leave no trace" ethic to personal hygiene with the help of Kathleen Meyer, author of *How to Shit in the Woods*.

#### 1 / PLAN FOR POOPING

Pack toilet paper, sealable plastic bags, alcohol-based hand sanitizer, and a trowel, such as the 5-ounce U-Dig-It Stainless-Steel Hand Shovel (\$19, rei.com). "It's stainless steel, folds into a sheath on your belt, and won't bend or break," says Meyer.

#### 2 / STAKE OUT A SPOT

Find a secluded area that isn't within 200 yards of a water source or right off the trail. Use your trowel to dig a hole 6 to 8 inches deep. "The best enzymes for decomposition are in that top layer of soil," says Meyer. Forgot TP? Hunt for soft fallen leaves that haven't dried up, or even a smooth stone.

#### 3 / ASSUME THE POSITION

Squat in a surfer's stance: butt below your knees, arms extended for balance. Done? Bury the leaves or stone along with your waste, or if you used toilet paper, seal it in a plastic bag, carry it out of the woods with you, and flush it at home. And don't forget to sanitize your hands!

### 4 First-Aid Upgrades

YOU SHOULD ALREADY HAVE GAUZE PADS, BAND-AIDS, IBUPROFEN, AND WIPES IN YOUR FIRST-AID KIT. BOLSTER IT WITH...

#### 1 / Duct Tape

It's waterproof, super-sticky, and versatile. "Pack multiuse things that are hard to improvise," says Matthew Stauffer, M.D., a Wilderness Medicine Institute instructor.

#### 2 / Tegaderm

It's perfect for covering road rash, burns, and abrasions. Brian Webster, N.P., a fellow for the Academy of Wilderness Medicine, calls this stuff "Gore-Tex for your skin."

#### 3 / Safety Pins

They require next to no room in your pack—and are just as multi-purpose as that duct tape. Use them to extract splinters, for example, or to turn a shirt into a sling.

#### 4 / 3M Vetrap

Vetrap is designed to wrap horses' ankles, but you don't have to be Seabiscuit to benefit. "It's like an Ace bandage that sticks to itself," says Dr. Stauffer.

**TRAIL MIX**  
Dr. Stork suggests starting slowly to get used to uneven surfaces. Sprint if you hear something roar.



## AVOID A RUN-IN ON THE TRAIL

Trails pose an agility challenge whether you're a road runner or not.

Even if your vehicle proudly displays a "26.2" sticker, you're probably less prepared to tackle trails than you think. "Because trail running requires so much attention, it's more like mountain biking or skiing than running on pavement," says Dr. Stork, an avid outdoorsman. So when you hit the ground running, imagine that you're navigating an obstacle course, keeping your mind engaged and present rather than distracted by squirrels playing with their nuts. "Focus on a spot on the horizon where you can still see the undulations of the trail," he suggests. "And start off at a jogging pace so the little stabilizing muscles in your lower extremities can adapt to the unstable surface." That means taking it slow for your first several outings.

You should also consider investing in trail-specific footwear; the recent minimalist movement has resulted in running-shoe designs that provide little to no protection in the toe region. "Without that protection, one false landing can easily lead to a broken toe or worse," warns Dr. Stork. Check out The North Face Single-Track Hayasa (\$110, the northface.com), a trail shoe recommended by *Running Times*. It features a protective toe cap and a lightweight plate to shield your forefoot.

Lululemon top, New Balance Momentum shorts and ST0 trail running shoes, Gaiety watch



**CLIFF HANGER**  
On the wall, use your legs for power. Dr. Stork says to use your head too—watch those knots!

## GO ROCK CLIMBING, NOT FALLING

Here's how to keep your thrill seeking from killing you.

Anybody who scales cliffs is probably an adrenaline junkie, but be careful how you get your fix. "The rookie mistake is not taking safety seriously," says Dr. Stork. "I was climbing with a friend, and he didn't finish his own knot, because he was so intent on tying his girlfriend's knot. His knot came undone. He fell 40-plus feet and fractured his back." Don't be that guy.

When top-rope climbing (the beginner technique that requires a belay partner), you should always run the rope through two carabiners, both attached to the anchor as backup. And if you're climbing in an area with loose rock, wear a helmet.

If you find yourself falling, assume this position, devised by German researchers: Extend your arms forward at shoulder level. Just before you hit the rock face, swing your feet toward it so they absorb the shock when you make contact. Once you land—no earlier—grab the rope just above the knot to avoid flipping.

That's the scary stuff. More likely are overuse injuries, like tendinitis in your fingers. "Keep your center of gravity close to the wall. New climbers often swing their hips back. That strains your upper extremities," says Dr. Stauffer. "Climbing shouldn't feel like a series of pullups. Your legs should drive you."



### Know This Knot

IF YOU LEARN TO TIE ONLY ONE CLIMBING KNOT, MAKE IT THIS ONE.

The figure-8 follow-through is the gold standard knot in the climbing world. That's because it creates a no-slip loop that you can attach to carabiners without placing a lot of stress on the rope, says Dr. Stauffer. Learn to tie it at [animatedknots.com/fig8follow/index.php](http://animatedknots.com/fig8follow/index.php).

Illustration: Top and shorts



## BYE-BYE, BLISTERS

Don't let those foot bombs turn your adventure into a nightmare.

► Sock it to 'em. Look for a pair of socks made with a moisture-wicking blend of synthetic micro-fibers, advises James Christina, D.P.M., the director of scientific affairs at the American Podiatric Medical Association. Try Under Armour's UA Zagger Crew Socks (\$9, [underarmour.com](http://underarmour.com)). In a study in *Military Medicine*, officer cadets who wore padded socks made of a poly blend were least likely to develop foot blisters.

Next, assess your footwear: Make sure your shoes are fitting properly, says Dr. Christina. You shouldn't have excessive slippage in the heel of your shoe, and there

should be adequate room in the shoe's toe box for your toes to rest comfortably.

If a blister still balloons, resist the temptation to pop it. "Let it drain on its own because opening it will increase your risk of infection," says Dr. Christina. Simply pad the inflamed spot with a cushioned bandage, like Spenco 2nd Skin AquaHeal Hydrogel Bandages (\$10 for 6, [rei.com](http://rei.com)), and if the blister does pop, apply an ointment like Aquaphor to the area and cover the wound. Research from Germany shows that keeping the area moist can accelerate wound healing.

### MY BIGGEST LESSON / BRAD LUDDEN, 31, EXPEDITION KAYAKER

"There's a calculated risk to what I do because I can never fully predict a river—and injuries are part of that equation. I've broken ribs, dislocated a shoulder, and even have a waterfall named after me, 'the Nosebreaker.' But my most expedition-threatening injury happened on dry land. I was scouting a rapid in Laos when I slipped on a muddy rock and cut my hand to the bone. I didn't have sutures, and it took a day to find a doctor who could sew up my hand, sans anesthetic. I still have a nasty scar. What I learned: (1) Put on gripping footwear, a life jacket, and a helmet *before* stepping into a kayak; (2) make sure your first-aid kit is stocked before you start a trip."

## PICK THE PERFECT POCKET KNIFE

A great blade can help you overcome lots of outdoor obstacles. Just remember: A grumpy grizzly isn't one of them.



### 1 CONDUCT A THOROUGH QUALITY CHECK

Few tools take as much punishment as your pocket knife. Which is why you should seek out an established brand—like Swiss Army or Leatherman—and not some dollar store knockoff, says Creek Stewart, founder of Willow Haven Outdoor survival school. An easy way to spot a subpar knife: The blade is loose. "When it's open, it shouldn't wobble from side to side," says Kristin Hostetter, gear editor at *Backpacker* magazine. Same goes for the tools: "Flip open each one and wiggle it. There should be little or no movement at the joint." A good pocket knife will have a 25-year warranty, at least.

### 2 TEST THE METAL

Look for tarnish on the blade; if the steel's color is off, it's likely low grade. And, says Stewart, check sharpness: Can the blade cleanly slice paper?

### 3 STICK TO BASICS

Stewart carries the Swiss Army Tinker (\$29), which features a wire stripper, three screwdrivers, a bottle opener, tweezers, and two blades. Not much else. "It's the perfect all-around pocket knife," he says. "You don't want tons of bells and whistles adding bulk to your pocket." Stewart also likes the durable Leatherman Juice C2 (\$65).

## Brew Coffee Over a Fire

OUT IN THE WOODS, YOUR EMOTIONAL WELL-BEING IS AS IMPORTANT AS YOUR PHYSICAL HEALTH. THAT'S WHY YOU SHOULD NEVER SETTLE FOR LOUSY COFFEE. CONSIDER SARAH HUCK AZULAI, AUTHOR OF *CAMPFIRE COOKERY*, YOUR BACKWOODS BARISTA.

### The Gear

Buy a lightweight aluminum or stainless-steel pot, such as the Open Country 4 Quart Pot (\$18, [rei.com](http://rei.com)), and preground espresso or Turkish coffee—the finest grind you'll find.

1



2



3



### The Method

1 / Pour a small amount (1/4 cup) of ground coffee into your pot and add 4 cups of cold water.  
2 / Place the pot on a grate over a live fire. (No grate? Rest it on top of the gap between two logs.) As soon as the mixture reaches a boil, remove the pot from the fire and place it on the ground. (If you let your brew boil too long, it'll end up tasting bitter.) Let your coffee sit for a couple of minutes to allow any stirred-up grounds to settle.  
3 / Use a ladle or mug to skim each serving from the top. Pull up a rock and enjoy.

## Why Lost People Stay Lost

3 WAYS TO GUARANTEE YOU'LL SPEND A NIGHT (OR TWO) IN THE WOODS.

### 1 / You Freak Out

That awful feeling when your mom lost you in the wilds of Walmart? Expect a flashback. Take a swig of water and inhale deeply to calm down, says survival expert John Leach, Ph.D.

### 2 / You Wander

Mentally backtrack your movements, and don't set out until you're ready to shift into reverse, says Kenn Griffiths, author of *The Survival Manual*. If your memory is foggy, just stay put.

### 3 / You Expect to Be Found

"I spent 8 years in a rescue team. We'd find people just sitting there, doing nothing," says Leach. Create signals: Light a fire, or put reflective duct tape on your clothing.

## TOP OUTDOOR INJURIES

A University of Utah study identified the injuries you're most likely to face in the woods.



### 1 / SPRAINS AND STRAINS: 55%

Wearing a pack can throw off your balance and lead to a twisted ankle, so use trekking poles to stabilize yourself. If you cross any water, "face upstream so it hits your shins and doesn't buckle your knees," says Dr. Stauffer.

Wipe out? If it's agonizing to press on the sides of your ankle or to take three steps, assume a fracture, says Webster. Use sturdy sticks for a splint, and exit the woods.

For sprains, follow the I.R.I.C.E. prescription: ibuprofen, rest, ice, compression, elevation. No ice? Stick your foot in a stream, or wrap a wet bandana around it. You'll need to rest a full 24 hours, which is why people often opt to be evacuated.

### 2 / CUTS, BRUISES, AND SCRAPES: 17%

Cover scrapes with Tegaderm, but don't shrug off a cut as a mere flesh wound. Flush it with purified water, hold the skin together, and apply duct tape, says Webster. If blood vessels are exposed, you'll need stitches. But you may not have to make a beeline to the ER: In a Stanford study, patients who waited 12-plus hours to get stitches fared just as well as those who sought immediate care.

### 3 / DENTAL INJURIES: 5%

Even if you avoid rocks like they're IEDs, you may still end up eating earth and losing a tooth in the process. Just don't drop it in your pocket. "Rinse it off and put it back into its socket," says Dr. Stauffer. "Use Dentemp—a paste for temporary fillings—to spackle between the adjacent teeth and cement it in. Or use dental floss to lasso it and tie it to the guy next door." This preserves the tooth until your dentist can permanently reattach it. Whatever you do, don't immerse it in your water bottle. "The blood vessels will basically turn to mush," he says.



## KEEP YOUR HEAD ABOVE WATER

Major rapids aren't the only danger you'll encounter in kayaking.

In a kayak, you're the captain, the crew, and, if things go bad, the corpse. "I love kayaking," says Dr. Stork. "It's also a sport that inspires fear in me. If you don't fear going into the river, you probably shouldn't be kayaking." Why? Because there's no telling what lies beneath. "If you see a downed tree, assume there's a 'strainer' under the surface—limbs that create a damlike effect," says Dr. Stork. "Like a colander, the limbs catch all the debris that comes downriver while the water keeps flowing." Strainers can increase the force of the current, potentially trapping you against the limbs or even pulling you under. If you see a fallen tree or branches poking out of the water, paddle to the opposite side of the river to avoid becoming just one more piece of debris.

Potentially even more treacherous are hydraulics, where water spills over a big rock and curls back upstream. The vortex is most powerful at the surface, so the best way to escape is to submerge the bow of your kayak (or dive down if you ditched it), says Dr. Stork. That way the downstream current beneath it can ferry you out. Forced to jump ship? Replicate a vessel by floating on your back with your head up and toes forward, skimming the surface, to avoid rocks.



## DON'T TRUST TRAIL WATER

You could be in deep trouble if you don't purify your H<sub>2</sub>O.

► That stream may look pristine, but even a sip is a gastrointestinal gamble. "Animals use streams and rivers as their toilets. And swimmers put germs in the water too—there's a bit of feces in every butt crack," says Charles Gerba, Ph.D., an environmental microbiologist at the University of Arizona.

Chlorine or iodine tablets alone won't eliminate *Cryptosporidium* or *Giardia* parasites. So invest in an MSR Sweet-Water Water Purifier System (\$100, rei.com), which wipes out bacteria, parasites, and viruses and was a top-rated purifier in a U.S. military report. Bonus: It has an activated carbon core to improve taste. "Keep the inlet and outlet hoses in separate bags to avoid cross contamination," adds Gerba.