

EXCLUSIVE CONTENT

SURVIAL THE MOST DANGEROUS GAME



TAKES TO SURVIVE?

EDITED BY COREY BUHAY

PLAYER SELECT

Some people are more likely to get into a survival situation than others. Choose your character wisely.



NICK

Nick is a 22-year-old college grad with a few overnights under his belt. He's thinking about hiking the Appalachian Trail while he ponders what to do with his new liberal arts degree.





Scott's a 49-year-old recent empty-nester. He's been getting out a lot with his newfound spare time, and thinks he knows everything there is to know about altimeter watches





CHRISTINE Christine, 35, is a formidable weekend warrior and an Instagram goddess. Though she has a high-paying day job now, she often dreams of the summers she spent as a river guide.



LIVES VVVV

Track your hearts as you move through the coming obstacles. At the end of each level, see if you have enough life to get to the next stage.



LEVEL 1: THE ESCAPE

Lightning. Flash floods. Falls. To advance in this game, you first must survive the immediate threats. Here's how to think fast, avoid panic, and make the right decisions in the critical first hour.

DODGE THE BOLTS/ A) Noon 2 p.m. C) 4 p.m.

IT HAPPENED TO ME **Struck Down**

A: Set a hard turnaround time; 90 percent of lightning fatalities occur between June and September. + ♥

flash of lightning and the sound o thunder. How far off is the storm? A) 5 miles 2 miles

C) 1 mile

C: Time to take shelter in a ditch or ravine or in a wooded area. Avoid bodies of water, caves, lone trees, and small, isolated groves. +

Best group strategy in a storm? A) stick together spread out

B: Disperse to reduce the risk of getting struck en masse. 🕂 🧡

PLAY THE ODDS Lighting strike victims that are male. Sorry, guvs: stats don't li

HEAD GAME **GOOFF-SCRIPT** Train your brain to neutralize panic.

YOUR BRAIN IS LAZY. Or, more charitably, your brain is efficient; it learns to do something, then codes it in what neuroscientists call a "script"—a task you can do without thinking, like tying your shoes. The trouble with scripts?

"According to the research, when you're put under extreme stress, you're not going to invent new behaviors to deal with it. You're going to do what you've done in the past," says Laurence Gonzales, author of *Deep Survival*: Who Lives, Who Dies, and Why. When you panic, your brain essentially turns off your prefrontal cortex, which is responsible for executive decisionmaking, and looks for shortcuts. And those automatic reactions—like lunging for a dropped camera during a river crossing-can be dangerous.

To skip the autopilot phase, Gonzales recommends practicing some neurological exercises, like tying your shoes a new way every day or moving your cups to a different cabinet. The more you can avoid creating scripts, the faster your brain will redirect to the prefrontal cortex when you're in trouble-giving you back precious seconds that could save your life.

LLUSTRATIONS BY PETER SUCHESKI (KEY SKILL) FEXT BY MORGAN MCFALL-JOHNSEN (HEAD GAME



Mary Chandler, 29, and three friends got caught in a lightning storm on a Colorado Fourteener in 2015. As told to Morgan McFall-Johnsen

WHERE'S WILL? I woke up on the side of Mt. Bierstadt, soaked, shaking, and buzzing with electricity. I could smell burning hair, and my hiking partners-including my fiancé Will-were gone. It was a beautiful June morning, and I'd wanted to make the most of it. Will and our friends Jonathan and Matt decided to grab our dogs and climb Bierstadt, an easy Fourteener near Denver, and set off around 7 a.m. I always wonder what would have happened if we'd left just 30 minutes earlier. We reached the summit under partly cloudy skies, took some photos, and started down. Then a dark cloud rolled in. It started hailing. Suddenly, a flash of white light swallowed everything.

Next thing I knew, a stranger was wrapping my head in his T-shirt. I was confused and panicked, and my heart was beating so fast I thought it was going to rocket out of my chest. My forehead was damp with blood. Did I fall? I scanned the scene for Will. He was OK, sitting and surrounded by other hikers, as I was. *He must have fallen, too*, I thought hazily.

Then I heard Jonathan screaming. He was badly injured, and his dog, Rambo, was dead. Thunder clapped in the distance. Only then did it occur to me: We were struck by lightning.

Storms kept the helicopters away, so we hiked down. Matt, Will, and I walked on our own, but a group of hikers had to help Jonathan, who'd taken the brunt of the strike and had a bad head wound. We all suffered spotty vision and migraines for months after the strike. Now those symptoms have faded, but the lesson never will: Everything can change in an instant. 🚷





KEY SKILL ROLL OUT OF A FALL

After drowning, falling is the number one killer in the backcountry, and even a non-lethal plummet can leave you with broken bones. To improve your odds, relax your joints and take the hit like a paratrooper, rolling away the momentum and letting your thighs and shoulders absorb the brunt of the impact.

SURVIVE A BEAR ENCOUNTER

Reality check: Fatal bruin attacks are pretty rare. There were 46 reported occurrences in North America from 2000 to 2017, or an average of three per year. But we get it; you don't want stats, you want to be prepared. So here's how to handle a bad-news bear.

WHO'S THAT BEAR?

Color and size can be misleading. Black bears often sport a brownish coat, and young grizzlies can be small. Knowing the difference is important: Grizzlies have been known to attack humans to defend their young, which means backing off or playing dead could spare you a mother's wrath. Black bears are more often responsible for predatory attacks-meaning playing dead for too long could get you eaten. Learn the right identification to help you predict the bear's next move.





BEST BEHAVIOR

TRUE/FALSE

1. Tie on a bear bell and you're good. 2. Bears are slow. 3. Bears are skittish. 4. If the bear charges, you're S.O.L.

1. FALSE. No study supports this feel-good measure. Talk loudly as you hike to alert nearby bruins.

2. FALSE. A bear can run 30 mph. Can you? Slowly back away, and speak in a calm, monotone voice to establish that you're a human, not a threat.

3. TRUE. If the bear approaches (even after a calm talking-to), yell, wave your arms, and stand together if you're in a group.

4. FALSE. If the bear precedes the charge with huffing, hopping, or jawpopping, it's likely a bluff; stand your ground. Not sure? Play dead (lay bellydown; protect your neck with your hands). If the bear turns predatory, it's time to defend yourself

Each correct answer: + Each incorrect one: -

(see right).

KEY SKILL ESCAPE A TREE WELL



Skiers and snowshoers who fall in often end up head first and can suffocate within 15 minutes. 1) When sliding into the well, grab the tree's branches or trunk to remain upright

2) Too late? Move your head slowly from side to side to look for air pockets. Avoid sloughing in more snow. 3) Shout for help. If you're alone, your chances are slim. Try to pop out of your skis or snowshoes and slowly and methodically feel for a branch or trunk. Grab on, try to shuffle your feet sideways, and haul yourself upright.

AVALANCHE/

On average, there are 28 avy fatalities each winter in the U.S. Nine of those are hikers, snowshoers, and skiers. While careful planning and navigation can prevent most accidents, sometimes the slope still rips.

1. Learn the basics. First things first: Get certified with an AIARE Level 1 course, which offers instruction on snowpack and terrain hazards. Pack a beacon, probe, and shovel into the backcountry—and know how to use them.

2. Avoid steeps. Don't cross on or below slopes between 30 and 45 degrees -those are the ones most likely to let loose.

3. Get to stable ground. If the snow starts sliding under (or above) you, try to escape the avalanche path and reach for a tree or plant a ski pole or ice axe beyond the break line. Move fast—slabs can hit 80 mph within five seconds. Far from the fracture? Start ditching potential anchors like skis and poles.

4. Stay above the snow. Only 40 percent of victims survive after being fully buried for 15 minutes. Keep your pack—bigger objects tend to "float" in an avalanche, and it may protect your backside. Fight to keep your head above the surface, using your arms to "swim" upward.

5. Create an air pocket. If you're caught in the flow and likely to be buried, tuck your face into the crook of your elbow (do this before the snow stops moving—once it does, it'll set like quick-dry concrete). If you can thrust your hand upward, it'll make you easier to find, but digging yourself out isn't an option; save your energy, and rely on your partners for rescue.

EXPERT WISDOM



"Remember, a lot of these crises happen to people who aren't aware of their surroundings. You've taken the responsibility to put all kinds of stuff in your pack, but ask yourself: Have you taken the time to turn on all the mental switches? It isn't enough to just know that flash floods, predators, and potential hazards exist. You need to move that awareness to the front of your consciousness. Don't get complacent-that's what will get you into trouble." -Shane Hobel, founder, Mountain Scout Survival School

HOTOS BY (LEFT) ISTOCK.COM (2); STEVE BLOOM IMAGES/ALAMY STOCK FEXT BY STASIA CALLAGHAN; RYAN WICHELNS; ETHAN SCHOWALTER-HAY LLUSTRATIONS BY PETER SUCHESKI (LEFT); WALTER NEWTON

SPED RIH

1. Midway through a river crossing, you're swept off your feet and into the racing current. You decide to:

(a) Crawlstroke like mad for the riverbank. (b) Ditch your pack, flip over onto your back, and float feet-first downriver.

(c) Swing your trekking poles overhead in hopes of snagging a low-hanging tree branch.

Answer: (b) Floating belly-up, you can use your feet to push off boulders and other obstacles while protecting the old braincase. Backstroke with your arms to steer. If you hit an eddy or other calm stretch, flip over onto your stomach and swim to the bank.

2. You're crossing a frozen lake, butsurprise!-you hear a sudden crack and feel yourself plunge underwater. Your plan?

- (a) Ditch your trekking poles and bust out the beached-whale move.
- (b) Use your poles to span the break so you have something to support your weight while you call for help. (c) Stab those carbide tips into the ice and
- claw your way out.

For each correct answer: + For each incorrect answer: -

Answer: (c) If you were smart, you'd have brought something like ice claws (basically little dowels with spikes on the end) in case of a plunge. But sometimes sharp pole tips will do the trick. Get horizontal, float your legs up behind you, and frog-kick yourself forward onto the ice.

FIGHT RIGHT If you know a bear's not EYE acting defensively, or if NOSE you're playing dead and it starts chewing on you it's time to start swinging. Where do you aim? **IECK** SHOULDER

Go for the eyes and nose? Those are the most sensitive +9

Land a shoulder or neck punch? Not so effective.

-

Short-term catastrophes play out fast. Take this guiz to find out how you'd fare.

3. In a hurry to pick up a resupply before the post office closes, you're hustling down the trail when a rattler sinks its fangs into your ankle. You're 5 miles out, and there's no cell reception. You should:

- (a) Apply a tourniquet to keep the venom from spreading.
- (b) Keep on walking; you've got a limited amount of time.
- (c) Wait for help. Sitting still will slow the venom's spread.

Answer: (b) True, a jackrabbit heart rate will pump venom through your system faster. But in most cases, you've got a few hours before you're in real trouble-long enough to hike a ways, but not enough to spend the night. Stay calm, try to ID what bit you, and walk at a steady pace toward the nearest trailhead. Have cell service? Call 911 ASAP.

PLAY THE ODDS



Average age of avalanche fatalities in the U.S. Did you pick Nick or Christine?



LEVEL 1: UNDER AN HOUR

PREDIGAMENT **STUCK IN A SLOT CANYON**

A dayhike through canyon country takes a turn for the worse. See if you have the decision-making chops to survive.





LIFE AFTER SURVIVAL **MAULED BY A MOUNTAIN LION**

How do you move on after a cougar tries to kill you? Following an attack in 2004, Anne Hjelle got back on the trail. As told to Katherine Blunt

EING TACKLED BY a mountain lion feels something like gettwo feet. Strangers stared at me when I ventured out to pick up pre-ting hit by a bus. scriptions, triggering the urge to look down, to hide my face. It was a The animal sprang out of the brush in Whiting Ranch taste of my new reality: Those stares have persisted ever since. When I was cleared to ride my bike a few months later, I brought my

Wilderness Park in Southern California without warning, and the force tore me off my bike and off the trail I'd been riding. I fought, thrashing and punching as its jaws clamped down on the back of my neck, and then my face. I felt my left cheek tear away.

My riding partner, Debi, hurled her bike at the lion, to no avail. She grabbed one of my legs, trying to pull me from its grip as it dragged me away. I felt its jaws close on my throat, and passed out.

I regained consciousness moments later, choking on my own blood. Other riders had thrown rocks at the lion, at last scaring it off.

My first surgery was that night. It lasted six and a half hours. When the bandages came off the next morning, a nurse reluctantly handed me a compact mirror. Nothing about my face looked familiar.

Eight days later, I left the hospital and returned home on my own





LEVEL UP

More than 10 hearts? You're soaked, mangled, and/or coursing with electricity, but you're alive. Ten or fewer? Replay the level; you're not ready for what comes next.

husband and some friends back to the trail. The lion that had attacked me (and killed another rider that same day) had been caught and euthanized, and mountain lion attacks are exceedingly rare as it is, but I still felt the grip of fear. I told myself not to give into it: I had to prove to myself that my nerves would not control me. I couldn't do anything to speed up the healing of my face, but I could work on strengthening my mind. I decided to focus on that.

As soon as we started the ride, I felt that old feeling of euphoria creep back in. For the first time since the attack, I felt my life was finally returning to normal.

I was hopeful for the second reconstructive surgery. But once it was over, I knew I would never look like I once did. The dead nerves around my eyes would never heal, my smile would never regain its former symmetry. Now I had to accept that, as a personal trainer in Orange County, I would always look a little different in a place and a career where appearance really matters.

But I couldn't dwell in grief or selfpity. The damage was only cosmetic, I reminded myself: I was alive, I had my family, I could still ride.

I kept biking consistently, forcing myself to fight my fears. I used to relish solo rides before the attack, but now, I feel more comfortable having someone else



in sight. It will probably always be that way, but that's all right: Solo or not. I'm still out there.

In the years since the attack, I've thought a lot about fear. It can be useful for making safe decisions, but it can also be restrictive. Over time, I've learned to balance my fear with logic: There is almost no chance that I will get attacked again. That's what I tell myself when I feel my heart rate start climbing. And I look around: Among mountains and trees, it's easy to remember that braving a little uneasiness is worth it.

Once, at a local speaking event, a woman told me that she stopped hiking at Whiting Ranch after hearing what happened to me. That broke my heart. I tell my story because I want people to know that if I can overcome my fear, anyone can.

I took her hiking there the next week. For her, it was the first step forward. 🚯



LEVEL 2: THE THICK OF IT

You escaped the immediate threat, but as the minutes stretch into hours, your ordeal is just beginning. Choose your next moves wisely.



🙀 COAX FLAME FROM A SPARK

There's no better heater, S.O.S. signal, or morale booster than a crackling fire. No lighter? Start one the old-fashioned way.

3

SPARK

Kneel as close to the

bundle as possible.

Hold your ferro rod

or flint palm-up in

one hand, and brace

that hand against your

thigh. The end of the

rod should touch the

tinder. Scrape the

back of the knife blade

(the straight edge just

behind the tip works

best) down the rod in

a firm, even stroke to

throw sparks onto the

tinder bundle. Repeat



Sparks are tiny, fragile things, and they won't last long without the right environment. Collect dry grass, frayed wood shavings, shredded birch bark, cattail fluff, or dried ferns, which all take a spark particularly well. Build them into a loose nest big enough to fill two cupped hands. Set it aside. Then, gather bundles of sticks of varying thicknesses-pencil-, thumb-, and wrist-

pee with the smallest sticks on the interior and the largest on the outside. (Leave enough in the center of the tee-



room between sticks for plentiful airflow, and leave an opening pee to insert tinder.)

size—and build a tee-



SCRAPE

If you've got a magnesium or ferrocerium rod, scrape a dime-size pile of shavings into the center of your tinder bundle. If you don't, go to the next step.

BREATHE

When the tinder's smoldering, lift the bundle. Blow gently, careful not to extinguish the spark or send shavings airborne. If the ember fails to grow after a few exhales. throw more sparks.

When you have a small flame, tuck the tinder into the teepee. Blow gently if it starts to fizzle. When the smallest sticks light, close the door of the teepee. Add bigger kindling as the fire grows.

KEY SKILL FIND WATER IN THE DESERT



1) Look for a wash. Dig at the outside of a curve in the waterway—it may vield subterranean water. If the soil's not damp a foot deep, try elsewhere. 2) Walk downstream. You might find surface pools or wet spots (dig there). 3) Look for green. Vegetation is often a giveaway for the presence of a nearby spring. 4) Follow animal tracks. They may lead to water.



ILLUSTRATIONS BY PETER SUCHESKI (KEY SKILL) TEXT BY MORGAN MCFALL-JOHNSEN; ETHAN SCH

SPEED ROUND

1. It's 104°F, the sun's directly overhead, and you swear you're seeing the shimmer of a mirage. Or is that your vision fading out? Your head's pounding...oh, and, yep, you just passed out for a minute there. You:

(a) Pound your last liter.

- (b) Find some shade, sip, snack, and make a plan to find water.
- (c) Keep moving; the map shows a bluedotted line on route in a few miles.

Answer: (b) You need to replenish water and electrolytes; have a salty snack with that liter, then look for a reliable water source on a map (dotted blue lines indicate intermittent ones). If you can, rest in the shade until temps drop, then set out.

2. Your foot snags between two rocks, and down you go. You hear a snap just as

TT HAPPENED TO ME In for a Dip

In December 2013, Samantha Robbins fell into an icy lake near her family cabin in Cle Elum, Washington, and lapsed into hypothermia. As told to Stasia Callaghan

IT WAS A CLEAR, 21°F December morning, and I had just gotten a new camera, so I strapped on my snowshoes for a quick hike down to Kachess Lake to try it out. It was just over a mile, but the path was steep and filled with deep snow. At the shore, I found a few stumps sticking out of the water. If I could climb onto one, I figured I'd get some cool shots. So I set down my pack and camera and

> stepped onto one stump that appeared wet from snowmelt, just to test it out. But what I thought was a sheen of water turned out to be a layer of ice, and I slipped, plunging into the lake. The ice-cold water ripped the breath from my lungs as my head submerged. I fought to the surface, then the shore.

> I shed my wet jacket and shirt and burrowed into the dry coat in my pack. Still shuddering, I began the adrenalinepowered hike back up the trail. My ears were ringing and my pulse was racing so violently I could hear it thumping in my head. I slogged uphill for 20 minutes and was about halfway back when the adrenaline started to drain from my system. I sat down, sagging into a snowbank. My muscles refused to work. All I could do was lie there.

I could feel my heart rate dropping and breaths slowing. I wanted to sleep. After five minutes, I tried to move again and found my pants had begun to freeze to the ground. That scared another jolt of adrenaline out of me-enough to peel myself up and keep hiking. At the cabin, I immediately put on dry clothes and climbed under the covers. My brother took my temperature: 93.8°F—any colder, and I might not have been able to get up out of that snowbank at all. 🚯

HEAD GAME SHAKE OFF STRESS

After the adrenaline wears off, there's just you, holding your life in your own hands.

THINK OF STRESS as a cloud. It inhibits decision-making in ways scientists haven't quite figured out, but most agree that too much of it almost always breeds bad choices. Stress makes us act before we've considered all options. It wakens a chattery inner voice that explains away "missing" lakes or mountains—a phenomenon called "bending the map." It tells us to keep going lest we be forced to admit that we're lost.

So your best first move is to breathe, observe your surroundings, and do simple tasks (like making a snack) until the panic subsides. "Check your pulse," suggests Robert Koester, the CEO of search-and-rescue research company dbS Productions and author of Lost Person Behavior. "If it's in the normal range, 60 to 80 beats per minute, the adrenaline rush has died down." Only then is it time to make a plan.

The good news? Research suggests that stress turns us all into risk managers. So while you might not make the best decisions, your psychology is firewalled against making those likely to kill you. Find that reassuring.





PLAY THE ODDS

Ready to handle an all-day emergency? Take this quiz to find out.

your leg riots with shooting pain. You're not positive, but it sure feels like your shin bone (or whatever that's called) is broken. What's your move?

(a) Apply a splint. (b) Pop some ibuprofen and hobble to the trailhead. (c) Try to confirm that the leg is broken.

Answer: (a) Just assume the leg's broken. Pad the area with clothing, and wrap a sleeping pad around the limb, including the joints both above and below the break. Tie it in place (ensure good circulation). Then wait for rescue. No supplies or no one coming? Use a Y-shape stick as a crutch, pop that Vitamin-I, grit those teeth, and start hiking.

3. You look up from your class 4 scramble and realize you've climbed yourself into a pickle: Going up looks impossible. Climbing down to the broad ledge 15 feet below looks just as scary. You have some paracord, and a storm's coming. You:

(a) Go for the downclimb. (b) Stay put and wait for rescue. (c) Lower off a nearby rock or tree.

Answer: (c) If there's little chance of a deadly fall, tie a hand line to a rock that's well attached to the mountain and that the rope won't slip off the top of, or a tree that's alive and at least 6 inches in diameter and 5 feet tall. Wrap the rope around your anchor three times and tie it off with a double fisherman's knot. Add overhand knots every few inches along the length of the rope to give it more grip. Face the cliff and lower down, hand-over-hand. (You'll have to leave the rope behind; this is for emergencies only.)

For each correct answer: + 🖤 For each incorrect answer: - 🖤



Cold and wet? Body temperature can drop to 95°F in as little as 15 minutes. Here's what to do for a severely hypothermic partner. 1) Replace wet layers with dry ones. 2) Lay down a tarp or tent fly, then a pad. 3) Stack three sleeping bags (if possible). Get your partner into the middle one. 4) Add hot water bottles (put them in socks). 5) Wrap up the tarp, burrito-style. 6) Get him or her to consume snacks and warm drinks.

PREDICAMEN1 CAUGHT IN A BLIZZARD

You only meant to be out a few hours, but winter had other plans. Think you can outlast the cold?



LIFE AFTER SURVIVAL **FREE FALL ON RAINIER**

Sometimes, the worst of the trauma is invisible. After a fall on Mt. Rainier in 2012, that's the kind Stacy Wren Liedle had to face. As told to Kassondra Cloos

HE BERGSCHRUND SLICED the glacial ice beneath us like a split-lipped grin.

 $My team-comprised \, of myself and three \, friends-was$ still buzzing from our successful summit of Mt. Rainier when we decided to pull out our anchors for the last of the traverse around the fissured ice on Emmons Glacier. I pulled up the last picket. took a few steps—and slipped. I felt the rope go taught, yanking my partners off their feet, over the lip of the bergschrund and into a 40-foot free fall onto the slope below. There was no time to self-arrest

I woke up 20 minutes later, bleeding and bruised but unbroken. Two of my partners were nearby and badly injured. I clawed up the ice, looking for the third. Then I heard her screaming: She had tumbled head-first into a crevasse on the way down and now acted as a counterbalance, keeping the rest of us from sliding to our deaths.

I scrambled to build a snow anchor and administer first aid while one of my partners called 911. The helicopter arrived two hours later and started loading up my friends. During all the chaos, I heard panicked voices over the radio. Shortly after, the weather turned, and the chopper had to evacuate before I could finish clipping in. I was left $behind {\rm \,to\,} camp {\rm \,on\,} the {\rm \,mountain\,} with {\rm \,two\,} rangers.$

Later that night I learned what all the yelling had been about: One of the rescuers, 33-year-old Nick Hall, had fallen while wrestling with one of the litters in the high winds, sliding 3,000 feet. He was dead.

The next morning, the weather was still too bad for flying, so we hiked down. I was so cold, tired, and hungry. I tried to give up. I begged them to leave me behind. "This is when you figure out what you're made of," one of the rangers told me. "This is when you dig deep."

When we eventually got down, I was herded away from the horde of reporters at the trailhead to see my parents, who'd flown in the night before. My mom fell to the ground sobbing when she saw me.

I felt shaken for weeks. The accident affected each of us differently, and we mostly dealt with our trauma on our own. I blamed myself, especially at first. I knew it had been an accident, but I also knew that my friends wouldn't have been injured if I hadn't fallen. It didn't seem fair that I'd escaped unscathed.

I did my best to get back into a routine-I would walk to a friend's

EXPERT WISDOM



LEVEL UP

Fewer than 12 hearts? Try again. Twelve or more? You've made it past the intermediate dangers, but you're not out of the woods yet. Let's see how you handle the long game.

RESULTS



house every morning to make coffee and sit on her porch and just appreciate being alive. I felt like I had cheated death, like I had been given bonus time. I didn't want to squander that.

But I didn't know how to confront what had happened. I thought the best way to cope with fear of falling would be to rock climb more, to push myself harder. But when I neared the edge of my comfort zone, I'd freeze on the wall, images of the fall flashing through my head. About 13 months after the accident, I locked up mid-climb on Lumpy Ridge in Estes Park, Colorado, and fell 30 feet, shattering my leg on impact.

I started seeing a therapist. I thought I'd gotten past all the guilt about my friends' injuries and Nick's death, but now I found it was all still in my head, a shadow following me everywhere I went. Therapy helped me look at those memories objectively and to see not just my shame, but the strength and resilience I used to survive. I learned to believe that I am strong, that I am capable, and that I'm worthy of being loved, even though I've messed up. That became my mantra.

I don't think about the accident every day anymore. But on the anniversary, I always do something special and toast to Nick and to being alive. I want his family to know he is not forgotten. I think about him when I'm laughing really hard, skiing an amazing line, or standing on a mountain ridge. I try hard to live a meaningful life he would be proud of. It's my way of honoring him, and the debt I can never repay. 🚯



LEVEL 3: THE LONG WAIT

Most search-and-rescue operations resolve within 24 hours, but some push both the clock and the human ability to endure. Play on to find your breaking point.



GET UNLOST Face it: You're beyond "just a little turned

around." Try these strategies.

 Triangulate. Align the O-degree mark on the compass with north on the map, then spin both together until your needle points north (adjust for declination). Match two landscape features to the map. Draw a bearing line from each. Your location should be where they intersect.
Backtrack. Retrace your steps to the last place you knew where you were. Do better next time: When hiking off-trail, compare your surroundings to the map every half hour and note waypoints like peaks, ridges, or bodies of water. On trail, mark off junctions and landmarks on the map as you pass them.

3.Sample routes. Can't backtrack? Hike a short distance in several directions (mark your route so you can get back to your original position if you need to). **4. Wait it out.** No dice? Stay put if you expect a rescue.

KEY SKILL



Pop quiz: What star is this? (If you answered the North Star, give yourself + ♥) Tip: If you can't see the Big Dipper, find your direction using the crescent moon. Draw a line through its two points. You'll find south where that line intersects the horizon.

BUILD LONG-TERM SHELTER

You're starting to realize you're going to be out for a while. Here's how to settle in for an indefinite stay.

SCOPE YOUR OPTIONS.

Find a spot close to water, under tree cover, and within walking distance of an open field or ridge for signaling. Avoid camping on game trails or in windexposed areas or cold sinks.

2

ERECT A SHELTER.

With the door facing away from the wind, put up a tent or tarp, or build a lean-to or debris hut. For the latter (the most protective option), butt the end of a slender, 12-foot log against a rock, and prop up the other end about 3 feet off the ground using two Y-shaped sticks planted at a 90-degree angle to one another (rest the log where the two forks overlap). Next, lean adjacent wrist-size sticks against either side of the log at a 45-degree angle. Pile leaves or duff 3 to 4 feet thick against the ribs. (Gather all wood at least 200 feet from camp so if you get hurt or sick you'll still have materials within easy reach.)

24+

HOURS

3

ADD INSULATION.

To protect your body from the cold ground, add at least a 12inch layer of leaves to the floor of your shelter. Using a tarp? Pile snow or dry debris around the edges to seal out weather.

> BY PETER SUCHESKI CALLAGHAN; RYAN W

> ILLUSTRATION TEXT BY STASIA

HEAD GAME DON'T STOP BELIEVING

Emotional resilience can be the difference between enduring a long-term survival challenge, and succumbing to one.

LEAVE OPTIMISM TO the rubes; it's not as helpful in a survival situation as you might think. According to Steven Southwick, a professor of psychiatry at Yale School of Medicine, the overly optimistic can be just as dangerous as the pessimistic: They tend to overestimate their abilities and underestimate hazards.

Resilience comes from realistic optimism: acknowledging the negatives, then forcing yourself to look at the positives. According to Southwick, survivors of long-term trauma tend to be able to set aside their fear: They see it as a helpful guide rather than its own emergency.

To get to that point, Southwick recommends acknowledging your fear, then using positive self-talk to keep up your morale (and temper your stress response). "Tell yourself, 'I'm a lot stronger than I think. I have a reservoir of resilience and I'm going to call on that,'" Southwick says. "Stay positive. Imagine that you're going to make it out." Do that and you just might.





You got more adventure than you asked for when you wandered off-trail above treeline. Can you save yourself?



LIFE AFTER SURVIVAL

FROSTBITTEN AND STRANDED

When Eric LeMarque was rescued off California's Mammoth Mountain in 2004, he had no way of knowing the hardship was just beginning. As told to Ryan Wichelns

HY DON'T YOU just meet me down the hill? I think I'm going to ride down," I told the dumbfounded National Guard medic.

He had rappelled from a helicopter to save me. My body temperature, he'd just told me, was 86°F. That I even had a pulse was remarkable considering I'd been wandering in the snow for the last seven nights. One foot was naked, and the other was frozen in its boot. But somehow, all I could think about was snowboarding.

I'd been riding at Mammoth Mountain Ski Resort when ski patrol started ushering people down. I ignored them, sure I'd be able to get in another run before the storm hit, and hiked out of bounds and into the backcountry in search of powder. Then the fog rolled in. Before long, I was hopelessly turned around. I wandered, on foot and via snowboard, all day and night, and eventually found a river, but I slipped at the edge and fell into the icy water. Soaked and freezing, I hauled myself out and walked 9 miles through deep snow over the course of a week, chewing on pine seeds and bark to stay alive. When I peeled off



my socks on day three, I found strips of my own flesh clinging to them. Starved and exhausted, I ate that, too. By the time rescuers found me, I was critically hypothermic—and delirious.

Rational thinking only returned later, in the hospital. By then, both my feet had been amputated. Sit with that fact in a small, white room, and it's impossible to avoid digging back into your memory and picking apart the experience that got you there. I wanted to avoid thinking about all of it—the cold, the fear, the arrogance that had led me to ignore ski patrol's warnings—but that luxury stopped the minute I looked at the other end of the bed and found it empty.

My feet had been my livelihood. They'd taken me to the NHL and the Olympics as a hockey player. As a snowboarder, it was my feet that had conveyed those sensations of gliding and floating. What had I done to end up here without them? And what was I going to do now?

I was disappointed in myself, angry that I had so blatantly ignored my own safety for the thrill of another run. But it wasn't just one bad decision that led me to that hospital—it was a long line of them. When my hockey career ended, I'd filled the void with snowboarding—and with drugs. The day I'd gotten lost, I was waiting for a court date for trespassing and drug possession, and I had a bag of meth in my pocket. In some ways, I'd been headed for disaster for a while. But I had to remind myself: I'd gotten lucky. I should have been dead, but I wasn't.

So as I bounced from hospital to hospital, I was both upset and thrilled with my situation. With some help from experts and my parents, I learned to focus on what I could still do: turn my life around.

The first step was humility. I'd been an elite athlete for so long, it was hard to start at the very beginning. I had to learn to walk with the prosthetics. I needed help at every turn. But I realized that asking for that support was the first step toward finally growing up.

I met with counselors and support groups, battled withdrawal, and stopped doing drugs. I learned to play hockey again, took a humbling entry-level tech job, and eventually got back to snowboarding. That last effort was about more than just picking up my old hobby. It was proving to myself—the athlete—that I was still the same person, that I could redefine my future without losing my past. (?)

THE NEXT LEVEL

These tips are a great start. Now take your lifesaving know-how to the expert level with our online class, **Outdoor Survival 101**.

Your Instructor: Shane Hobel, founder of Mountain Scout Survival School Course topics: Building shelter, making fire, finding and filtering water, foraging, crisis management, and more Register now: Go to backpacker.com/survival101 and use the code BPMAG at checkout for a 20 percent discount.

YOU SURVIVED/

Or did you? Count up your 🛡 's to see what you've got: 18-23 Not a scratch. 11-17 One arm and a speaking tour. 0-10 Our condolences for your family's loss.

