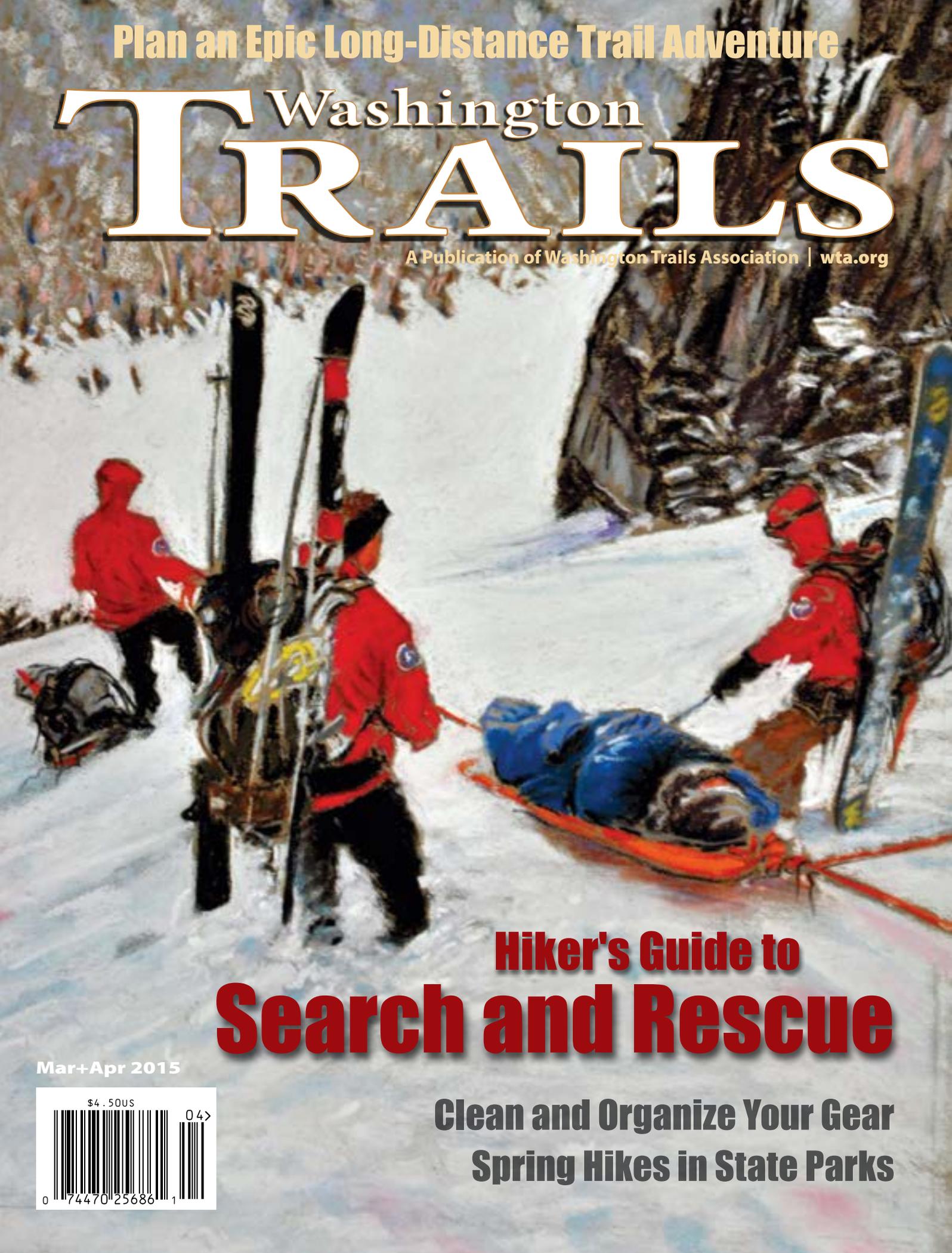


Plan an Epic Long-Distance Trail Adventure

Washington TRAILS

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Hiker's Guide to Search and Rescue

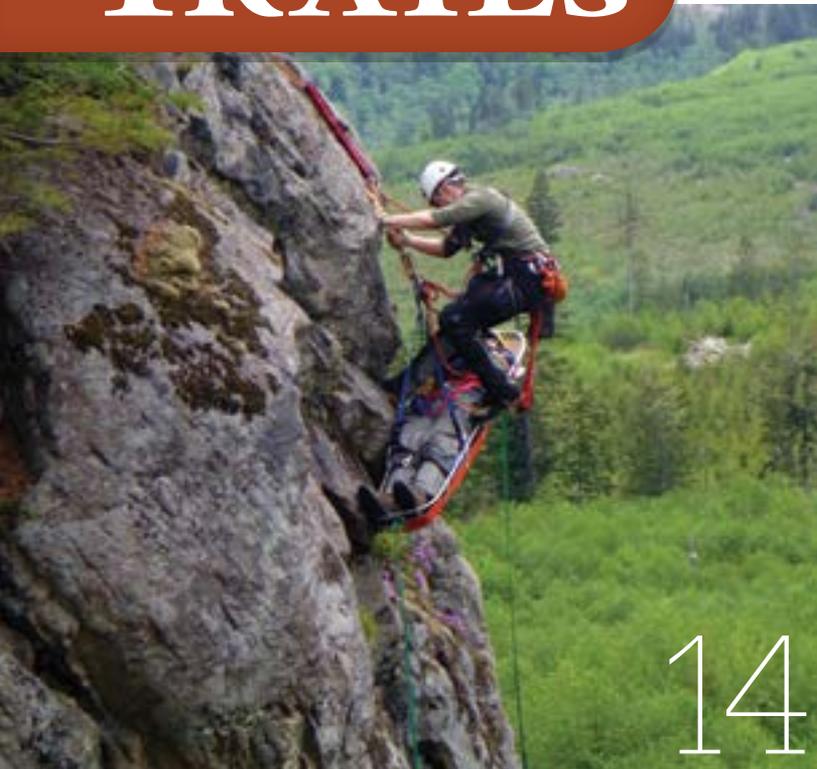
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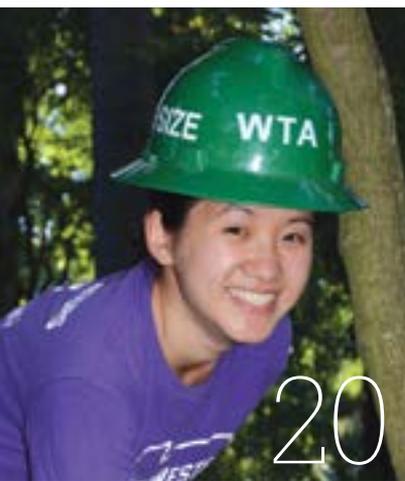
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Clean and Organize Your Gear
Spring Hikes in State Parks



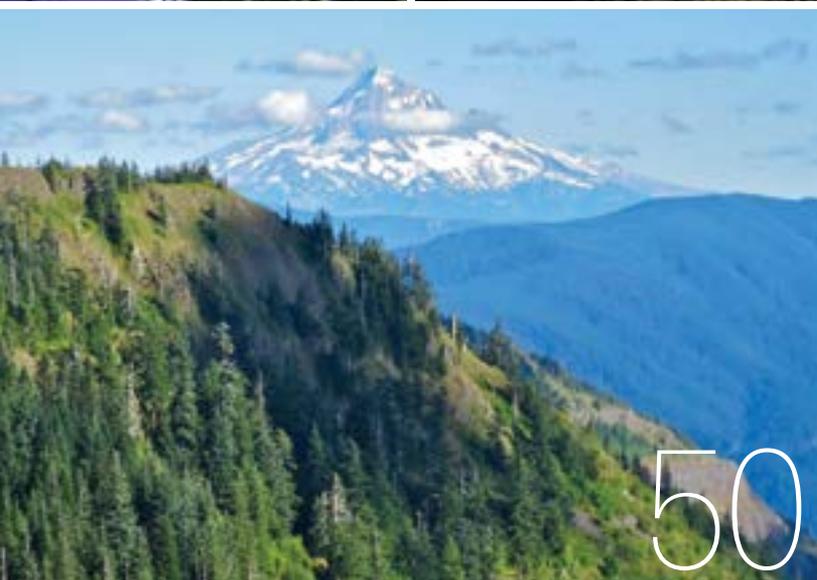
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Mar+Apr 2015

NW Explorer

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COVER: Portrayal of a rescue on Mount Snoqualmie. "This scene tells a story of one adventurer's mishap," says painter Jannelle Loewen, "but the injured, now encircled by people of courage and competency, no longer has fear, and pain is mitigated."

The Hiker's Guide to SEARCH AND RE



Rescuers survey the safest route to ascend Infinite Bliss on Garfield Mountain. Photo by Bree Loewen

SCUE

By Cassandra Overby



For Josh Hancock, 31, there was never a reason to suspect that his daytrip to Alpental would end any differently than the dozens of excursions he'd done before. It was an ordinary Wednesday, and the environmental consultant was taking a day off work with his climbing partner, Kjel. The weather was beautiful and the climbing conditions were favorable—it should have been a fun day away from the office and enjoying the great outdoors. Instead, it was one of the scariest days of Hancock's life.

The two friends hiked 3 snowy miles toward Kiddie Cliff and a spectacular frozen waterfall that was perfect for ice climbing. An experienced climber, Hancock should have had no problem reaching the top. But as he hefted himself over the final ledge with his weight on the rope, the unexpected happened: his anchor failed. Hancock fell 35 feet to the frozen creek below, slid across the ice and lay motionless on the ground. When he regained consciousness, he couldn't feel his legs.

After doing what he could to stabilize his friend, Kjel went for help. Four hours and what seemed like an eternity later, that help arrived in the form of five search and rescue volunteers. They had bags full of medical supplies and radios to call for a helicopter—and they were the closest thing to angels that Hancock had ever seen.

If search and rescue had saved only one life last year, theirs would still be an inspiring story. But in 2014, the work they did to save Hancock was repeated more than 130 times in King County alone and more than 800 times statewide.

Despite the large number of hikers, climbers, skiers and bikers they help each year, most people know very little about the elite group behind the heroics. Members of search and rescue aren't publicity hounds; they don't seek attention for their service. But you can bet there's a lot to learn about these people who treat injuries, offer comfort and save lives.

Gaining a better appreciation for search and rescue can make you a safer and more confident hiker. After all, at some point, you—like Hancock—might be the one in need of help. And in that moment, your knowledge of who to call, when to expect help and what to do while you wait could just save your life.



MEET THE HEROES

When it comes to getting outdoor enthusiasts out of sticky situations, search and rescue is the one to call for help. But what exactly is search and rescue? It's an elite group of volunteers that's attached to the sheriff's office in each county and goes where regular EMS can't. Its members find lost people, treat injured parties and assist them in getting back to civilization safely. Because they are volunteers, no one gets paid and the group doesn't charge for its services. (Yes, you read that right. It's free.) Instead, search and rescue is funded by grants, generous companies, grateful individuals and a limited amount of taxpayer money.

Based on the very technical rescues they mastermind, you'd never know that most search and rescue personnel are, by day, software engineers, teachers, writers and stay-at-home moms. But don't let their day jobs fool you. When it comes to being professional rescuers, there's no one better for the job. That's because these volunteers go through a minimum of 164 hours of rigorous training in map and compass navigation, outdoor survival and first aid, often during the harshest weather conditions to simulate actual rescues. And that's just to become state certified as a "ground pounder." Many individuals join specialty units once their state certification is complete. King County

alone has eight such units, including horseback, K-9, 4x4 and ski patrol teams, each with their own additional training requirements and practice hours. Snohomish County even has a helicopter team.

Volunteers are drawn to search and rescue for many reasons. For some, it's the opportunity to learn advanced outdoors skills. For others, it's a physical escape from a sedentary day job. A surprising number of volunteers get involved in the organization as a way to give back after being rescued themselves.

Regardless of the many reasons they're initially drawn to the organization, search and rescue volunteers have one big thing in common: they love helping people. It's their passion, their reason for being. It's why they buy their own gear for missions, drive their own personal vehicles to rescues and spend their own money on the gas necessary to do so. For them, going where EMS can't—and finding lost people, treating injured parties and assisting them in getting back to civilization safely—isn't an inconvenience. It's a privilege.

Yana Radenska, who volunteers with both WTA and search and rescue, says it best: "There's nothing we'd rather be doing."



Steve Allen
SEATTLE MTN RESCUE

The most addictive thing is when you've been personally involved in saving someone's life. That's an incredible rush.



Yana Radenska
SNOHOMISH COUNTY
HELICOPTER RESCUE TEAM

With mountain rescue you touch more lives than you could ever possibly imagine. I've found that to be true over and over again.



Drew Fletcher
SEATTLE MTN RESCUE

I got attracted to search and rescue when I got injured very badly. I told myself, 'as soon as I recover from this, I think I'm going to join these guys.'

Essential Information

Q: Who can call for search and rescue's help?

A: Anyone!

Q: How do I call them?

A: Activate your SPOT or personal locator beacon in an emergency, or call 911.

Q: How much does it cost?

A: It's free!

Q: What if I have an animal with me?

A: Search and rescue can sometimes help an animal that's with an injured human. But they don't assist injured animals. For that, try WASART at (425) 681-5498.

Q: How can I help out?

A: Check out wta.org/helpsar to join their ranks or donate money.

LEARN THE ANATOMY OF A RESCUE

All of the time and effort that search and rescue volunteers dedicate to training is put to the test when an emergency call comes in. In King County, that happens an average of once every three days. Although each rescue varies based on the location and situation of the person in trouble, a general procedure is usually followed. Knowing what's going on behind the scenes of a rescue can be helpful, especially if you're the one waiting for help—anxiously wondering what's taking so long.



For SPOT, alarm and coordinates routed to SPOT call center; for PLB, alarm and coordinates routed to U.S. Air Force. Based on the location of the victim's coordinates, they figure out which authority to call

SPOT or PLB activated; call to 911

0:00

Call routed to nearest 911 operator

0:01

911 operator assesses situation; contacts SAR at local sheriff's office

0:05

Victim's GPS coordinates and any other known info shared with search and rescue deputy.

SAR deputy assesses situation and decides on course of action; immediate response for injured hikers; SAR team contacted

0:10

For missing hikers, the deputy might wait a little longer for the person to show up, depending on how long they've been overdue, or check the trailhead for the hiker's car.

SAR team assembles at meeting place; if enough team members show up, rescue mission will commence

0:45

For injured hikers, someone from the SAR team is asked or volunteers to pick up the command vehicle and group equipment (litter, radios, etc.) from the unit's headquarters.

A "hasty" team is dispatched to find the victim while the rest of the SAR operation is organized

1:00

While the "hasty" team is searching, the remaining SAR teams are deployed

1:30

If not enough SAR members or teams arrive on site for a safe rescue mission, a second round of pages will go out.

The "hasty" team reaches the victim

2:00

If the victim is evacuated by litter, they exit to the nearest road to meet an ambulance; if road conditions are unfavorable, they meet a 4x4, which then transports the victim to an ambulance.

The remaining SAR teams reach the victim

3:00

Operation leader decides the best way to evacuate the victim from the location

3:30

If the terrain prohibits a safe evacuation, or the situation is dire, the victim is evacuated by helicopter.

The victim is taken to the hospital

SAR teams return to trailhead or command center for mission debrief

DID YOU KNOW ...

- * The SAR page that goes out is usually 1-2 lines of text summarizing the situation and the meeting place. Ex: 30-year-old female with broken ankle. Meet at Little Si trailhead.
- * Each command vehicle is self-sufficient and stocked with everything its occupants might need for 48 hours, from power to food to water.
- * Most SAR volunteers keep their personal mission gear in their vehicles and leave wherever they are within 5 minutes of being paged.
- * SAR volunteers are not allowed to use sirens or exceed the speed limit when on their way to a call.
- * As the name implies, the "hasty" team is responsible for getting to the victim as soon as possible. These SAR volunteers carry minimal gear—sometimes just warm clothes and a medical kit. Their goal is to scout the location, stabilize the victim and communicate the situation thoroughly to the rest of the SAR team.
- * Special permission is required to fly a helicopter into designated wilderness areas. If a helicopter evacuation is necessary, that permission is obtained (quickly) from the U.S. Forest Service.
- * Packing someone out on a litter is an arduous process. Because it's so tiring, packers frequently switch out with each other for breaks. Also, sometimes they must construct special rigging to get the litter down a particularly steep or otherwise dangerous section of trail. Because of all of this, the typical speed of a team packing out a litter with an injured person is 1 mph.
- * Once the injured person is in the ambulance, their care is transferred from search and rescue to EMS.

PHOTOS: Opposite: Seattle Mountain Rescue crew on a training day in North Bend; A rescuer being lowered over Snoqualmie Falls; photos by Bree Loewen; Above: Rope rescue training near Mount Persis; photo by Yana Radenska

This timeline represents a best-case scenario of a mountain rescue operation. Rescue times can vary significantly depending on terrain, weather and other factors that can make rescue operations more challenging and take longer.

HELP THEM HELP YOU

Being saved by search and rescue is probably one thing that's not on your hiking bucket list. And while you can't control everything in life—after all, sometimes things like equipment failure just happen—there is a lot you can do to keep yourself safe on trail. This includes being well-prepared before you go on an adventure, knowing how to make good choices while you hike and understanding what you should do if you get into trouble.

PRO TIP: Don't want to notify your emergency contact every time you go for a hike? Check out the **Bugle app**. It allows you to create an activity itinerary, as well as set a panic time. If you don't return on time, the app will automatically alert your emergency contact.

BEFORE YOU GO

1. TEST YOUR LAYERS

"One of the best things you can do before you go on an adventure is to test your layers and see if you've packed enough," says SAR volunteer Yana Radenska. Before your next hike, put on everything in your daypack, from your mid-layer to your spare gloves, then just sit outside and do nothing. Notice how quickly you get cold. This simulates being injured and waiting for rescue. Now add rain and overnight factors. Chances are you should consider adding more layers to your pack.

2. LEAVE A DETAILED ITINERARY

The next thing you can do to avoid meeting search and rescue on trail is to leave a detailed itinerary of your hike with an emergency contact. Be sure to include information about yourself (including any medications), the trail you'll be hiking and your expected time of return. You can download a printable itinerary form at wta.org/itinerary, or create your own.

3. HAVE A WAY TO CALL FOR HELP

It's also important to have a way to call for help if you get lost or injured on trail. Doing so can alert authorities much sooner than waiting for your emergency contact to respond. There are several devices to choose from. Some rely on cell phones, while others choose to go with a SPOT device or Personal Locator Beacon (PLB).



Helicopters are invaluable for inserting rescuers into remote locations, as well as for searching from the air and extracting and transporting injured subjects. Photo by Yana Radenska

Which Tech to Take?

1. Cell Phone

- ▶ Activated when you call 911; routed to proper authorities; works wherever there is cell service; no extra charges.
- ▶ If you don't have service, it won't do you much good.

2. SPOT Satellite Messenger

- ▶ Routed to private call center, then to proper authorities; works globally; service includes rescue insurance.
- ▶ Pay unit cost (\$150) and annual subscription fee.
- ▶ Send non-emergency updates and signals.
- ▶ Needs clear view of the sky to function; sometimes signals don't always go through, so contacts might worry.

3. Personal Locator Beacon (PLB)

- ▶ Routed to military center, then to proper authorities; works globally but devices need reprogramming outside the U.S.
- ▶ Only pay unit cost (\$280); no subscription fee.
- ▶ Strongest alert signal among all devices; 5-year battery.

4. No specific similarities

5. Send updates and messages; rechargeable, replaceable batteries.

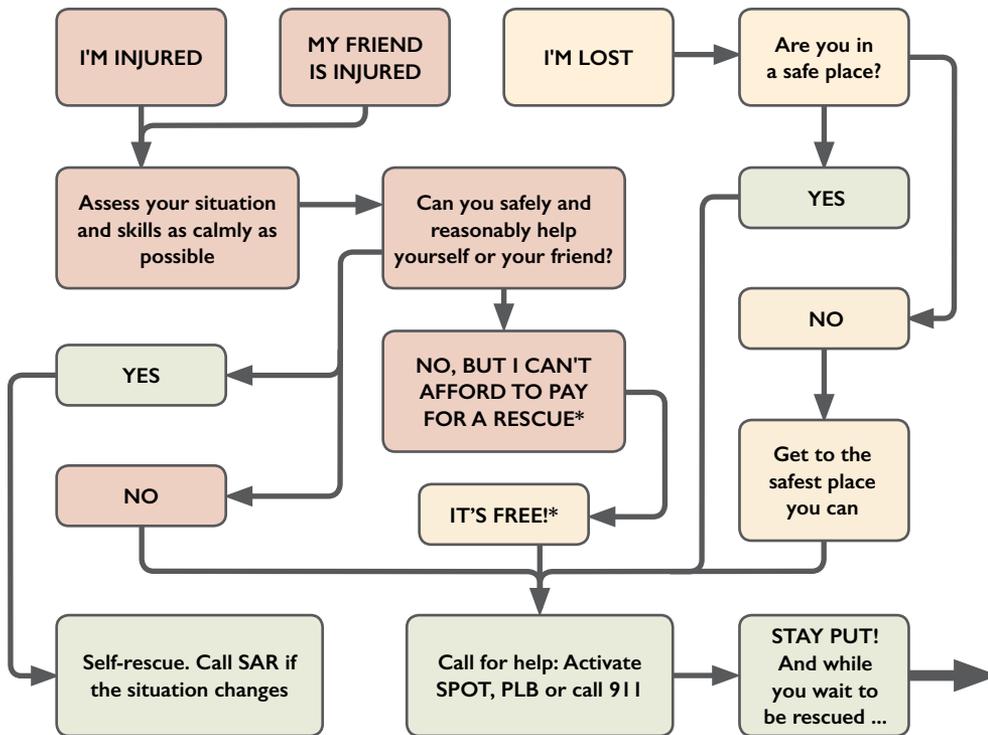
6. Press panic button and an emergency signal is sent.

7. Authorities can locate you by your GPS coordinates.



MAKE GOOD DECISIONS ON TRAIL

There is an art to knowing when to help yourself and when to ask for help. Being proactive is key. That's because the easiest time to help yourself is before you get into trouble, by making good decisions on trail. Sometimes that means staying away from the edge of a cliff. Sometimes that means drinking enough water. And sometimes that means turning around, especially if you're exhausted or it's getting dark or you've run out of food. But what do you do when, despite your best intentions, things start to get a little iffy?



*National parks sometimes contract with private SAR services that may charge a fee. But wouldn't you rather live?

Waiting for a Rescue

Even if you do end up needing to be rescued, there is still plenty you can do once you make your emergency call to help search and rescue help you. The most important things focus around staying safe, staying warm and staying visible.

Stay Safe

- ◆ Stay in the same location where you sounded your alarm.
- ◆ Shelter yourself from the elements as best you can.
- ◆ Mentally prepare to be outside for a couple of hours, perhaps longer.

Stay Warm

- ◆ Put on all of your warm clothes.
- ◆ Eat a snack.
- ◆ If you're able to do so safely, move your body.
- ◆ If you're incapacitated, you can still do isometric muscle contractions to generate heat. If you're on the ground, try tensing and holding your stomach muscles for several seconds at a time.

Stay Visible

- ◆ Put on something bright.
- ◆ If you hear voices or a helicopter, yell.
- ◆ Signal a helicopter by waving items like a shirt or tarp, or set your headlamp to blinking mode. If your headlamp doesn't have a blinking mode, move your hand in front of the light to simulate blinking.

Even if you do everything right, from planning thoroughly to making good choices on trail, there might come a day when you, like Hancock, need help. After all, there are risks inherent in enjoying the outdoors—the unpredictability and the wildness of being in the great unknown are the very things that draw us there.

The answer isn't to give up what you love, to stop hiking or trade in your boots for a remote control. Because you can get hurt doing anything in life, and that includes

sitting all day. The answer isn't to focus on everything bad that could happen out there either. It's to recreate responsibly—and to appreciate that you have experienced, wonderful, highly trained search and rescue volunteers on your side.

So keep yourself safe out there. Better yet, help keep others safe too by supporting search and rescue. Being a trail angel is as easy as donating your spare change or volunteering your spare time. And the life you help save might just be your own.

PRO TIP: When in doubt, call for help. Search and rescue would much rather have an easy mission and see you on your way—happy and healthy—than have to plan a more dangerous mission (for you and them) later. Be smart, not shy. Call for help.

This article focuses on volunteer search and rescue, which is the vast majority of the group's personnel. A limited number of search and rescue positions are taxpayer funded; in many counties, there is one paid staff member to dozens (or even hundreds) of volunteers. Larger counties may have more.

Want to help search and rescue? Visit wta.org/helpsar for info on donating or joining their ranks.