

TerranearPMC Safety Share

Week of January 3, 2017 – Hiking and the Elements

Last week the nation heard about the story of a family that decided to visit the Grand Canyon when their car got stuck in mud near the North Rim. The mother/wife, Karen Klein, decided to be the one to go get help as her husband had recently been in an accident. Because Karen was somewhat versed in outdoor activities as well as being a runner, she thought she could handle the elements and seek help. Her objective was to stay on the road in the hope of flagging down a vehicle. However, the area was closed to vehicle traffic during the winter, so she decided to continue her trek through the rough terrain and cold weather.

Hours later, she found herself alone in the dark. Over the next 36 hours, she ended up trekking almost 30 miles of snow-covered ground with no cell service, no snow boots and nothing but a small pack of cheerios to eat.

"I didn't think I would be out that long" while admitting that she and her husband should have done a better job at planning.

"As far as places being closed, we just didn't realize that these roads were closed and these visitor centers were closed," Klein added, "We didn't investigate that deeply."

For shelter, Klein at one point wedged herself beneath an evergreen tree, but was afraid to fall asleep and freeze to death. Klein ate aspen and evergreen twigs and melted snow for food and water. But after walking for miles, she had pulled a muscle near her hip and lost a shoe due to compacted snow. In order to move her leg, she said, she had "physically pick it up and put it forward."

"I could only move 10 steps at a time," she said, before getting "very exhausted and sore."

At last, Klein came across an uninhabited residence for park rangers and broke the glass with her elbow to get in. She didn't know it at the time, but when she hadn't returned to the car, her husband and son walked in the opposite direction until they got cell service and were able to call for help. A search and rescue team discovered Klein in the residence she had broken into.

Karen Klein was very fortunate as many persons that decide to hike or just venture into the wilderness, do not understand the risk they are taking. As Karen admitted, she and her husband did not make take the necessary plans for their trip and didn't realize that the roads they decided to travel as well as the visitor centers were closed.

I suppose even the most experienced hikers and/or outdoorsmen make mistakes (if you haven't read Jack London's short story, *To Build a Fire*, it is worth the read). Here are a few things – basically do's and don'ts that, in the event, you or someone you know decide to tackle the elements while being a mountain man. The following comes from an article by outdoors expert, Jason Stevenson. While the original article was quite lengthy, please accept this modified, abridged version.



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Wearing denim-Denim is cotton, so wearing jeans (and jean jackets for that matter) is a poor choice for any hike, especially in rainy or cold weather. That's because cotton retains moisture instead of wicking it away like wool and polyester fabrics. Not only does cotton get wet, it takes a long time to dry out while the moisture on your skin siphons away body heat through convection, leaving you shivering and therefore, more susceptible to hypothermia. In addition, Jeans are the worst of all cottons because they can ice up in below-freezing weather.

Buying your tent or sleeping bag at Wal-Mart (no offense Sam Walton!) - Yes, Wal-Mart does sell an Ozark Trails sleeping bag for \$10, but experts all agree that specialty outdoor stores and reliable brands for the gear that matters most, like footwear, raingear, sleeping bags, and tents.

Hiking a trail with a road map - Not all dotted lines are made equal. Thus, the map that helps you find the trailhead parking lot won't help you navigate a trail. Hyper-detailed USGS topographical maps (called "quads") are the gold standard for backcountry navigation, but they are often overkill for popular and well-marked trails. Much easier to acquire and use are designated trail maps that include topographical features like rivers, ridges, and peaks, as well as key info like hiking mileage and trailheads. Book stores and visitor centers often stock maps and guidebooks for local trails, while National Geographic's Trails Illustrated series is great for U.S. recreation hot spots from Acadia to Zion.

Packing a first aid kit as if you're landing on Omaha Beach - You should bring a first-aid kit appropriate for the length of your trip, the size of your group (along with any individual medical needs), and your medical knowledge. If you don't know how to use a first-aid item—like a suture kit—you probably shouldn't be carrying it. Packing obscure supplies you'll probably never use in place of additional bandages and painkillers doesn't make sense. Basic first-aid essentials for most outings should be: adhesive bandages (various sizes), medical or duct tape, moleskin, sterile gauze, ibuprofen, Benadryl, antibiotic ointment, and alcohol wipes.

"Lightning can't strike me—I'm not carrying anything metallic." Lightning is attracted to tall, isolated objects, which could be anything from a clueless hiker standing on a summit to a lone tree. And even if you're not touching that lone tree, the lightning might strike the ground right next to it, or the ground current may surge up you. Secondary strikes can be just as deadly. What's more, lightning can strike targets up to 10 miles from the center of a storm. Always get into a forest or the low point of rolling hills, a ravine, or a gully.

Going ultra-light without ultra-experience – While definitions vary, ultra-light hiking generally means having a base pack weight (your gear minus food and water) of 10 to 12 pounds. The advantage, of course, is that you have less weight to carry, but your safety net also shrinks: You have fewer backup provisions (food, fuel, warm clothes) if things go wrong, like you fall in a river or rodents steal your food.

Wearing boots fresh from the box –Starting weeks ahead of time, you need to break in boots while mowing the lawn, walking the dog, or running errands around town. Trail shoes, which perform more like athletic footwear, conform quickly to your feet, while taller, rigid boots require more break-in time. Also, remember that most people's feet swell a half size or more by the afternoon.

Starting too late in the day - Starting at 2 p.m. a hike that you intended to begin at 10 a.m. is bad news. Therefore, it's best to start on time, or shorten your route. An athletic adult hikes at 3 mph, but



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that rate drops to 2 or even 1 mph when you factor in rough terrain, elevation changes, and rest breaks. If you find yourself starting later than anticipated, check your map for shorter routes or a cut-off trail to reach your destination before sunset. If you find yourself falling behind, avoid the lure of cross-country shortcuts, and instead keep moving, watch the time, and be prepared to finish using headlamps, which you packed for just such an occasion.

Ignoring the weather forecast - A little rain isn't a reason to cancel a hike. That's why we have Gore-Tex boots and waterproof jackets. But even the best equipment can't provide 100 percent protection from the soggy remnants of a hurricane or an Arctic-born blizzard. So before every trip, review the website www.noaa.gov, which uses a "Google Maps" interface to generate five-day forecasts for precisely where you will be hiking.

Science progresses best when observations force us to alter our preconceptions - Vera Rubin 1928-12/25/2016 (discoverer of Black Matter)

