



AAC Publications

Crevasse Fall – Hypothermia

Wyoming, Grand Teton National Park, Teton Glacier

After descending from Mt. Owen via rappels in the Koven Couloir, a two-person climbing party (Kia M., Ryan S.) came upon a distressed climber (Josh A.) in the flats of Teton Glacier at about 9:20 p.m. on August 8. Josh explained that his partner, Tyler, age 34, had disappeared into a crevasse about 20 minutes prior to their arrival. Tyler had fallen roughly 25 feet into the crevasse, which was estimated to be 45 feet deep. He was stuck sideways in a horizontal position in a constriction in the crevasse. Josh had prepared the lip of the crevasse and lowered a rope to Tyler, but Tyler was unable to secure himself nor manage prusiks to ascend out of the crevasse.

Tyler had been unroped but was wearing a helmet and a harness. He was in shorts, a cotton shirt, and light insulating jacket. He was not wearing crampons and had limited mobility of his arms and hands. His backpack was partially attached to him. The crevasse hole at the surface was roughly five feet by four feet.

An SOS text message was attempted at roughly 10 p.m. via a Garmin inReach, but limited view of the sky prevented its successful sending.

Two deadman snow anchors were constructed uphill of the crevasse in heavy, wet snow. A 3:1 Z-drop haul system was assembled, using prusiks and a Tibloc traction device. A large bowline was lowered to Tyler in an attempt to raise him by his armpits, since access to his harness was prevented by his position in the crevasse.

With two people hauling on the Z-drop and the third tending the progress prusik, Tyler was raised roughly 20 feet. The original lip, prepared by Tyler's partner, had morphed into a ceiling in the remaining snow bridge, preventing Tyler from making a smooth exit onto the surface. Feeling extreme pain from the pressure of the rope and worried he would fall, Tyler urgently asked to be lowered. He ended up back in his original position, 25 feet down and stuck in the constriction, with no access to his harness. A new lip in the crevasse was prepared and Ryan, using a long loop on the unused length of the 60-meter rope, rappelled into the crevasse to reach Tyler, who was now minimally vocal and responsive. He was covered in snow and completely wet. Ryan was able to secure the rope to Tyler's belay loop with a locking carabiner and then climbed back out of the crevasse. Tyler complained that he could not use his hands and that his arms felt broken.

At 10:20 p.m., the climbers again attempted to raise Tyler. However, his wedged position prevented upward progress. A 5:1 Z-drop system was rigged for more power, but abandoned due to friction in the wet rope and small diameter carabiners. Josh was then lowered into the crevasse via a top belay in an attempt to unstick Tyler from his position. Tyler was freed and raised to the new crevasse lip at roughly 10:45 p.m. He was intermittently moaning and nearly completely unresponsive; he had contusions on his left eye and exposed knees. With Josh slightly below Tyler in the crevasse, the climbers were able to rig a shoulder harness onto Tyler and secure it to the haul line, in order to pull him over the lip.

Tyler was removed from the crevasse at roughly 11:10 p.m. He had been in the crevasse nearly two hours. His wet upper clothes were removed and replaced with a light jacket, along with head coverings.

Weighing the competing risks of exposure versus exacerbating any potential spinal or head injuries, and because Tyler previously had not complained of major injury, the team elected to move Tyler off the snow and exposure to wind on the glacier. Unsure if there were other crevasses in the area, the party roped up in a glacier configuration and attempted to create a litter to tow Tyler to dry land, roughly 70 yards to the north. Unable to securely move him this way, the party resorted to incremental lifts, supporting his head.

At 11:45, Tyler was situated at the edge of the glacier on the first dirt and rock available. A platform of rocks, ropes, and backpacks was created in an attempt to insulate him. He was completely unresponsive at this time, infrequently moaning and snoring. He had foam at the mouth and intermittent spasms of his legs and arms, which demanded constant tending to keep him covered in his makeshift clothing.

A successful inReach message was sent and acknowledged by Grand Teton National Park at 11:45 p.m., but continued poor reception prevented the climbers from replying. Rangers Shain and Evans began hiking to the Teton Glacier at approximately 12:30 a.m. Tyler's partner snuggled up to him to provide body warmth, and the climbers monitored his vitals. The two climbing rangers located the climbers a little after 4 a.m. With new and dry supplies, Tyler was layered and wrapped, and a platform for a short-haul litter was created. A ranger actively warmed Tyler with his body heat and hands. By 7 a.m., Tyler was verbal and aware of his surroundings. He had memory of his fall and the incident.

Arrangements were made to fly Tyler directly to Eastern Idaho Regional Medical Center. Soon, rangers arrived by helicopter and dropped off a litter and full-body vacuum mattress, as a precaution because of spinal injuries. A little after 8 a.m., Tyler was short-hauled off the glacier to Lupine Meadows, where he was transferred to an air ambulance. The rest of the party followed in two subsequent flights to Lupine Meadows. Tyler was treated for hypothermia and discharged after a few days, with some lingering nerve damage in his hands.

ANALYSIS

There is no record of any prior crevasse fall on the lower Teton Glacier in this publication's archives. This crevasse was in a nearly flat section near the toe of the glacier. The many climbers who cross this part of the glacier while hiking to or from Mt. Owen rarely if ever rope up. One reasonable precaution before crossing any snowfield or glacier is to cover all skin (long pants vs. shorts) as protection against abrasion in a fall; however, additional clothes were unlikely to prevent Tyler's hypothermia after being inside a wet crevasse for two hours.

The two climbers who came upon this scene after a long day in the mountains, along with Tyler's partner, worked through the night to save him—a highly commendable effort. (Sources: Ryan Stolp, Grand Teton National Park Search and Rescue Report, Sharp End Podcast episode 58 interview with Tyler Willis.)

Images



Rangers tend to hypothermic climber awaiting helicopter rescue. Approximate crevasse location is circled.



Accident scene below the Koven Couloir on Mt. Owen, showing the location of the crevasse fall and the bivy site at the edge of the Teton Glacier.

Article Details

Author	Ryan Stolp, Grand Teton National Park SAR and Sharp End Podcast interview with Tyler Willis
Publication	ANAM
Volume	12
Issue	74
Page	
Copyright Date	2021
Article Type	Accident reports