

Rescue Missing Hiker in High Sierras

August 27-30, 2015 Fresno County High Sierras - Guest Lake, (Near Blackcap Mt. 11,559 feet). 2015-033

Written by Kevin Kearn

RMRU alerted members at 9:21 PM on Thursday August 27, 2015 after an OES (Office of Emergency Services) request for Type I, Mountain Search and Rescue teams, to deploy to the Sierras in Fresno County. The mutual aid request from Fresno County Sherriff's Department was for lost 62-year old, female hiker, Miyuki Harwood. Miyuki had become separated from her Sierra Club hiking group in the vicinity of Blackcap Mountain (11,559'). The group had set up camp at Guest Lake (10,000') just below the summit and over 19 miles from the trail head at Wishon Reservoir. The group was doing a day hike from the camp at Guest Lake when Miyuki, in exceptional physical condition and faster than the others in her group, decided to go on ahead at her own speed alone. She was reported to have already summited Blackcap Mountain and passed the ascending group at a saddle while she was on her way down on the afternoon of August 20, one week earlier. Another hiker had reported seeing what everyone believed to be her footprints on a ridge, north of that saddle. Summit ridges were characterized by steep cliffs on the northern and western sides and rescuers feared that she may have fallen. Despite no other signs of her, she was an experienced and super fit hiker; furthering the sense of urgency was the Rough Fire burning to the south. The smoke from the Rough Fire was seriously disrupting the search effort. Obscuration prevented aircraft from effectively observing the ground and it was often impossible to safely land helicopters.

Given the exceptional urgency conveyed by Gwenda, I was able to depart my work at Ft Irwin at 10:00 PM and link up with Donny Goetz at his home in Culver City by 2:00 AM. Donny had luckily been working the night shift and was reasonably fresh to drive, as I had already been up since 4:00 AM the day previous. After configuring our equipment and loading into one car, we departed at 2:30AM and drove to Wishon Reservoir off Route 168 in the Sierras. Cameron Dickinson would depart later in the morning around 4:00 AM after getting the RMRU's Explorer from Hemet; Eric Holden and Tony Hughes also drove up later, Friday night, after work.

Donny and I arrived to find heavy smoke blanketing the command post at Wishon Reservoir at 7:15 AM. Temperatures were mild in the mid 50's and winds were light. The

Fresno Sheriff's Deputies were finishing their brief with about 35 searchers when we signed in. Although the search teams had already been organized, we were aggressive and finally drew a radio, maps, and teamed up with Santa Barbara Mountain Rescue – another two man technical team. Together, with Craig Scott and Don Gordon from Santa Barbara, we formed Team 2.

For the rest of the morning and into the afternoon, all the teams had to convoy to three different Landing Zones over 20 miles apart because the smoke grew increasingly worse as the day got warmer - inversion layers dissipated and winds increased. Finally, at around 2:30 PM, our team was picked up at Shaver Lake when the smoke cleared for a short while, narrowly averting the need to move to a fourth Landing Zone in Fresno another hour west.



Donny heading to Helicopter Photo by Kevin Kearn.

Team 2 went out on the second load, in a California Army National Guard CH-47 'Chinook', and inserted into the Land Zone established south of Horsehead Lake (10,400'). We flew above the smoke until the final approach from the west. I was sitting near the crew chief's window and although it was very hazy, I was able to make out the steep cliff sides of Black Cap Mountain, Guest Lake where the Sierra Club's campsite was still located, and our assigned search zone. Aerial search for subject was impossible under the smoky conditions – and actually hazardous.

Horsehead Lake was also the site of the Forward Command Post and approximately 1 mile north of the Sierra Club's original camp site. Donny and I had a rope, climbing and

medical equipment, along with all gear necessary to be out three days at 10,000'+. Although we expected to be extracted in 48 hours, Deputies made it clear that the worsening Rough Fire could potentially eliminate all air traffic at any time and require all teams to hike the 20 miles out on our own.



Search Area Photo by Kevin Kearn.

We exited the aircraft and descended south-southwest along a trail to Maguire Lakes (10,000'), just east of the Sierra Club's camp at Guest Lake. Other inserted teams peeled off and also moved to their assigned sectors. We established a bivouac site by the north shore of the eastern lake, hung our food, and began a search of the areas around the lakes up to the base of the cliffs as high as we could safely go without roping up. Before the darkness set, we returned to our bivouac site and communicated on one of our two radios that we had nothing significant to report. We planned to search the ridge the next day and we all agreed that Donny and I would descend with ropes down a steep chute off the ridge where a person might have attempted to climb and slipped down.

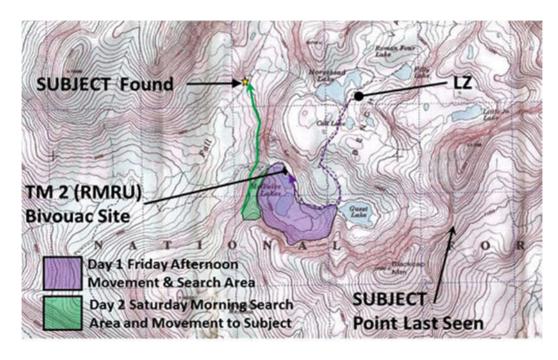


Kevin on Rocks Photo by Donny Goetz.

Night illumination was 98% with the moon out the entire evening. Temperatures seemed warm and there was almost no wind, but our team woke with some frost on our equipment so it got down to the low 30's. After rising, checking in with the command post, and prepping our equipment, we set out at 07:30 AM Saturday again.

While ascending the ridge around 9:00 AM, we heard reports on the radio that a Marin County SAR Team had voice contact with Miyuki. She had initially responded to their calling with a whistle and then cried out -"Two broken legs!" We plotted the Marin team's location and their bearing (300 degrees) to Miyuki's communication – we estimated her location to be under a ½ mile and below us. We began moving as the Marin Tm closed in on her.

The Marin Tm linked up with Miyuki first and transmitted her UTM grid which we quickly plugged into two GPS units. We headed north after descending 400' and linked up with Marin County SAR, Bay Area Mountain Rescue Unit (BAMRU), and a Fresno SAR on the scene. Miyuki was about 20' from a stream and not far from a steep ridge.



Map of Search Area

Shortly after our arrival, BAMRU's ER doctor got to the patient. She was conscious and very alert. Her major injuries included: a dual (tibia and fibula) fracture in her left leg with no evidence of compartment syndrome yet, a broken right ankle, and mild pain in her lower back that was later determined to be a crushed vertebrate. She was also mildly hypothermic and slightly dehydrated. Upon request, RMRU provided the SAMS splint that they used to splint her right broken ankle.

Miyuki later explained that she had descended down the trail from the saddle that she had taken up but that she had overshot her campsite on the way back. She realized her error as it was getting dark and had turned around to return when she fell off a ledge. She fell 4-5 feet and landed on both legs and her rear – breaking her legs. She was immobile until the second day when she realized she had to move to the sounds of a nearby stream to get water. She dragged herself on her elbows over 150' to a drainage which was running with water. There, she survived another seven days in some pine straw about 25' from the stream – dragging herself back and forth once a day to drink a liter of water through a filter straw. Her location on the pine straw provided some insulation from the cold but the trees overhead prevented observation from the helicopters bringing searchers in.

A tentative Landing Zone was identified and Donny help set up a haul line with our Team 2 teammates, Don and Craig, to support bringing a litter up from Miyuki's location over a 15' high CL IV section. Initial planning had a CHP helicopter lowering a litter with a haul line. When queried, I was the only one who had experience with the hook they were expecting on the A-Star, so I prepared to receive and unhook the litter when it

arrived. Eventually the plan changed; the CHP helicopter could land further below and to the south, and internally load the patient after reconfiguring the aircraft.

Smoke was increasing again - so much so that the CH-47 that loaded Cameron, Eric, and Tony at Shaver Lake could not land at the Horsehead Lake anymore and had to turn back. The three RMRU members, having been forced to return with the aircraft and receiving word of Miyuki's find, headed back to Riverside County.

I moved to the new Landing Zone approximately 700' from Miyuki's location and linked up with the CHP helicopter as it landed. A runner took the backboard back and I helped the pilots with reconfiguring their aircraft which involved removing the left side pilot seat and controls out of the floor, reinstalling the seat behind the right pilot, and installing a 'tray' to put the patient in.

Meanwhile the plethora of rescuers now on site had found a way to bypass the hazardous section and prepared to carry Miyuki's. Donny took down the ropes and repositioned with me near a small trench 200' from the helicopter. When rescuers arrived at the trench, they handed the letter off to our group. Donny and I helped carry Miyuki the last 200' and loaded her into the helicopter.



Loading Subject
Photo by Craig Scott, Santa Barbara SAR.

After carefully placing the foot of her backboard into the front of the aircraft under the controls, I said,"Kiotsukete," – Japanese for "Take Care." She immediately opened her eyes, looked at me, and smiled widely ... And before the pilots closed the door, she

shouted strongly to everyone, "THANK YOUUUUUUU!" The CHP whooped their sirens for the rescuers as they lifted off for a trauma center in Fresno.

Our team took our time to return to our bivouac site since extraction was no longer possible with the smoke until the next morning. We broke camp after first recovering Don Gordon's GPS that he had accidentally dropped before Miyuki was found. We hiked back to Horsehead Lake where all the SAR teams had consolidated. Fresno SAR had caught over 40 trout and we had a massive fish fry and SAR-B-QUE with all the rescuers. It was a great time bonding with the other teams from all over California after the great success of finding Miyuki alive after NINE DAYS.

We got lifted out the next morning on the first CH-47 while the temperature inversion layer suppressed the smoke. Teams landed in Shaver Lake again because thick smoke obscured Wishon Reservoir. Donny and I drove the one hour back to the Main Command Post to drop off our radios, debrief, and sign out. We returned to Los Angeles that Sunday afternoon very happy that RMRU was part of this successful effort.

Lessons Learned:

Don't Hike Alone: Always hike with a buddy, especially in the deep wilderness. Make sure people know your route and intentions. If you absolutely must hike alone, consider getting a radio or personal locating beacon. Be wary of leaving a group to go faster on your own – you might need the group or the group might need you in an emergency. In the immortal words of the late, famous outdoorsman and beloved Riverside City College Professor, Bill Wiley, "When you hike alone, you hike with a fool."

Maintain Comprehensive Physical Fitness: Miyuki was the best hiker in her group and reportedly a competitive triathlete. Her superior cardiovascular fitness coupled with her mental toughness unquestionably contributed to her survival. As a 62-year old woman though, she suffered numerous fractures from a relatively short fall. Although we can only speculate if osteoporosis was a factor, it still underscores the importance for senior hikers to incorporate weight training into their fitness program along with a high calcium diet to retain bone strength.

Always Bring Small Signal Devices (Whistle and Mirror): Miyuki's decision to move to water saved her life, but it was her whistle that enabled rescuers to find her. A whistle carries much further than a human voice and is easier to do especially when one is tired or injured. Whistles can generally be heard over a ½ mile away under good conditions. Visual signal devices are equally important; Miyuki reported seeing multiple helicopters pass over her but was unable to signal them to her location. A lightweight, commercial 2"x 3"signal mirror is best but a compass mirror can work almost as well. Strobes and Rescue Lasers are great at night but, at a minimum, flashlight, or headlamp are practical

visual signals too.

Always Have Warm Clothing to Survive the Night: Miyuki had a light jacket and even though she was uncomfortable and mildly hypothermic, she was able survive the night at 9,600' – in August with no winds. Had there been higher winds or any other time besides the warmest month of the year, she may have succumbed to hypothermia. In the mountains, exposure is the greatest survival risk and usually presents itself before dehydration. Always bring a shell, it provides a little warmth by trapping your heat, but more importantly will help reduce rapid heat loss through convection (wind) and protect from rain.

Tie/'Dummy Cord' Critical Equipment: Rescuers often operate at night and fumble with multiple tasks on the move. Sooner or later, we all drop something except some things are more important and can compromise a mission. On a cliff side, a dropped object can fall hundreds of feet away. Consider tying items off with a small cord, critical items like your knife, GPS, and radio. There are numerous retracting cords available as well to keep cords out of the way and still allow easy use. Clip rings inside the storm hood and backpack are also a good idea to clip small equipment (headlamp or keys etc.) that may inadvertently fall out during an access stop in the darkness.

Calling Out – NEVER STOP: Rescuers are realistic and sometimes after a period, naturally become less optimistic that they are searching for a live person vice a body. We must consciously resist the tendency to stop frequent group call-outs for our subjects. Miyuki survived NINE days and is a great example of why we must never catch ourselves reducing our call outs during a search.

RMRU Members Involved: Cameron Dickinson, Donny Goetz, Eric Holden, Tony Hughes, and Kevin Kearn.

RMRU is a volunteer search and rescue team that covers Riverside County and assists other teams with search and rescue efforts in other counties. Each member purchases their own equipment and takes time off work, without compensation, to participate in search and rescue missions. Team equipment is purchased from contributions from the community. We are a non-profit organization and are funded by donations from people like you.