

MOUNT SHASTA

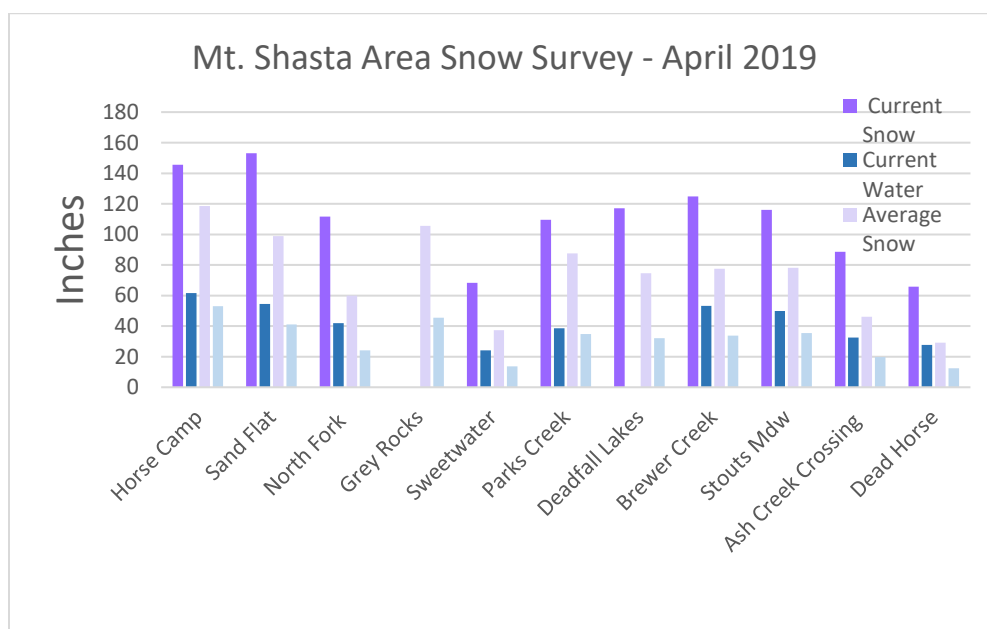
Climbing Ranger Report 2019



Season summary

Winter 2018/19 was fueled by generous storms resulting in a deep winter snowpack. Rangers knew this meant the 2019 spring/summer climbing season would be full of hustle and bustle. Eager parties of skiers and climbers made the trek up Mount Shasta all throughout the spring and summer. Visitors marveled in amazement as they traveled past massive walls of avalanche debris from the Valentine Day avalanche in Avalanche Gulch. We all made bets on how long the debris pile would take to melt.

Winter storms continued well into May. These late season storms thwarted off many successful summits for the early contingent of climbers. The inclement weather did little to discourage climbers though and it wasn't long before the vibrant tent city at Helen Lake took shape. Rangers erected their home away from home, a 6x7 foot canvas walled tent, on May 8th and for several weekends had to dig it out due to spring storms. Final state snow surveys in April resulted in water totals 141% of the historical average. The snow depth at Horse Camp was approximately 12 feet deep. Final snow-water equivalent came in at 61.6 inches. Theoretically, if you could melt all this snow instantaneously, over 5 feet of water would result.



A total of 6,579 summit passes were sold in 2019, only 32 above the yearly average since 1997. On busy weekends in May and June, rangers routinely hosted over 150 climbers on a Friday or Saturday night, just at Helen Lake. Hundreds more could be seen on route early in the morning near The Heart in upper Avalanche Gulch. Despite near normal number totals for the season, accidents are bound to happen.

Search & Rescue

Search and rescue incidents were above average for the second year in a row. Common denominators in accidents are the same, every single year. Slips and falls, failing to self-arrest and climbers becoming lost top the charts. Rangers continuously talk about the importance of knowing how to self-arrest and properly navigate. These skills are essential for any wilderness and mountain travel, not just on Mount Shasta.

Shasta attracts a lot of novice climbers, and that's okay! Rangers commend the bravery of trying something new. One of the best parts of adventure is that feeling of uncertainty, the unknown. There will always be uncertainty with any good adventure, but what should stand above all is *proper preparation*. With sufficient knowledge, skills, ability and proper equipment and decision making, most accidents can be easily prevented. Plan and prepare before you try something new. Even if you're an expert, the mountains don't care. Plan and prepare every time you decide to go out into the mountains. Have a plan should something go awry. Carry the 10 essentials.

Accidents happen when you least expect them. Proper navigation tools continue to remain a common problem for climbers. Cell phone apps can work, but batteries die quickly in cold weather. Carry extra batteries or charging stick. Very few think about an un-planned bivy. What would you do? A tarp, small tent or extra clothes could make the difference. First aid kit? Many climbers we encounter don't have one. Just because you can see the I-5 freeway from most places on the south side of the mountain does NOT mean it is safe, or that rescue is near. What's your plan for self-rescue? Help is almost always available, but not always when you want it.

We regrettably report that there was one fatality on the mountain this year. The accident was unwitnessed, but members of the climber's team reported that they had initially got off their intended route (Avalanche Gulch), going far climbers left up the flank of Casaval Ridge. At this point, a different and older member of the team slipped, suffering minor injuries. The team, uncomfortable with the steep slope and along with an injured member of their party, decided to descend utilizing a rope. A younger member of the team, Carlos Gomez Flores, 27, decided to descend alone. He did not want to wait to use the rope. He was later found unconscious by the team who immediately called 911. Carlos was transported to the hospital via a joint effort by the Northern California Highway Patrol helicopter crew, an off-duty Squaw Valley Fire Paramedic, Scott Holferman, Siskiyou County SAR and USFS Rangers Coots and Moore. Three days later, on September 2nd, Carlos Flores succumbed to the injuries sustained during his slip and fall on snow.

The Rangers

A contingent of four climbing rangers managed the Mount Shasta and Castle Crags Wilderness areas, trailheads, facilities and corridors during the 2019 season. Nick Meyers continues to be the valiant lead ranger and the only permanent employee for the program. Forest Coots who is accustomed to the hard work and long days returned for his 13th season, providing solid guidance and mentorship to the crew. Paul Moore, coming back for his 3rd season, is a quick study and continues to gain experience each year. Paul is a definite asset with his smile, positive attitude, and good public speaking skills. Ryan Sorenson joined the team for his rookie season bringing a fresh mind to the team.

Regular patrols, trail and trailhead maintenance and thousands of visitor contacts were conducted all spring, summer and fall. The Helen Lake camp was set up in early May and staffed every weekend throughout the summer season. Regular patrols took place on all routes. The climbing ranger program consists of three main objectives: climber and visitor safety, wilderness and mountain preservation and continued educational outreach / local community participation. The rangers achieve this through a variety of outlets. These include boots-on-the-ground climber contacts, posted information at trailheads, the Mount Shasta ranger station, state and local presentations, social media (facebook and Instagram) as well as our website, www.shastaavalanche.org. The website remains one of the best ways to share information about all things related to Mount Shasta. Avalanche, climbing and weather information is available on the site and we've seen steady increase in website use over the past 5 years. Top pages include the avalanche forecast, climbing advisory and weather forecast pages.

Rangers participate in the ongoing glacier re-photo project. (<http://rephoto.glaciers.us/>). Twenty-five pre-determined photo locations exist on the mountain. Rangers visit each site in the fall and photograph the glaciers, submitting the photos to the website listed above. Unfortunately, simple photo comparison shows the glaciers are shrinking. No further research has been conducted.

Each year, the climbing rangers host the annual interagency helicopter search & rescue training. This is an opportunity for all agencies who participate in search and rescue to come together and train with local helicopters used for rescue on the mountain. Helicopter use remains one of the best and safest ways to extricate injured climbers off the 14,179-foot snow, rock and glaciated peak. There is no other feature like Mount Shasta in the area. This training provides critical practice for pilots and crew to become familiar with mountain terrain and in-flight handling. Ground crews refresh on how to safely operate around and in helicopters. Everyone comes away with knowledge and skills to continue to safely operate in extreme environments during high risk search and rescue operations.

OUTREACH & PUBLIC EDUCATION:

A long history has been established within the US Forest Service ranger program to foster local partnerships within the community. We continue this today through a variety of local and broader outreach efforts. Many forms of free education and awareness are provided, locally and out of the area, children to adults.

The “So, You Want to Climb Mount Shasta?” presentations at various Sacramento, SF Bay Area, and Medford REI locations continue to be popular.

Much of the summer/fall education by rangers continued to be with Siskiyou County school groups. Students typically embark on a 1.7-mile, ranger lead hike to Horse Camp with wilderness, flora, fauna, geologic and snow-based topics discussed. Thanks to Rebeca Franco for organizing and facilitating the field going sessions.

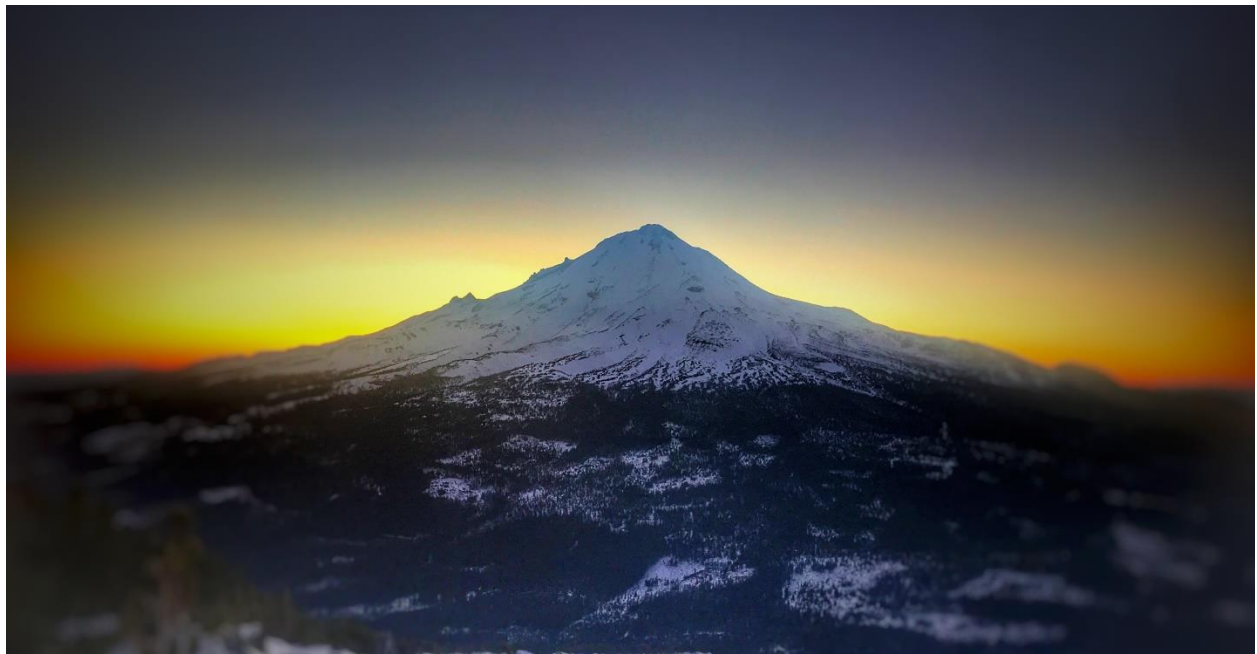
Rangers also participated in the increasingly popular and super fun, Siskiyou Science Fair, held in downtown Mount Shasta. Nick and Paul set up an exhibit and hosted, “What is the recipe for an avalanche?”, complete with a mock avalanche slide board. Sugar was included as the weak layer of snow and flour as the heavier storm snow for the “avalanche” demonstration. The

“snow” is spread out over the tilt board, sugar first, flour second. The board is then tilted until failure. We’re fairly certain kids had the *most* fun playing in the flour and sugar, but hopefully learned a thing or two about avalanches.

Paul conducted a short presentation for the Breast Cancer Fund ‘Climb Against the Odds’ climb as well as spoke to Yreka Juvenile Hall students. In the winter, avalanche forecasters continue to provide free avalanche awareness and companion rescue clinics every month of the winter.

VOLUNTEERS:

The rangers employ a select few volunteers each season to help with a myriad of duties. The visitor information trailer is a great example of government/local partnerships and volunteers giving back to the community. The visitor information trailer locations usually include, but not limited to, Bunny Flat, Panther Meadows and the Old Ski Bowl. Volunteers help share information with visitors about all things Mount Shasta and the area. Volunteers also help with Bunny Flat facility cleaning and maintenance and Panther Meadows campground host duties. Our volunteers are a solid set of people with high integrity and we appreciate their willingness help us on the mountain. Mount Shasta is a world class destination for many forms of use and recreation. It takes a village of dedicated, passionate and caring folks to protect and share all it has to offer.



Common Warnings and Incident Reports issued by Rangers:

- **Motorized use in Mount Shasta Wilderness:** This involves either over snow vehicles (snowmobile/snow cat) and/or ATV use
- Dogs in Wilderness:** Dogs are not allowed inside the Mount Shasta Wilderness or on Sierra Club Land.
- **Illegal Camping:** These incidents are typically limited to people camping too close to springs/creeks inside the Mount Shasta Wilderness, specifically in the Clear Creek spring area just above tree line. Other illegal camping incidents involve camping in day use areas, or inside the Traditional Cultural Property (TCP) area of Panther Meadows. The only camping allowed in the TCP is in the designated sites of Panther Meadows campground.
 - **Sanitation/Litter:** Rangers frequently find either climber camps or most often, transient camps outside of the Mount Shasta Wilderness in the Sand Flat/Bunny Flat/Panther Meadows area that are unsanitary with abandoned property and trash. Climber camps found are usually from improperly securing equipment/trash upon leaving for a summit attempt. Animals and wind will spread climber tents and gear far and wide. Rangers also find a lot of “micro-trash” at major base camps on Mount Shasta. Tear offs of wrappers, match sticks, tea bags, tent stakes, food scraps, etc. account for much of the trash hauled off the mountain.
 - **Abandoned camp:** Abandoned camps are ongoing and most often found in the dispersed camping areas along the Everitt Memorial Highway, Sand Flat, Bunny Flat and Upper Ski Bowl. The South Fork Flats, Twin Arrows, and Bear Springs areas also host abandoned camp issues.
 - **SMMU District Trash:** During slower times, rangers will patrol other areas around the SMMU district aside from the Everitt Memorial corridor and Mount Shasta Wilderness. Trash, waste dumps, shooting ranges, abandoned camps are found every year.
 - **Parking related issues:** On occasion we get vehicles parking and obstructing the Everitt Memorial Highway at or near Bunny Flat. It’s not uncommon to observe 150+ cars at the Bunny Flat Trailhead on a busy weekend. Our road counter on the Everitt Memorial Highway counted 131,088 cars for the 2017 year with an average of 2.2 people per car. This is a dead end road that terminates in the Old Ski Bowl.
 - **Fire/Campfire in Wilderness:** Small campfire rings are found each year and are dismantled. Campfires are not allowed inside the Mount Shasta Wilderness. Fire rings are naturalized and ashes packed out.
 - **Oversize Group:** Group size is limited to 10 inside the Mount Shasta Wilderness, as well as in Panther Meadows. This also includes groups of over 75 people outside Wilderness boundaries.
 - **Illegal Commercial Guiding:** Commercial guiding on Mount Shasta without a permit is an ongoing occurrence, but one we are gaining ground on. Almost all suspected illegal commercial use lies within the spiritual/new age realm and outside of wilderness boundary, although we have had a few climbing groups suspected of illegal guiding.
 - **Exceeding 30 Day Stay limit:** We often run into folks in Mount Shasta who want to spend the summer “living” in the Mount Shasta/McCloud district. Rangers must do their best to keep track of folks and their stay limit on the forest.

2019 Photos



The ranger crew at Helen Lake, left to right, Nick Meyers, Paul Moore, Forest Coots and Ryan Sorenson below.



May 19th, 2019, Avalanche Gulch above Lake Helen...A deep winter snowpack made for good looking spring climbing and skiing conditions.



A barrage of winter storm throughout the spring kept climbing rangers working hard to keep the tent free of snow.



The annual interagency helicopter training at Eagles Nest Aviation, Weed, CA. Cooperators include Siskiyou County Search & Rescue team, California Highway Patrol, Army National Guard, US Forest Service, Shasta Mountain Guides, Sierra Wilderness Seminars and others.



This training provides an opportunity for multiple country, state and federal agencies to come together for critical hands on Search and Rescue aerial and ground ops training.



Leif Hansen tragically passed away on May 9th 2019. Leif was a legend of the community and donated countless volunteer hours assisting the Climbing Rangers and Mount Shasta Avalanche Center.





Mount Shasta attracts a wide verity of climbers and hikers, some of them ill prepared. Rangers make hundreds of climber contacts throughout the season informing climbers of current conditions, wilderness and mountain preservation and safe climbing techniques.





Rangers' primary mode of travel is on skis until the snow melts and the hiking boots come out mid-summer.



The rewards of a smooth and speedy decent are much appreciated after long, hot days spent climbing, picking up trash and human waste pack-out bags, talking with visitors, search and rescue, etc.



One of less glamorous parts of the job. Facilities are a non-stop effort to keep clean and tidy during peak climbing season. Climbing Ranger Moore happily cleans the Bunny Flat restroom knowing fresh air and climbing the mountain awaits.



This trailer was abandoned just off the Everitt Memorial Highway. Climbing rangers and USFS officials worked to remove this abandoned trailer.



California Highway Patrol helicopter staging for a rescue near Bunny Flat. This ship is based out of Redding and can be on scene within 30 minutes usually. CHP and their Airbus H-125 helicopter, equipped with a hoist, is the “go-to” for rescues on Mount Shasta.



CHP H-16 departing for Redding after a search and rescue incident involving two hikers that became stranded on a loose, rocky ledge over a substantially sized cliff on Green Butte. The helicopter inserted SAR personnel to the hiker’s site, separately hoisted both hikers back to the Old Ski Bowl and then finally the rescuer.



Climbing rangers participated in the second annual Siskiyou Science Fair, held in downtown Mount Shasta. Nick and Paul hosted an exhibit to highlight how avalanches are formed as well as technology used to locate buried avalanche victims.



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An impressive pile of snow and tree debris from a large slab avalanche that occurred on Valentine's Day was left to melt out during the summer season. Full trees were snapped off from this avalanche that was estimated to have ran over 3 miles and approximately 5,000 vertical feet. These photos were taken on July 27th, over 4 months after the slide occurred. Snow debris from the avalanche lasted all summer, until snow began to fall again for the following winter season.





This photo taken June 26th shows how impressively deep the winter snowpack was. The gate to Panther Meadows and Old Ski Bowl didn't open until August 12th.



A couple trailheads received damage from the deep and heavy snowpack. Rangers replaced/repaired this infrastructure throughout the season.



Wilderness Rangers and Alicia the recreation technician replaced and installed new signs in the Red Fir and Sand Flat areas.





Wilderness rangers designed and installed all new trailhead information signage.





Volunteers help staff the information trailer, clean and maintain trailhead facilities and campground host. The info trailer can often be found at Bunny Flat or the Old Ski Bowl near the Panther Meadows trailhead. Volunteers: Bill on duty (top) and Steve off-duty (bottom).





The job as a ranger on Mount Shasta can be exhausting both mentally and physically. One can be rewarded with a strong sense of purpose in helping others, keeping wilderness wild and yes, getting in a few good turns from time to time!

Thank You

Written and compiled by USFS Rangers / Mount Shasta, CA

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