2016 Annual Mountaineering Summary

2016 Statistical Year in Review

Each season’s mountaineering route statistics, including total attempts and total summits for Denali and Foraker, are now compiled into one spreadsheet spanning from 1979 to 2016. For a more detailed look at 2016, you can find the day-to-day statistics, weather, and conditions reports discussed in the Denali Dispatches blog.

Quick Facts—Denali

- Climbers from the USA: 677 (60% of total)
  Top states represented were Alaska (122), Washington (103), Colorado (95), and California (64)

- International climbers: 449 (40% of total)
Foreign countries with the most climbers were the United Kingdom (52), Japan (39), France (28). In a three-way tie for fourth position were the Czech Republic, Korea, and Poland, each with 23 climbers. Nepal was close behind with 22. Of the less-represented countries, we welcomed just one climber each from Montenegro, Iceland, Mongolia, and Croatia.

- **Average trip length**
  Overall average was 16.5 days, start to finish.

- **Average age**
  39 years old

- **Women climbers**
  Comprised 12% of total (132 women). The summit rate for women was 59%.

- **Summits by month**
  - May: 112
  - June: 514
  - July: 44

- **Busiest Summit Days**
  - June 16: 83 summits
  - June 23: 71 summits
  - June 1: 66 summits
  - May 31: 35 summits

**2016 Search and Rescue Summary**

**Avalanche Hazard**

A winter climber departed Talkeetna on January 21, 2016 for a planned 65-day solo expedition on the West Ridge of Mount Hunter. On April 3 (Day 72 of the expedition), the uninjured soloist was evacuated from 8,600 feet via short-haul rescue basket after becoming stranded with inadequate food and fuel due to persistent avalanche conditions.

**HAPE/HACE**

After an eight-day, early season ascent to the 14,200-foot basin, one member of a three-person climbing team was ataxic and presented with a headache, persistent uncontrollable cough, and fluid in the lungs. As the only team in camp, the
climber’s teammates sent a satellite phone text to the Alaska Region Communication Center (ARCC) requesting an emergency evacuation. On April 24, the sick climber was evacuated by park helicopter from the 14,200-foot camp because of suspected high altitude pulmonary edema (HAPE) and high altitude cerebral edema (HACE). The patient was flown to Talkeetna, and then transferred to ground ambulance for further care. The remaining two expedition members descended without incident.

Frostbite

On May 25, two teammates at the 17,200-foot camp on the West Buttress contacted NPS rangers via FRS radio to report frostbite injuries sustained during their ascent from 14,200-feet the day before. One climber reported deep frostbite injuries to both hands, while the teammate reported deep frostbite injuries to both feet. They requested rescue assistance due to their combined inability to safely descend in technical terrain. A significant storm prevented safe travel for the following three days; however the team maintained scheduled FRS radio communications with medical updates, treatment recommendations and evacuation logistics. When the storm ended on May 28, the injured climbers and the NPS ranger team met at 15,400 feet on the West Buttress. Following a patient assessments, the climber with frostbitten hands was assisted on foot, while the climber with frostbitten feet was packaged and transported via ski toboggan with belay to the camp at 14,200 feet. The patients were treated and monitored in camp overnight, then evacuated via helicopter to Talkeetna the following day. Both subjects were transported via personal vehicle to a frostbite specialist at MatSu Regional Hospital for further evaluation.

Fatal Skiing Fall

On May 28, a ski mountaineer fell while skiing the Messner Couloir on Denali. The unroped fall initiated at approximately 17,000 feet. According to the surviving climbing partner, the two were retreating from a planned ascent of the Messner Couloir due to difficult route conditions. The pair had transitioned from climbing in crampons to skis for their descent back to their camp at 14,200 feet. After two to three ski turns during the descent, one of the skiers caught a ski edge in the snow surface and fell approximately 1,500 feet. NPS rangers at the 14,200 foot camp were notified of the fall and initiated ground rescue efforts. After confirming the skier had died of traumatic injuries sustained in the long fall, members of the NPS patrol recovered the remains, while other patrol members assisted the surviving teammate back to the 14,200-foot camp.

Frostbite

On June 6, a climber was evacuated by helicopter from the 14,200-foot camp on the West Buttress due to severe frostbite to fingers and toes on all four extremities. The patient was flown to Talkeetna, and then transferred to ground ambulance for advanced care.

Fatal HACE

In the early morning hours of June 14, a climber began to demonstrate signs and symptoms of high altitude cerebral edema (HACE) while descending from the summit of Denali on the West Buttress. Based on reports from teammates and a passing climber who rendered assistance, the climber’s condition rapidly deteriorated before the individual collapsed at
18,400 feet near Zebra Rocks. The patient initially indicated that his eyesight had diminished, and soon thereafter he became incapacitated and unable to walk. The assisting climber quickly descended solo to high camp for help, while the impaired climber’s four teammates remained with him. NPS rangers were notified of the incident. The park’s high altitude helicopter pilot and crew flew an initial reconnaissance mission to 18,400-feet, then returned shortly thereafter with a rescue basket via short-haul line. The teammates secured the unresponsive patient in the rescue basket for transport to the 14,200-foot camp. Advanced Life Support (ALS) interventions were initiated, but the patient was pronounced deceased. The climber’s remains were transported to Talkeetna.

**HAPE**

NPS rangers and volunteers at 17,200-foot camp received notification from a commercial guide that one of their clients was experiencing signs and symptoms of high altitude pulmonary edema (HAPE) on June 17. The NPS patrol traveled to the base of Denali Pass and helped walk the patient back to the 17,200-foot camp for assessment and treatment. The client’s guide had already started appropriate drug interventions on descent from Denali Pass, and then low flow oxygen was administered at 17,200-foot camp. Nevertheless, NPS responders reported that the patient’s status was deteriorating. The park’s high altitude helicopter pilot launched from Talkeetna at 4:15 am, picked up a ranger paramedic at basecamp, then flew to high camp. The NPS patrol at high camp loaded the patient for a direct flight to Talkeetna. In Talkeetna, transfer was made to a Life Flight air ambulance and the patient was flown to Mat Su Regional Hospital for further care.

**Fall with Multiple Traumatic Injuries**

In the early hours of June 23, while descending from the summit, a climber on a four-person rope team lost their footing at about 18,400 feet, pulling the rope team off their feet. One of the teammates successfully arrested the fall. However, one team member sustained a closed head injury and was unconscious, and a second teammate sustained a chest contusion with a possible broken rib. The climber with the rib injury, who happened to be a physician, remained with the unconscious teammate while the two uninjured climbers descended to high camp for help.

Between 3:00 and 4:00 am, the two climbers made contact with a guide at high camp who relayed the accident information and rescue request to NPS rangers at the 14,200-foot camp. Based on the injuries and location, the park helicopter was launched, however due to high winds at upper elevations, the helicopter had to stage at base camp to wait for better weather.

Later that morning, a different guided party moving up the mountain arrived at Denali Pass and spoke with the injured party. That guide relayed to the NPS rangers that the climber with the head injury had regained consciousness and could walk at that time. At this point, the team communicated to the rangers that they no longer were requesting an NPS rescue. Over the next hour, several other teams arrived at Denali Pass. One individual, Blaine Horner, volunteered to assist the two down to high camp on his rope. For approximately five hours, Horner assisted the injured climbers in safely descending past numerous ascending parties on the fixed lines. Mid-afternoon, the injured climbers were re-united with their teammates at 17,200-feet. They all descended the mountain together without further incident. In recognition of Horner’s extraordinary and selfless efforts, Denali mountaineering rangers named him the 2016 Mislow-Swanson Denali Pro Award winner.
HACE
On June 26, a client on a guided expedition was at the 14,200-foot camp on Denali’s West Buttress when they began having symptoms of HACE, including a severe headache and blurred vision. The client’s lead guide initially assessed the condition and provided medication. When the patient failed to respond favorably to medication, the NPS ranger team was summoned and the patient was moved to the ranger medical tent. The patient was given additional medication and started on hyperbaric chamber treatments which continued roughly every other hour through the afternoon and night until the client was evacuated by helicopter the morning of June 27. While down at an elevation of 320 feet in Talkeetna, the recovering patient was evaluated by Mat-Su Borough ambulance personnel and later declined transport to a hospital.

Broken Arm
A backcountry traveler was attempting to traverse with two partners from the Pika Glacier to the Tokositna River when a boulder underfoot gave way on the lower Granite Glacier. The individual suffered an open, compound broken arm with significant blood loss and associated pain. Due to the location of the team and immediate threat to the arm, they use an inReach satellite device to contact friends, who in turn contacted NPS rangers for assistance. The patient was evacuated to Talkeetna via helicopter and driven by friends to Mat-Su Regional Hospital.

Abdominal Pain
On August 1, the Alaska Ranger Communication Center staff received a satellite phone call alerting park staff about a person in severe abdominal pain at the Mountain House on the Ruth Glacier. The individual had been suffering from acute pain and related distress for five days, and the group was concerned about the patient’s hydration and overall nutrition. Prolonged cloud cover on the landing strip precluded a fixed wing pick-up. Later that afternoon, the park’s high altitude helicopter pilot was able to fly to the Mountain House with two park ranger-medics on board to evacuate the patient and one family member. The family member drove the patient to the hospital for further medical care.

2016 Medical Summary
Denali mountaineering rangers and volunteer medical personnel treated 17 patients that met the 'life, limb or eyesight-threatening' guideline. Patients not meeting this treatment threshold are expected to self-treat and evacuate as needed. The following list provides a breakdown of the field diagnoses from this season:

- High Altitude Cerebral Edema (HACE) - 3 cases
- High Altitude Pulmonary Edema (HAPE) - 5 cases
- Cold Injury (Frostbite) - 6 cases
- Cold Illness (Hypothermia) - 1 case
• Traumatic Injury - 3 cases
• Medical (Respiratory) - 1 case

*Note that some patients had concurrent diagnoses resulting in a higher number of diagnoses than total patients.

Of the patients treated, 13 were independent climbers, 3 were from guided expeditions, and 1 was an NPS volunteer. Twelve of these patients were treated at the 14,200-foot camp on Denali, three were treated at the 17,200-foot high camp, and one was treated at the 11,200-foot camp. One patient was treated in the foothills of the Alaska Range during a pack raft exit from the range.

One fatality resulted from traumatic injuries sustained in a skiing fall and the other likely from high altitude cerebral edema (HACE) based on the report from his expedition teammates.

The patient care reports from the 2016 climbing season denote ailments and injuries common to climbing in the Alaska Range. Many of these medical and trauma problems are preventable given prudent decision-making and a reasonable ascent profile during a climbing expedition. Additional information on the prevention, recognition, and treatment of common mountain medicine issues can be found in the Denali Expedition Planning Tools.

2016 New Routes and Significant Repeat Ascents

Researched and Compiled by Denali Mountaineering Ranger Mark Westman

The 2016 Alaska Range climbing season featured several early season successes on lower elevation peaks by strong and motivated teams. El Nino yielded another very warm winter in Alaska, and also a deep snowpack which proved to be generally supportive, and also made for good ice conditions in many areas of the range.

In early April, Andy Anderson and Kim Hall completed two new routes on the southwest fork of the Tokositna Glacier. On April 12, they ascended a prominent rock tower on the far left side of the south face of Mount Providence. “Outside Providence” (IV, WI4, M5) follows a large couloir for 500 meters, then exits left to a rising traverse leading to the base of a cleft in the tower. 200 meters of steep ice and mixed climbing up to WI4 and M5 led to a prominent notch in the tower, which was separated from the main summit ridge of Mount Providence. They descended from here.

Next, Anderson and Hall climbed a new route on the south face of Thunder Mountain. “Thunderstruck” begins up the existing route “Maxim” on the far left side of the face. After 500 meters of climbing, they traversed right on unclimbed ground to gain a parallel couloir. This couloir featured several pitches of snow followed by five pitches of steep ice and mixed up to WI5 and M4. They crossed a snow fluting and continued up another mixed pitch in a narrow slot. Several hundred feet of steep snow trenching through faceted sugar snow gained the heavily corniced summit ridge. As it has been with most of the established routes on Thunder Mountain, the team chose not to negotiate the overhanging summit ridge cornices and began descending the route.
On April 21, Ben Erdmann and Jess Roskelley were flown to the Cul-de-Sac Glacier in the remote Kichatna Mountains. Over the next two days, the pair established a difficult new route on the west face of the Citadel, which featured hard mixed climbing on loose, thinly ice rock. At mid height, they were beset by a small storm and made a bivouac to wait for better conditions. The weather improved significantly by morning. They continued up thinly ice slabs connecting diagonal ramp systems, which gave access to the upper snow couloir and the summit. They rappelled the line of ascent and named it “Westman’s World” (VI, M7, AI4X, A3, 70 degrees). This was the second new route the pair have established on The Citadel, having established the “Hypa Zypa Couloir” on the east face in 2013, along with partner Kristoffer Szilas.

In late April, a large group of French climbers visited the Ruth Glacier and made several significant repeat ascents and new routes. On April 28, Antoine Rolle, Steve Thibaut, Christophe Moulin, and Mathieu Rideau established “Little John”, a mixed route on a small tower attached to the southeast face of Mount Johnson. The tower is located immediately to the left of the beginning of the classic route “The Escalator”. Little John begins on ice smears left of a large corner. Sustained grade 4 ice climbing reaches a ridge, at which point the route passes a gendarme on the south side. Following this, sustained 5.10 rock climbing leads to steep and unprotected snow climbing up the final summit mushroom of the tower. They descended to the pocket glacier to the right and continued down the lower portion of the Escalator to return to the glacier. The 1,500 foot route is graded TD, 5.10, WI4+, 90 degree snow R, M3.

Moulin and Rolle also made the third ascent of “The Warrior’s Way” (V, M5 R, AI4+), which follows the huge and impressive corner on the 4,400’ east face of Mount Grosvenor in the lower Ruth Gorge.

On May 5, four members of the same French group -- Camille Marat, Vincent Rigaud, Mathieu Détrie, and Benjamin Ribeyre -- completed a difficult and very direct new route on the north face of Mount Church. “Les Démens de Minuit” starts about 100 meters to the right of the route “Memorial Gate”, and climbs directly up the imposing wall, utilizing a prominent chimney system. The lower part of the route featured sustained difficulties including vertical snow excavation and hard mixed climbing. The sixth pitch featured vertical excavation up a snow choked chimney which involved “caving” behind the snow plug, and was graded M7R, with 90 degree snow. Above the rock band, the technical difficulties eased but concluded with 700 meters of steep snow flutings with very little protection.

Four members of this French group also made what may be only the fourth complete ascent of the coveted north buttress of the Rooster Comb, a route which has seen many attempts but few successes since it was established by Nicholas Colton and Timothy Leach in 1981. Camille Marat, Vincent Rigaud, Mathieu Détrie, and Benjamin Ribeyre made one strong attempt before weather drove them back. A few days later, an entirely different foursome from the group, consisting of Mathilde Oeuvrard, Léo Billon, Benjamin Védrines, and Frédéric Gentet, completed the route to the summit of the Rooster Comb. They found mostly firm snow and solid ice on the route, something which many parties have found elusive in recent years. And, Mathilde Oeuvrard is believed to be the first woman to reach the summit of the Rooster Comb by any route.

On April 29, Mark Pugliese and Nik Mirhashemi established a 1,500 foot alternate start to the French (Northwest) Ridge of Mount Huntington, climbing it as a diversion during marginal weather. Their route begins near the start of the 1984 route “Polarchrome” and climbs straight up to the ridge, reaching it below the “First Step”, the initial difficulties of the French Ridge route. The pair did not continue to Huntington’s summit, but descended back down the French Ridge from this point, suggesting the route by itself as a good, lower commitment objective during weather that is too unsettled for going higher.
The named the route “Macho Madness” and graded it M6, 75 degrees.

On May 1, Nicolas Preitner and Teresa Au established a high quality new line on the northeast face of Mount Barrille. The route begins just to the left of the route “Alaska Primer” and ascends several new pitches up to M5 and AI5+, then breaks to the right and joins Alaska Primer for several moderate snow pitches and one grade 5 ice pitch. Where Alaska Primer continues right across an exit ramp, Preitner and Au’s new route continues straight up a beautiful ice strip on the steep wall above (WI5 R), followed by several pitches of more moderate ice climbing. The route’s 15th pitch gains the summit ridge very close to the summit of the mountain. They completed the route over two days, making a bivouac high on the route and needing to stop during the day to wait for cooler temperatures in order to continue safely. They descended the backside of the mountain by way of a dangerous avalanche gully to return directly to the Mountain House.

In May, David Lee, Kurt Ross, and Keenan Waeschle completed a route on the left side of the west face of Peak 11,300’. In 2015, Seth Timpano and Sam Hennessey had climbed this line to within 300 feet of the summit but retreated in storm and poor visibility. Timpano and Hennessey had found a solitary rappel anchor part way up, but no record of any ascent existed for this route. Lee, Ross, and Waeschle were able to complete the final section of the heavily corniced and mushroomed northwest ridge to the true summit. They described the route as an outstanding quality ice climb with difficulties to AI4 and M5. The trio descended by way of the standard descent on the southeast ridge.

Mount Foraker’s legendary Infinite Spur had only been climbed once in the past 15 years. This year, it received three ascents, two of which were particularly notable for their speed, and for the route’s first solo ascent. Colin Haley and Rob Smith made the route’s ninth ascent in an astonishingly fast 18 hours and 20 minutes, eclipsing the previous fastest ascent time of 25 hours, accomplished in 2001 by Steve House and Rolando Garibotti. While on route, Haley and Smith passed Pete Graham, Will Harris, and Ben Silvestre, who went on to make the route’s tenth ascent. Less than a week later, Haley returned to the Infinite Spur alone and made the first solo ascent of the route. He climbed the entire route without a rope or any sort of belay, and reached the summit in an even more incredible 12 hours and 29 minutes. A storm arrived a full day earlier than predicted and trapped Haley during his descent of the Sultana Ridge. It would take him more than 48 hours to reach Kahitna basecamp from Foraker’s summit, during which time he encountered strong winds, heavy snow, and very dangerous avalanche conditions. Despite having no shelter and running out of food and fuel, Haley was able to survive unscathed in part due to his enormous depth of alpine climbing experience and his extraordinary level of fitness.

In May, Jimmy Voorhis and Michael Gardner reportedly completed a new variation on Denali’s Fathers and Sons Wall. Details were unavailable at the time of this writing.

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