

Mountaineering Report – 2004

Highlights

The 2004 climbing season was marked by large fluctuations in weather, a consistent string of rescues, construction projects at Camp Muir and Paradise, and consistent staffing by Climbing Rangers both at high camps and in the ranger stations.

The weather on Mount Rainier varied dramatically over the course of the season. In April and early May, temperatures were well above normal with below average precipitation. This led to a well-consolidated snowpack and excellent climbing conditions. By mid-May, winter had returned to the upper mountain refusing to leave until the end of June. This prevented many climbers from reaching the summit, but prolonged the climbing season on many routes. Summer was back in full swing by early July and the Disappointment Cleaver and Emmons-Winthrop, Mount Rainier's standard routes, remained in great shape throughout the summer and early fall.

There were few rescues in 2003 and no climbing fatalities; however, 2004 was a different story. From May to October, there was a succession of rescues and body recoveries. The most dramatic and publicized incidents were on Liberty Ridge, where, four fatalities occurred. There was also a list of other incidents: 2 broken ankles, 3 knee injuries, 2 dislocated shoulders and 3 instances of climbers becoming stranded. Below is a short narrative of the major accidents this year. For more details and a full analysis of the accidents and rescues, see the park website, or refer to the 2005 publication of *Accidents in North American Mountaineering*.

Large scale restoration and renovation on the Camp Muir Public Shelter and Guide Service Cook Shack took place during August and September. The Public Shelter's appearance, livability and durability have been greatly improved. In Paradise, the two-year-long refurbishing of the Guide House was completed this year. The Guide House will be the new home to the Paradise Climbing Rangers and Climbing Information Center.

Climbing Statistics

There were 9,251 registered climbers in 2004, another relatively light year when compared to the record high of 13,114 in 2000. Of the 9,251 registered, 3,714 were led by a guide service and 5,537 climbed independently. Table 1 lists those statistics in comparison to other years. Independent climbers have a 48% success rate; guide service averages a 60% success rate.

Table 1 *Registered Climbers (Annual Totals 2000-2004)*

	2000	2001	2002	2003	2004
Total Climbers Registered	13,114	11,874	11,313	9,897	9251
Independent Climbers	8,736	7,282	7,632	6,377	5,537
Guides and Clients	4,378	4,592	3,681	3,520	3,714
Total Summits	6,083	5,171	5,553	5,295	4,951

The Disappointment Cleaver remains Mount Rainier's most popular route with over 5,400 attempts. The registration statistics for the most popular routes are as follows:

Table 2. 2004 Registered *Climbers, Popular Routes*^[1]

Routes Attempted or Climbed:	# Climbers
Disappointment Cleaver (DC)	5,400
Emmons – Winthrop	1,700
Ingraham Direct	700
Kautz Glacier and Fuhrer Finger	450
Liberty Ridge	130
Gibraltar Ledges	120
Little Tahoma	120
Tahoma Glacier	100
Other Routes	531

^[1] These numbers are approximate. Unpredictable mountaineering conditions sometimes send climbers up routes other than the one for which they planned.

Mountaineering Patrols, High Camps and Ranger Stations

Patrols

Climbing Rangers patrolled over 13 routes this year maintaining a strong NPS presence on the upper mountain. Rangers monitored the climbing routes, provided up-to-date route conditions, and were prepared and positioned in the event of an incident. The average patrol included: inventory of resource impacts; removal of human waste; dismantling of cairns and rock walls; contacting climbers about leave-no-trace practices; sharing route, weather and other mountain related conditions; monitoring of concession activities and the occasional response to emergencies.

The 2004 Climbing Ranger Program consisted of four rangers based at Camp Schurman and the White River Ranger Station and eight rangers at Camp Muir and the Paradise Old Station. In addition, the program welcomed two new full-time volunteers and one part-time volunteer.

Together, rangers worked a total of 315 field days. Those included 242 days at high camps and 73 days on non-standard route patrols. Climbing rangers spent 170 person-days working in the White River and Paradise ranger stations.

High Camps

With few exceptions, Camp Muir and Camp Schurman were staffed daily with at least one ranger throughout June, July and August. Rangers at high camps provided updated route, weather and safety information to the public and the guide services. Climbing rangers traditionally provide this information during "evening rounds". Evening rounds also allow rangers to note the plans of climbing groups, which can prove invaluable should the party encounter problems during their climb.

In addition to maintenance on high camp buildings, climbing rangers regularly cleaned and maintained the pit and solar dehydrating toilets. It was also beneficial to have a dedicated maintenance manager staff the Camp Muir Thursday to Sunday.

During the months of August and September the Camp Muir Public Shelter was restored and renovated. The original south entrance, which had been filled with masonry, was reopened and a door resembling the original was installed. New cooking areas and bunks were built and a state-of-the-art roof was installed. Walls were repaired and windows were replaced, they also added solar roof tubes (skylights). These upgrades will prolong the life of the shelter and provide the public with better light and ventilation. The shelter was closed during the restoration but is now open to public again.

Ranger Stations

Climbing rangers staffed ranger stations at Paradise and White River which provided route and weather information as well as the latest safety reports. These reports can also be found on the web at: www.nps.gov/mora/climb/climb.htm. For pre-recorded information in the spring and summer, call 360 569 2211 ext. 2314.

Annual climbing passes are \$30 and are required for climbing trips. Climbing passes may be purchased at the Paradise Old Station, White River Wilderness Information Center, Longmire Wilderness Information Center and at Wilkeson Ranger Station. Passes may also be purchased by fax or mail using a form available on the Park web site. Funds collected from the sale of climbing passes are used for the operation of the climbing and waste management programs on the mountain.

Farewell to the Paradise Old Station. Built in 1922, the Paradise Old Station has been the main

point of contact for climbers and the NPS over the decades. 2004 was the last season climbing rangers will issue permits out of the station. In 2005, the rangers will move to the newly renovated Guide House. Renovating the Guide House was a huge effort, the results of which climbers will enjoy. There are new exhibits and displays on: climbing, history, safety, and natural resources. Come see the new facility this spring. The Guide House is the high peaked building across from the Paradise Inn.

Rescues

In 2004 Mount Rainier Climbing Rangers responded to 12 major rescues that included 6 fatalities. They also tended to: 19 climber assists, 4 medicals, 3 carry outs, and 4 searches for missing persons.

Mount Rainier National Park recognizes and thanks new members of our SAR team, the Oregon Army National Guard. Their search and rescue helicopters from Pendleton and Salem did a superb job during a number of challenging high-altitude rescue operations. The NPS also thanks Rainier Mountaineering Inc. and the Washington State Mountain Rescue Council for their continued assistance and teamwork during emergency incidents.

Liberty Ridge - 1 fatality, 1 rescued

May 15th, a climber took a 30 foot fall while leading, just below the Black Pyramid on Liberty Ridge near 11,800 feet. His partner caught the fall, however the leader sustained a serious head injury after tumbling off a small cliff. The NPS was notified via cell phone and responded with several ground-based climbing teams because the weather was very poor. Severe weather and challenging snow conditions hampered the ground efforts. Rangers spent two days reaching the injured party and accident site. On May 17th, the weather fortuitously cleared as climbing rangers reached the accident site. On scene rangers coordinated a helicopter hoist evacuation with the Oregon Army National Guard. Unfortunately, the injured climber died enroute to the hospital due to the severity of the trauma. The rangers and the remaining partner down climbed the route and were flown off the mountain the following day.

This event required the assistance and cooperation of over 50 Mount Rainier National Park personnel. Every division in the Park helped to support this operation. It drew local, national, and international media attention.

Liberty Ridge - 1 fatality, 1 injured hand/knee

On June 3rd a climbing party of two fell on Liberty Ridge at nearly the same location at 11,700 ft. One climber died a few hours later because of his injuries; the second sustained a hand injury and serious leg injuries. Four rangers were flown to Liberty Ridge. Performing a "power on" landing, the rangers were inserted near 11,200 feet. Once on scene, the injured climber was air-lifted by an Oregon Army National Guard Blackhawk helicopter and transported to Madigan Hospital. The second climber who died was also flown off the mountain. The rangers down-climbed Liberty Ridge to the Carbon Glacier for a pick up the following day.

Emmons Glacier - 1 injured knee

In the midst of the rescue operations on Liberty Ridge (June 3rd), a party descending the Emmons Glacier to Camp Schurman reported that one of their team members had sustained a debilitating knee injury during a fall. Rangers were flown to 12,300 feet on the Emmons Glacier. There, the climber was assessed, lowered, and prepped for air-evacuation. The patient and rangers were flown off the mountain that day.

Liberty Ridge - 2 avalanche fatalities

In mid-June two climbers were reported overdue on Liberty Ridge. Climbing rangers began helicopter reconnaissance of the area when they noted the body of a climber at the base of Liberty Wall on the Carbon Glacier. Four climbing rangers were flown to the vicinity to recover the body and search for the second missing climber. Two separate attempts were made on that day to locate the second climber within a large avalanche debris zone, however both were unsuccessful.

In mid-July, an independent climber spotted a body with some equipment on the Carbon Glacier below Liberty Wall. A recovery proved that this was the second missing climber. The accident investigation strongly indicates that the pair was caught in an avalanche above 13,000 feet on Liberty Ridge. The avalanche swept them over 4,000 ft of ice, cliffs and rocks down Liberty Wall. Both climbers were found in down parkas without their climbing gear on and un-roped. This suggests that they were taking a break, or in camp when the fall occurred.

Liberty Ridge Distressed Climbers – 2 rescued

During the recovery efforts for the avalanche on Liberty Ridge, a two-person team called the NPS via cell phone from Thumb Rock to request a rescue. One climber reported that the team could not ascend or descend the route. Though they had no injuries, the climber felt it was too dangerous for them to move. During the search and recovery for the avalanche fatalities, the NPS with the assistance of the Oregon Army National Guard, hoisted the two climbers from Thumb Rock on Liberty Ridge a day later.

Kautz Glacier – 1 dislocated shoulder

On June 30 a climber sustained a dislocated shoulder while arresting a fall on the Kautz Glacier. Though he was able to descend to Camp Hazard with the assistance of his team, the climber needed to be evacuated. A helicopter inserted a ranger near Camp Hazard who assessed, packaged and assisted the climber via helicopter off the mountain.

Tatoosh Range - Knee injury

On July 24 a climber sustained a knee injury in the Tatoosh Range below Unicorn Peak. The female climber had lost control while glissading down a snow slope. The party was able to self-extricate her to the top of the gully feeding Snow Lake where they were met by two rangers who assisted with the lengthy belay to Snow Lake. Once at Snow Lake, another team of rangers assisted with the carryout back to the parking lot.

Stevens Canyon - 1 kayaking fatality

On July 27 climbing rangers assisted with the technical recovery of an Oregon kayaker in Stevens Creek. The recovery was technical involving steep rocky terrain.

Kautz Glacier Broken Ankle - 2 injured

On August 12 the NPS received a phone call from a distressed member of an independent party who had been climbing the Kautz Glacier. The two person team had taken a 400 foot fall in the icy steps of the Kautz Glacier around 11,900 feet. The fall was arrested when one climber fell into a shallow crevasse. Both climbers were injured; one sustained a compound fracture of the ankle. RMI guides assisted. They secured the scene and stabilized the injured climber. A climbing ranger was inserted via hoist from an Oregon Army National Guard Blackhawk helicopter to extricate the injured climber. The climber was packaged and evacuated using the Blackhawk's hoist. One of the guides assisted the partner back to Paradise.

Emmons Glacier - 2 disoriented and stranded climbers

On the evening of August 20 two climbers fell above the Disappointment Cleaver on the Emmons Glacier. With absolute luck, the pair landed on a semi-detached island of ice in the glacier, surrounded by deep crevasses and steep ice. While no serious injuries were sustained, the pair reported being stranded and requested help. Rangers responded from Camp Muir and “eyeballed” the climber’s headlamps around midnight. However, because of darkness, they were unable to find a route through the late summer crevasses. After first light, climbing rangers found a route and assisted the climbers off the mountain.

Muir Snowfield - 1 climber with broken ankle

On October 3rd a 34 year-old male sustained a broken lower left leg while glissading with crampons on the Muir Snowfield at 7,800 ft. Shortly after receiving the report, an eight person NPS litter team was assembled and hiked up the snowfield. Arriving at 10:30 P.M the team packaged the patient and lowered him back to Paradise, arriving at the parking lot at 1 A.M.

Ingraham Glacier - 2 climbers in avalanche, 1 killed, 1 buried

On October 24, two climbers abandoned their summit climb and instead elected to practice a variety of glacier skills in the crevasses on the Ingraham Glacier. Near the Disappointment Cleaver, the pair found a large cavernous crevasse in which to explore. They walked into the chasm and traversed it roughly 75 yards until they found an exit ramp. While ascending that ramp, a slab avalanche triggered and engulfed the pair.

One climber was completely buried, the other was partially buried. It took the partially buried climber roughly ½ hour to extricate himself from the firmly set snow. By the time he was able to break free, locate his partner, and clear his head from snow, his companion had expired. Asphyxiation was the cause of death. The body recovery was accomplished early the next morning by a team of three climbing rangers assisted by a MD-500 helicopter.

Resource Protection

High altitude, expansive glaciers, pristine beauty, and easy access make Mount Rainier one of North America’s most popular mountaineering destinations. To ensure its preservation, the climbing rangers work closely with mountaineers to eliminate human impacts in fragile alpine areas. Some important tenets of resource protection are:

- Properly disposing of human waste
- Camping on snow or durable surfaces
- Avoid creating new rock walls or tent platforms
- Traveling on established trails
- Packing out all trash
- Leave no trace

On the mountain, properly disposing of solid human waste is accomplished by one of two methods, using the established toilets or by using blue bags. Toilets are available at Camp Schurman and Camp Muir. Well-maintained toilets keep these locations sanitary, resulting in cleaner snow for drinking water. Camp Schurman has one solar toilet while Camp Muir has three solar units and two pit toilets. The solar dehydrating toilets are only operated during the summer months. Pit toilets are predominately used during the colder seasons of the year.

When toilets are not available, climbers collect their waste in “blue bags”. Mount Rainier’s “blue bags” are the lightest known system for safely packing out human waste and they are distributed to climbers during registration. Used blue bags are deposited into 55-gallon barrels located at

high camps or at select trailheads.

In 2004, over 27 barrels of human waste (five and a half tons) were collected from high camps and Panorama Point. Rangers also removed 82 incidents of improper human waste disposal around the mountain. Climbing rangers carried down over 472 lbs of trash from high camps, dismantled 79 cairns and rock walls, and contacted 18 parties who were camping outside the scope of their permit and in high impact zones. The great majority of climbers do their part to leave no trace, and we appreciate it greatly.

Looking Ahead

The 2005 season will see the Paradise Climbing Rangers working out of the Climber Information Center located in the Paradise Guide House. This will be the new location for climbing registration and information at Paradise. The Old Station will no longer be used to issue climbing permits.

The Camp Muir Public Shelter with the majority of its restoration complete is ready to serve climbers once again. Accommodation in the 18-person capacity shelter will remain first-come first-served. More construction is scheduled to take place up at Camp Muir during the summer of 2005 as work crews reconstruct, stone-for-stone, the historic men's restroom. Built in 1936, this structure has been slowly collapsing due to geologic changes.

In closing we would like to welcome back Stefan Lofgren to the climbing program. Stefan will become a lead climbing ranger, stationed out of Paradise. Since the late 1980's, Stefan has been a park ranger in the Pacific Northwest. He's traversed, climbed and hiked the backcountry of Olympic and Mount Rainier National Park extensively. He spent two summers on Mount Olympus as well as six summers on Rainier as a climbing ranger and we look forward to working with him on the mountain again.

2004 Climbing Staff	
Supervisor	Mike Gauthier
Lead	Glenn Kessler
Seasonal Leads	Paul Charlton David Gottlieb Greg Johnson Chris Olson
Rangers	Andy Anderson Asha Anderson Charlie Borgh Matt Hendrickson Bree Loewen Stoney Richards Adrienne Sherred
High Camp Maintenance	Ted Cox
Volunteers	Lynn Finel Tom Payne Brent Rosato