

## **Highlights**

It was a unique year of climbing on Mount Rainier. The winter was marked by extended stretches of clear and stable weather with very little snowfall. This provided incredible winter mountaineering opportunities, of which some climbers took advantage. We found that winter registration grew threefold in 2004/2005 to over 375.

The stable weather pattern changed in the spring however when a series of cold and wet storms blanketed the upper mountain with snow. This precipitation revitalized the glaciers and the alpine meadows for the summer season. Aesthetically and botanically, the meadows were simply amazing. They melted out early and many Mount Rainier aficionados found the abundance of alpine wildflowers in 2005 to be some of the most spectacular in recent memory.

Another highpoint in 2005 was the reopening of the Paradise Guide House. The newly remodeled facility houses climbing, alpine ecology, and rescue exhibits. It's also the best place to get a climbing permit. During the summer, climbing rangers staff the Climbing Information Center each morning and help with registration. The Guide House has become a great venue for information about the upper mountain.

Similarly, the renovation of historic Camp Muir that started in 2004 was finally completed this summer. The contractors did an outstanding job restoring the Cook Shack, Public Shelter, and Historic Men's Toilet. In particular, the work on the Public Shelter was exceptional. Visitors staying at Camp Muir will appreciate the enhanced appearance, lighting, and livability of the remodeled interior.

On the climbing front, the season was intense and short. Most notably, the total number of climbers registered decreased. Though there was a successful winter climbing season, formable spring weather denied climbers' reliable access until July. Additionally, there were numerous rescues and three recoveries in 2005; it was a difficult spring.

## **Climbing Statistics**

There were 8,972 registered climbers in 2005. We again see a continued trend in climber registration numbers. Over the past five years, those numbers have been steadily decreasing (table 1). Of the 8,972 registered, 3,879 were part of a guided trip, while 5,093 climbed independently. Table 1 lists those statistics in comparison to other years. Independent climbers have a 44% success rate; guide services average a 60% success rate.

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

	2000	2001	2002	2003	2004	2005
Total Climbers Registered	13,114	11,874	11,313	9,897	9251	8,972
Independent Climbers	8,736	7,282	7,632	6,377	5,537	5,093
Guides and Clients	4,378	4,592	3,681	3,520	3,714	3,879
Total Summits	6,083	5,171	5,553	5,295	4,951	4,604

The Disappointment Cleaver remains Mount Rainier's most popular route with over 2,049 attempts. The registration statistics for the most popular routes are as follows:

Table 2. 2005 Registered *Climbers, Popular Routes*<sup>1</sup>

Routes Attempted or Climbed:	# Independent Climbers as of
Disappointment Cleaver (DC)	2,049
Emmons – Winthrop	1478
Ingraham Direct	928
Kautz Glacier and Fuhrer Finger	276
Liberty Ridge	94
Gibraltar Ledges	100
Little Tahoma	106
Tahoma Glacier	54

## **Mountaineering Patrols, High Camps, and Ranger Stations**

### *Patrols*

Climbing Rangers patrolled over 12 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 tasks such as: resource monitoring; restroom duties; dismantling of rock walls, cairns, and camps; climber contacts, concession monitoring, and responding to emergencies as needed.

<sup>1</sup> These numbers are approximate. Unpredictable mountaineering conditions sometimes send climbers up routes other than the one for which they planned.

The 2005 seasonal Climbing Ranger Program consisted of four rangers at Camp Schurman and White River and six at Camp Muir and Paradise. In addition, the program welcomed six full-time volunteers and two part-time volunteers. Those 18 rangers were led by two lead climbing rangers, and one supervisor.

### *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 the climb.

Climbing rangers regularly cleaned and maintained the pit and solar dehydrating toilets. It is incredibly beneficial to have the dedicated maintenance manager at Camp Muir from Thursday to Sunday. Climbing rangers also provided routine maintenance and repair at both camps. They assisted with projects such as rebuilding retaining walls, painting, minor structure repair (like reattaching doors that continually blow off) fixing leaky roofs, and other amendments to the high camp toilets.

A restoration crew focused on the Camp Muir Public Shelter and Men’s Pit Toilet in August and September. In the Public Shelter, new bunks, new cooking surfaces, another sunlight, an active ventilation system, and a new concrete floor were installed. Work was also done on the Men’s Pit Toilet, which was collapsing into the Cowlitz Glacier. The contractors moved and reconstructed the small rock building more to the south allowing for its return as storage.

### *Ranger Stations*

Climbing rangers staffed the White River Ranger Station and the Climbing Information Center at Paradise. They are available during the mornings and some evenings and are excellent resources for route and weather information as well as the latest safety information. These reports and other climbing information can also be found on the web at: [www.nps.gov/mora/climb/climb.htm](http://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. In the summer, climbing passes may be purchased in person at the Paradise Climbing Information Center, White River Wilderness Information Center, Longmire Wilderness Information Center, and at Carbon River Ranger Station. For most of the year, climbing passes are purchased by mail or by using the form available

on the park web site (listed above.) Monies collected fund the climbing ranger program, the human waste program, and preventative SAR.

## **Rescues**

The Mount Rainier Climbing Rangers responded to over 20 major rescues and four fatalities in 2005. They also assisted numerous visitors in routine events such as carry outs, minor medicals, and short searches for overdue teams.

Mount Rainier National Park again recognizes and thanks the Oregon Army National Guard for their search and rescue helicopters. They again did a superb job during a number of challenging high-altitude rescue operations. The National Park Service also thanks Rainier Mountaineering Inc. and the Washington State Mountain Rescue Council for their continued assistance and teamwork during emergency incidents.

### *Brief Summaries:*

#### *Ptarmigan Ridge, Frostbite, over extended trip*

Two climbers (ages 25 and 28) set out to ascend Ptarmigan Ridge on Tuesday Feb 1st. They hoped to complete the climb by Thursday, February 3<sup>rd</sup>, and definitely by Friday. By Friday night, and per instructions from her boyfriend, a girlfriend contacted Mount Rainier National Park and told them about the overdue team.

Later that same evening, however, she received a cell phone call from the party stating that they were okay. They reported some minor frostbite and stated that they were taking longer than expected. It actually took the team two more days to reach the summit, and along the way, they ran out of food and camped on the summit during an intense storm. One of the climbers had frostbite amounting to blackness in his toes and fingers and some blisters on his fingers.

During the descent, the pair became lost in the storm. They down-climbed through serious avalanche terrain, snowstorms, and whiteout by trail. They accomplished this while keeping radio communication with the National Park Service. Along the way, they experienced a small avalanche in which they lost some gear. The ordeal ended when they met with a team of rescuers late the third night. The member with the frostbite was flown from Camp Muir to the hospital the next morning. The other climber hiked down with rangers.

#### *Muir Snowfield, Exhaustion, Hypothermia –Fatalities*

On May 21<sup>st</sup>, 2005, two hikers left Paradise for Camp Muir around noon. Camp Muir was visible from Paradise at the time, but by 4 PM, the mountain became shrouded in fog, clouds, and snowfall. Independent climbers reported seeing a two person party matching the description of the hikers at Camp Muir. They reported that the party left the public hut and descended shortly after they arrived. On May 23<sup>rd</sup>, when the pair had not returned home, a relative placed a call to the park. An investigation turned search found two bodies laying the snow on the Paradise Glacier at nearly 8,500 feet. A recovery operation revealed the identities. Somehow during their descent, the pair had wandered off route, attempted to set up a shelter, but abandoned it. In the ensuing storm, the prepared, but improperly dressed team succumbed to hypothermia.

#### *Gibraltar Ledges - Fall on steep ice - Fatality*

On June 10<sup>th</sup>, a two person team was climbing the Gibraltar Ledges unroped when one member fell to his death. During the ascent, near 12,000 feet, a partner watched as his teammate unsuccessfully attempted to self-arrest after slipping in the steep icy chute. The uncontrolled slide continued down the 45-55 degree slope for more than 900 feet. The climber tumbled over rock outcroppings along the way. Immediately, his partner descended to the site and called 911 requesting assistance.

At the bottom of the Nisqually/Gibraltar Chute, the climber found his partner laying face-down without respirations but with a weak pulse (about 35.) After 10 minutes, he could no longer detect a pulse and began CPR. CPR was continued until rangers arrived a few hours later. Once on scene, the ranger confirmed the lack of vital signs, and evidence of serious trauma. Shortly thereafter, medical control advised rangers to stop CPR. The body was flown off the mountain that morning.

#### *Fuhrer Finger - Rockfall*

While ascending the Furher Finger route on June 29<sup>th</sup>, an RMI client was hit by rockfall and sustained an open tib/fib fracture. While the party assessed, stabilized, and splinted the patient's leg, rangers made arrangements for air evacuation. Simultaneously three Rainier Mountaineering Inc. (RMI) guides left Camp Muir with a litter to rendezvous with the injured team. The patient was lowered down the lower Furher Finger route taking care to avoid further rockfall, while the RMI guides crossed the Wilson Glacier and established a landing below. At approximately noon, the patient arrived at the landing zone, and soon thereafter, the helicopter transported him to a hospital in Seattle.

#### *Tahoma Glacier - Stranded Climbers – Inadequate Equipment – Lack of Communication – Poor Planning*

At 4:30 PM on June 29<sup>th</sup>, park rangers received an emergency call from a three person climbing team at 13,500 feet on the Tahoma Glacier. The team formally requested a rescue, as they could no longer continue or descend the route (which they felt was too dangerous). The team left camp that day without a tent and stove, and only had one sleeping bag between them. Though they had some food and water (1.5 liters) they did not think they could survive the night without help. The temperatures were well below freezing, and the winds were a steady 20 mph.

Climbing rangers left Camp Schurman around 6 PM, in hopes of reaching the team near the summit. A helicopter was also requested and used to drop an emergency cache of equipment and supplies near the west crater summit. Climbing rangers reached the summit near midnight, and found the cache and climbers. Everything was fine at that point, but the team was escorted down the Emmons Glacier to the White River Campground.

#### *Tahoma Glacier - Torn Chest Muscles*

On July 1st, a Rainier Mountaineering Inc. Guide radioed Mount Rainier Rangers requesting an urgent evacuation of a client who was experiencing severe chest pain at 12,000 feet on the Tahoma Glacier. The 39 year old male collapsed on his pack during a rest break while grabbing his chest. He complained of intense chest pain, especially when breathing deeply and stated that he could not continue climbing.

Mount Rainier National Park requested an Oregon National Guard medivac Blackhawk helicopter with hoist capabilities to assist with the evacuation. The helicopter arrived approximately four hours later. It successfully hoisted the patient and transported him to Madigan Army Medical facility. He was diagnosed with torn chest muscles and held overnight for observation.

#### *Muir Snowfield - Dislocated knee*

On July 2 a hasty litter team responded to a dislocated knee at Pebble Creek. The team made contact with the patient on the Skyline Trail near Panorama Point and evacuated the patient to Paradise.

#### *Camp Muir – Overexertion, pre-existing medical condition*

Early on July 3<sup>rd</sup>, 3 climbers began their ascent to Camp Muir hoping to climb the Ingraham Direct the following day. One climber, a 52-year-old male, experienced significant back pain once at Camp Muir. He described his pain as nearly unbearable and was having trouble walking around camp.

Rangers assessed the man, and determined that he would be unable to safely descend under his own power. Assisted by a member of Seattle

Mountain Rescue, the rangers lowered the patient from Camp Muir to Pebble Creek via litter. They were met there by a wheeled litter team and assisted to Paradise without incident.

#### *Kautz Glacier - Struck by ice*

On July 5<sup>th</sup> a 46-year old male was hit by ice while ascending the Kautz Glacier and sustained a serious leg injury. Using a cell phone, his teammates notified the National Park Service to request a rescue. Afterward, they lowered him to a safer location to care for his injuries and prepare for evacuation. Climbing rangers patrolling the Fuhrer Finger responded to the incident by climbing to 13,300 feet and descending the Kautz Glacier. They provided emergency care and assessed the possibilities for air evacuation once on scene.

The Oregon Army National Guard responded with a medivac Blackhawk from Salem. A paramedic was lowered via hoist to the 11,500 foot location, triaged the patient, and successfully lifted them package from the mountain. The climber was flown to Madigan Army Hospital for treatment.

#### *Ingraham Glacier - Trip and fall*

On July 7 a Rainier Mountaineering Inc.(RMI) guide was leading a rope team up the Ingraham Glacier near 12,800 feet when one of the clients fell on the icy slope. The guide successfully arrested the client's fall and then attempted to place a picket for a running belay. Before this could be done, the client regained his footing, climbed a bit more, and then fell again. With slack in the rope, the client pulled the guide off his feet.

It was a icy and steep section of the route, and neither was able to hold the self arrest. The guide and the client continued to fall past the other two teammates, pulling them off too. The fall continued approximately 150-200 feet before hitting a crevasse. The guide and the initial client actually missed the depth of the crevasse and landed on the shelf near the surface. The other two clients however fell deeper into the crevasse, roughly 30 feet down. The guide, who sustained lacerations and a head injury, radioed for assistance to other RMI parties as he assessed the team's injuries.

The rescue call indicated that four climbers were badly hurt; injuries included femur fractures, serious head wounds, and spinal injuries. Within minutes a helicopter working in the park was diverted to pick up climbing rangers at Camp Schurman, Camp Muir, and the Kautz Helipad. The rangers were flown one by one to 13,000 feet. They worked with the guides to assess and stabilize the scene. The patients were triaged and extricated from the crevasse, as the guide and initial client (the two most ambulatory of the four) were shuttled off the mountain. The last two injured climbers were lifted via

hoist by the Oregon Army National Guard Blackhawk helicopters. The seriously injured patients were flown directly to Harborview and Madigan. All patients survived.

A summary of the injuries were: the guide sustained a broken eye orbit, lacerations, and contusions but was released the same day. The client who took the initial fall dislocated his shoulder and was also released the same day. The two clients who were pulled off each spent numerous days in the hospital. One cracked his C 5 and C 6 vertebrae, broke 6 ribs, ruptured his spleen and severely bruised his femur and thigh. The other also sustained 6 broken ribs, a punctured lung and a lacerated liver.

### *Emmons Glacier - Fall on glacier*

Mid afternoon on July 12<sup>th</sup> four members of a seven person group were descending the Emmons when one member tripped (possibly on rope slack) on a crampon. Her fall pulled two of the three remaining members off a 40-degree icy slope near 13,500 feet. Thankfully, the rope leader caught the teammates with a self-arrest, otherwise a more significant accident would have occurred.

Two were hurt in the fall, one with a broken nose, and the other with a severely sprained ankle. The rest of their party helped to stabilize the injured and rope-team; which took a fair amount of time to accomplish. During this time, another team (who were near the accident) descended to Camp Schurman and requested assistance. After a while, it was apparent that the remaining climbers could not wait out the long cold night without bivy gear. They descended to Camp Schurman leaving only the leader to stay with the two injured.

Rangers and guides from Camp Schurman observed the odd activity from camp through binoculars and assembled a rescue plan. They would carry overnight gear and first aid supplies to the party, while a helicopter evacuation was planned for early the next morning. When the rangers finally arrived on scene (they had already summited once that day) they found the leader was also in need of assistance. It was an incredibly cold night at 13,500 feet, the winds were blowing a steady 20-30 MPH with higher gusts and the temperatures were well below freezing. The three climbers were also hypothermic.

The rangers and guides dug a small ledge in the 40 degree icy slope and set up the tents. They spent a short, rough night huddled in two tents with the injured. Early the next morning, the Oregon Army National Guard hoisted the two most injured off the mountain, and the leader was escorted back to Camp Schurman.

### *Inter Glacier - Crampon snagging on glissade - broken leg*

On July 15<sup>th</sup> rangers were notified that a climber had broken his leg near the bottom of the Inter Glacier. The climber had been glissading with his teammates when his crampon caught an edge. This caused him to tumble and break his right tibia and fibula. The patient's teammates had already splinted his leg when the Camp Schurman climbing rangers arrived. After quick evaluation, the rangers elected to package the patient into a litter and lowered him to Glacier Basin. There, they met with an Airlift Northwest helicopter which transported the patient to the hospital.

### **Resource Protection**

Easy access to glaciers and alpine terrain make Mount Rainier one of North America's most popular mountaineering destinations. An important part of the climbing program is to ensure the preservation of the mountain. Eliminating human impacts in fragile alpine areas is achieved by:

- 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

Dispose of solid human waste 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 open 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 a light system for safely packing out human waste. Blue bags are distributed during registration. Deposit used blue bags into 55-gallon barrels located at high camps or at select trailheads.

In 2005, over 36 barrels of human waste (five and a half tons) were collected from high camps and Panorama Point. With good news, we report that fewer climbers improperly disposed of their human waste. Climbing rangers, however, still carried down hundreds of pounds of trash and garbage from high camps. They also dismantled rock walls, newly established camp sites, and contacted parties who were camping illegally. The vast majority of climbers do their part to leave no trace, and it's greatly appreciated.

## Looking Ahead

Look for the climbing rangers in the Climber Information Center at the Paradise Guide House in 2006. As a reminder, Paradise will probably be a busy place, as the National Park Service (NPS) expects a number of large scale construction projects to be occur next summer. We ask that climbers check in with the NPS before coming to the park. You can find the latest information on our web site: [www.nps.gov/mora/climb/climb.htm](http://www.nps.gov/mora/climb/climb.htm).

The Camp Muir Public Shelter is also ready to serve climbers once again. It now accommodates 20 people (more in a pinch) and will remain first-come first-served.

In closing we would like to welcome back our longest returning seasonal climbing ranger, David Gottlieb. David has served Mount Rainier National Park at Camp Schurman for the past 10 summers. Many climbers may recognize David as the tall thin climbing ranger with the beard. Last winter, David received the Red Cross's Hero Award for rescue work on the mountain; congratulate him at Camp Schurman this summer.

<b>2005 Climbing Staff</b>	
Supervisor	Mike Gauthier
Lead	Glenn Kessler
Lead	Stefan Lofgren
Seasonal Leads	David Gottlieb Chris Olson
Rangers	Andy Anderson Charlie Borgh Matt Hendrickson Bree Loewen Stoney Richards Jeremy Shank Adrienne Sherred
High Camp Maintenance	Ted Cox
Volunteers	Mimi Allin Hannah Carrigan

Lynn Finnel  
Peter Jewell  
Tom Payne  
Sam Wick  
Andy Winslow