



Throughout the summer of 2010 researchers monitored use of the Half Dome Cables. These photos show use on a permit day, Friday, August 20, 2010, at 12:40 PM (left) and a non-permit day, Wednesday, August 4, 2010, at 1:20 PM (right).

Beginning in May 2011, permits will be required to ascend the Half Dome cables seven days per week, when the cables are installed (typically, late May through early October).

In 2010, the National Park Service instituted an interim permit system for the Half Dome cables to address safety concerns caused by crowded conditions on the busiest days (Fridays, Saturdays, Sundays, and holidays). During the 2010 season, park scientists monitored conditions on the cables. While monitoring revealed dramatically improved conditions on permit days, it indicated

that unsafe conditions had shifted to Mondays and Thursdays. To ensure that the desired safety conditions are met every day, the National Park Service will require permits to use the cables seven days a week in 2011. This interim permit system will be in effect until a plan to address safety and wilderness character is finalized.

## 2011 Revised Interim Permit System

- Obtain a permit to hike to Half Dome by visiting www.recreation.gov or by calling 877/444-6777. Up to four permits will be allowed per internet or phone session. Each permit has a nonrefundable service fee of \$1.50.
- Available permits may be obtained through midnight the day before use.
- Permits may be canceled via www.recreation. gov, by calling 877/444-6777, or by turning them in at the Valley Wilderness Center or the Happy Isles Preventive Search and Rescue table (6–10 am daily) through the day before the reservation date.
- The 2011 interim permit system will limit daily use to about 400 hikers.
- Wilderness permit holders may receive a Half Dome permit with their wilderness permit if their itinerary includes Half Dome. Wilderness permits are already subject to a quota system.
- Unused permits will not be reissued in the park, neither at the subdome nor along the trail. All unused or cancelled permits will be put back in the inventory for recreation.gov and available only by phone or internet.

Canceling an unused permit allows someone else a chance to hike to Half Dome.

## Studying the Half Dome Cables

Park staff had noted a steady increase in use since the Half Dome area was designated as Wilderness in 1984. In 2008 the park undertook a study to quantify the level of use on the trail and cables and the corresponding impact on visitors' experience. The study revealed that average use on weekdays was about 400 hikers and 692 on Saturdays and holidays. In addition to recording the daily number of hikers, researchers also photographed and observed use of the cables. They noted that when more than 30 people were on the cables at one time, travel times increased and people had trouble moving freely up or down because of congestion on the cables. On weekdays, when use averaged 416 hikers, the cables tended to have 30 or fewer people on them at one time throughout most of the day.

In 2010, Yosemite National Park implemented a new permit system to address visitor safety on Half Dome. The park issued 400 permits per day for Fridays, Saturdays, Sundays, and federal holidays. The number of permits was based on the desire to maintain conditions that allowed visitors

to move freely up and down the cables. The 2008 study indicated that these free flowing conditions on the cables were achieved most of the day when about 400 people per day hiked to the top of Half Dome.

Throughout the 2010 hiking season, scientists monitored visitor-use conditions on and around Half Dome. Initial study results revealed that, on permit days, travel on the cables was unimpeded (less than 30 people on the cables at one time) 85 percent of the time. However, the study also revealed that the crowded conditions seen on weekends in the 2008 study had shifted to non-permit days in 2010. Visitor use non-permit days averaged 635 hikers compared to 301 on permit days in 2010. Travel on the cables on non-permit days was impeded (more than 30 people at one time) 65 percent of the time and less than 15 percent on permit days.

The 2008 and 2010 studies are available at www. nps.gov/yose/naturescience/half-dome-cables. htm.

## Why is crowding a problem?

Crowded conditions on the cables can greatly limit the ability to rapidly descend during hail, rain, or lightning storms. Hikers can become stranded either on the summit or on the cables due to crowding and slippery conditions. Descending at a reasonable pace to avoid inclement weather can become impossible due to the slow, constricted exit route. Lightning strikes to the summit of Half Dome and cable route have occurred, including a strike in 1985 that resulted in two fatalities.

On a crowded Saturday in June 2009, a man fell from the cables during a rain storm and died. This incident also required the dangerous rescue of more than 40 hikers who were unable to descend the cables due to the cold, wet conditions.

## **Long-term Solutions**

The National Park Service initiated an environmental assessment process to develop a long-term plan for the Half Dome cables in spring 2010. The plan is expected to be out for public comment in spring of 2011 and implemented during the 2012 season. Monitoring results from

the 2010 and 2011 season will help inform and refine the plan. To find out more about the Half Dome Trail Stewardship Plan visit www.nps.gov/yose/parkmgmt/hdp.htm.