

What Goes Up Mt Whitney Must Come Down

As the highest mountain in the "lower 48", Mt Whitney is a favorite destination for many hikers in the United States and beyond. However, this popularity has led to a number of management problems, including impacts associated with very large numbers of visitors on the trail and summit and improper disposal of human waste (**Crowding; Impacts to attraction sites; Impacts to trails; Impacts to soil; Impacts to vegetation**). Portions of Mt Whitney lie in Sequoia National Park and the adjacent Inyo National Forest, and the National Park Service and US Forest Service have cooperated in managing recreational use of the mountain in several important ways. This coordinated program of management is based on the strategies of **Limiting use** and **Reducing the impact of use** and includes: **1.** designating a Mt Whitney Zone where special regulations apply (**Zoning**); **2.** requiring a permit for both overnight and day use (**Rationing/Allocation**); **3.** promulgating a special set of regulations that apply to visitors in the Mt Whitney Zone, including a requirement that visitors remove their solid human waste (**Rules/Regulations**); **4.** a program to inform visitors about special regulations (**Information/Education**); and **5.** enforcement of these regulations (**Law enforcement**).

Introduction

While there is some uncertainty about the exact height of Mt Whitney in California, there is no disagreement about the fact that it's the highest mountain in the contiguous United States. The brass plaque at the summit of the mountain lists its elevation as 14,494 feet, but recent measurements have found its height as 14,505 feet. **Mt Whitney's distinction as the highest mountain in the lower 48 states, along with a well-maintained trail to the summit, has made it a prized destination of many hikers.** Though there are several trails that approach the mountain, the

Mt Whitney Trail up the east side of the mountain is the most popular, and is the only one that offers access to the summit by a day hike. However, it's a demanding hike covering a 22-mile round trip and requiring over 6000 feet of elevation gain. Despite the grueling nature of the hike, hundreds of visitors used to gather at the trailhead at Whitney Portal well before dawn to attempt the climb. This resulted in very large numbers of hikers on the trail and at the summit, exceeding use levels that many people felt were appropriate for a wilderness environment. Disposal of human waste was a special problem, given that much of the trail is above tree line and

where there is little or no soil to accommodate conventional waste burial guidelines. These and related problems have led to implementation of a suite of new management practices.

Sequoia National Park and the Inyo National Forest

The summit of Mt Whitney marks the boundary between Sequoia National Park and the Inyo National Forest (Fig. 15.1). These areas are managed by the National Park Service and the US Forest Service, respectively. There has been a long history of bureaucratic rivalry between these agencies; the National Park Service has its genesis in efforts to preserve scenic areas, while the Forest Service has its origins in a more utilitarian approach to natural resource management. Nevertheless, the two agencies have adopted a strong partnership in their joint efforts to manage recreational use of Mt Whitney in a responsible manner.

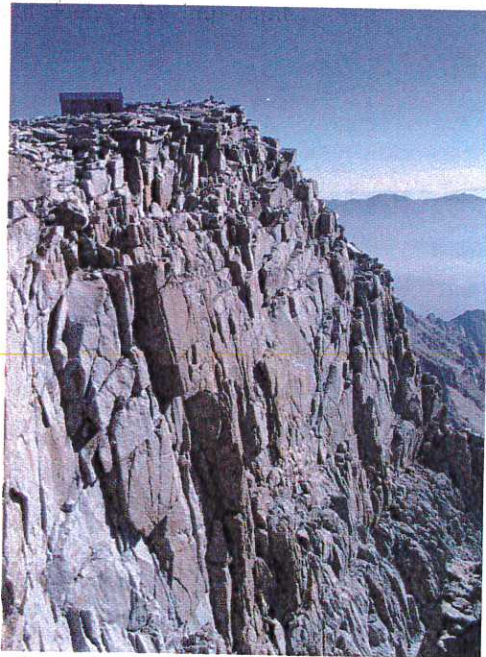


Fig. 15.1. Mt Whitney is the highest mountain in the continental United States and is jointly managed by the National Park Service and the US Forest Service. (National Park Service photo.)

Sequoia National Park is adjacent to Kings Canyon National Park and these two national parks are administered together. Sequoia is sometimes referred to as "the land of giants" because of its signature groves of sequoia trees, the world's largest living things. The Inyo National Forest is also monumental, including nearly 2 million acres of the Sierra Nevada and Great Basin Mountains. Landforms range from semiarid deserts to lush meadows and high-elevation lakes to alpine summits. It includes nine wilderness areas that offer a staggering array of recreational opportunities.

Managing Recreational Use on Mt Whitney

Management of recreational use on Mt Whitney includes a suite of coordinated actions. First, the mountain and its immediate surroundings have been designated as the "Mt Whitney Zone". This calls attention to the importance of this area and the need for special management focus. An important component of this program of management is the cooperative approach of the National Park Service and the US Forest Service. It would not be possible to manage recreational use of the mountain in a coherent and effective way without this type of coordination. An important manifestation of this cooperative approach is the Eastern Sierra Interagency Visitor Center. This facility is staffed by both agencies and offers a program of information and education on the special character of Mt Whitney and guidelines for use of this area. In addition to providing information to visitors about use of Mt Whitney, it sends a strong message to potential visitors: **"To preserve its wilderness character, all visitors must be committed to extremely high standards of conduct."**

Given the especially high demand for access, use has had to be limited through a permit system. On the popular Mt Whitney Trail, 60 overnight visitors and 100 day-use visitors are allowed each day during the peak use period from 1 May to 1 November. For trips in May, June, and July, visitors must apply by 20 April. For trips in August, September, and

October, applications are due by 27 April. A lottery is used to select successful applications. If there is space left after the lottery has been conducted, permits may be obtained in person the day before the permit entry date at the Interagency Visitor Center. Permits must be attached to the outside of backpacks so as to be visible to rangers who patrol the area. If visitors do not have a permit, they will be fined up to \$100 and asked to leave the area.

The combination of high use and the need to preserve the wilderness character of this area means that all visitors must abide by a number of regulations. For example, from Memorial Day weekend through 31 October, all food, food-related trash, and scented items (e.g. toothpaste, deodorant) must be stored in bear-proof containers (most hikers use plastic "bear canisters" that are carried in backpacks). Moreover, at the trailhead, food-related items must be taken out of cars and stored in the bear-proof lockers provided. These regulations are designed to discourage bears from frequenting this area and becoming aggressive with hikers on the trail or at campsites. Bears are adept at breaking into

cars to get food; if this happens, visitors may be fined (as well as having to deal with the damage to their cars!).

Perhaps the most demanding regulation is that visitors must pack out all solid human waste. Conventional burial of human waste is not feasible given high use levels and lack of soil at higher elevations. Hikers receive a waste allocation and gelling (WAG) bag with their permits (Fig. 15.2). This is a plastic bag with a urine-activated powder to encapsulate and deodorize solid waste. The bag includes a zip-lock seal, but extra bagging is recommended. WAG bags can be disposed of in dumpsters at the trailhead. WAG bags are now used in an increasing number of specialized outdoor recreation areas such as mountain climbing sites.

The coordinated, multi-agency program of recreation management on Mt Whitney employs a suite of management practices designed to protect both the area's extraordinary resources and the quality of the visitor experience. At iconic places such as Mt Whitney, both managers and visitors must be prepared to accept increasingly intensive management.



Fig. 15.2. Hikers on Mt Whitney must carry out their own solid human waste because soils in the area are too shallow for burial and decomposition. (National Park Service photo.)

Further Reading

- Barringer, F. (2007) No more privies, so hikers add a carry-along. *The New York Times*.
- Cleanwaste (2012) Available at: <http://www.cleanwaste.com/wag-bag> (accessed 24 January 2012).
- Climburg, A., Monz, C. and Kehoe, S. (2000) Wildland recreation and human waste: A review of problems, practices, and concerns. *Environmental Management* 25, 587–598.
- Inyo National Forest (2012) Available at: <http://www.fs.usda.gov/recmain/inyo/recreation> (accessed 20 January 2012).
- MacDonald, D. (2008) Packing out waster: You can take it with you. *Backpacker Magazine*, June.
- Oye, G. and Spitek, B. (2012) Mount Whitney case study. Available at: <http://www.nps.gov/yose/parkmgmt/upload/Oye%20Briefing%20Sheet.pdf> (accessed 20 January 2012).
- Sequoia and Kings Canyon National Parks (2012) Available at: <http://www.nps.gov/seki> (accessed 20 January 2012).