

Pressured Meadow Given New Lease

This is a story of a lovely mountain meadow that caved in under the pressure of too much visitor appreciation – a meadow that was “withdrawn from service” and allowed to recover – a meadow that was gently eased back into usage, but with a difference!

The story begins in the winter of 1972-73, when the NPS Washington Office ordered the development of management plans for backcountry use in all national parks having potential wilderness areas. At that time, Mount Rainier NP already had recognized the need for a coherent backcountry management plan and was independently developing one to deal with such impacts.

The star of this story is known as Indian Henry's meadows, and the history of camping at this Mount Rainier site goes back to the earliest days of the park. The meadows are lovely, flower-filled, and inviting. The views they afford of Mount Rainier are unsurpassed. Fifty years ago, a public shelter was built in Indian Henry's subalpine meadows, and campsites were selected in the vicinity of the shelter without major management controls.

In the late 60s and early 70s, park management began to note serious deterioration of the shelter, bare ground impacts around the sites, vandalism, expansion of social trails, the scars of many campfires, and other common user impacts.

The first backcountry management plan for Mount Rainier NP was published in 1973. It called for removal of certain shelters, including Indian Henry's, and the removal of associated subalpine campsites. A minimum impact educational program was initiated and still is in effect. A cornerstone of this program was elimination of undesigned camps on trails throughout the park, but especially in subalpine areas.

It took time, but eventually this educational approach gained strong public support. At Indian Henry's, an alternative camp was developed about one mile from the old campground, deep in old growth forest on the banks of Devil's Dream Creek. Despite growing user education and expanding user information on minimum impact camping and the desirability of having alternative camps in hardened areas, visitors contacted indicated a desire, at least among some people, to camp at subalpine sites.

In the autumn of 1983, it was found that rehabilitation of the old campground at Indian Henry's was nearly complete. Some scars remained, but they were healing well with time. Because of that healing process, park management began considering an experimental development of some alternative form of camping in subalpine meadows, to serve those campers who desired that experience. It was decided then, that a technique would be developed that would allow a single party to camp in or near the Indian Henry's subalpine meadows without causing lasting impacts on biotic systems.

Design responsibilities, as well as installation of the experimental site, were given to the park's Natural Resources Planning unit, with a target date of early summer, 1984 for installation of this experimental facility. The site criteria were:

1. It had to be located near the trail, near a good source of water, and near a toilet.
2. It had to assemble and disassemble rather simply, because it is intended that it will be moved from year to year. Its components had to be reasonably lightweight, so that a small

party could erect, or disassemble it in a single day.

3. It had to be large enough to accommodate a single camping party (roughly 100 square feet).
4. Its design would encourage the users not to leave it.
5. The materials used would blend aesthetically with the surrounding environment.

Subject-to-furlough Park Ranger Bob Martin volunteered several weeks to create a sound design package. Bob elected to design a platform composed of six floor panels, elevated on 4 x 4's to be installed 30 to 50 feet from the trail, and made accessible from the trail by the development of a highly portable elevated metal walkway. Design drawings are available upon request.

A 96-square-foot platform was constructed and preassembled in the park's carpenter shop in the spring of 1984, disassembled, and flown with an installation crew of six to Indian Henry's early in the summer. The date and period were carefully selected to provide maximum vegetative and soil protection due to the presence of snow still on the ground and reasonably easy installation due to the absence of most snow at the selected installation site.

Care was taken during installation to further minimize impacts on delicate vegetation by installing the walkway into the site first, carrying the panels to the end of the walkway and bolting them together while standing on half sheets of plywood. Vegetative crushing was expected and noted, but it was reported some weeks later that vegetation had rebounded.

The construction crew erected and put the campsite into operation in a 5-hour work period, then hiked out. The campsite was removed in early October after a killing frost and before heavy snow, by a work crew of 5 in about 3 hours. It is expected that the platform can remain in use for 8 to 10 years and be installed

at different sites each year, to minimize long-term impact.

Impacts created by the platform's installation and removal, as well as by public use, were monitored by the park botanist and by park researcher Dr. Ola Edwards of the University of Washington. The site was photographed before and after installation as well as while in use. Monitoring of the site will continue through October 1985. It was recognized in the planning stage that there would be transitory impacts, but – although a final evaluation cannot be made until monitoring is completed – it is believed by the Mount Rainier staff that impacts were vegetative in nature, of reasonably short duration, and that if the campsite is not used in 1985, very few vestiges of impact will remain.

The total cost, figured at \$3,050, breaks down as follows:

Materials, \$1,100; carpenters' costs for construction, \$400; installation/removal costs, about \$850 exclusive of about 24 volunteer hours; helicopter costs, about \$700. Designing took about 100 volunteer hours.

From its installation on July 27, through Sept. 30, 1984, the experimental platform was used by 18 parties who stayed an average of one night, totalling 44 people, for an average of 2.4 persons per party. At the junction of the access ramp with Wonderland Trail, a sign was posted describing the experiment. A brochure offered the users and passersby the opportunity to comment. A total of 71 responses were received, 16 from users, representing a user response rate of 88 percent.

Observations by at least 3 staff members were that in discussions with upwards of 60 hikers, their verbal response was generally positive.

Backcountry Specialist Peter Thompson of the Mount Rainier NP staff concluded that the objectives



Vegetation shrouds side of walkway at minimum impact campsite southwest of Wonderland Trail.

were met and that the "minimum impact camping" educational program had been successful. "This conclusion is based," he said, "on the comments we received from visitors – they played our program back to us."

If the platform is to be used in the future, he said, it should be moved to a new location annually and that site should be surveyed prior to placements by a subalpine plant specialist.

Thompson recommended that the unit be used on a continuing experimental basis, and that after a second season of use a final evaluation and decision regarding long-term applicability should be made.

"If we could do this job over and take advantage of 20/20 hindsight," Thompson concluded, "we would:

- "1. Paint walkway and platform prior to placements, or make it all of environmentally compatible materials.
- "2. Consider elevating the walkway to a height of at least 10" so vegetation would not grow through the walk and be trampled by users.
- "3. Conceal the site from the trail.
- "4. Redesign walkway to a more aesthetically pleasing type."