# BOOT 'N BLISTER REUNION TRIP, 1997 LASSEN VOLCANIC NATIONAL PARK OVERNIGHT BACKPACK

### August 15, 1997

Dear Boot 'n Blister alumni and alumnæ, We are back on our Columbus-Day schedule this year. We are also back in the Cascades this year but farther south. Last year we went to Crater Lake and did it in August because it was too far north to do in



Lassen Peak from Kings Creek Meadows. Photo by Lyn Topinka, USGS.

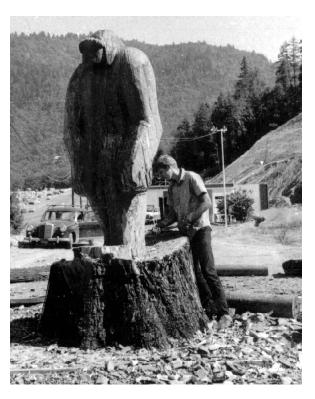
October. We also attracted more folks from Oregon. Mount Lassen is where the gang decided to go this year and it should be a wonderful time of year for the

trip. Lassen is one of our old stomping grounds although I recall going there mostly on cross-country skis. Rumor has it that Rick Robinson has hiked "every mile of trail" in the park. So ask him any questions you have left after reading this <grin>.

The trip last year was a car-camp trip with day hikes. That was quite nice for the little ones among us. We had our resident naturalists with us; Carol and Chris Rush worked there in the '70s and

Jim carving Bigfoot, Willow Creek, 1967 were busy pointing out flowers between the rocks on the hikes. I, on the other hand, was busy looking at the rocks between the flowers... The gang last summer consisted of Kristie; Chuck and Darby; Kathy and Don; Rick, Candy, Ansel, and Janine; Carol and Chris; Jay and Alycia; and me.

This year puts us back into the standard overnight backpacks. For base camp, we will drive up to Manzanita Lake Campground (see enclosed topo map) on Friday evening, October 10. The next morning we will drive on to Summit Lake to begin the hike. There is a campground at Summit Lake also but it is expected to close by about September 15. We will hike a loop trip of about 11 miles camping half way on Saturday night. We will come out on Sunday, October 12 and be able either to drive home or spend another day Monday visiting the national park. Further information can be had from Lassen Volcanic National Park, Mineral, CA 96063, (916) 595-4444. Information is also available on the Web at http://www.nps.gov/lavo/ or at the Information Center for the Environment (ICE) at http://ice. ucdavis.edu/nps/ which has comprehensive plants and animals lists.



Let me know if you might attend so that I can get an idea of how many to expect; I also love to hear from you folks. I'll get a Wilderness permit for us when I have an idea of how many will attend. I'll add a few so you can attend even if you pop in on Saturday morning.

Bring ideas of where to have the trip next year and the year after. Is the hike too short? Too long? Should we stay closer or range farther from Humboldt? Let me know. Mike Diggles

U.S. Geological Survey, MS-951, 345 Middlefield Rd., Menlo Park, CA 94025. Phones: (800) 223-8081 x 5404 or (650) 329-5404 commercial. Fax: (650) 329-5453 [note new area codes]

Email: mdiggles @usgs.gov

The following write-up on this 1997 Lassen Park Boot 'n Blister backpack is mostly excerpted from Jeff Schaffer's fine book Lassen Volcanic National Park & Vicinity from Wilderness Press. I highly recommend that you buy a copy for this trip or for doing an armchair hike if you don't attend this one. The Geology section is excerpted from Hoblitt et al. 1987 and copied out of the Sierra Nevada Ecosystem Project report (v. II, ch. 18 by Diggles <wink>) from U.C. Davis. **Hike Location** 

Summit Lake to Cluster Lakes loop, Lassen Volcanic National Park, northern California **Dates** 

October 10-12, 1997 **Hike Length** 

The trip is 10.8 miles in a loop with our hike-in camp at 4.9 miles.

### Terrain

Roadhead elevation 6,700 feet plateau before Cluster L 7,200 feet Cluster Lakes 6,950 feet Feather Lake 7,050 feet



Carol planning a hike, Crater Lake, 1996



Joe and Sverre, Deadfall Lake hike, 1993



Maralyn on her horse somewhere near Price Creek, 1967

Lower Twin Lake 6,537 feet Echo Lake 6,850 feet Maps

- U.S. Geological Survey Prospect Peak 15' (1:62,500) quadrangle
- U.S. Geological Survey Mt. Harkness 15' (1:62,500) quadrangle
- Insert in Schaffer's book (see references)
- AAA Northern California road map

## **Driving Instruction**

Fifty miles east of Red Bluff on Highway 36, and 50 miles east of Redding on Highway 44 (see enclosed overview map)

### Trailhead

At the east end of Summit Lake's north campground. Since we are backpacking, we will have to park by the Summit Lake Ranger Station trailhead 0.4 mile from where the day-hikers can park and begin their hikes.

## **Hike Description**

Here is the trail log from Schaffer's book (incremental milage):

3.3 miles to Little Bear Lake
0.2 miles to Big Bear Lake
0.8 miles to Cluster Lake
0.1 miles to Silver Lake
0.3 miles to northernmost Cluster lake 0.2 miles to Feather Lake (where we plan to camp Saturday night)

1.7 miles to Lower Twin Lake

0.6 miles to Upper Twin Lake

1.6 miles to Echo Lake

2.0 miles to complete the loop at the trailhead

To begin, we climb east, first up a gully and then up a ridge to a junction  $1^{1/4}$  miles from Summit Lake's north-shore campground. At the junction, we go left, eventually circling clockwise around to this junction. Schaffer does not recommend going around the other direction because the climb out of Little Bear Lake is no way to end a vacation. We climb for a gradual quarter mile and another moderate quarter mile to the plateau east of Hat Mountain. The plateau is about a mile long and then we drop fairly steeply into Little Bear Lake. Beyond Big Bear Lake, there is a junction to take a side trip a



Janet on the Falk photography trip, 1968

couple hundred yards to the north to visit Cluster Lake. You can never see too many lakes in your life, you know... After that visit, return to the junction and continue on past Silver Lake over a low divide to Feather Lake where we will camp Saturday night.

Sunday morning, we go one mile to Twin Lakes' seasonal creek, climb about 250 yards past it and hit the Pacific Crest Trail. A third of a mile more and you are at Lower Twin Lake. The side trail to the east from here takes you to Rainbow Lake where you can go up Fairfield Peak. To finish the hike, we continue up (duh) to Upper Twin Lake, around a nose of our

familiar plateau to Echo Lake, and hit the junction where we were yesterday. Another  $1^{1/4}$  miles and we are back at the cars.

## **Peak-bagging Opportunities**

On the way in on Saturday, a nice side trip might be to go up Hat Mountain. It is a classic cinder-cone shape and is 7,696 feet high. You take off to the west once you get on top of the plateau before the Bear Lakes. On the way home on Sunday, you can take a side trail to the east to Rainbow Lake (fun just for the lake) and go up Fairfield Peak just north of the lake. It is 7,272 feet high. Both of these peaks have nice little craters on top like good volcanoes should. You can stick around an extra day on Monday like I hope to do and go to the top of Lassen Peak from the road out to the south entrance. It is 2.3 miles up the trail to the summit. Bring water, dark glasses, and sunscreen. It is 10,457 feet high.

#### Weather

September ends the season for mostly sunny skies, warm daytime temperatures, and cold nighttime temperatures. The weather may stay mild into October but bring warm clothes anyhow. The snows don't tend to come until November but a Gore Tex shell might be a good idea.



Alycia leading Jay and the other hikers, Crater Lake, 1996

### Hazards

Water needs to be run through a water filter to avoid *Giardia*. Many of us use a Katadyne or Sweetwater filter pump now that our First Needs all got clogged. Schaffer does not mention bears in his book and his reference to mountain lions is that they are rarely seen and follow the deer herds. The deer will be on their way back down to the foothills about the time we get to Lassen. We should be there too late in the season for mosquitoes, but I always bring my Cutters anyhow.



Crater Lake group, 1996

• 35,000 years ago: Eruptions produced two pyroclastic flows from a vent east of Sunflower Flat near the north end of the chain. These eruptions were followed by extrusion of one or more domes at vents in the same area.



Don, Kathy, and The Blue Puma, Long Lake crosscountry ski trip, 1971

### Geology

This text is excerpted from Hoblitt et al. 1987. Information about Cascade volcanoes is available from the Cascade Volcano Observatory of the USGS on the Web at http://vulcan.wr.usgs.gov/

The Lassen volcanic center consists of a chain of vents aligned roughly north-south that extends about 8 km (5 mi) north from Lassen Peak. Although volcanism began between about 600,000 and 350,000 years ago, events of the last 35,000 years are the most thoroughly studied and form the basis for assessing hazards from future eruptions in the region. The stratigraphic record of late Pleistocene and Holocene eruptions in this region contains evidence of many eruptions during the last 35,000 years

• 25,000–35,000 years ago: Eruptions at Hat Mountain produced andesitic lava flows that reached up to 6 km (4 mi) from their vents. About the same time, eruptions at a vent now buried by the Lassen Peak dome produced at least four pyroclastic flows and several short rhyolite lava flows.

• 20,000 years ago: Eruptions formed an ancestral dome, now buried by the Lassen Peak dome, which is thought to have erupted shortly before



Caribou Lake group, 1987

11,000 years ago. During late Wisconsin deglaciation, lahars formed on the slopes of Lassen Peak and flowed at least several kilometers, primarily to the northeast.

• 1,000–1,200 years ago: The Chaos Crags eruptive episode began with eruption of a pumiceous tephra. At least two pyroclastic flows traveled west down Manzanita Creek about 4 km (2.5 mi) and a similar distance north down Lost Creek. Explosive activity generated pyroclastic flows that extended down Manzanita, Lost, and Hat Creeks. Shortly thereafter, extrusion of five dacite domes formed the Chaos Crags.

• 300 years ago: Three or more rockfalls from the Chaos Crags generated high-velocity avalanches of rock debris that traveled as far as 4.3 km (2.7 mi) westward from the Chaos Crags. The falls may have resulted from



Canyon Creek group, 1995

earthquakes, steam explosions, or intrusion of a of 1917. dome into the central part of the Chaos Crags. The 9 km (5.6 mi) above the vent and deposited a lobe of pumiceous tephra that can be traced as far as 30 km (19 mi) to the east-northeast. The fall of fine ash was reported as far away as Elko, Nevada, more than 500 km (300 mi) east of Lassen Peak. Intermittent eruptions of variable intensity continued until about the middle



Ron near Sarp Peak in the North Cascades, 1974

• a.d. 1914–1917: The most recent eruption at

The record of late Pleistocene and Holocene eruptive activity at the Lassen volcanic center suggests that the most likely hazardous future events include pyroclastic eruptions that produce pyroclastic flows and tephra. The Lassen volcanic center is one of the principal candidates in the Cascade Range for future silicic, probably explosive, eruptions. Based on its history, pyroclastic flows could endanger areas within several tens of kilometers of an active vent. Lahars and floods could affect lowlying areas even farther from the vent, particularly if eruptions occur during periods of thick snow cover. Eruptions that produce lava flows are generally less dangerous, although both lava flows and domes can become unstable and produce pyroclastic flows and rockfall avalanches that could affect areas as far as several kilometers away. Mixing of hot debris with snow can generate lahars that could inundate valley

> bottoms for tens of kilometers as in 1915.

Lassen Peak took place early in this century, when a small phreatic eruption occurred on May 30, 1914, at a new vent near the summit of the peak. More than 150 explosions of various sizes occurred during the following year. A vertical eruption column resulting from the pyroclastic eruption rose to an altitude of more than



Jeannie and Dan at Caribou Lake, 1987



Barbie and her North Face tent, Desolation Wilderness, 1994



Canyon Creek group, 1991



Charlie Bloom and Mike Diggles, 1989. Photo by Mac



Steve with Katherine and Martha, One-Mile-Lake hike, 1992

Sharp, Grant, 1959, 101 Wildflowers of Crater Lake National Park: Univ. of Washington Press

Williams, Howel, 1932, Geology of the Lassen Volcanic National Park, California: Berkeley, U.C. Department of Geological Sciences Bulletin, v. 21, p. 195-385.

#### References

Harris, Fire mountains of the West: Mountain Press. Hickman, ed., 1993, The Jepson manual, higher plants of California: U.C. Press.

Hoblitt, R. P. C. D. Miller, and W. E. Scott. 1987.

Volcanic hazards with regard to siting nuclear-power plants in the Pacific Northwest. U.S. Geological Survey Open-File Report 87-0297.

- Milne, Birds of Lassen Volcanic National Park.
- Munz, A California flora and supplement.
- Niehaus, Sierra Wildflowers: Mt. Lassen to Kern Canyon:

U.C. Press

- Schaffer, Lassen Volcanic National Park and Vicinity: Wilderness Press
- Schultz, Road guide to Lassen Volcanic National Park

Nancy (wearing her Kelty pack) and Wayne catching up on lost folk-dancing time, 1991

