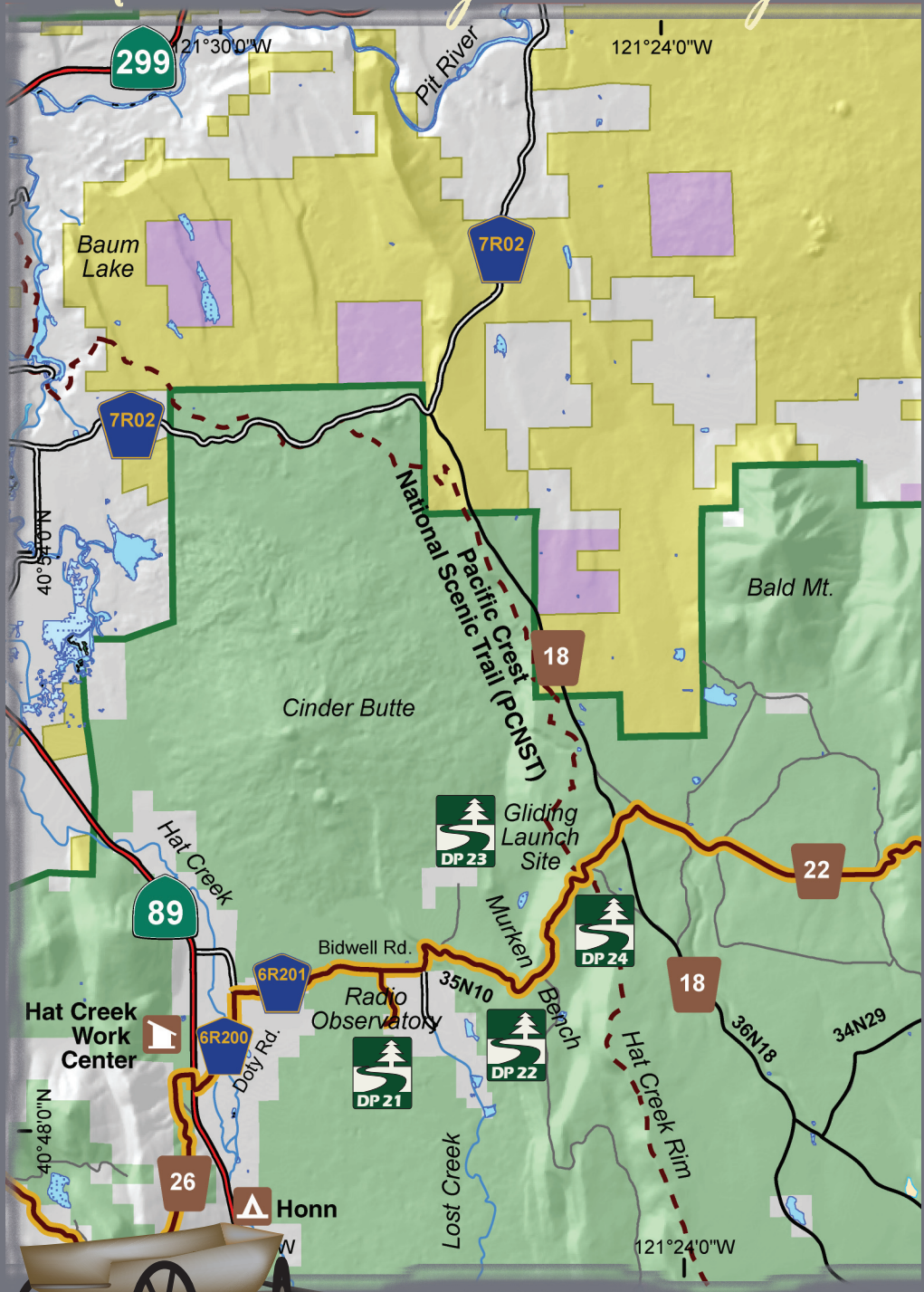
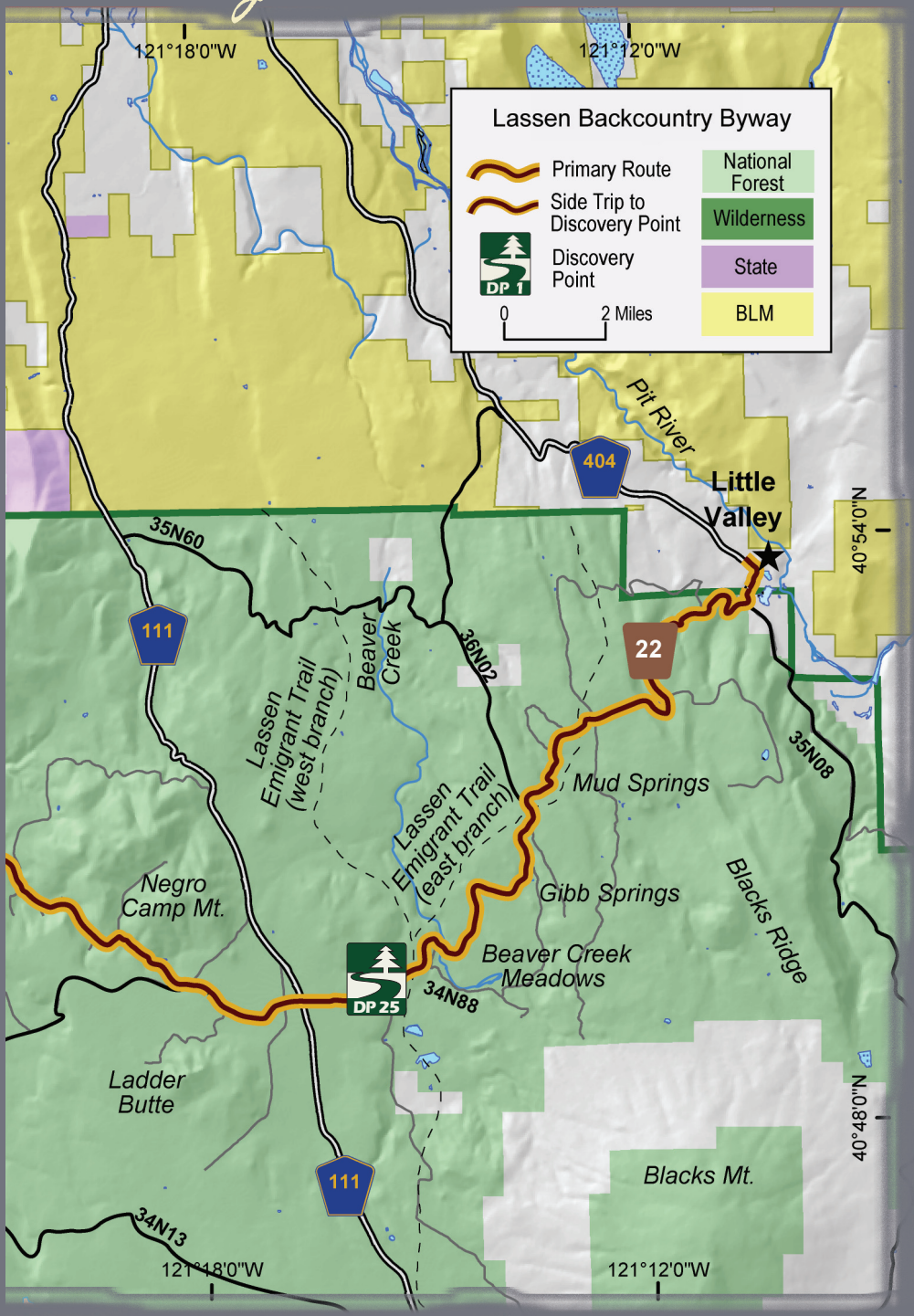
From Valley to Valley



Emigration in Earnest



From Valley to Valley
Emigration in Earnest

Section 5 *Discovery Points 21 ~ 25* *Distance ~ 21.7 miles*

The valleys of this region were major thoroughfares for the deluge of emigrants in the 19th century. Linking vale to dell, using rivers as high-speed transit, these pioneers were intensely focused on finding the quickest route to the bullion of the Sacramento Valley. ***From valley to valley, this land remembers an earnest emigration.***

Mapquest®, circa 1800

During the 1800s, Hat Creek served as a southern "cut-off" from the Pit River allowing emigrants to travel southwest into the Sacramento Valley. Imagine their dismay upon reaching the Hat Creek Rim with the valley floor 900 feet below! This escarpment was caused by opposite sides of a fracture, leaving behind a vertical fault much too steep for the oxen teams and their wagons to negotiate. The path that was eventually developed coincides closely to the SR 44 route today.

In 1848, Peter Lassen and a small party set out to blaze a new trail into the Sacramento Valley and to his ranch near Deer Creek. They got lost, but were eventually able to join up with other gold seekers and find a route to his land. His trail became known as the "Death Route" and was abandoned within two years.

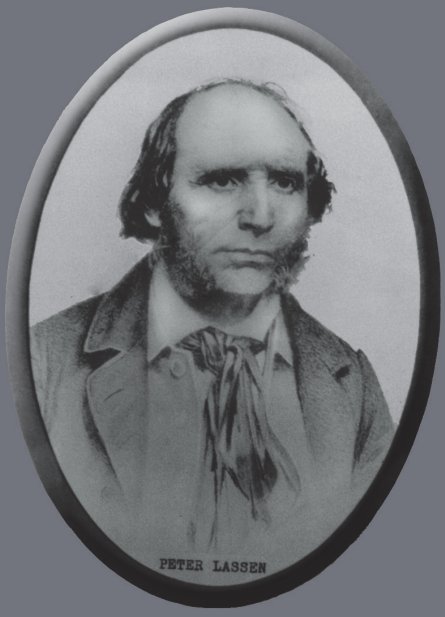


Photo of Peter Lassen, courtesy of the Lassen County Historical Society

Settlement in Fall River and Big Valley also began to take shape during this time. In 1855, Sam Lockhart built a connecting road between the Nobles Emigrant Trail and Red Bluff, spurring even more small towns. Fort Crook (1857) was established near the town of Fall River Mills with horse soldiers from this military compound traveling this same road.

View from Gibbs Spring

The Lassen Backcountry Byway crosses pieces of these early travelers' routes.

Milepost 0.0
Lat/Long 40° 48' 24"N, 121° 30' 48"W
Section 4 begins at the intersection SR 89 and Shasta County Road 6R200, Doty Road. Turn left onto the Doty Road and continue east.

Heading east, the landscape changes from green pasture to pine forest. Then, "sagebrush steppe" becomes obvious as western juniper and sagebrush replace pine trees and mountain mahogany. You're in the western Great Basin, which averages only 4-11 inches of rain per year. Compare that to the Cascades that get 48-50 inches per year!

Work's Work

One of the first Euro-American explorers in this region, John Work believed his 1832 expedition would be the first to trap the creeks and rivers said to be full of beaver. They were bitterly disappointed to find instead the remains from Ewing Young's expedition that had come through a year before. Few animals remained. On his trek through Hat Creek Valley, Work made camp near the current Forest Service Hat Creek Work Center where he wrote in his journal for November 12, 1832: "Proceeded 5 miles up the river [Hat Creek] to another small plain at the foot of the mountains where we encamped; it would have been too long to cross the mountains with our poor lame horses".

There are two privately owned campgrounds nearby, one to the right of Mile 0.2 and the other 6.0 miles south of Mile 0.0 on SR 89. Honn Campground (Forest Service) is located 1.5 miles south on SR 89. Gas, food, and lodging are available in Old Station (12 miles south on SR 89) and Burney (15.0 miles north on SR 89 and 299). Food, lodging, and supplies (but no gas) are also available in Hat Creek at both ends of the Doty Road loop off SR89.

Mile 1.3
At the intersection of Shasta County Road 6R200 (Doty Road) with Shasta County Road 6R201 (Bidwell Road), turn right and go east.

DP 21 *Hat Creek Radio Observatory*

Mile 3.2
Lat/Long 40° 49' 36"N, 121° 28' 14"W

A new kind of radio telescope is being built in the Hat Creek Valley. The telescope will ultimately include 350 dishes, each 20 feet in diameter, and will be one of the most powerful telescope arrays in the world. The large number of dishes provides unprecedented sensitivity for the detection of weak signals from space, including signals generated by extraterrestrial civilizations. The project is a joint effort between the U.C. Berkeley and the SETI Institute (Search for Extra Terrestrial Intelligence). Financing is provided in part by the Paul Allen Foundation with additional funds from other private donors.

Although the Allen Telescope Array is the most recent scientific instrument constructed at the Hat Creek Radio Telescope, the observatory has been in operation since the 1960s. During the 1970s and 1980s, research and development of interferometer technologies were undertaken.

Hat Creek Radio Observatory

In the late 1980s and early 1990s the Hat Creek interferometer was the fastest, highest resolution millimeter-wave interferometer in the world. Among the discoveries at HCRO the presence of water, formaldehyde, ethyl alcohol, and other complex molecules were detected in interstellar space.

To better understand their activities and plans for the future, you can visit the observatory Monday to Friday, 9:00 a.m. to 3:00 p.m. where you can see the antenna array and watch an informational video. You may also visit the SETI website: ***www.seti.org*** and click on Allen Telescope Array.

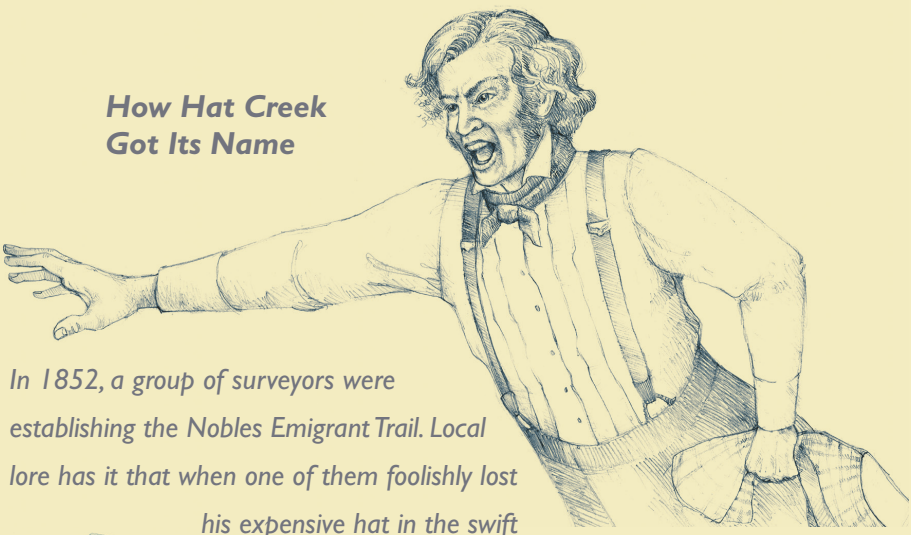
After leaving the Hat Creek Radio Observatory, turn right and continue east on PFR 22. At the end of the pavement, turn left and start up the steep Murken Bench.

DP 22 *Murken Bench*

Mile 3.8
Lat/Long 40° 49' 50"N, 121° 27' 39"W

As you ascend Hat Creek Rim, stop at the first switchback for views of the lava flows and cinder

How Hat Creek Got Its Name



In 1852, a group of surveyors were establishing the Nobles Emigrant Trail. Local lore has it that when one of them foolishly lost his expensive hat in the swift waters, he "turned the air blue with his sulfurous comments." In a mock ceremony, his laughing partners named the stream "Hat Creek."

cones fields. Looking south, let your eyes follow the rift at the base of the Rim. This geological fault is practically brand new – only tens of thousands of years old! Compare it to the older faults around the rim and others to the east that eroded millions of years ago and are now covered with vegetation.

On the left side of the road just past the corner, note the unusual circular pattern in the lava. Its ropey texture is typical of pahoehoe lava. As molten lava oozes out of cracks in a flow, it fans out in spherical designs. This lava traveled 14 miles from its source near Old Station, flowing mostly underground in lava tubes and tongues. The slab was originally horizontal, but was tipped nearly vertical by the geological energies that formed Hat Creek Rim. Lava tubes are common in the Hat Creek Valley, created when the outer surface of a river of basaltic lava cools and hardens, and the hotter interior continues to flow.

Pahoehoe-like lava

Volcanic Rocks We Use

Obsidian (volcanic glass) was used by prehistoric people for arrowheads, scrapers, and knives. Basalt, another type of lava, was used as a stone tool by aboriginal peoples, although it was not as prized as obsidian. Today, volcanic cinders are used by the California Department of Transportation on icy and snow covered roads.

When the flow stops and the outer surface thins, it cracks and breaks, falling into the void where the lava once flowed. See if you can find where the black lava flow ends and the green valley begins.

Changes in plant life above ground tell what's going on underground. Curleaf mountain mahogany (the clusters of small trees) and green moss tend to grow on or near lava tubes, which are cool and moist inside.

Side Trip - Hiking

To get a closer look at the spatters of lava ejected from the volcano's vents, hike the Spatter Cones Trail (1.5 miles south of the SR 44/89 intersection at Old Station). Or, visit Subway Cave (0.25 miles north of this intersection) and walk a 0.35 mile trail through a subterranean cave, created by the cooling lava.

DP 23 *What You See From Here*

Mile 7.2
Lat/Long 40° 50' 30"N, 121° 25' 37"W

A short side trip to a hang gliding site on the north side of the road will reward you with magnificent views. Start by looking left along the top of Hat Creek Rim. Turning to your right, you can see West Prospect Peak, Lassen Peak, Sugarloaf Peak and Thousand Lakes Wilderness, Hat Creek Valley, Hat Creek Radio Observatory, Burney Mountain, Mount Shasta, and the Medicine Lake Highlands.

During favorable weather, gliders soar over the valley and land below where the windsocks wave.

Return to Mile 7.2, turn left and continue uphill.

DP 24 *Hat Creek Rim*

Mile 7.4
Lat/Long 40° 50' 26"N, 121° 25' 36" W

Welcome to the top of the Hat Creek Rim! You are on top of an excellent example of a fault, where the earth's crust has been shifted

vertically along fractures. These fractures are caused by forces deep beneath the surface that can shape and move entire continents. The floor of Hat Creek Valley is over 900 feet lower than the top of the Rim. A million years ago, they were at the same elevation!

Mile 7.7
Lat/Long 40° 50' 36"N, 121° 25' 26"W

You are crossing the Pacific Crest Trail. Here, hikers are halfway from Mexico to Canada on their 2,650-mile journey.

Mile 7.8
At the Y-intersection with PFR 18, stay left on PFR 22 and watch for Backcountry Byway signs.

Mile 8.4
Go straight ahead , past the intersection with PFR 18.

Mile 8.7
Go straight ahead for 0.1 mile to the intersection of PFR 22 and 35N72. Turn right at the T-intersection and go east on PFR 22.

Mile 16.9
Continue straight ahead, past the intersection with Lassen County 111.

Mile 19.0
Go straight ahead on the primary route. Or, at the intersection with FS 34N88, turn right to reach the Beaver Creek Pasture Campground in 1.5 miles. At this site, there are no restrooms, water, or structures.

Beaver Creek Meadows

DP 25 Lassen Emigrant Trail

Mile 19.1-22.4
Gibb Springs Lat/Long 40° 50' 30"N, 121° 13' 57" W (Mile 20.7)
Mud Springs Lat/Long 40° 51' 37"N, 121° 13' 27"W (Mile 22.4)

From here at the Beaver Creek Crossing, to the end of the Lassen Backcountry Byway at Little Valley, you generally follow the 1849 Emigrant Trail.

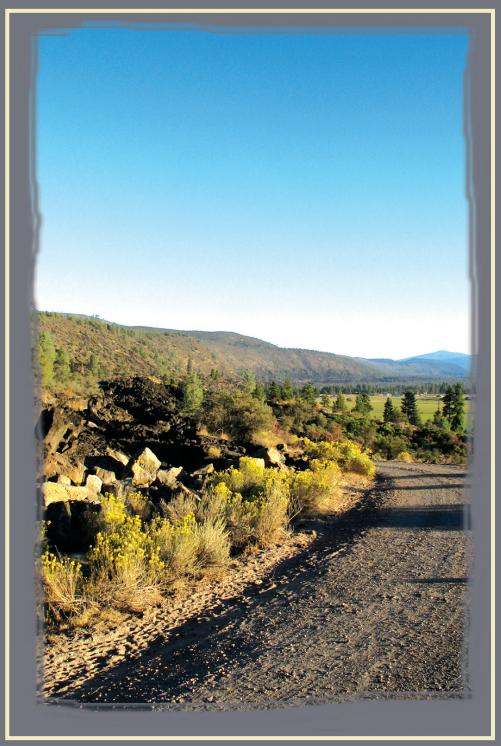
Mud Springs and Gibb Springs were undoubtedly important stops on the Trail where travelers could get water and graze their stock. This is also Peter Lassen's ill-fated point of disorientation during his search for the route west into the Sacramento Valley.

Caution! No potable water here.

Mile 27.1
Lat/Long 40° 53' 44"N, 121° 10' 46"W
Turn left at the T-intersection and go 0.6 miles to the railroad tracks.

You have reached the end of the Lassen Backcountry Byway! Your journey has taken you through landscapes both beautiful and bizarre; its stories are a part of our collective and priceless heritage. Enjoy, understand, appreciate, remember, and retell your discoveries!

You are now part of the story of this land.



Our modern emigrant trail ?

To exit Little Valley, go north on Lassen County 404 to SR 299 near McArthur, or return to Hat Creek. Gas and restaurants are located in McArthur in 20 miles. Lodging can be found in Fall River Mills, 25 miles from Little Valley.