Lava Beds

NATIONAL MONUMENT • CALIFORNIA

CENTURIES AGO, a group of flaming volcanoes erupted great masses of molten basaltic lava, spreading on the level land below in rivers of liquid rock. The rivers cooled, hardened, and formed here in Northern California one of the most rugged and fascinating landscapes in our Nation.

From a distance, the land looks fairly level, sloping gently downward to the north, dotted with symmetrical cinder cones and craters. On the horizon are two ancient volcanoes, their sides eroded into steep cliffs by old Tule Lake. The right-hand cone is the Petroglyph Section of the monument, where pre-historic Indians—long before the Modoc—carved designs on the vertical face. Elevations range from about 4,000 to 5,700 feet above sea level.

The smooth cinder cones are the most conspicuous features. These miniature volcanoes rise 100 to more than 500 feet from the lava beds. Among the largest of these cones is Schonchin Butte, named after a famous war chief of the Modocs. There are about 17 cinder cones, most of them in the southern part of the monument.

You will also notice spatter, or dribblet, cones formed on the lava flows. Some of these form large, tubelike structures resembling chimneys, and other have deep holes extending down into the earth. One such hole at Fleener Chimneys, northwest of headquarters, is 3 feet in diameter and 130 feet deep, although today partially filled with cinders.

Eruptions here were of two general types. The first, the gaseous type, created the cinder cones. The second, the fissure type, produced great masses of pahoehoe (ropy) lava which flowed like frothy molasses from deep cracks in the earth's crust.

The lava tubes, or caves, occur in this type of lava. Nearly 300 lava tubes have been found within the monument, and many more are believed to exist. The surface of the lava cooled and hardened into a strong crust; whereas the lava beneath, cooling more slowly, continued to flow from under the crust, thus leaving a tube, or cave. Today, collapsed lava tubes form the serpentlike trenches of broken rock 20 to 100 feet deep and 50 to

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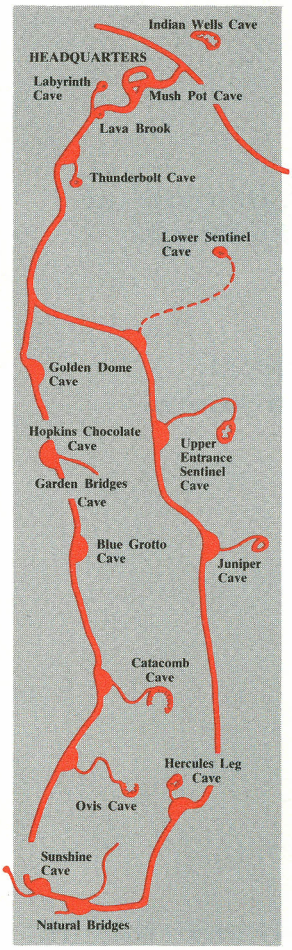
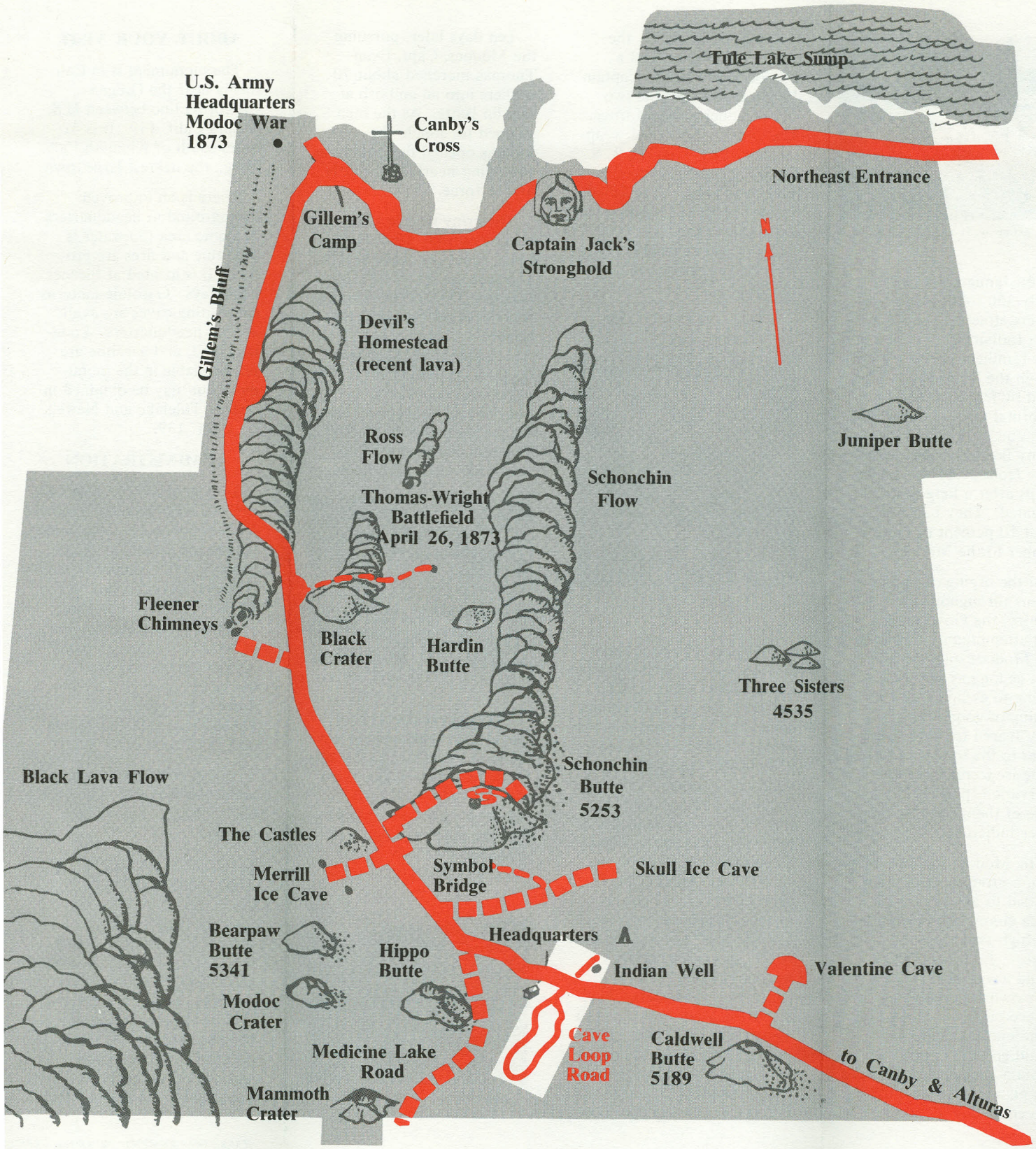



Tule Lake Sump
U.S. Army Headquarters Modoc War 1873
Canby's Cross
Northeast Entrance
Gillem's Camp
Captain Jack's Stronghold
N
Gillem's Bluff
Devil's Homestead (recent lava)
Juniper Butte
Ross Flow
Schonchin Flow
Thomas-Wright Battlefield April 26, 1873
Fleener Chimneys
Black Crater
Hardin Butte
Three Sisters 4535
Schonchin Butte 5253
Black Lava Flow
The Castles
Merrill Ice Cave
Symbol Bridge
Skull Ice Cave
Bearpaw Butte 5341
Headquarters
Hippo Butte
Indian Well
Valentine Cave
Modoc Crater
Cave Loop Road
Caldwell Butte 5189
Medicine Lake Road
to Canby & Alturas
Mammoth Crater

BUT THERE IS ANOTHER STORY, TOO—for this grim and jagged landscape was later to be host for a grim and tragic campaign: the last stand of the Modoc Indians against a new world they didn't understand.

250 feet wide, occasionally bridged by narrow, unbroken strips, which are such prominent features of the monument landscape.

When the flow in the lava tubes diminished, "lava-cicles" formed. These lava-stalactites resulted from cooling of liquid lava splashing against the ceiling, or from remelting of ceiling rock heated by gases escaping from the molten lava below. Rivulets of lava on the side walls of some tubes hardened into ribs.

Many of the caves are on the Cave Loop Road in the headquarters area, where there is a series of 17 caves which exhibit most of the lava-tube features. Sentinel Cave is so named for the guardian figures of stone which adorn its passageway. Catacombs Cave, one of the most striking in the whole region, derives its name from the peculiar niches in the wall, resembling the burial places of ancient Rome. The floors of this cave, with 1½ miles of passages, are for the most part very smooth.

Merrill Ice Cave contains a frozen waterfall and a river of ice which persists year after year. Skull Ice Cave has three levels and is one of the largest in the region. The beautifully domed roof rises 75 feet above the floor. The lower level has a thick floor of ice. The cave is so named because many skulls of bighorn and pronghorn were once found here.

Valentine Cave contains excellent examples of varying flow levels, where pauses occurred in the subsiding flow of lava through the tube, permitting the edges of the lava stream to cool and form crusts.

The plantlife of the area is unexpectedly colorful. In spring and early summer, the region at times is a veritable garden, with flowers blooming profusely wherever there is sufficient soil. About 250 species grow here. The purple sage, scarlet Indian paintbrush, pale blue wild flax, and yellow rabbitbrush stand out sharply against the black lava flows, and the many shades of green in scattered juniper, ponderosa pine, flowering antelopebush, mountain-mahogany, and wild current. Greenish-yellow and orange lichens add spectacular color to the volcanic rocks in spring and winter.

There are about 40 species of mammals in the monument. During winter, hundreds of mule deer come from the nearby high country to forage.

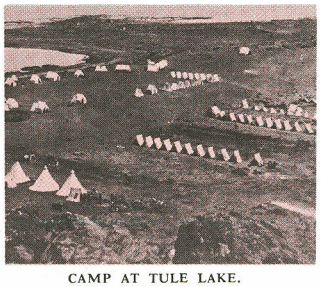
Old trails of bighorn are visible on some of the buttes, but before the monument was established these animals had been exterminated, probably by diseases and competition from domestic sheep and cattle for the scant forage under the snow.

Tule Lake National Wildlife Refuge, administered by the Fish and Wildlife Service, U.S. Department of the Interior, adjoins the monument on the north and is a haven for millions of birds, especially during the migrations each spring and autumn. The checklist of birds of the Lava Beds area has about 200 species.

MODOC war

The Modoc War of 1872-73 was one of the last clashes between Indians and white men in the Pacific west. Considering the small number of Indians involved and the hundreds of troops amassed against them, it probably was the most costly Indian campaign ever waged by the United States. The Modocs were not exceptional fighters, nor were they well organized, but the skill and organization of the Americans were even worse. These facts, combined with the clear advantage for the Indians of the incredibly rugged yet familiar terrain, prolonged the dispute beyond all expectations.

The Modocs were an independent people, fiercely attached to their homeland of sagebrush plateaus, wooded mountains, and broad, shallow lakes. They lived largely on fish and waterfowl, and on bulbs and seeds. When settlers began to cross their territory and disturb the game, the Modocs attacked wagon trains and harrassed would-be ranchers. Troops and volunteers sent to protect the emigrants learned that the Modoc homeland was highly suitable for stock-raising, and demand grew for the removal of the Indians.



CAMP AT TULE LAKE.

In 1864 the Modocs agreed to move north to the Klamath Indian Reservation. But there they lived on Klamath homeland, a fact that the Klamaths would not let them forget. One group, led by Captain Jack, finally had all it could take of the overbearing Klamaths and returned to its former home

CAPTAIN JACK.

on Lost River, north of Tule Lake. Friction then developed with the ranchers who, meanwhile, had occupied the region. Jack's men walked freely into the settlers' homes, frightened their families, and demanded tribute for use of the land.

ON THE LOOKOUT FOR AN ATTACK.

On November 29, 1872, troops, aided by settlers, attempted to force the Modocs back to the reservation. However, there were too few soldiers to overawe the Indians. After a brief fight the Modocs escaped to the natural fortress in the lava beds now known as Captain Jack's Stronghold. During their retreat, a few Modocs killed 14 male settlers on isolated ranches near Tule Lake.

The settlers in this California-Oregon border country became more and more indignant. Troops were rushed to the Modoc country,

BLUFF WEST OF TULE LAKE.

and on January 17, 1873, nearly 350 soldiers and volunteers attacked the 50 or more Indian fighting men and their families—some 160 in all—in the Stronghold. Confused by fog, hampered by the brutal terrain and winter cold, and intimidated by enemy fire which seemed to come from everywhere, the troops after a long day retreated. They had lost about 10 percent of their number to the Modocs.

At the urging of humanitarians throughout the country, the Government next attempted to negotiate. The Modocs spun out the talks as long as possible, hoping to escape with the coming of good weather. They feared trusting themselves to the soldiers and had no desire to return to the reservation, particularly since some of them were by then under indictment for murder.

The Modocs had one more plan: a group among them decided to assassinate the peace commissioners and a few high-ranking army officers. Following what would have been true under their own customs, they believed that by killing the white man's leaders they would end the opposition. Captain Jack at first opposed this plan, but he was shamed into endorsing it.

On April 11, 1873, the peace commission and a Modoc group led by Captain Jack met between the two camps under a flag of truce. The Indians produced weapons, and Brig. Gen. E. R. S. Canby and the Reverend Eleasar Thomas were killed. Ironically, these two men had been among the most sympathetic and strongest advocates of fair treatment of the Modocs.

CAPTAIN JACK'S CAVE.

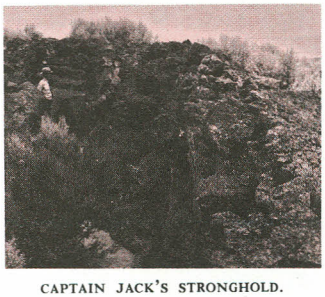
Four days later the final attack on the stronghold was launched by about 1,000 soldiers. On April 16 troops advancing from west and east joined along the lakeshore and cut the Modocs off from their water supply. This event shook the Indians' faith in their shaman, or medicine man, who had asserted that no soldiers would reach the stronghold. Another blow came that night when the Modocs lost their first man. The shaman, who had convinced the defenders they were invincible, now was considered powerless. The dispirited Modocs decided to abandon their fortress, and the same night silently moved their entire camp along a natural depression southward into the Schonchin lava flow.

Ten days later, pursuing the Modocs, Capt. Evan Thomas marched about 70 soldiers into an ambush at Hardin Butte. As the men stopped for lunch, the Indians opened fire, killing or wounding nearly two-thirds of the force.

The army won its first victory on May 10 at Dry Lake, repulsing what began as a surprise attack by the Modocs. Divided by quarrels, two-thirds of the band surrendered. Captain Jack was tracked down and captured by June 1. He and three others were convicted of murder and hanged at Fort Klamath on October 3, 1873. The remainder of the band was removed to Oklahoma.

MURDERERS OF LOST RIVER SETTLERS.

The main battlefields of the Modoc War, located in the monument, are practically the same today as they were in 1873. The rock forts marking the scenes of conflict are preserved and protected by the National Park Service.



CAPTAIN JACK'S STRONGHOLD.

ABOUT YOUR VISIT

The monument is in California near the Oregon-California line between U.S. 97 and Calif. 139. It is 41 miles south of Klamath Falls, Oreg., the nearest large town.

There is an improved campground at headquarters. A picnic area (no water is available and fires are prohibited) is located at Fleener Chimneys. Gasoline lanterns for visiting caves are available at headquarters. Lodging, food, and gasoline are *not* available in the monument but may be obtained in nearby Tulelake and Newell, on Calif. 139.

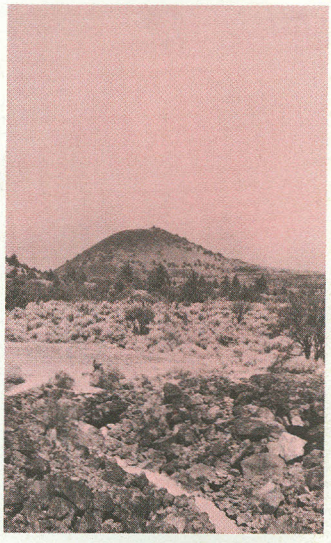
ADMINISTRATION

LAVA BEDS NATIONAL MONUMENT, established on November 21, 1925, and containing about 72 square miles, is administered by the National Park Service, U.S. Department of the Interior.

The National Park System, of which this area is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of its people.

A superintendent, whose address is Box 867, Tulelake, Calif. 96134, is in immediate charge.

THE DEPARTMENT OF THE INTERIOR—the Nation's principal natural resource agency—bears a special obligation to assure that our expendable resources are conserved, that our renewable resources are managed to produce optimum benefits, and that all resources contribute to the progress and prosperity of the United States, now and in the future.



SCHONCHIN BUTTE.

U. S. Department of the Interior

National Park Service

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