

FIGURE 1—Location of Pancho Villa State Park.

Introduction

Pancho Villa State Park in Columbus, New Mexico, (Fig. 1) was established in 1959 "in interest of preservation of the memory of the unique, historical occasion of the last hostile action by foreign troops within the continental United States" (Kottlowski, 1980). It became the only park in the United States to be named after a foreign invader. The creation of the 60-acre park was a gesture of good will between the United States and Mexico. The town of Columbus has been designated a National Historic Site. Across the street from the park is the privately owned Pancho Villa Museum.

Facilities

Visitors enjoy camping, hiking, picnicking, and wildlife viewing; campsites, restrooms with showers, a dump station, group shelters, and a playground are available (Fig. 2). Bird watching is also a favorite pastime (Table 1). Many of the camp sites offer full electrical hookups that especially attract winter visitors. Interpretive hiking trails (Fig. 3) wind through the park, providing visitors a chance to view 30 different species of desert cacti and other flora in the botanical gardens, as well as historical exhibits from Camp Furlong. The park's Visitor Center was originally the U.S. Customs House and was built in 1901 (Fig. 4). At the center, visitors can see exhibits describing Pancho Villa's raid and General John J. Pershing's punitive expedition. A film is shown regularly.



FIGURE 3—Visitors relaxing under trees along one of the many interpretive trails through the park.

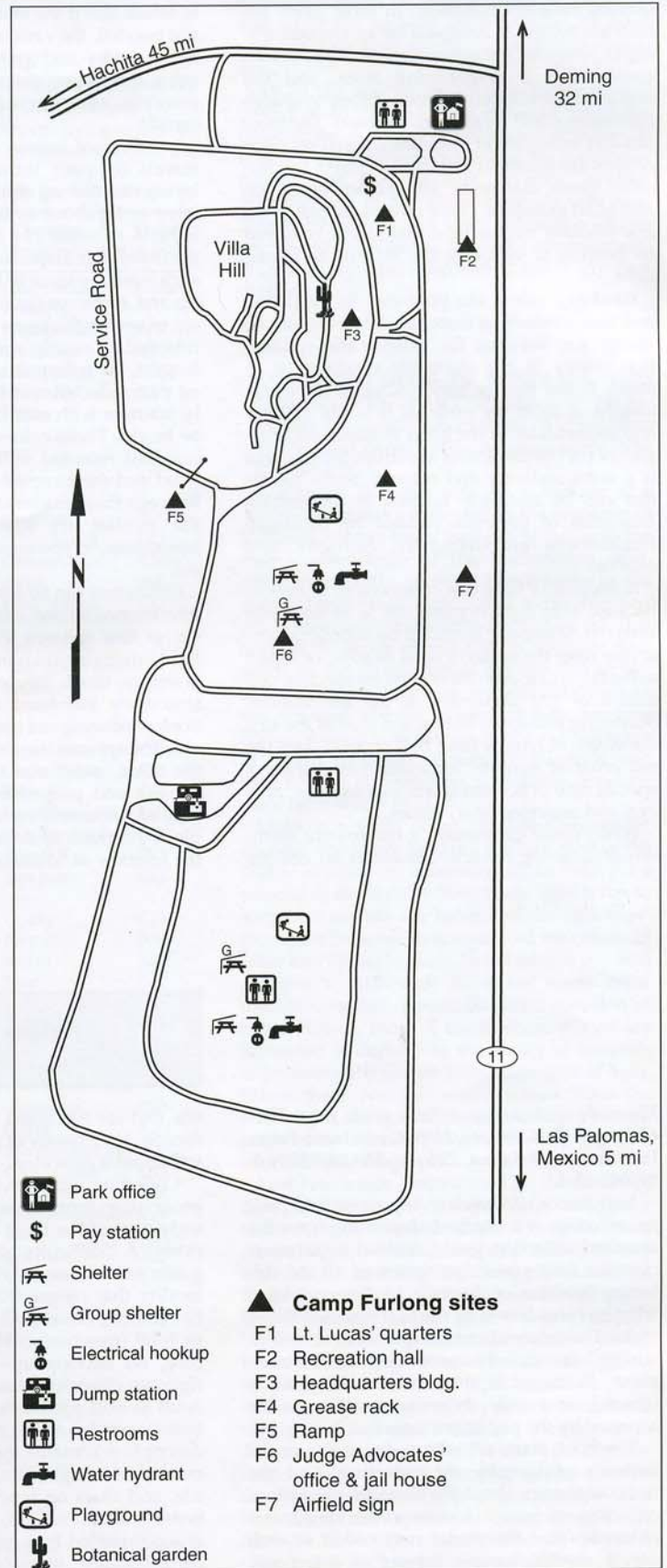


FIGURE 2—Map of facilities of Pancho Villa State Park. Reprinted by permission of Southeast Publications USA, Inc.

History

The desert surrounding Columbus was never very attractive to anyone before 1891. Very few people traveled through the area, and no one settled here. Water is scarce, summers are hot, and the wind blows constantly. The area is still remote and somewhat desolate. The Mimbres (Spanish for willows) Indians once settled and farmed along the Mimbres River north of Deming before it dried up. Apache Indians roamed through and perhaps stayed for short periods of time in some of the surrounding mountains.

In 1848, the Mexican War ended with the signing of the Treaty of Guadalupe Hidalgo, and New Mexico became part of the United States of America. The international boundary between Mexico and New Mexico was to be settled later by a special commission comprising representatives from both countries. In 1850, President Zachary Taylor appointed John Russell Bartlett as the head commissioner and assigned him to establish and map this southern boundary (Clemons et al., 1980, p. 105). The original map from the treaty was found in error, but the Mexican representative, General Pedro Garcia Conde, still suggested that the flawed map be accepted. Bartlett proposed a compromise that would have established the boundary 40 mi north of Columbus, thereby placing Columbus and Deming in Mexico. Bartlett's compromise was not received well in Washington, and he was recalled. Congress wanted this approximately 40 mi by 175 mi stretch of land, known as the "Mesilla Strip," to complete the transcontinental railroad.

TABLE 1—Birds found in Pancho Villa State Park. How many can you find?

| | |
|--------------------------------|--|
| American kestrel | |
| American robin | |
| Barn swallow | |
| Black-headed grosbeak | |
| Brewer's blackbird | |
| Bronzed cowbird | |
| Brown-headed cowbird | |
| Burrowing owl | |
| Cactus wren | |
| Common nighthawk | |
| Common raven | |
| Cooper's hawk | |
| Dark-eyed junco | |
| Flicker (red shafted) | |
| Gambel's quail | |
| Great-tailed grackle | |
| Harlan's hawk | |
| House finch | |
| House sparrow | |
| Inca dove | |
| Killdeer | |
| Ladder-backed woodpecker | |
| Lark bunting | |
| Mockingbird | |
| Mourning dove | |
| Oriole (Scott's and Bullock's) | |
| Red-winged blackbird | |
| Roadrunner | |
| Rock dove | |
| Sandhill crane | |
| Swainson's hawk | |
| Swainson's thrush | |
| Thrashers | |
| Western kingbird | |
| Western meadowlark | |
| Western tanager | |
| Yellow-rumped warbler | |



FIGURE 4—The Visitor Center was built in 1901 and used as the U.S. Customs House.

President Franklin Pierce appointed James Gadsden to correct the compromise and negotiate a settlement. On April 25, 1854, the Gadsden Treaty was signed, and the disputed Mesilla Strip became part of the Gadsden Purchase and, ultimately, the United States.

Colonel Andrew O. Bailey originally founded Columbus, New Mexico, in 1891. Bailey chose the site in hopes of it becoming a point of entry for a planned Northern Mexican and Pacific Railroad that would connect Mexico with the United States. That railroad never was built. However, in 1902 the El Paso and Southwestern Railroad built a line connecting El Paso, Texas, and Douglas, Arizona, and also built a depot 3 mi north of the community of Columbus. Soon the town moved to the depot. Luna County was established in 1901 from parts of Grant and Doña Ana Counties with the county seat at Deming, north of Columbus. Camp Furlong was established at Columbus early in 1916 to protect the border region against raids from Mexico during the Mexican Revolution, which started in 1910.

In late 1914, Pancho Villa was part-time President of Mexico (Young, 1984). Pancho Villa was not his real name; he was born June 5, 1878, in Durango and christened Doroteo Arango. He took the name Francisco "Pancho" Villa when he became a revolutionary (Young, 1984; Julyan, 1996). Villa's enemies, Venustiano Carranza and Alvaro Obregón, united against him in 1915 and defeated his forces in Chihuahua and Sonora in a series of battles. The United States soon officially recognized Venustiano Carranza as leader of Mexico.

On March 9, 1916, Pancho Villa and approximately 500 men raided, burned, and looted the small town of Columbus (Fig. 5). By daylight and the end of the raid, ten U.S. civilians and eight soldiers were killed; two civilians and two soldiers were wounded. At least 90 of Villa's men were killed, and many more were wounded; some accounts claim that more than 200 of his men were killed (McGraw, 1988).

There were many reasons for the raid. Villa was involved in the Mexican Revolution and was short on supplies, ammunition, and guns. Villa felt betrayed by President Woodrow Wilson, who at one point in the Mexican Revolution supported him, but later Wilson supported the Mexican government led by Venustiano Carranza. Wilson allowed approximately 3,000 Mexican soldiers to travel in the United States from Texas to Arizona to surprise and attack Pancho Villa. Finally, Sam Ravel, a merchant in Columbus, refused to acknowledge a credit Villa believed he had with the storeowner. When one of Villa's men approached Ravel for guns and ammunition in exchange for the credit owed to Villa, Ravel threw him out of his store. Pancho Villa then turned his troops toward Columbus. Fortunately for Ravel, he was out of town on March 9, 1916. Some accounts suggest that Pancho Villa may have been a German sympathizer and that the German government encouraged the raid.



FIGURE 5—Photo of Pancho Villa in 1916 (courtesy of New Mexico State Parks).

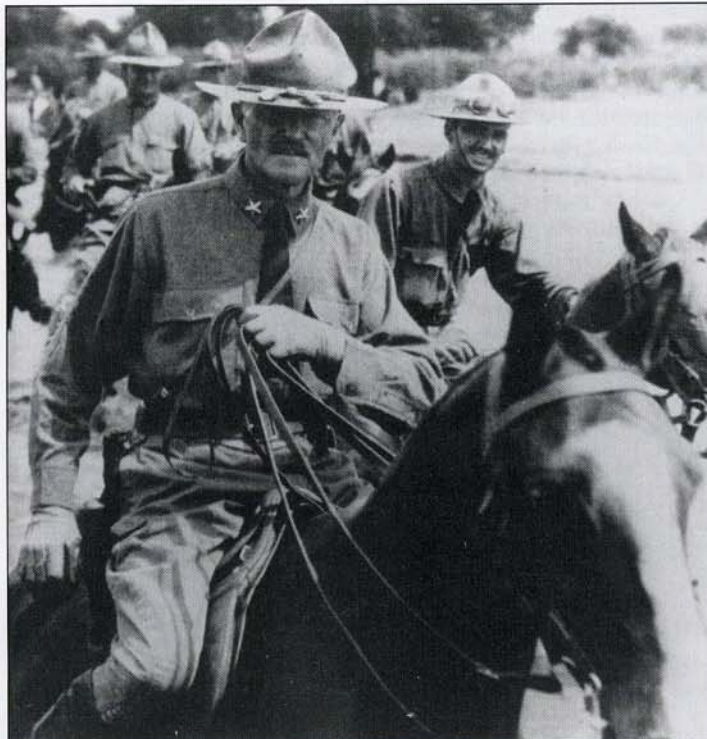


FIGURE 6—Photo of General Pershing and his troops leaving Columbus in 1916 (courtesy of New Mexico State Parks).

Word of the raid was telegraphed across the country. The U.S. Army immediately began pouring men and supplies into Deming and then Columbus. Six days later, General John J. (Black Jack) Pershing, supported by a fleet of four-wheel drive Nash and Jeffry automobiles and eight biplanes (Fig. 6), led a punitive force of 10,000 men into Mexico after Pancho Villa (Fig. 7). Although Villa's forces were scattered throughout Chihuahua, Mexico, Pershing's men found and killed more of Villa's men and recovered most of the stolen guns and ammunition. Pershing returned to the United States 11 mos later when the Mexican government requested that the Americans leave Mexico.

Although Pancho Villa was not caught, the punitive expedition into Mexico provided the military with training and experience that later proved invaluable in World War I. This was the last use of cavalry and the first use of motor vehicles and airplanes in a military action by the U.S. Army. Much of the fuel and sometimes even the vehicles themselves had to be dismantled and transported by pack animals and wagons! The first grease rack installed to service U.S. Army vehicles is near the headquarters building at the park (Kottlowski, 1980). The first airbase used for combat was established at Columbus. Photojournalism was used throughout the campaign and was perfected.

After the punitive expedition, the soldiers returned home, and the town of Columbus soon became nearly deserted. On July 20, 1923, Villa was assassinated while driving his car through Parral, Chihuahua. Camp Furlong closed in 1924. In the early 1960s, the railroad near Columbus was abandoned. Today, Columbus is a small, quiet community dependent on ranching, farming, retirees, and travelers. The international border crossing between Columbus and Las Palomas, Mexico, is open 24 hrs a day.

Geology

Pancho Villa State Park lies on the nearly flat alluvial plain extending southward from the Tres Hermanas Mountains (Spanish for three sisters). The alluvial plain consists of gravel, sand, and mud derived from the adjacent mountains and transported by streams and sheetwash. The Mimbres River, which starts in the Pinos Altos Mountains to the north, flowed episodically throughout the Pleistocene and Holocene past Deming, around the Florida Mountains, east of Columbus, and into Mexico to fill the playa lakes south of Las Palomas in the Bolson de los Muertos (Kottlowski, 1980; Love and Seager, 1996). Today, the Mimbres River flows into the Mimbres Basin east of Deming. Ground water in the buried alluvial fan deposits, in part a remnant of the ancient Mimbres River, is pumped to irrigate fields in the Deming and Columbus areas.

The most prominent land feature within the park is Villa Hill (also known as Coote's Hill), in the northwest corner (Fig. 8). This hill rises approximately 25 ft above the flat, featureless desert floor and is composed of reddish-brown to black, vesicular basalt. Gas bubbles formed the vesicles or irregular cavities during cooling of the basaltic lava as it flowed from its vent, now covered by the lava. Small xenoliths or fragments of limestone and other country rock are found within the basalt. A sample of the basalt was dated by $^{40}\text{Ar}/^{39}\text{Ar}$ as 3.8 m.y. (unpublished age determination, New Mexico Geochronology Research Laboratory, New Mexico Institute of Mining and Technology). A sample of a similar lava flow southwest of Columbus has been dated as 3 m.y. old (Seager et al., 1984). Geochemically, the Pancho Villa basalt is alkaline and similar in chemical composition to the basalts found in the Potrillo volcanic field south of Las Cruces and east of Columbus. The basalt was formed by partial melting of material derived from the upper mantle (Anthony et al., 1992) and was extruded during the latest stages of the formation of the Rio Grande rift (Seager et al., 1984; McLemore, 1999). A rift is a long, narrow feature where the Earth's crust is being pulled apart by plate tectonic forces. As the crust is pulled apart, large blocks in the center of the rift drop into the resulting elongate depression or trough, known as a graben. The Rio Grande rift is actually a series of linked troughs extending

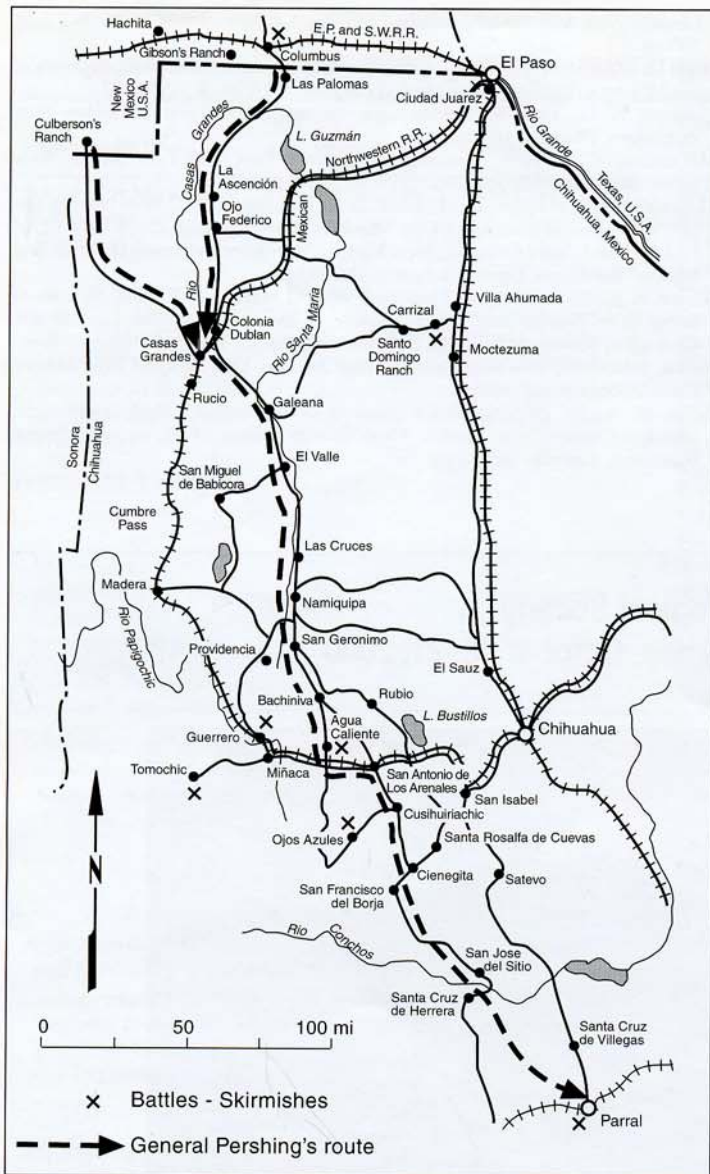


FIGURE 7—Route of Pershing's expedition to capture Pancho Villa in Mexico (courtesy of New Mexico State Parks).

from near Alamosa, Colorado, southward to El Paso, Texas. The Mimbres Basin east of Deming is one of these down-dropped troughs. The remainder of the state park consists of relatively flat, sandy desert soil; small sand dunes are common throughout the park.

The Tres Hermanas Mountains are three prominent peaks 7 mi northwest of the park. The three peaks consist predominantly of a quartz-monzonite stock that is about 35 m.y. old (unpublished age determination, New Mexico Geochronology Research Laboratory, New Mexico Institute of Mining and Technology). The quartz monzonite is surrounded by a thick sequence of predominantly Paleozoic and Cretaceous sedimentary rocks and Tertiary volcanic rocks (Balk, 1962; Griswold, 1961; Leonard, 1982). Fragments of monzonite, rhyolite, latite, basalt, andesite, chert, and limestone, some as large as 1–2 ft in length, were transported by occasional stream flows from the Tres Hermanas Mountains to the park where they may be seen scattered among the cacti. Gold, silver, copper, lead, and zinc were discovered in the Tres Hermanas Mountains in about 1881. Total production from the mineral deposits in the district is unknown but is estimated from 1885 to 1957 as \$600,000 worth of copper, gold, silver, lead, and zinc, including 200,000 lbs of lead and 1 million lbs of zinc (McLemore et al., 1996).

The Florida Mountains form the jagged peaks north to northeast



FIGURE 8—Villa, or Cooté's, Hill in the northwest corner of the park is made of vesicular basalt and offered soldiers an excellent lookout.

of Columbus. The range consists of Paleozoic through lower Tertiary sedimentary and volcanic rocks overlying Proterozoic and Cambrian granite and syenite plutons (Clemons and Brown, 1983; Clemons, 1984). Tertiary rhyolite, diorite, and andesite intrude the older rocks. From 1880 to 1956, 5,000 lbs copper, <10 oz gold, 8,000 oz silver, and >30,000 lbs lead worth approximately \$102,000 were produced from carbonate-hosted lead-zinc replacement and polymetallic vein deposits in the Florida Mountains mining district. In addition, 200 short tons of fluorite and 1,421 long tons of 22–30% manganese have been produced from epithermal veins.

The sharp, jagged peaks of the Big Hatchet Mountains lie on the western skyline. The Big Hatchet Mountains consist of faulted and tilted Paleozoic limestones and Cretaceous shales and sandstones that show few signs of mineralization or alteration (Zeller, 1975; Drewes et al., 1988; Drewes, 1991a, b). The rocks in the area consist predominantly of Horquilla Limestone and Earp Formation, with a thin, thrust band of Oligocene andesite or basaltic andesite. Small carbonate-hosted lead-zinc replacement deposits have been identified along the faults; production from these deposits has been small, amounting to less than \$2,000 (McLemore et al., 1996).

Summary

Pancho Villa State Park offers visitors a chance to camp, picnic, bird watch, and hike in the desert Southwest. The park occupies the abandoned Camp Furlong and was the site of the last hostile action by foreign troops within the continental United States—Pancho Villa's raid. Soldiers used Villa Hill, a basaltic flow that rises 25 ft above the desert floor, as a lookout before and after the raid.

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—Virginia T. McLemore

New Mexico Geological Society 51st Annual Fall Field Conference, October 18–21, 2000



Looking northwest across South Alkali Flat, a playa lake in Animas Valley, toward northern Peloncillo Mountains. The highest point is Steins Peak. Photo taken from I-10 at Animas exit (exit 11).

The 51st annual field conference of the New Mexico Geological Society will be held in the Basin and Range province of southwestern New Mexico, north and east of the Bootheel in a region encompassing the Pyramid, Little Hatchet, Victorio, and Florida Mountains. Conference hosts will be New Mexico State University and the New Mexico Bureau of Mines and Mineral Resources. Conference participants will spend two nights in Lordsburg and one in Deming. This conference, launching the second demi-centennial, will honor James Lee Wilson, an outstanding contributor to the geology of New Mexico and understanding of carbonate rocks in Earth history.

The field conference is designed to appeal to a wide range of geologic interests. The theme is "Southwest Passage" a title intended to highlight the region as a geologic, geo-

graphic, and human crossroads. The conference itinerary covers the geology of southwestern New Mexico from the Precambrian to the Quaternary. The tentative itinerary is as follows:

Day 1. Mid-Tertiary ash-flow tuffs of the Pyramid Mountains, calderas of southwestern New Mexico, Animas basins and geothermal resources, and economic resources of southwestern New Mexico.

Day 2. Mid- to upper-crustal transect of Little Hatchet Mountains, including Cambrian plutonism, Jurassic sedimentation and magmatism, Laramide volcanism and deformation, ore deposits, mid-Tertiary plutonism, playas, and Hachita basins.

Day 3. Igneous petrology, stratigraphy, and structure of lower Paleozoic rocks in Victorio Canyon, Florida Mountains. Optional stop to see magma mixing in the Florida Mountains.

A premeeting trip to the Redrock Wildlife Refuge to examine Proterozoic rocks is limited to 30 people.

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