# IDENTIFYING TRACES OF THE OLD SPANISH TRAIL: A Five-Year Project Update

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The Old Spanish Trail is a historic trade route that connected the northern New Mexico settlements of Santa Fe, New Mexico, with those of southern California. Approximately 700 miles long, the trail ran through areas of high mountains, arid deserts, and deep canyons from 1829 to 1849. It is considered one of the most arduous of all trade routes ever established in the United States. The Bureau of Land Management is dedicated to the protection and stewardship of this historic trail. The Barstow Field Office has been actively engaged in the continuous and ongoing mapping and documentation of the Old Spanish Trail as it cuts through the Mojave Desert. The goal of this project is to identify, document, and nominate portions of the trail to the National Register of Historic Places for further management and protection. The utilization of primary documents, aerial imagery, previous research, and GIS has allowed us to effectively document physical traces of the trail. The discovery of diagnostic artifacts related to the Old Spanish Trail and Mormon Road also aid in this endeavor. This article provides updated information on the current status of the project and its developments over the last five years.

The Old Spanish Trail is a historic pack trail and livestock driveway turned wagon road, which was utilized by Mexican and American merchants and tradesmen between New Mexico and southern California from 1828 to 1849 (Figures 1 and 2). Use of the route affected Native Americans who lived along the route, as well as Mexican and United States commerce, economics, and overall transportation throughout the region. Urban development, road construction, and the ephemeral nature of the trail all contribute to the rarity of visible and intact traces today. To compensate for limited visible traces of the Old Spanish Trail, we use aerial imagery and ArcGIS data from previous research to select pedestrian survey areas in which trail traces are likely to occur within the Bureau of Land Management (BLM) Barstow Field Office boundaries. The objective of this project is to locate and document physical remnants of the trail on BLM land to better implement management plans to protect the heritage of the Mojave Desert and contribute to the growing body of knowledge of trail systems in the American West.

#### HISTORY OF THE OLD SPANISH TRAIL

The origins of the Old Spanish Trail date to as early as the 1770s, when the Spanish government in Mexico began attempts to create a route that connected its two northern territories, New Mexico and California. The initial purpose of the Old Spanish Trail was to facilitate the transportation of woolen goods to California and horses and mules to New Mexico (Hafen and Hafen 1993). In 1829, Mexican national, Antonio Armijo, used a combination of trailblazing and pre-existing Native American trails to travel from Abiquiú, near Santa Fe, to Los Angeles, thereby establishing the route that became the Spanish Trail, known today as the Old Spanish Trail (Warren 2004).

After Armijo, Mexican and American merchants, military personnel, explorers, and trappers conducted similar expeditions. Variables such as weather, terrain, and water availability prompted numerous expeditions to periodically detour from previously established routes. As such, the Old Spanish Trail was not a single route that resembled the highways we use today. Instead, it was a series of narrow, intertwining footpaths along which horses and mules drove cattle and carried trade goods (Hafen and Hafen 1993).



Figure 1. Old Spanish National Historic Trail map (NPS).

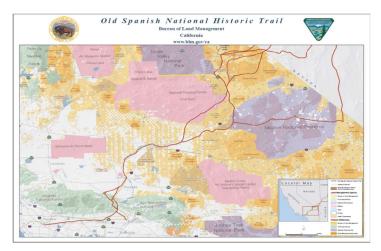


Figure 2. Map of Old Spanish Trail through California with land status GIS layer (BLM).

When the United States acquired the California and New Mexico territories in 1848, traffic along the Old Spanish Trail shifted from an economic thoroughfare to an emigrant trail. That same year, Mormon settlers and traders established the Mormon Road, which accommodated wagon travel, along the portion of the trail west of Salt Lake. New types of traffic, prompted by westward expansion and the discovery of gold in California, began traveling westward across the United States. This resulted in the development of more direct routes west and alterations to the original Old Spanish Trail.

## PREVIOUS RESEARCH

Previous archaeological and historical research pertaining to the Old Spanish Trail and Mormon Road have focused on retracing the steps of this arduous journey by analyzing primary documents. The maps, diaries, and correspondences containing geographic data have allowed researchers to estimate the most probable areas to relocate traces of the trail through pedestrian survey. In the Barstow Field Office, past research has established that the Northern and Armijo routes of the Old Spanish Trail entered California

near California Valley, crossed the Nopah Range at Emigrant Pass, and continued west before turning south through Silurian Valley. The Northern Route then diverged from the Armijo Route and crossed terrain that is now encompassed by the Fort Irwin Military Base. The Armijo Route continued south to follow the Mojave Road through Afton Canyon. The routes joined outside of Yermo and proceeded southwest toward the Cajon Pass (Armstrong et al. 1987; Hafen and Hafen 1993; Lyman 2004; Lyman and Reese 2001; National Park Service 2001; Steiner 1999; Warren 1974).

#### **METHODS**

To begin identifying trail traces, we traversed several areas that previous researchers identified as likely locations for the Old Spanish Trail. These areas were identified as being the most likely locations of trail segments through the analysis of primary documents that described unique and identifying natural landmarks, such as the arduous climb of "Emigrant Pass." Trail corridors were initially recorded with a Trimble® Juno® in anticipation of future pedestrian survey to identify any remaining traces of the Old Spanish Trail or Mormon Road. The best strategy for identifying Old Spanish Trail segments was to conduct pedestrian survey to locate linear alignments potentially representative of the wagon road established by Mormon emigrants that traversed the same route after the decline of the economic trail.

Any identified linear alignments were followed and surveyed to the furthest extent possible in search of artifacts consistent with the time period during which the Old Spanish Trail or Mormon Road was used (Figure 3). Physical traces of the trails, pack or wagon, are identified by their characteristic depression in the ground and the small rock berms that skirt and define the outline of the path (Figure 4). For areas in which there was no visible evidence of trail traces, we used vegetation distribution and terrain to estimate the most expedient route between verified trail segments.





Figure 3. Two-track linear features in Silurian Valley (left) and at Riggs Wash (right).

## RESULTS AND UPDATES

Based on the research by Hafen and Hafen (1993), Lyman and Reese (2001), National Park Service (2001), Steiner (1999), and Warren (1974), the Armijo Route and Northern Route fall within the Barstow Field Office boundary. Prior to this update, trail traces that we believe represent these portions of the Old Spanish Trail were documented in California Valley, the Nopah Range, Silurian Valley, and Afton Canyon. Recently, our search within the Silurian Valley corridor has expanded to include three additional segments. We have also expanded the segment previously identified in California Valley. Lastly, a continuous segment

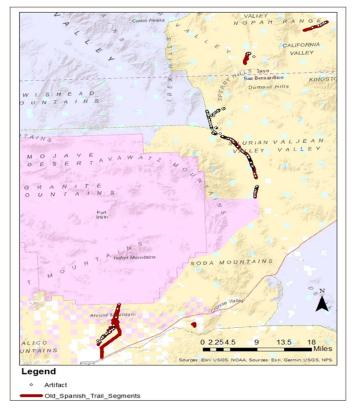


Figure 4. Physical traces of the Old Spanish Trail.

was established south of the Alvord Mountains where those traversing this route would have had to pass when leaving the known watering hole of Bitter Springs, now located within Fort Irwin. With the previously identified segments and newly identified portions of the Old Spanish Trail, the Barstow Field Office has documented 21.37 miles of physical trail.

## DISCUSSION

Confirming an association between a trail segment of the Old Spanish Trail or Mormon Road presents several challenges. Much of the mule and horse pack trails that comprise the original trail were covered by the Mormon Road, which was subsequently overlain by historic and recent road construction. Unaffected trail segments are therefore rare, and there are few methods by which to confirm that a trail segment is associated with the trail.

While the most reliable method for identifying the trail is to locate artifacts along potential route segments that are consistent with the Old Spanish Trail or Mormon Road periods of use, the artifacts are as limited as the trail traces. By the time travelers on the Old Spanish Trail reached the area that is now the Barstow Field Office, they likely had already disposed of all nonessentials that could be discarded. Several hundred artifacts have been documented along the 21.37 miles of trail in the Barstow Field Office, with only 30 of them being diagnostic to the Old Spanish Trail and Mormon Road period. These artifacts include cut nails (Figure 5), mule shoes (Figure 6), ox shoes, a ceramic Zachary Taylor president pipe, early period aqua glass, blue transfer-print ceramics, and hole-in-cap cans (see Figure 7). Without diagnostic artifacts, confirming the Old Spanish Trail status of a trail segment is difficult. In addition, numerous washes occur throughout Silurian Valley and Afton Canyon and bisect the Old Spanish Trail. Fluvial action not only damages the remaining trail traces, but potentially washes away any artifacts associated with the trail.



Figure 5. Type B cut nail documented along Old Spanish Trail trace at Alvord Mountain.



Figure 6. Mule shoes documented along Old Spanish Trail trace at Alvord Mountain.

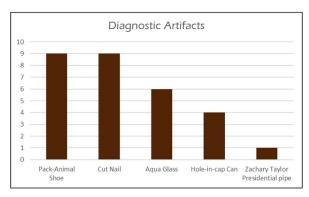


Figure 7. Frequency of diagnostic artifacts documented along Old Spanish Trail corridors in the Barstow Field Office.

We succeeded in identifying artifacts consistent with the use period of the Old Spanish Trail or Mormon Road near No Name Lake in Silurian Valley and most recently in Alvord Mountain. We consider these artifacts sufficiently convincing to associate the trail trace with the Old Spanish Trail. Any linear alignments in Silurian Valley that appear to connect with this trace we also consider probable remnants of the Old Spanish Trail.

#### **NEXT STEPS**

For this ongoing methodological approach, areas known to be associated with the Old Spanish Trail informed by primary documents will be surveyed and assessed for management plan implementation. Areas such as the Silurian Valley that demonstrate high confidence relating to the trail's identification and integrity will be nominated for the National Register of Historic Places. Lastly, we will continue our community engagement and education to better preserve the memory and importance of the Old Spanish Trail.

## REFERENCES CITED

Armstrong, Augustus K., Cole L. Smith, George L. Kennedy, Charles Sabine, and Ronald T. Mayerle

1987 Mineral Resources of the Nopah Range Wilderness Study Area, Inyo County, California. USGS Bulletin 1709-C. USGS, Denver, Colorado.

Hafen, LeRoy R., and Ann W. Hafen

1993 Old Spanish Trail: Santa Fe to Los Angeles. Reprint. University of Nebraska Press, Lincoln. Originally published in 1954 as part of the series "The Far West and the Rockies Historical Series 1820-1875," Arthur H. Clark, Glendale.

Lyman, Edward Leo

2004 The Overland Journey from Utah to California: Wagon Travel from the City of Saints to the City of Angels. University of Nevada Press, Reno.

Lyman, Edward Leo, and Larry Reese

The Arduous Road: Salt Lake to Los Angeles, the Most Difficult Wagon Road in American History. Lyman Historical Research and Publishing Company, Victorville, California.

National Park Service

2001 National Historic Trail Feasibility Study and Environmental Assessment: Old Spanish Trail, New Mexico, Colorado, Utah, Arizona, Nevada, California. United States Department of the Interior, National Park Service, Denver, Colorado.

Steiner, Harold Austin

1999 *The Old Spanish Trail Across the Mojave Desert*. The Haldor Company, Las Vegas, Nevada. Warren, Elizabeth von Till

1974 Armijo's Trace Revisited: A New Interpretation of the Impact of the Antonio Armijo Route of 1829-1830 on the Development of the Old Spanish Trail. Master's thesis, University of Nevada, Las Vegas.