



“Sand Spikes” are found at the foot of Mount Signal, in the Colorado Desert of California.

MEXICAN BORDER SAND SPIKES IN CALIFORNIA’S COLORADO DESERT

by JAY ELLIS RANSOM

Each year thousands of visitors enter Arizona from the west. In doing so, they traverse an extensive mineral belt on the California side of the Colorado River containing a number of fascinating collecting fields. The great Colorado Desert borders each side of the Muddy River, and from the Mexican border north to the triangle where Arizona, California and Nevada come together near Hoover Dam, both sides are noted for its collecting material. Therefore, a description of these fields properly begins with those on the California side.

Although this book is primarily a guide to the Arizona gem hunting fields, some of the more important collecting grounds outside the title area are included to round out the problem of organizing a field trip. By including these extraterritorial fields, it is hoped that the rockhound visitor to Arizona will find a maximum of pleasure and profit in laying out his itinerary.

Essentially, the two sides of the Colorado River represent a continuous and contiguous gem stone bearing area of great value for the visiting collector. In ancient times, the great river deposited vast level terraces over a wide area, leaving in the river gravels and sands an untold wealth in cutting materials. At the same time, more or less, the mountain building processes which elevated the disjointed ranges whose eroded cores we now see on both sides of the California-Arizona border, created mineral deposits. Many of these have been worked in past decades for gold, silver, and other useful metals. Others we refer to simply as gem stone collecting fields.

Mexican Border Sandspikes

There are only a few places on the Colorado Desert where the fantastic sandstone concretions known among the collecting fraternity as sandspikes have been found. One of the more easily reached locations, just two miles from a paved highway, is a spot on the northeast slope of Signal Mountain, almost squarely on the international border south of Seeley, California.

It was in February, 1774, that Juan Bautista de Anza led his followers in their heart-rending struggle across the waterless desert between the lagoons of the Colorado River and the mountains of California. Their guidemark was a dark mountain against the western sky beyond which, Indians had told them, lay water. Eventually the exploring party passed by the mountain, named by a soldier of bitter humor *Cerro del Imposible*, i.e., "Impossible Mountain!" They found the Santa Rosa wells, and passed through the Coastal Range into the rich heart of California.

This mountain served as a beacon to others during the next century, whoever traveled on foot or by mule back across the desolate below-sea-level plain. Finally, a United States Government mapping expedition renamed the dark peak Signal Mountain, today as much a landmark to travelers over high speed U.S. Highway 80 as it was to the trudging pioneers.

Early travelers by foot or by horse and wagon passing Signal Mountain picked up bits of petrified wood, broken shreds of Indian pottery, and the oddly formed sandspikes which attracted the curious. Modern day visitors leave Highway 80 at Seeley, turning south on the Calexico Road, i.e., California State Highway 98.

At mile 8.0, the pavement makes an abrupt eastward turn, and a graded dirt road branches southwest, crossing two irrigation canals. Less than one-tenth of a mile from the junction, turn left again onto a wide bladed road angling toward Signal Mountain. At mile point 9.8 a fork branches to a gravel pit. At mile 9.9 on the main road, one comes to a sharp right curve, and at mile 10.0 the car may be parked. Here the visitor will find an abundance of curiously shaped sandspikes bordering either side of the road.

Sandspikes are freakish earth forms. As cabinet specimens they are not especially handsome; they can't be cut or polished like gem stone. Yet they are one of Nature's strangest attractions, for it is difficult to imagine what natural processes formed them. Some are twisted into oddly grotesque forms while others appear to have been turned out on a lathe. An imaginative rockhound once suggested that they are really petrified gopher holes! If so, some of the creatures must have been unusually small and agile to make such tiny spikes as some of those picked up. The spikes are made of sandstone all the way through, but why these crystallized concretions should have occurred in such odd shapes is a mystery.

The country surrounding the sandspike collecting area is formed of low, knobby sand mounds. Broken segments of sandspikes litter the sandy surface. A little pick and shovel work will uncover perfect specimens. Roughly, the area embraces about an acre of ground, but pieces of float found in the washes suggest that there are other similar concentrated deposits scattered over a much broader area.

In this field a shovel becomes a handy instrument for the collector. The sand is dry and easily moved, but during excavation one should be careful in working around the larger spikes to prevent breaking off the tapering ends. The concretions range in size from an inch in length to wellformed spikes a foot or more long and weighing several pounds.

The only evidence of any commercial activity in the area around Signal Mountain is the extensive excavation of a gravel deposit during the time when highways were being built across the desert. In earlier times, prospectors made their gopherings for gold, particularly since the black mountain seems to have been one of the landmarks for early searchers after the Lost Pegleg mine. Legends of lost gold and other treasure have long circulated about Signal Mountain, going back to the very earliest travelers through the region, a time when the Yuma and Cocopah Indian tribes were constantly at war.

In visiting this locality, it should be remembered that most of Signal Mountain lies south of the Mexican Border in Baja California. While many visitors have climbed the peak in search of Pegleg's "black" nuggets, a few unfortunates have been forced by roving Mexican authorities to trek all the way into Mexicali to explain their reasons for being in Mexico without a permit.

So much for rock collecting. Botanically minded visitors will be interested to note in the spring that the locale is rich in wild flowers: verbena, dune primrose, yellow evening primrose, palafoxia, forgetmenots, and *Baileya pauciradiata*.

Rock hunting anywhere along the Mexican Border should not be attempted in summer, only during the early spring, late fall and winter months. There are no hotter drier and more desolate inhospitable regions anywhere in America than this portion of the Colorado Desert, a dangerous place to be caught in the sand with a bogged-down car when the thermometer sizzles at 120 degrees. Yet during the rock hunting season, there are few more beautiful areas to be found anywhere.