

On the 20-Mule Team Road

By Carrie J. Gregory

"If the twenty mule teams were not born in Death Valley, they were perfected there."

Harold Weight, 1981

In the South Range of Naval Air Weapons Station China Lake, the historic landscape of the 20-Mule Team Road consists of the Mojave Desert landscape, 35 miles of the road, historic springs, historic way station sites, graves, archaeology, and artifacts. There is great public interest in the 20-Mule Team story, and its preservation is a high priority for China Lake's Environmental Program.

The 20-Mule Team Road was borne of Southern California's borax industry. In Death Valley, that industry began between 1875 and 1880 with the discovery of borax in Furnace Creek. Borax was an important commodity in the late 1800s, as it aided digestion, kept milk sweet, improved a person's complexion, removed dandruff, was an excellent soap, and supposedly cured epilepsy and bunions.

San Francisco businessman William Tell Coleman established Harmony Borax Works, the largest borax works in Death Valley. His greatest challenge was to find a way to economically transport the borax from the mines to the railheads at Daggett and Mojave, 165 miles away. Coleman would commission the construction of the largest freight wagons of their day, which would become part of the 20-mule team outfit. The outfit consisted of two wagons, which could hold ten tons of borax each, and a 1,200-gallon water wagon in tow. The outfit, which weighted 36 to 38 tons, was pulled by two horses and eighteen mules. Beginning in 1883, five 20-mule teams were operating from the Harmony Borax Works. In 1888, calcium borate (key ingredient of borax) was discovered only 12 miles from the railhead at Daggett. The Furnace Creek operations shut down, and Coleman's San Francisco-based empire collapsed. The 20-Mule Team Road and support operations were abandoned, leaving a remnant historic landscape in the Mojave Desert.

Support for the outfit consisted of springs, way stations, and dry camps along the route. Historic accounts indicate that water was available at Mesquite Wells north of the South Range, Lone Willow and Granite Wells in the South Range, and Blackwater Well west of China Lake. Way stations were established near the springs, and water was piped to the station and stored in tanks. Way stations consisted of a small structure for the teamsters to stay the night; a corral where the team could be hobbled; feed containers left on return trips; caches of barley and hay in specially constructed wooden boxes; and emergency blacksmithing equipment. Dry camps were provisioned with water from tank wagons, which have been said to carry from 500 to 1,200 gallons.

Management objectives of the China Lake Environmental Program are to protect the resources associated with the 20-Mule Team Road. These tasks are made difficult by limited public access to the military installation and the far-removed location of this landscape. Management goals are to preserve known resources as a treatment; provide access to sites for research; and interpret for the public.