

Introduction

I first read the following *Borrego Sun* article almost 20 years ago, more than 20 years after it was written, while researching the history of groundwater management or, more accurately, the lack thereof, in the Borrego Valley. I was taken by it at the time and never forgot about it, but did not, to my regret, retain a copy of it. The good folks at the *Borrego Sun*, however, recently provided a copy of the edition in which it appeared and, with the author's permission, the text of the article appears below.

The well-written little gem appeals to me on at least two levels: it concerns coyotes, which I find intrinsically interesting and endlessly fascinating in their own right; it underscores the importance and offers an object lesson for the proper use of scarce and precious water in the desert. When digging their wells coyotes are simply trying to survive in the hostile desert environment. But the unintended consequence of their instinct for self-preservation enables the survival of many other desert dwellers as well. That strikes me as a shining example of the kind of delicate, symbiotic balance and integration frequently found in nature. One that human desert dwellers would do well to emulate.

Digger
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Wells of the Water Witch

by
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The high summer sun pressed down upon the desert floor with stifling intensity. The months of summer had taken their toll of life from this land – what remained was stark and foreboding. Stillness was interrupted only by shimmering waves of heat distorting distant dunes and sandstone ledges. Before my straining eyes lay Font's Wash, bleak and seemingly lifeless. Ahead a dark figure took form amidst the heat waves – a large black bird rose from the barren sands. Startling me, I braked my Jeep to an abrupt halt only to watch once again – this time in clear focus – another raven being borne out of the washbed gravels.

I took a hurried gulp from my warm canteen and still the two ravens persisted. Enough of this noonday glare for them – and they took flight to a patch of shade on a cliffside bordering the wash. Cautiously walking to where the ravens had arisen from the sand the drone of swarming bees took my attention. Even more curious now I stepped closer, searching for the swarm. Darting in and out of a depression in the gravel were hundreds of wild bees. To my complete

surprise they were feasting ravenously on a small pool of water two feet below the surface of the ground! Water in the desert summer is a scarce life giving commodity.

Scattered about the area were feathers, raven tracks, and foot-prints of a score of desert mammals, the most recent being those of a coyote. So *this* was a “coyote well!”

Many legends credit coyote wells with saving the lives of explorers, Indians, and jackass prospectors. The coyotes keen sense of smell makes water a reality for wildlife which otherwise would perish or be forced to leave the barren, waterless desert floor. The coyote has been known to dig as deep as three or four feet to reach water, and then to visit the well daily to drink and further excavate the sandy hole. Benefits of the coyote’s labor are shared by many of the desert’s summer residents. Kit foxes take up cool water by darkness while by day red-tailed hawks compete with the ravens, bees, and round-tailed ground squirrels for the precious one or two cups of available surface water.

This badland country is dry and desolate throughout. Mudhills rest for millennia, battered by wind, sun, and erratic summer thunderstorms. A coyote would find little reward in digging a well just anywhere. Only in the sandy wash bottoms will the coyote strike water. Then only where the wash makes a sharp turn, causing subsurface water to gather, or where subterranean clay's form an impervious layer which keeps the water from sinking far below the surface and out of reach.

The Borrego Desert is not without its share of coyote wells. The Borego Spring for which the community was named many times in its existence was nothing more than a sandy hole of rank water kept alive by the coyotes. The coyote well of Font’s Wash is the only water in the western badlands. Only when rising into the Santa Rosa Mountains four miles to the north can we find surface water during the long hot summer.

Seventeen Palms oasis was an outpost for wildlife thanks to the coyotes, They dug their well on the north end of the palm oasis, and for many years dug it out during their nightly patrols. Now, perhaps temporarily, the coyote well is overgrown with debris. The water table has dropped

and surface water is to be found no more.

Barrel Springs, southwest of Devil's Slide in the Ocotillo Wells area, has long been a famous coyote well. The site of a huge Indian encampment, Barrel Spring has served Indians and prospectors for centuries. It is the only year around water in fifty square miles of desert.

Arroyo Seco del Diablo in the south sector of Anza-Borrego is not always an "arroyo seco" due to the occasional presence of a briny Coyote well. Amid the white alkali crust on a sharp turn in the wash one can often discover the distasteful water brought to the surface by the coyote. Prairie falcons, kit fox, and redtailed hawks frequent this waterhole – again one of few in this desiccated sector of the desert floor.

Other coyote wells which are used only occasionally can be found in Mollusk Wash near Split Mountain, Bighorn Wash above the Mescal Bahada, and in Blackwater Canyon off of Carrizo Canyon. These are dug only after rainstorms when water is very close to the surface. These areas lack the important clay layer near the surface which catches the rain water before it seeps away.

Man's use of coyote wells is not frequent for several reasons. Man usually misses these inconspicuous waterholes, and may choose not to drink the water even if he could find them. These wells are usually very alkaline, picking up salts from below and carrying them to the surface, where they are concentrated by evaporation. Some though are low enough in salinity to provide a needy human with a usable, if not tasty supply of water.

The coyote is not a martyr of the desert, he merely does what he has to do to survive. It is not entirely unselfishly that the coyote nightly scours out these isolated water wells. Many coyote families are brought into the desert world rather late in the season – late spring to early summer. Without a source of free water many pups would not survive their first summer. The female would be hard-put to produce adequate supplies of milk without having the "well" to depend on for replenishment.

So instinct brings life together on the desert floor. The bee, raven, and ground squirrel, all easy prey for the coyote in many instances, nevertheless have him to thank for their precious existence. The coyotes keen sense and diligent labor bring to surface that precious commodity which earns God's dog the title of the desert water witch.

This article appeared in the March 27, 1980 issue of the *Borrego Sun*, page 7, when Mark Jorgensen was a ranger on the Anza-Borrego Desert State Park staff. Later in his 36-year career with the California State Parks he served as Anza-Borrego Desert State Park Naturalist and State Park Resource Ecologist before being appointed ABDSP Superintendent, a position from which he retired in 2010. He now serves as Community Representative on the Borrego Springs Interim Watermaster Board and is a member of its Environmental Working Group focused on the protection of human health and the environment.