

Agropyrum. Stranger creek.  
Atheropogon olygostachium. Canadian river.  
Koeleria nitida. Pawnee fork.

EQUISETACEÆ.

Equisetum hyemale. Near crossing of the Arkansas.

APPENDIX No. 7.

WASHINGTON, December 6, 1847.

SIR: I have the honor, at your request, to address you a brief memoir on the subject of the district of country in Sonora, Mexico, which I passed over in November and December last, with a wagon train, when I deviated, in search of a practicable route, from the mule trail of Brigadier General S. W. Kearny, on his march from New Mexico to California.

When he turned off from the Rio Grande, opposite the copper mines and the heads of the Gila river, I kept the river for thirty miles to the south, and making a southern bend, turned again towards the north, and struck his route (as surveyed by Mr. Emory of your corps) just above the village of the Pimo and Maracopa Indians, an estimated distance of 444 miles.

Immediately below the point of deviation, on the Rio Grande, the country bordering the river became sensibly flatter and less broken. I left the river when in view of a point marked on the common maps as "San Diego," and the distant view towards "El Paso" proved the country to be unbroken and comparatively level.

From the high valley of the river I ascended to the table land of Mexico, by an almost insensible slope over smooth prairie. For 150 miles on this smooth level table land, which is studded with isolated hills or mountains, I journeyed without any difficulty, passing over but three hills, in two cases, I know, in the third, I believe, unnecessarily. I then, unexpectedly and suddenly, arrived at a great break off to a lower level of country, the descent to which was very broken and rough mountains for fifteen miles. I found, however, that I had at that moment fallen into an old wagon trail, which led, I was told, from Yanos. I was able to get my wagons through, following a stream all the way, and descending in the 15 miles possibly a thousand feet. This was the head of the Huaqui river, which empties into the California gulf. I was told that this was called the Pass of Guadalupe.

I then passed an unbroken country, about 80 miles, when I fell upon the José Pedro river, which empties into the Gila. I descended this without difficulty of ground about 80 miles. In turning off there is an ascent to nearly level country of, perhaps, above an hundred feet, but it could be made very gradual. It is then about 48 miles to Tueson, a town of about 500 inhabitants with a fort and garrison. This distance is over much smooth ground, maintaining the same general level. Tueson is in a rich and well cultivated valley, where there is also a dense forest of maguery. From Tueson it is some 75 miles to the Gila. It is a level plain, generally of clay, where my wagons and footmen (water being very scarce) passed at the rate of about 30 miles a day.