

BOSQUE REDONDO RESERVATION.

LETTER

FROM

THE SECRETARY OF WAR,

RELATIVE TO

The unsuitableness of the Bosque Redondo reservation in New Mexico for the location of the Navajo Indians.

APRIL 10, 1868.—Referred to the Committee on Appropriations and ordered to be printed.

WAR DEPARTMENT,
Washington City, April 1, 1868.

SIR: I have the honor to send herewith, for the information of the proper committee, certain papers transmitted to this department by the Commissary General of Subsistence, respecting the unsuitableness of the Bosque Redondo reservation in New Mexico as a location for the Navajo and Apache Indians, now resident upon it.

Your obedient servant,

EDWIN M. STANTON,
Secretary of War.

Hon. SCHUYLER COLFAX,
Speaker of the House of Representatives.

OFFICE CHIEF COMMISSARY OF SUBSISTENCE,
DISTRICT OF NEW MEXICO,
Santa Fé, New Mexico, December 9, 1867.

GENERAL: In reply to your letter of October 16, 1867, asking what disposition has been made of the garden seeds sent to New Mexico during the last few years, and the general result of their culture, and for any information further to be obtained, I have the honor to state that I am ignorant of the disposition of those sent prior to last spring, as all the troops garrisoning the posts have been changed within the last eighteen months.

From the report of First Lieutenant R. McDonald, fifth United States infantry, herewith enclosed, will be learned the result of all the seeds planted this year. As none of the posts except Fort Sumner cultivated a garden, the seeds received last spring were all sent to Lieutenant McDonald, at that post.

The almost total failure of the Indian farm is a source of much disappointment. 2,367 acres were carefully ploughed and planted, without any appreciable result. This farm was divided into three sections, and each section was subdivided into ten-acre fields. Over each of the three divisions a non-commissioned officer, with four private soldiers as assistants, acted as superintendent, and eighteen Indians performed the labor; the soldiers instructing and assisting them. From one to two hundred Indians were employed a great part of the time in keeping the acequias (ditches) in good order. Lieutenant McDonald had entire control over all farming operations.

The failure of the farm this season is attributable, first, to the dryness of the season; secondly, to the washing away of the banks of the Pecos, and the consequent scanty supply of water in the acequias; and lastly, to the strong alkaline properties of the soil and water.

After all the labor and care expended on the farm this last season, it must be confessed that the result is rather discouraging; but when we reflect that it has been the means of teaching agriculture to a large number of a very formidable and warlike tribe, and has been the nursery in which they have received their first lessons in civilization, much consolation may be derived.

It was my fortune to be at Fort Sumner in April, when the planting was going on, and it was not without emotion that I saw the whole tribe working earnestly and cheerfully on their farm, and on their own gardens; these very same Indians with hoes in their hands, who, but a little more than two years before, had been the terror of every family from Albuquerque to the borders of Old Mexico.

In New Mexico agriculture is of the most primitive kind, wooden ploughs for the greater part being used, and but little improved machinery having been introduced. Threshing is done by means of mules, goats, or horses, tramping out the grain on the ground, and this accounts for the prevalence of grit in the flour made.

The only land under cultivation is that bordering the streams, as nothing can be raised except by irrigation. When much snow falls in the mountains during the winter, enough of water is assured to warrant good crops during the next season. Americans who have resided here for many years tell me that good crops as well as poor ones come by cycles. For the last twenty years, experience has shown that three or four years of good crops are followed by one or two years of almost total failure, and the poor are then reduced to the verge of starvation, and prices for breadstuffs become exorbitant. The last bad crop was in 1865, and in the spring of 1866 the people of the lower Rio Grande were in such destitution that the military commander ordered rations to be issued to them. The crops this year have been unusually fine, and prices for corn and wheat are consequently very low. The reason that the prices of breadstuffs in New Mexico can never fall as low as in the States is, that the constant labor and unceasing care that cultivation by means of irrigation demands, makes the price of wheat or corn more, even when the grain pays only the actual cost of the labor expended.

New Mexico is peculiarly adapted to stock-raising; abounding in vast plains covered with rich gramma and buffalo grasses, which are exceedingly nutritious even when dead in winter, and having a climate so pure and equable that no diseases prevail, even among sheep. I am told that ewes drop two lambs a year, and that, after deducting the loss from wolves and other accidents, the sheep herd increases invariably seventy-five per cent. annually. The troops, at present, cannot depend upon this country for their supply of beef, but afford a market for Texas cattle to the number of six or seven thousand head yearly. Depredations committed by the Jicarilla, Mescalero and Mimbres Apaches, the Comanches, and some other tribes, have been so frequent and so disastrous as to prevent, in a great measure, the general raising of cattle. Like the farming

implements, the stock generally is unimproved and of a degenerated kind. The beef cattle weigh net on an average not more than 420 pounds, and sheep about 26 pounds. Horses are of small size. Owing to the high price of corn during most seasons, but comparatively few hogs are raised. In the mountainous parts of the Territory large numbers of goats are herded.

The soil along the Rio Grande is quite sandy, and fruits, particularly grapes, grow to great perfection. Apples are unimproved, small, pithy, and devoid of juice. Peaches in the lower part of the country are quite large, and of excellent quality. Some few enterprising citizens, generally Americans, have introduced grafts from the States, and are successfully raising very superior apples and peaches.

The soil of this country, probably on account of cultivation by means of irrigation, yields remarkably fine vegetables of all kinds. At Messilla, last March, I saw a garden (not a sugar) beet which weighed 73 pounds. Onions attain a great size, and are of a less pungent flavor than those of the States. Cabbages, cauliflowers, and radishes grow luxuriantly, and are of delicate flavor. The bean crop this year has been in many sections a failure, owing to a bug destroying the vines. Potatoes, owing to some chemical ingredient lacking in the soil, grow but in few sections; near Fort Stanton and near La Plaza del Alcalde they were successfully cultivated this season. In the southern part of Colorado, from the vicinity of Fort Garland, the steady supply is drawn. Dried fruits are not produced in sufficient quantities to make the prices reasonable, nor the supply sufficient for the troops.

By offering a little encouragement last spring many persons were induced to plant largely of vegetables, and this fall I have succeeded in purchasing at moderate rates all that are required at the posts.

Staff officers charged with supplying the troops and government animals in New Mexico are obliged to exercise much forethought, and to keep themselves thoroughly informed as to the state of the crops, if they depend upon drawing their supplies to any extent from this country, so that if there is a prospect of failure they may make timely requisition on the east for a sufficiency, so that the little upon which the population should subsist may not be taken from them, and the United States be compelled to pay famine prices for what it consumes.

Should the Pacific railroad pass through New Mexico, grain can be brought here so cheaply that the staples of the country will, in a few years, be cattle and sheep, and wool and wine. With proper treatment, the grapes produce the finest wine, but with it, as with everything else, the manufacture is of the most primitive character. During this fall, it is estimated that one thousand, and perhaps more, barrels of wine have been made. It sells at present at from 60 to 70 dollars per barrel in Santa Fé.

Very respectfully, your obedient servant,

CHARLES McCLURE,

Brevet Major and Commissary Subsistence U. S. A.

Major General A. B. EATON,

Commissary General of Subsistence U. S. A., Washington, D. C.

OFFICE OF ASSISTANT COMMISSARY OF SUBSISTENCE, I. D.,

Fort Sumner, New Mexico, November 12, 1867.

SIR: In obedience to your instructions of the 2d instant, I have the honor to submit the following report of the operations in farming and gardening carried on this season at this post, embracing the Indian farm, post gardens, and the Navajo lands.

SITUATION.

The Indian farm is on the left bank of the Pecos, extending northwest by north, adjoining and above the post, in latitude $34^{\circ} 19' 45''$ north, longitude $140^{\circ} 09'$ west, magnetic declination (June, 1866,) $13^{\circ} 45'$ east, approximate altitude 5,500 feet. The valley declines to the southeast, forming the western limit of the dry Llano Estacado.

CLIMATE.

Very warm and dry; the air exhilarating and invigorating; unsurpassed for purity. Here are no marshes or sloughs giving forth miasmatic exhalations; timber alone is wanting to realize the poet's dream of Arcady. Here one ought to attain, if ever, a patriarchal age. Frost, however, lingers in the lap of spring, too often destroying the early hopes of the ambitious gardener; indeed, few plants are safe until after the 25th of April. Again, the hoar king manifests his pleasure in early October, followed by a lengthened period of consecutive fine weather, winter being scarcely felt. Snow, indeed, may fall, and ice form, but under our ardent beam both are evanescent as the morning shadows. Rain and timber are alone wanting to make this a second Paradise; bordering on the dry Llano Estacado, in no season does the rain falling exceed 10 inches, and during the six months of last summer scarcely any fell, the heat being very great.

The following table gives the amount of rain which fell, with the degrees of heat registered during the months specified in 1867.

	Max.	Min.	Mo. Mean.	Rain.
March	78°	8°	42°.34	.00
April	86	34	58°.19	.43
May	95	57	66°.33	.00
June	96	64	74°.77	.70
July	98	68	79°.62	.80
August	90	70	78°.43	.50

On the 26th of June a destructive hail storm furnished .50 of the .70 recorded that month, so that in the six months but 1.93 inches of rain fell.

SOIL.

A rich alluvion, here and there belts of sand, and gravel and sand. Could a sufficient supply of water be obtained for irrigation there could be no question of its productiveness. Some portions of the farm exhibit on the surface a white efflorescence of an alkaline character, which, in combination with the river water, contains a principle highly destructive to the cereal forms of vegetative life. This kind of soil need not be cultivated, as thousands of acres of a better quality wait, since the dawn of creation, the hand of industry.

THE INDIAN FARM

Has an area of 2,367 acres; it is divided into three ranches, each having one non-commissioned officer, four privates, and eighteen Indians. This area, with 1,000 acres of Indian lands, post gardens, and the garrison, depend upon one acequia for a supply of water. No husbandry can be carried on this low down the Pecos without irrigation. The present acequia, when charged to its full capacity, does not convey over one-third of the volume required. It is about eight miles in length, tapping the river six miles above the post, where a temporary dam is thrown across the river to enable the acequia to drain it during its

low stages. Through winter the Pecos is a brackish, diminutive stream, but when the snows melt its volume swells, overflowing the valley, tearing and dragging everything with it in its headlong fury. Last winter this dam had been greatly strengthened and extended, and supposed, by competent judges, sufficiently strong to resist the force of the current, which proved a fact; but during the periodic rise, unable to force the dam, it cut the left bank away to the extent of one hundred and twenty feet, forming a new channel nine feet deep at high water; the stream was so formidable that nothing could be done to prevent further injury until after the river had subsided. It was found, however, that there were no means at the post that could be diverted to this object; the crevasse, in consequence, remaining open. Farming operations commenced on the 16th of December; forty ploughs were set to work, Indians holding them, and by the 10th of March the whole farm was ploughed. Dividing the farm into ten-acre fields, casting up borders, and digging acequias to convey into each water from the acequia madre, occupied until the 18th of April. The prevailing winds in spring blow from the west, conveying with them immense clouds of sand, which, had the acequias been dug earlier, would have entirely refilled them; hence, this kind of labor cannot be done in the fall or winter. Corn planting commenced on the 19th of April, and was finished on the 24th of May, thus planting over one hundred acres per day in holes dug with hoes by Indians, three and a half by four feet apart, dropping six to eight grains in each hill. Towards the close of April the weather grew very cold, so that seed dropped in May appeared first. As soon as the braird appeared irrigation commenced in earnest; one hundred and fifty Indians were daily employed for that purpose, and running the ploughs between the rows; but soon it became evident that unless the rainy season came to our relief our efforts would be fruitless. Some days no water could be obtained, owing to the crevasse; at all times the quantity discharged was so diminutive that in the endeavor to do too much all was lost. The sky contained no moisture, no rain having fallen in May, and but .70 inch in June, .50 of which were the contents of a hail storm, which caused much injury to the growing crops. On the 30th of June I became convinced that should July indicate rain, resort should be had to replanting. After replanting two hundred and fifty (250) acres, and no indication of rain, I deemed further replanting inexcusable, the supply of water having entirely failed and but .80 inch having fallen in July. To save the crops from complete destruction, they were turned over to the Navajo chiefs. The labor and seed used, in consequence of the dry season and the impossibility to procure sufficient water, did not yield appreciable results. The Indians strove hard to aid the young corn in its struggle for existence. The awful Deity which presides over the laws of rains and storms refused to be propitiated; the inexorable cause could not be turned aside, and although the Navajoes brought much labor to bear, economizing every spare drop of water, their efforts were crowned with little success. The endeavor to cultivate too much defeats itself; until a permanent dam is built and an acequia madre of sufficient capacity dug, all efforts to cultivate the whole of the Indian farm under similar circumstances will, in the future as hitherto, end in failure. The better way would be to build the dam, dig the acequia, furnish seed, and let the Navajoes plant in their own manner. I do not say the government ought to incur this expense; on the contrary I believe it should not. A two years' experience, and an intimate knowledge of the views which the Navajoes entertain with regard to the Bosque, convinces me that the Indian will never be contented here, and that the want of wood will compel him (in his struggle for life) to leave, even if he perish in the attempt. At no distant day the government will be compelled to seek a more suitable location for a permanent reservation.

Corn planting should commence no earlier than the 10th of May, and should

be over by the same date in June; there is nothing gained by planting in April, if you depend upon the rainy season for water. During the four years cereals have been grown here, the maize plant, after attaining its maximum growth, has become more or less infected with a disease of a fungous character, destroying much of its value. I attribute this to some deleterious principle contained in the river water, and by this medium conveyed to the plant, which, in taking up the water, does not possess the power to reject the poison thus insidiously held to it.

SORGHUM.

Forty pounds of this seed were dropped by hand, ten grains in each hill, four feet apart and covered lightly, on the 30th day of April, and on the 14th of May seventy pounds were dropped by hand in furrows freshly turned and covered shallow—about sixty acres in all. It came up very well, and, though the cane grows here luxuriantly, the want of water or rain, as in the case of the corn, prevented the full success of the experiment. The Indians are passionately fond of it, and no sooner than the least saccharine matter is developed than they steal it by night and by day. The Indian agent has collected over two hundred pounds of this seed for use next spring. A portion of the seed was distributed in spring among one hundred Indian families; it grew well, forming handsome borders to their plots.

SOUTH CAROLINA RICE.

On the 5th of May one hundred and fifty pounds of this seed were sown broadcast in a low spot, harrowed, and eighteen inches of water let in; after three days the water was turned off; this was done three times, when the shoots appeared and were kept constantly watered, letting in and turning off many times. Notwithstanding the great attention given and the constant supply of water, it sickened and died. Embankments two feet high were thrown around it, and in this case the supply of water was constant and abundant. Whether this state of things should be attributed to a want of skill in its culture or the great altitude of the valley I am not prepared to say.

EAST INDIA RICE.

On the 7th of May one hundred pounds of this variety were sown by a drill machine; no embankments thrown up; the ground very low and easily watered. After seeding the water was let in, and in twenty-four hours turned off, this variety not requiring the same treatment as the Carolina; it was kept sufficiently watered to keep the ground always moist, occasionally an inch or two deep, like the other variety; after appearing above the ground it sickened and died. In this case, also, I am not able to assign the cause. I am, however, of opinion that this variety is grown in India above the Ghauts, and at an altitude scarcely inferior to this. The heat there is doubtless more constant, so are the rains; indeed, in no part of the world, the valley of the Nile and the coasts of Peru excepted, does less moisture fall than here.

GARDEN SEEDS.

A portion of the garden seeds received were given to the Indians, a portion to the staff and company gardens, the balance planted on each of the three ranches of the Indian farm; a card attached to a staff pointed out the different varieties. Unfortunately, however, the hail-storm of the 26th of June tore off the cards, destroying at the same time the melon, squash, and pumpkin vines. The troops

constituting the garrison having been ordered away, the details were so often changed that it was impossible to interest the men in the operation going on, and though the staff and company gardens were partially successful, the ranch gardens did not exhibit that degree of success that would justify me in asking that a detail be retained in charge after the farm was turned over; they were, in consequence, turned over with the farm to the Navajo chiefs. The staff and company gardens cover twelve acres, and though each company garden contains but one acre, in the charge of troops, they readily sell at from two to three hundred dollars each. Melons, squashes, and pumpkins grow here to perfection, so do beets, carrots, radishes; turnips not so well; cabbage, like maize, is subject to a fungus disease which invariably destroys the plant before maturing. It were well that some one would introduce the sweet potato and other species of yam, as the climate and soil are adapted to their growth, and they would prove of lasting benefit to the Indians. The sweet potatoes forwarded from St. Louis last spring froze on the way, and were quite decayed on arrival here.

INDIAN LANDS.

The area cultivated by the Navajoes is about 1,000 acres, all of which they planted with corn, sorghum, melon, squash and pumpkin, the most part of the seed being furnished by the subsistence department. Their corn planting lasted from the 8th to the 15th of May; their melon from the 1st to the 8th of May; more than one-half of their ground was appropriated to the latter variety of crops. The Navajoes do not disturb old ground, merely letting on water for a day or two; the squaws with hoes dig shallow holes, the papooses dropping the seed and covering it with a dash of the foot. In a similar manner they plant their other varieties. Should they have to break in a meadow they soften it sufficiently, then dig it with heavy hoes three or four inches deep; after taking off the grass, roots, &c., they proceed as above described. When the young vines or shoots appear they go over the whole surface with a light hoe, and should there be no indication of rain, or it be found impracticable to irrigate by hand, they keep hoeing their patches every second day after sunset. To this habit, in the absence of water, may justly be attributed their complete success, when cultivation in the improved mode has had but partial success. The hail destroyed much of their young corn and vines; most, however, had seed to replant, succeeding very well. Even this season their corn would, if left to mature, average 30 bushels to the acre; this, however, they do not permit, using much of it when in a milky condition. Their melons were tolerably good, their squash and pumpkins excellent; these with a little Chili are the only varieties they care for. The introductions of the different species of yam, doubtless, would prove a lasting benefit to the Indians, who are extremely fond of vegetables, eating them raw even in a green state. During the season of spring they dig up immense quantities of a root they call numassee, a species of wild potatoes similar in habits to the sweet. Any efforts, however, to ameliorate their condition at the Bosque will have but a temporary effect, as the want of timber, both for building and fuel, will prove an inseparable barrier to the permanency of the Bosque as a reservation. As I have already said, the Indians have told me again and again that unless the government provides them with a suitable location they will, by bands or collectively, make an effort to leave the Bosque, even if assured of perishing in the attempt. All that is requisite to make the Navajoes a contented and useful people, the equal in every respect of the Pueblos, is their removal to a suitable location, where wood, water and grass abounds.

As the seeds received from the subsistence department were issued to 2,500 lodges, it is impossible for me to give you specific statistics. I can only speak

of them in a general manner; they are, however silent, conferring benefits that bear a lasting impress.

R. McDONALD,
*Lieut. 5th Infantry, U. S. A., Acting Commissary Subsistence,
Indian Department.*

Major CHARLES McCLURE,
*Chief Commissary of Subsistence,
District of New Mexico, Santa Fé, N. M.*

ADJUTANT GENERAL'S OFFICE,
Washington, January 13, 1868.

Respectfully referred to the Commissary General of Subsistence.

By order of the Secretary of War :

R. WILLIAMS,
Assistant Adjutant General.

OFFICE COMMISSARY GENERAL OF SUBSISTENCE,
January 16, 1868.

Respectfully returned to the Secretary of War, with the remark that the general and detailed purport of these very reliable papers, as well as the whole experience of the subsistence department in its efforts of several years to subsist and instruct in agricultural and stock pursuits the Navajo and Apache Indians placed on the Bosque Redondo reservation, on the Pecos river in New Mexico, clearly indicate that the selection of that location as a place for the attempt to civilize these Indians was unfortunate, and that it ought not to be further continued, but that some more suitable location should be selected and the Indians transferred to it.

A. B. EATON,
Commissary General of Subsistence.