

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
INDIAN FIELD SERVICE

Polacca, Arizona.  
August 29, 1929.

Mr. John G. Hunter,  
Supt., So. Navajo Agency,  
Fort Defiance, Arizona.

Dear Mr. Hunter:

Referring to our recent conversation, it would seem to me that the general reservation conditions are about as follows:

Just at the present time we are blessed with something near a normal growth of grass, as compared with the growth of a few years ago; and this is the first normal growth of Grama grass (the main dependable forage for stock growing in the Navajo country) for the past three or four years.

It is well understood that this country has suffered from a lack of precipitation for the past few years, which is believed to be what is known as the last half of a "cycle", as our weather records will show that our seasons run in cycles from the wettest to the driest, covering a period average ten to twelve years in length. It is to be hoped that we are, or soon will be, able to enjoy a greater precipitation, in accordance with the coming of the last half of the cycle, assuming that we have passed the peak of the dry period.

Even though we may expect more precipitation in the future, and a greater growth of forage, it would be dangerous for us to take for granted that the present number of stock now ranging on the Navajo reservation can be safely maintained indefinitely; as the range is badly overstocked, and is being depleted with an alarming degree of rapidity.

F. W. 2419

J.G.H.-2-

There appear to be but few people who realize the seriousness of this to the Navajo people.

There are many things which are combining their forces in destroying the range for stock-growing purposes. Some of these are the following:

First. Overgrazing has the bad effect of not only eating off the grass to a point where it is not allowed to develop seed and automatically reproduce itself, but it is tramped out in many places, and the natural sod is even destroyed; and the place of the original grass is partly or wholly taken by a plant which has no food value, and grows undisturbed to such an extent that it finally takes the entire control of the overgrazed section.

Second. The devastation by overgrazing causes another very destructive condition, as, where the surface is partly or completely bare, there is nothing to retard the flow of rain water, etc; therefore the degree of penetration of moisture is much less than it would be under normal conditions. For instance: it would be reasonable to expect moisture to penetrate to a depth of from twenty-four to thirty-six inches, provided the normal growth existed; but as it is in many places, there is no resistance to the run-off, resulting in but few inches of penetration; therefore leaving but a small amount of moisture to withstand the dry winds and to produce another growth sufficient for grazing.

In addition to this we have the rapid and increasing effects of erosion due to the fact that we have an accelerated run-off which rushes down into the valleys to where it was originally retarded by heavy growth and was spread out over a large area which it completely inundated, thus effecting a thorough irrigation of these wide valleys and causing a heavy growth of grass;

F. W. 2420

J.G.H. -3-

whereas now this rapid run-off meets with no such resistance and causes violent erosion, creating arroyos from one foot deep and a few feet wide to arroyos with a depth of forty feet and a width of a few hundred feet. And, in turn, small arroyos form as tributaries to the larger ones; and in some cases this process of erosion has almost destroyed entire valleys in which it occurs, for grazing purposes. Not only do these arroyos break down and carry away the original surface of the valley, but because of their depth they under-drain great portions of the valley, thus lowering the capillary fringe; and the zone of saturation is lowered to a point where sub-irrigation is impossible.

In order to avoid further overgrazing and tramping out of the original sod it will be necessary to develop all of the natural springs and to build surface reservoirs of sufficient size to insure permanent water from season to season; and in addition to this to drill wells, where possible, with a view to making the entire range of the Navajo country available for grazing. And even if it is possible to get money with which to do this increased work, we will still be a long way short of having sufficient grazing area to maintain even the present number of stock in the future; for it is a well known fact that during the last eighteen years the stock has increased to a point where the Indians are now selling annually more sheep and cattle than existed altogether on the reservation in the year 1911. It is also true that the grazing land has gradually deteriorated during these years; and as a result of the overgrazed condition of the ranges, great numbers of sheep, cattle and horses actually perished during the past year.

For these reasons a careful plan should be worked out to continue the water development in places where there is feed; and there should be a thoroughly organized system of scientific supervision of grazing and movement of stock devised and vigorously enforced.

F. W. 2421

J.G.H. -4-

After we have understood these facts, it only requires the use of a few figures to show that with the present rate of deterioration of our grazing lands, it will be only a few years until our Navajo country will be reduced to what is known as a "bad land"; and when this is done and the problem of re-seeding and restoring the natural grasses faces us, it will be found exceedingly difficult (if at all possible). And the great resource of the Navajos will be ruined and the real Indian problem begun. This may seem pessimistic; but when you figure on so many acres of grazing land, allowing so many acres of each animal, and dividing the area among forty thousand Indians, you will see how many sheep or cattle it will be possible for each Indian to have; then ask yourself how much higher an ambition it is possible to maintain above the present civilization, with this as a resource.

This picture, of course, is drawn from a consideration of the grazing resources only; when this resource is dissipated it will be necessary for the Indians to turn to other pursuits. To what pursuits can they turn; and what is being done to open up and develop other means of living?

Some of these statements may seem to people who have not been familiar with reservation conditions over a period of several years as being "far-fetched" or off-hand conclusions; but I am sure, judging from the past eighteen years of climatic conditions, and assuming that it is unsafe to expect any material change of such conditions, we had better conform to our experience of the past and make the necessary plans to safeguard the range in every way possible; by increasing the value and breed of animals rather than increasing numbers; developing water in places where it is needed to make all grazing land available; by supervising the movements and grazing of stock;

F.W. 2422

J.G.H. -5-

and by making every effort to get more land from the public domain adjacent to the reservations, such as blocking together railroad lands and Indian holdings, similar to the plan already in use by some of the more energetic superintendents.

As to the water development program, much can be done to further protect the grazing country; but the process is rather slow, and much of the country will continue to suffer from congested conditions until more funds can be obtained to carry the water development to such districts.

There are many Indians who were unfortunate enough to be living on the public domain, prior to the establishment of reservation lines, whose lands and homes were not included in the reservations when they were established. Such Indians are deprived of the benefits arising from the expenditure of any appropriations made by Congress for water development on the reservations. These people are very much in need of assistance along water development lines; and since they are not entitled to any benefits from the appropriations made for the benefit of the Navajo country, and in order to protect the Indians now established on the reservations from an influx of Indians from outlying Indian communities out side of the reservations, such as the Navajo settlements at Ramah, Canonicito, Puertecito and other places, it will be well to work out some program similar to the water and grazing development program on the Navajo reservations, applicable and available for the nonreservation communities, in order to prevent further overcrowding on the reservations by infiltration of the outlying bands.

It is well to remember that prior to 1910 there was no water development work done in the Navajo country; and the Indians were dependent on the few natural watering places, including a few undeveloped springs and water holes. It was perfectly natural that when the Indian herds were favored with a few favorable seasons their numbers would increase considerably; and when a dry

F. W. 2423

J.G.H. -6

period existed their herds would naturally perish down to a number which could subsist with the water available. This was taken by the Indians as an unavoidable condition, and little was said about it. Later on, as more and purer water was developed the Indians could see the possibility of safely increasing their herds; and as permanent water has been developed they have taken more and more advantage of it; and through the encouragement and help from their superintendents they have improved the grade of their stock and increased their numbers to a point that is at least approaching the limit, as heretofore stated.

The problem now appears to be a matter of maintaining the number of stock the Indians now have, with a careful system of selling it as soon as possible after it has reached a marketable age, thus relieving the range of any unnecessary increase.

The worthlessness of burros and horses is fairly well understood by the Indians, as all the superintendents have made strenuous efforts to free the reservation of these animals.

I have tried to make it plain that regardless of how much water can be developed or how much more valuable an individual animal can be made, a civilization dependent on this stock country as a main source of existence cannot be expected to rise to a much higher plane than that which now exists; and that any statement that the Navajo Indians are now in possession of more land than they are using is simply an unfounded statement.

Very respectfully,

A.H.Womack

F.W. 2424