34 1924 AGRICULTURE

UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF BIOLOGICAL SURVEY

MATTER TOTAL BLOOM

CEIVED

Referred to

For signature of

Niebrara Reservation In Nebraska

> P.O. Valentine, Nebr July 15' 1924

Bureau of Biological Survey E.W. Nelson Chief Washington D.C.

My Dear Sir:

In response to your letter of June 27' I submit herewith Report of conditions and work upon the Niobrara Reservation for period from January 1' to June 30' 1924.

The big Came Animals have increaded or decreased as follows; -

	1923	1924
Bison,	46	51
Elk	57	53
White-tail Deer	3	1

Bison

Continue to thrive in the new pasture and required no extra feeding last winter. When snow conditions appeared bad at Meadquarters, on two occassions, the herd was followed up and a particularly good number of bare ridges were noted that no drifts appeared to cover with snow and the bison knew where these were. In fact they selected their storm area and went to it for every storm, High ridges are frequent and take variant direction in the pasture, so that snow cannot cover all of the ground, The oldest cow that went across the river with the herd, did not survive the winter, She was alone most of the time approx, one half mile to the rear of the other animals. I thought early in the winter that possibly she should be got back in the headquarters pasture but later considered she had a better chace on the north side with its more favorable shelters than at the barns with its hay and not as good shelter. total loss has been three. The eldest cow referred to. the older bulls, that was assisted to his death by another animal in the ice and mud of the pands during the hardest weather and the Bull that was disposed of for \$100. (This latter was precisely on July 1' but will include in this period,) There are eight calves to the herd's credit for this season of 1924 Five males to three females Of the 51 head, now of the herd, Six are at Meadquarters, and 45 in the large pasture,

Elk.

Attemps have been made to tally this seasons calf crop for this report but it cannot be done without an expense for several riders, and it was not thought advisable to do this, when the whole calf tally can be obtained for a later report and a partial report might be confused. Five head of calves have been found, but these were beaten out of the dense brush where they were hidden away. The difficulty is the fact that they are hidden by the cows during the day and from the nature of the pasture, the various small streams coursing across with intervening ridges and unless these ca be ridden simultaneously, the animals beat out of one cover, over the ridge to another—cover and mingle with animals not yet counted,

The elk are divided into small bunches and as widely scattered as the pasture will admit; it can be approx.stated that there are twelve calves if desired,

They have handled themselves to good advantage this past winter and with no loss due to winter conditions. Three of the animals at Keadquarters have died, Two had been wasting for a year and the third fell away rapidly f with the cold weather Another elk, a small one met his death in a peculiar manner, by leaping the barb wire fence that surrounds the Beaver Cabin, and his tark front legs went through two strands of wire and he got fast, by turning over, It was in a slight basin and the fence must have been half drifted with snow, so that the elk saw perhaps but the top wire.

Came Birds

last year and yet there has been no winter snow drifting that might have depleted last seasons increase The surplus must have spread over adjacent regions leaving the familiar fields to the older broods, There would be the ordinary depletion due to pre datory animals, birds and other causes. The winter feeding was successful as far as carried out, Grain used was wheat screenings and cracked corn , two bushels only It has a tendency to hold the flocks close in to the sites chosen and only the quail that were started with That is= additional quail; did not con gregate to the geeding. All bunches must choose their winter habitat and then stay close to it, There would be no limit to the extent that the feeding of quail could be carried out in this territory The chief aim, would be to stat the grain feeding in close proximity to large clumps of strong bushes in which they might take shelter from the cornice forming snew drifts that imprison them, or else make artificial snow racks strong enough to hold the drifts in lea of other sheltr \$ 25. worth of grain could be used for quail winter feeding, and as I state the sole object of the feeding would be to have the quail close to a possible shelter, when storms broke, It would appear that the State would be interested in providing the grain for such purposes if the Reservation Management would effer the labor, and attention,

I do not observe that there are more quail than

1 House

Grouse and Prairie Chicken

Departed from their habit of last season and not been so close into Headquarters Yet reports from the large outlying ranch holdings are "abundant as ever" We had a very dry spring and early summer, a deficiency in the annual moisture records and last year we had a wet early season which might have held the birds on the prairie in general without regards to creek locations

There are birds c scattered about the Reservation, but it will take the autumn season to concentrate them and ascertain their relative increase or decrease over seasons of the past, There were some most severe hail storms, over certain areas in June, just after the hatching date and it must be a fact that all small bird life on the prairies covered by these storms, were wiped out,

A permit was obtained from State came Department for possible capture of prairie chicken or grouse for experimental purposes in holding and breeding in captivity. The pens were put in readiness and traps out in three localities, with the help of some farmers, but no birds obtained, It was due to the lck of hard conditions on the surface a lack of laying snows, January was a cold month, but the ground was not covered to the birds detriment.

May Sales and Other Revenues.

There has been turned into the Treasury as revenues from hay sales, an aggregate of \$ 188.42 and revenues from disposal of old building materials, accrued from wrecked buildings \$ 32.90. The prospects for hay cuttings this coming season are not particularly bright, There has been adericieny of moisture and hy meadows are in bad shape, Conditions might change as this prairie sand hill ground responds at once to rain, no matter if late summer. Our alfalfa did not reach the cutting stage and it is doubtful if there will be a matured corn crop,

Covotes The Covernemnt Trapper referred to in mid winter Report continued his work on Reservation until May and completed his fiscal year with work close at hand but off the Reservation He totaled in coyotes ? numbers * Bob cats 2 and various badgers, skun ks and cooms accidental, The den work for young coyotes was made off the Reservation as the use of traps in the large pasture and the trails was detrimental to the young bison and elk calves, Within a few days after the Trapper captured his two bob cats on the Reserve, two others were taken close at hand, He reports an unusual number of skunks in this region, but chiefly out in the sand hill areas, Your Warden found where skunks had devoured the eggs from one prairie chicken nest and crows had destroyed another nest,

^{*} Obtain this from Predartory Animal Div.

In connection with the activities of the Government rTrapper referred to it might be mentioned that in his use of poison bait, the most accidental damage was perpetrated on the crows and magpies,

Improvements,

No improvements were undertaken to any expent, in ast six months acct. diversion of funds to other Reservations, and no apparent need for improvements, All extra labor was dispensed with after the first of the year excepting to move hay stacks for feeding at intervals and general upkeep, A lot of post and wire material had to be shifted in place for the moving of the bison and elk across river and this has been shifted back to place again, But dring the patter part of June a small surplus fund was used on the big fence in the ground work under the wire and for closing apertures against coyotes, This will be continued in the present year, The usual farm crops were planted in May-June and somestrong winds, in May-June tore down fences and dmaged outbuildings somewhat and these all had to be repaired,

Fred M. Dillo

Warden Niobrara Reservation

Niobrara Reservation, Nebr.

Bison,	January	11	1924.

Males;	Calves of Apr. 1923	3
	Yearlings	2
	Two yr Olds	3
	Three yr olds	4
	Seven Yrs	1
	Nine yr	1
	Ten year	2
	Twelve yr	117

Females

	1,	
Calves	4	
Yearlings	3	
Two years	5	
Three years	3	
Four year	3	
Five year	2	
Six year	4	
Seven year	2	
Fourteen Yr	1	
Sixteen yr	1	
Seventeen Yr	1	29

On hand at Headquarters

Males 7 = ages 12,10,9.7. and 2/3 (2/20) Female 1 Age 4 yr

Cul. Jun 1923 Progress Report, Niobrara Reservation, Nebraska, January 1' 1924. The work, represented by labor, since the first of July 1924 has been the harvesting of the oat, corn and alfalfa crops at Readquarters, and the supervision of the a various has harvesters in the Mill, s Such detail as keeping them in boundary, division of territory, the care of the stacks measurements and division of stacks, One stack of eight tons was put up on north side, Government share of hay total all over place over 100 tons, But the winter season will not develope much revenue from this as the larger portion of the winter was too open and mild for much feeding, and the demand will be light, The heavy detail for the autumn work has been the crossing of the bison and elk across the river to the North Pasture. repeated intervals of work, to change the steep hill, down to the river the crossings, and the fence wings, Seon after the first of July, the large gates arrived and were taken across River and placed in position, with new heavy padlocks, One fourth gate was planned and placed in fence, for entrance to pasture, from the best Ford on river, Some road work was done on the blass just above this new gate site, so that wagons could climbonto Table with some sort of a load, but there will be required considerable more work to mke this hill road available as it should be, for hauling back and forth, Heavy rains in May, June and continued in July caused heavy growths of all grass and weeds and the immediate place was mown three times to keep appearances presentable, Usually one mid summer mowing has been sufficient, Also much more mowing with some plowing was done on the fire gueards (Guards) about the place, The U.Shunter sent here for predatory animal work expressed a wish to locate for the winter at the Beaver Creek cabin, So it was made more comfortable for winter with an inner lining or inner wall, banking up, the windows bettered, anda shelter barn for his two horses This improvement cost made Also a load best hay sent over, but a trile as most of the material was salvaged, on the place, Much old barb wire and posts were brought in from North Side ad and placed conveneinet o to move to position on south side for

boundary fencing

A road grader was brought from Town and used on the Roads through the place, To shape them to grade again and clean the ditches, One new culvert was put in,

Beaver Trapping has been active above and below the Boundaries under State Permits but no great amount of Bevaer have been caught on the River, Most of the parties that are out trapping impress me that they are not experienced suffic ient to trap Beaver but as a result the animals have moved to a more secluded portion of the river,

Quail There has been but two bad drifting blizzards that would endanger the quail, but I believe that they have all come through these without detriment, Many are seen as before in the gulches and lower hill sides and we have heard nothing regarding hunters in common molecting any of them, The quail are obtaining a good foothold,

I have been feeding some grain at times leaving it at frequested places on the north side river in the big pasture, Wheat screenings one grack, and cracked corn,

Grouse and prairie chicken are scattered over large areas, ad the Reserve has actual less than heretofore,

appointing hunting season for the hunters, They could not locate the flocks to advantage,

Within the cultivated regions there was so many corn fields, and so much corn harvested, that it scattered them over a large territory But with the development of winter they continued to hang out and have not come in close as former years,

There are abundance of them in the Gountry as a whole, I mean fifty miles out, but less within ten miles out than usual,

Bison tally, On hand July 1' 19243

48

One next to oldest cow died in August one one female calf died in August

46.

Across the river in large pasture On hand at Meadquarters

38 8 46

Ilk Tally

On hand July 1' 1924 3 No additions, No losses to Jan 1' 57

Across river in large pasture 45 On hand at Readquarters 12.

The cow, was punctured, in the paunch, perhaps not in fighting, but she was thinner in flesh than the oldest and perhaps did not get out of the way from some other fight during breeding season, She lingered about for one week, and after death it was not possible to get to her for three days,

The calf was born with a weak back and never strengthened up, The calf crop here for two seasons has been over proportioned to the number of cows, and there are two

Too many young calves from too young mothers, One that was turned across river with a young mother, is a very poor specimen, and one that died prior to June 30' was with young mother, (Pasture too small) mother,

Grederick m. Diles

Niowara Recuation -.
Tehnang 8: 1974.