R Reports

January 15, 1924.

Dr. E. W. Nelson,

Chief, Biological Survey.

Dear Dr. Helson:

In compliance with Paragraph 210 of the Administrative
Regulations, I have the honor to submit the following progress report
on the project "Nichrara Reservation" (Symbol 9) for the calendar
year 1933:

The big-game animals have increased as follows:

	1933	1923
Buffalo	40 53	46 58
Deer (Whitetailed)	1	3
Totala	94	107

#### Buffalo:

The buffalc have come through the year in good shaps. Nine calves were reported for the year but one died in the early spring. The first one was reported on March 18. One female calf died in August, and one of the older cows, which had never been strong, died also in August. This cow was punctured in the paunch while in the way of other animals when they were fighting.

The north pasture was completed early in July and the buffalo were later placed in this 4000-acre enclosure. The warden states that the animals show a decidedly improved appearance since they have been taken out of the small pasture. Eight buffalo were retained in the small pasture near headquarters.

# Elk:

After the completion of the big pasture on the north side of
the Nichrara River, the elk herd was placed in this large enclosure,
with the exception of twelve animals retained in the small pasture near
the headquarters. There was a loss of three animals during the previous
winter and the cows were in poor flesh when the calves were dropped.

The warden reports that there has been a great improvement in the appearance and action of these animals since being placed in the big
pasture. As these elk had always been winter-fed, it was felt that
some feeding might be necessary during cold weather after they were
transferred to the north pasture, and provision was made for such feeding. It would appear from the rapidity with which the animals have
adapted themselves to their new conditions and improved that no winter
feeding will be necessary unless there should be a period of severe weather
and heavy snow.

#### Game Birds:

Quail are reported to be more numerous this year than for seven and years. The mild winter of the previous year/ the lack of hail during the nesting period are believed to be the reasons for this increase.

At the time of the nesting period, it was estimated that there were

300 birds on the reservation. During the favorable summer weather many flocks of young were raised on the refuge. Up to Jamary 1, there had been but two heavy storms that were sufficiently severe to cause quail loss. As far as can be learned, however, there was no extensive loss during these storms. The warden, after studying the situation and noting the storm directions, placed several feeding stations and has kept these supplied with grain. It is planned to extend this winter feeding so that the birds can be brought to frequent sheltered locations where grain can be made available to them in periods of severe weather.

Prairie chickens and grouse were plentiful. The warden estimates that 300 pairs of these birds nested on the refuge. The majority of these nests were located in the heavy grass areas south of the river. Some birds nested close to headquarters and were frequently seen along the stream flowing from the springs in the buffalo pasture. There is every reason to believe that the aquatic plant growth in these streams fed by springs offer much food to the birds in this locality.

Then fall came, the birds scattered over the areas where corn was extensively raised. During the hunting season and up to January 1, the birds remained scattered. That they have not come into the refuge this year as usual does not mean that there are less birds because they are known to be scattered over a wide area. An ample supply of food and lack of snow rendering the grain available to them are evidently the causes responsible for the birds remaining scattered.

## Hay Harvest:

The unusual growth during the year gave an abundance of gress for hay. The Government's share of all the hay cut was 100 tons. Very little demand will be made upon this amount as only the three horses belonging to the reservation, the trappers' horses, and 23 game animals are being fed. There will be little demand for the surplus hay as the winter has been so open the ranchmen have needed no extra supply of hay for their stock.

### Covotes:

Some complaints have been made by the ranchmen raising poultry around the reservation regarding the extent to which the refuge lands serve as a breeding place for coyotes which prey upon their birds. At least three litters of coyotes were pupped on the refuge this year.

A Covernment trapper was assigned to the locality with instructions to give close attention to the area of the big pasture. This trapper made his headquarters at the reservation during November and December and prepared to clean up the coyotes during the winter.

#### Improvements:

The most important improvement of the year was the completion of the woven wire fence on the north side of Nichrara River, enclosing a pasture of approximately 4000 acres which has been made available for the buffalc and elk. Work was resumed on this project in October, 1922, and the wire was placed, under a prior let contract, to the extent of 2.56 miles. Following this and up to December, 1922, 1.63 miles of the fencing was placed, with a small force of laborers, leaving 7½ miles

to be placed. This was accomplished in seven weeks' time and the last of June taken to complete smaller details of the work on the commecting lanes and river crossings for moving the herds when transferring them to the new pasture. The total cost of this fence was \$22,045.79.

Some minor work was done about headquarters in repairs on buildings and placing some woven wire about farming fields and moving old fence materials.

Soon after the first of July, the large gates for the big fence arrived and were taken across the river and placed in position. One gate was placed in the fence for entrance to the pasture from the best ford on the river. Some road work was done on the bluffs just above this new gate-site so that wagens can be drawn on to the table above with a light load.

Much barbed wire and many posts were brought in from the north side of the reservation and placed where they could be conveniently moved to position on the south side for a boundary fence.

### Personnel:

D. C. Nowlin resigned as warden of this reservation, effective at the termination of May 31, 1923. Fred M. Dille was placed in charge of the reservation.

Very truly yours,

In Charge, Game and Bird Reservations .