

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY

IN REPLY REFER TO

R

Jackson, Wyoming.
April 5, 1934.

Chief, Bureau Biological Survey,
U.S. Department of Agriculture,
Washington, D. C.

Dear Sir:

Attached is my Quarterly Report for the Winter Elk
Refuge for the period from January 1 to March 31, 1934.

Respectfully yours,

Alvin J. Nelson
U.S. Reservation Prptector.



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Wm. B. Stebbins
U.S. Reservation Protector



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Quarterly Report for the Winter Elk Refuge for the
period from January 1 to March 31, 1934.

The winter in the Jackson Hole valley was an exceptionally mild one. The few snow storms that occurred during the winter were followed by warm weather that melted the snow in the valley, leaving our meadow and pasture lands bare from snow during the greater part of the winter. In the high mountains there is a fair depth of snow which will, of course, make available some water in the streams from which we obtain water for irrigating our meadow lands. During the last week of March and up to the present time, we have had stormy weather with a great deal of rainfall. Because of a dry season last year and a light snowfall during the winter, the soil in this region had become dry for several feet in depth. However, the recent storms have moistened the soil from 12 to 18 inches in depth. This was much needed to give all vegetation moisture for beginning its spring growth.

The winter of 1933-34 is another of those winters in which it has not been necessary to feed and fodder to the elk herds that gather in the Jackson Hole valley during the winter months. From our past records, I find that this has been the fourth winter, since the Elk Refuge was established in 1912, that it has not been necessary to feed hay to the elk in order to carry them through the winter.

There were approximately 4500 elk that wintered on the Refuge and adjoining ranches. As there was sufficient forage available to them

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past records, I find that this has been the fourth winter, since the
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feed in order to carry them through the winter.

Approximately 4500 elk that wintered on the Refuge
As there was sufficient forage available to them



on the meadow and pasture lands to supply their needs they came through the winter in very good condition. In fact, I found only six dead elk which had died from the number wintering on the Refuge. Five of these were old cows and one was a bull that had broken his neck in jumping over a fence. Many of the elk wintered far back in the mountains, with about the usual number in the Gros Ventre region. The forest ranger stationed on the Hoback about 20 miles south of Jackson informed me that he had seen more elk on his district than in previous winters. There was also a large number of elk that wintered on the Sheep Creek and Flat Creek foothills which were often visible from the Refuge lands on the upper portion of the League Addition. From all information obtainable the southern elk herd that wintered over the Jackson Hole region came through the winter in excellent condition with no loss among the herd from any cause. Practically all of the elk that wintered on the Refuge have now left the valley lands and are slowly moving north toward their summer range.

At the end of the elk feeding period on April 16, 1933, we had about 250 tons of hay left over. From our hay lands last season we harvested 1235 tons of hay, and during the winter we purchased 700 tons of hay from private ranchers which gives us a total of 2185 tons of hay. From this amount we have fed about 40 tons to work horses. This leaves about 2145 tons of hay on hand that will be available for feeding the elk another winter. In addition to our hay the State Game Department has on hand for feeding the elk another season 432 tons of cottonseed cake, 50 tons of corn, and 275 tons of hay. Practically all of the cottonseed cakes and corn is stored on the Elk Refuge. Should we have a fair season this year for growing hay, with the amount of hay and other feed that we have on hand, it would seem that we will be prepared to

on the meadow and pasture lands to supply their needs they came through the winter in very good condition. In fact, I found only six dead elk which had died from the number wintering on the Refuge. Five of these were old cows and one was a bull that had broken his neck in jumping over a fence. Many of the elk wintered far back in the mountains, with about the usual number in the Gros Ventre region. The forest ranger stationed on the Hoback about 30 miles south of Jackson informed me that he had seen more elk on his district than in previous winters. There was also a large number of elk that wintered on the Sheep Creek and Flat Creek foothills which were often visible from the Refuge lands on the upper portion of the Laramie Addition. From all information obtainable the northern elk herd that wintered over the Jackson Hole region came through the winter in excellent condition with no loss among the herd from any cause. Practically all of the elk that wintered on the Refuge have now left the valley lands and are slowly moving north toward their summer range.

At the end of the elk feeding period on April 18, 1933, we had about 230 tons of hay left over. From our hay lands last season we harvested 1235 tons of hay, and during the winter we purchased 709 tons of hay from private ranchers which gives us a total of 2185 tons of hay. From this amount we have fed about 40 tons to work horses. This leaves about 2145 tons of hay on hand that will be available for feeding the elk another winter. In addition to our hay the State Game Department has on hand for feeding the elk another season 432 tons of cottonseed cake and 275 tons of hay. Practically all of the cottonseed cake is stored on the Elk Refuge. Should we have a fall for growing hay, with the amount of hay and other feed that we have on hand, it would seem that we will be prepared to



take care of the southern elk herd another winter.

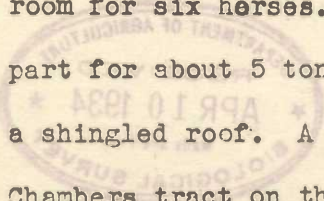
Due, perhaps, to the warm weather during the winter there were on an average more waterfowl that stayed on the Refuge. On January 28, I counted in the large springs on the Refuge 112 ducks, 103 Canada geese, and 1 swan. However, this spring, when the waterfowl usually return to the Refuge in larger numbers no noticeable increase in the number that was already here has been observed. The bluebirds, robins, and meadow larks made their appearance at the Refuge this spring about March 15.

From funds allotted under the National Industrial Recovery Act we have accomplished several improvements on the Refuge.

Under project 100 a new dwelling house on the Germain tract has been completed. The house is of log construction placed on a concrete foundation, and is on the same plan as the house we constructed four years ago on the League Addition, only it is smaller. It has four rooms. The kitchen is 12 feet by 16 feet with a built-in cabinet. The living room is of the same size. There are two bedrooms 12 feet square with a built-in wardrobe in each. The kitchen porch which includes the entrance to the basement is 10 feet square and is inclosed. The basement is 12 feet by 28 feet. There is also a front porch 7 feet by 10 feet. The building is neat in appearance and is well finished on the inside.

The new barn at the Germain tract to replace the old one has also been completed. The barn is 18 feet by 30 feet, and has stable room for six horses. The barn has a gambrel roof with room in the upper part for about 5 tons of hay. The barn is also of log construction with a shingled roof. A barn of the same type has also been completed on the Chambers tract on the upper portion of the League Addition. The old

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12/11/34*



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Under project 100 a new dwelling house on the German tract

has been completed. The house is of log construction placed on a concrete

foundation, and is on the same plan as the house we constructed four

years ago on the League Addition, only it is smaller. It has four rooms.

The kitchen is 12 feet by 12 feet with a built-in cabinet. The living room

is of the same size. There are two bedrooms 12 feet square with a built-

in wardrobe in each. The kitchen porch which includes the entrance to

the basement is 12 feet square and is finished. The basement is 12 feet

by 22 feet. There is also a front porch 7 feet by 10 feet. The build-

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part for hay. The barn is also of log construction with

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German tract on the upper portion of the League Addition. The old



Handwritten notes in red ink:
100
103
112
117

dilapidated dwelling house and barn on the Germain tract have been demolished and the material from these buildings that was serviceable was salvaged and used in the construction of the other buildings. All the worn out floors and mangers in the barn at headquarters have been torn out and new floors and mangers have been put in. An enclosed kitchen porch has been added to the dwelling house at headquarters. This porch is 11 feet by 20 feet in size. Minor repair work has also been done on some of the other buildings.

Work was resumed on March 19 on project 101. With the use of a road grader and one of our McCormick-Deering tractors, the road from Jackson to the upper portion of the League Addition was graded up and in many places widened. Our Defiance $3\frac{1}{2}$ -ton truck is being used to haul surfacing material onto the road. By the time our funds for this project are exhausted our road will be in good condition.

On project 102 a number of headgates have been constructed and placed in the fields at various locations. Many loads of stone have been hauled from the meadow lands, ditches have been cleaned and some have been enlarged, and about 50 acres of land on the upper portion of the League Addition has been plowed this spring, with additional lands being plowed on the Germain tract.

The telephone line under project 103 has been completed except for the purchase of a few insulators. This line gives us telephone service to the three quarters occupied by Pratt, Osborne, and McInelly, and is useful in the administration of the Refuge. Form Bi-1308 "Job Analysis and Expenditure Report" will be mailed immediately on completion of this job.

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Under project 104 a ram has been installed for pumping water to headquarters for watering the lawn and trees and it seems to operate satisfactorily. The portable pumping outfit with a set of hose has been received.

Two of the storage sheds under project 134 have been completed at the Refuge, except for the paint work. One of these sheds is 22 feet by 26 feet in size and is covered with galvanized iron sheeting, with a concrete floor and foundation. The other building at headquarters is of log construction 22 feet by 30 feet in size, and it has a concrete floor and foundation with a shingled roof. The other four sheds under this project will be constructed as soon as the roads are in condition so the material can be hauled to the locations where the sheds are to be built.

Photographs will be taken at a later date of all the buildings that have been constructed, as well as some of the other work that is being done. The films will then be mailed to your office.



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