

ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: 9-23 1944

MR. SALYER

SECTION OF HABITAT IMPROVEMENT:

MR. ELMER

Mr. Griffith

REG 9-25

Dr. Bourn

WSB 9/23/44

Miss Cook

WEC 9-25

SECTION OF OPERATIONS:

SECTION OF LAND MANAGEMENT:

Mr. Krummes

WK 12/18

Mr. Barnshaw

B

Mr. Regan

WJR 10/25/44

Mr. Dufont

WAD 12/30

Miss Baum

SECTION OF STRUCTURES:

STENOGRAPHERS:

Mr. Taylor

WV 11/30

11-6-44 a.k.

REMARKS:

CRESCENT LAKE NARRATIVE REPORT

MAY-AUGUST 1944

Return to: Hab. Improvement

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Narrative Report
Crescent Lake Refuge
May, June, July & August 1944

I. GENERAL

A. Weather Conditions.

Despite inclement spring weather, conditions in general have been quite favorable for wildlife, stock-grazing, and for the production of hay during this past four month period. May and June both had somewhat better than average precipitation. Precipitation for July amounted to 4.57 inches. Two rains were of washing and flooding proportions. The only damage experienced here was the washing of roads adjacent to the refuge. On July 30 there was a severe hail storm causing, however, no damage that effected the refuge. This storm was widely scattered, and in adjoining farming areas considerable crop damage was reported. The following is a table of weather conditions from May thru August:

	Precipitation	Max. Temp.	Min. Temp.
May	2.40	92°	20°
June	3.59	100°	36°
July	4.57	97°	42°
August	1.59	101°	20°
Total Precipitation	<u>12.15"</u>	<u>101°</u> Ext.	<u>20°</u>

B. Water Conditions.

The situation of water levels is encouraging. During 1943 the lake levels were the highest since the establishment of this refuge. A comparison of three lakes which are checked weekly will give a clear picture of existing water conditions over last year.

<u>Lake</u>	<u>1943</u>	<u>Elevation</u>	<u>1944</u>	<u>Elevation</u>
Blue	5-4	3784.124	5-2	3784.324
	6-5	3784.024	6-5	3784.324
	7-6	3784.224	7-3	3784.324
	8-6	3784.124	8-8	3784.324
Crane	5-4	3786.68	5-1	3786.88
	6-5	3786.78	6-5	3786.68
	7-5	3786.68	7-3	3786.68
	8-6	3786.38	8-8	3786.78
Roundup	5-4	3800.789	5-1	3801.189
	6-5	3800.889	6-5	3801.089
	7-5	3800.789	7-3	3801.089
	8-6	3800.689	8-8	3800.789

Many new potholes are appearing over the refuge, and the margins around the lakes are increasing in circumference and area.

C. Fires.

At the time of this writing the fire hazard is greatest. To date there have been no fires in this area. All risk areas have fire caches at strategic points. A 22 Caterpillar tractor, fire-lane plow, and 1-1/2 ton truck are in readiness at this station should any fire occur. All fire back-packs have been checked over, repaired and a dozen are filled with water and placed adjacent to the truck. The next forty days should cover the fire season for this area. The local ranchers are fire conscious and very cooperative, for they know the range grass is their source of livelihood.

II. WILDLIFE

A. Migratory Birds;

1. Population and Behavior. **

This year, like the year previous, there has been a marked increase in the number of adult ducks using this area as nesting and feeding grounds. During the fore part of July there was an estimated 8,000 to 10,000 young ducks on the refuge. The most likely

** Wildfowl data is somewhat sketchy since the present manager reported for duty July 7, 1944.

reason for this increase in young is the increased duck population throughout the country, augmented by a more attractive nesting ground here as a result of abundant water and adequate protection. There are approximately 6,000 ducks on Gimlet Lake in the following proportions: Coot 30%, mallard 20%, ruddy 10%, gadwall 15%, B/W Teal 10%, redheads 10%, and miscellaneous 5%.

By the end of August the long-billed curlew, upland plover, avocets, western willet, and spotted sandpiper had all left the refuge. The last long-billed curlew were observed on August 20. Local residents stated the long-billed curlew were very numerous, but not as many as last year. The first young were seen May 23.

2. Food and Cover.

The food and cover factor is very favorable as a result of the constant, yet slight raising of the water elevation of the lakes. The stands of sago pond-weed, arrowhead, smartweed, and the three predominating bullrushes are doing nicely. We have a dense growth of cattail on Gimlet Lake that should be burned off this fall.

3. Botulism.

As a result of the present water condition there has been no sign of botulism, nor any reports from adjoining areas.

B. Upland Game Birds.

1. Population and Behavior.

There has been a slight increase in pheasants over last year. The young are two-thirds grown and broods are averaging 7.5 birds. Recently several newly hatched broods were seen on the refuge. We will have our large influx of pheasants when the gunning season opens on October 14, when they will seek the safety of the refuge. The pheasant season has been extended ten days this year, making the season coincide with that for migratory waterfowl of this zone.

Sharp tailed grouse are somewhat more plentiful this year and can be seen at any time by making a short inspection of the higher ridges. This bird is protected by the Nebraska State law and it is anticipated that eventually there will be a short open season in some of the counties where they are staging a good comeback.

The population of the prairie chicken remains about static and there are very few of these birds on the refuge.

2. Food and Cover

There is an abundance of food and cover for upland game birds. The grasshopper period has just reached its climax, while the plants have reached their maturity and will provide adequate seed until the snow falls. There is a copious amount of grain planted in all directions adjacent to the refuge. However, we do not expect any depredations from migratory ducks this fall since the majority of the crops will be harvested by the time the ducks arrive.

C. Big Game Animals.

1. Population and Behavior.

Antelope are the only big game found on the refuge, with the exception of an occasional visit of white-tailed deer from the south. We can never expect to maintain deer since the entire area lacks sufficient browse. With antelope it is somewhat different, and we would like to see them increased since we believe that they would never increase to such a population as to become a management problem as the country is cut up too much with fences. The only antelope seen regularly are a buck, doe, and fawn that make their range in the country about our 100 ft. observation tower south of Gimlet Lake. At this time of year antelope make considerable movement from place to place since there is water everywhere, and they are constantly startled by the movement of the hay crews from meadow to meadow. Later, after the snow falls and they begin to bunch up, a better index of the population can be made. There have been no reports from coyote depredations to date.

2. Food and Cover

There is an abundant supply of succulent food and roughage for several hundred antelope on the refuge without causing competition between wildlife and livestock.

3. Disease.

There have been no reports of diseased antelope.

D. Fur Animals, Predators, Rodents.

The muskrat is the salient fur bearer to be found on this refuge. As a result of the rising lake levels the muskrat is increasing rapidly. Last year plans were made for the removal of 800 to 1,000 rats from Deer and Gimlet Lakes, but about 30% only of the crop was harvested. The catch was small because one permittee (trapper) became ill shortly after beginning operations and the second started so late in the season that lakes froze before he actually got started. The muskrat trapping season in Nebraska is

from January 1 to February 15th. The State law prohibits the trapping in houses, and since the lakes are nearly always frozen at that time a trapper must be on the go during the short season to make a profit.

The coyote population undoubtedly has increased somewhat in this section since there are fewer trappers. Also, often the farmers have been hampered by not having cartridges for their rifles. Although farmers are permitted to purchase shells to kill predators, it has very often been their bad fortune to own odd caliber guns for which there are no shells available since only the more popular size shells are being manufactured and released for sale. In general this is an insignificant factor -- but has been a common occurrence here in the sandhills.

Because of the lack of adequate personnel at this station the bullsnake trapping was discontinued this season. Some 160 snakes were killed by the personnel during the summer. The traps have been stored, and will be overhauled this winter so as to be in readiness for another season.

E. Fish.

The fish situation is not bright since the majority of the lakes are shallow "potholes"-- the exceptions being Crescent, Island, and Blue Lakes. Some years back these three lakes were popular "pan fish" lakes abounding with perch, crappies, and bullheads. Eventually carp were brought to these lakes as minnows for live bait so that today carp dominate, and are a menace to aquatic plant life on the lake banks. These carp should be exterminated and the waters fertilized if necessary.

III. REFUGE DEVELOPMENT MAINTENANCE

A. Physical Development.

There has been no refuge development this last quarter. The chief emphasis has been the maintenance of existing structures and developments. Some eight miles of refuge road were graded and filled in. About eleven miles of roadway were mowed, and another sixteen are to be mowed this month in preparation to "haying" the sandy stretches.

Calomine was removed from the bedroom walls of the residence and repainted with flat paint. The bathroom has been repainted with semi-gloss enamel. The floors have been varnished and shellaced. Mr. Wayne Fleming and my family and myself did this redecorating. We have received permission to have the kitchen, breakfast porch and pantry painted.

Several large willow trees were destroyed by windstorm this year. The debris was removed to likely blow-out areas, (areas practically devoid of vegetation) the stumps removed, and plans made for the planting of suitable cuttings in the spring.

A light canvas covered skiff was repaired, canvas re-stretched, and painted with white lead paint. This boat is very light and can easily be loaded on a pickup by one man and has proven successful for use on shallow lakes in checking on botulism, etc.

IV. ECONOMIC USE OF REFUGE

A. Grazing.

Twenty-two special use permits were issued this past year. They include approximately 14,000 aums and the cutting upwards of 1000 tons of hay at an average price of \$1.00 per ton. The total receipts will be included in the next report when figures will be complete for the current season grazing and hay cutting records. About 90% of the cattle are Herefords, of very good quality. There are no sheep, swine, nor mules on the refuge. There is no apparent conflict between cattle and wildlife since the cattle are not permitted access to nesting areas until July 16th -- at which time the ducklings and other waterfowl are hatched.

B. Haying

There is a very high demand for hay this year, and the hay is of a good quality. The stand however, was somewhat lighter due to the late spring which retarded early growth. After a late start, the warm summer rains accelerated the growth so that it had reached maturity by July. One operator, Mr. E. M. Eldred, who has a permit to cut upwards of 500 tons will undoubtedly fall short of his goal due to insufficient and unsatisfactory labor. This controlled hay cutting does not conflict with wildlife since there is ample cover left for nesting, shelter, and food. It also prevents an excess growth of vegetation that eventually would not be desirable by wildlife as it would be too dense. Also it prevents the flora becoming too great a fire risk.

C. Fur Harvest.

The forthcoming fur harvest should be very good providing we can get sufficient, satisfactory trappers - and the price for hides does not drop too low as to make trapping financially unattractive. The present plans call for a minimum harvest of 1500 rats this next season.

D. Other Revenue.

In addition to the above mentioned revenues, there is a special use permit for the rent of the old Boyd headquarters on a year long basis. This revenue amounts to \$102.00 per year.

V. PUBLIC RELATIONS

A. Recreational Uses.

The chief recreational use on this refuge is fishing. Bullheads and carp are the only fish to be caught in the lakes on the refuge. There has been a marked increase in fishing this past month since the majority of farmers in this area have reached the peak of their harvest and turn to fishing for diversion. Family groups have been making jaunts to Blue Lake and making a day of it. All have been very cooperative in respecting the closed "no Fishing" areas, and the removal of trash when they leave.

B. Visitors.

Mr. F. C. Gillette, Regional Refuge Supervisor, visited the refuge on July 6, 7, and 8th at which time an inspection was also made of the North Platte Refuge. Mr. Gillette made it a point to explain the function of the service and its policies to the new manager. We are looking forward to his next visit as he can give us valuable information and knowledge of the workings of a refuge.

On July 30 and 31st Mr. A. C. Elmer, of the Central office, paid us a visit. After a general visit, Mr. Elmer was driven to Rushville, Nebraska where he was met the following day by personnel from the Lacreek Refuge.

August 21 Mr. Larson, field man from the Kansas City office of the U.S. Weather Bureau and Mr. Dyke of the Lincoln, Nebraska office of the same bureau came to make the annual check of instruments at cooperative field stations. They were stuck three times in the day driving to the refuge, and one time for four hours. Before leaving a new house to hold the old thermometers was installed as our old shelter was badly weather beaten and out-moded.

C. Violators.

There were no violators reported nor observed on or near the refuge.

Taking all factors into consideration, the progress of the refuge has been very good. In addition to maintenance, patrol and routine duties - the ever prominent land exchange and land acquisition is of chief interest to the refuge personnel.

There are no snapshots included with this report inasmuch as we do not possess a camera. For future reports we will endeavor to furnish snapshots of interesting places on the refuge.

Completed 9-6-44

Louis D. Hatch
Louis D. Hatch
Refuge Manager

moh:LDH

APPROVED C. A. Johnson
REGIONAL DIRECTOR
9/13/44

Narrative Report
North Platte National Wildlife Refuge
May, June, July & August 1944

I. GENERAL

A. Water Conditions.

Due to a change in personnel, accurate figures on acre-feet of water could not be obtained for this report. One inspection trip was made to this refuge during the quarter. On July 7, 1944 this area was inspected by Mr. F. C. Gillette, Regional Refuge Supervisor, Mr. Gene Crawford, and myself. We found the lake to be very high - in fact so high that if that level were retained it would eventually undermine the roots of the deciduous trees planted in W.P.A. days. However, this condition was only temporary. After several days of intensive irrigation drainage the water level would be at a satisfactory level.

II. WILDLIFE

This refuge is not important as a nesting area, but is very valuable as a nesting area during periods of migration. Very few ducks were observed during the inspection trip to Lake Alice and Minatare.

After a visit with Mr. H. R. McElwee, retired caretaker of the irrigation project, it was determined that the upland game birds were increasing. Quail, pheasant, and sharp-tailed grouse are to be found in increasing numbers. Pheasants have increased about 10% over last year, while bob-whites have increased 50%. Five covies of B obs were observed during the inspection. Sharp-tails, while not so numerous, have made a remarkable comeback since the establishment of this refuge. Ten years ago no sharp-tails were to be found in this vicinity.

III. MAINTENANCE

There are several days fence repairing that we anticipate doing this next quarter after several frosts as the vegetation will be less troublesome then. Also at the same time we can

get several days of policing at the same time.

It was noted that the abandoned C.C.C. camp at the entrance to the refuge was being put into shape by the Army. There has been a question in our minds as to what effect this activity would have on wildlife, if any.

Completed 9-6-44

Louis D. Hatch
Louis D. Hatch
Refuge Manager

APPROVED

W. J. Henson
REGIONAL DIRECTOR

9/13/44

MIGRATORY BIRDS

Refuge Crescent Lake Months of May to August 31, 1944.

1612

(1) Species Common Name	(2) First Observed		(3) Became Common	(4) Peak Concentration		(5) Last Observed		(6) Young Produced			(7) Total
	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg. Size	Esti- mated Total	Number Using Refuge
** Avesets											1000
American Bittern								20	5	60	100
Black Crown N. Heron								15	4	110	190
Common Mallard								30	7	700	2000
Coot, American								50	8	1100	3500
Hared Grebe								-	-	100	150
Gadwall								20	7	1000	1700
Long Billed Curlew								-	-	-	3000
Pintail								4	7	700	1600
Redhead								9	7	2400	4000
Ruddy Duck								12	9	2400	4000
Shoveller								9	8	300	700
B/W Teal								16	8	2500	3000

REMARKS: (Pertinent information not specifically requested) **All are resident birds.****** Information in column 8 Broods Observed, not complete since the the present refuge manager reported at this refuge 7-7-44. Numbers using refuge is a fairly good estimate.**

INSTRUCTIONS

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact are to be omitted.
- (7) TOTAL: Estimated total number of the species using the refuge during the period. This figure may or may not be more than that used for peak concentrations, depending upon the manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

* Only columns applicable to the period covered should be used.

Refuge Grassent LakeMonths of May to August 31, 1944

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Prairie Chicken	Long grass, prairie.								40	Practically static
Ringnecked Pheasant	Clover, Agr. margins								3000	15-20% increase over 1943
Sharp-tailed Grouse	Long grass, prairie								400	Slight increase

INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.*

- (1) SPECIES: Use correct common name.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

* Only columns applicable to the period covered should be used.

