

CRESCENT LAKE

NARRATIVE REPORTS

JANUARY-DECEMBER 1952

U.S. DEPARTMENT OF THE INTERIOR  
FISH AND WILDLIFE SERVICE



ENTERING  
CRESCENT LAKE  
NATIONAL WILDLIFE REFUGE



BRANCH OF WILDLIFE REFUGES

NARRATIVE REPORT

ROUTING SLIP

DATE March 16, 1953

~~Mr. Salyer~~ \_\_\_\_\_

Mr. ~~Callmont~~ PAO

~~Mr. Krammes~~ \_\_\_\_\_

~~Miss Brown~~ \_\_\_\_\_

Section of Operations:

~~Mr. Call~~ \_\_\_\_\_

~~Mr. Mullen~~ Law

~~Mr. Regan~~ NR

Section of Habitat Improvement:

~~Mr. Griffith~~ REG

~~Mr. Kishak~~ \_\_\_\_\_

~~Mr. Dunn~~ WJB

Mr. Stiles \_\_\_\_\_

Section of Land Management:

~~Mr. Asher~~ DA

~~Mr. Davis~~ ADP

Stenographers:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

REFUGE Crescent Lake and North Platte Nat'l Wildlife Refuges

PERIOD September - December 1952

CRESCENT LAKE NATIONAL WILDLIFE REFUGE

AND

NORTH PLATTE NATIONAL WILDLIFE REFUGE

REFUGE NARRATIVE REPORT

September, October, November, December

1952

\* \* \* \* \*

P  
E  
R  
S  
O  
N  
E  
L

\* \* \* \* \*

\* \* \* \* \*  
\*  
\* Lloyd R. Ramelli, Refuge Manager \*  
\*  
\* Patrick J. Kennedy, Maintenance Man \*  
\*  
\* Harley F. Modlin, Refuge Clerk \*  
\*  
\* \* \* \* \*

UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

ELLSWORTH, NEBRASKA



## TABLE OF CONTENTS

### CRESCENT LAKE REFUGE

|   |        |
|---|--------|
| I General   |        |
| A-Weather Conditions . . . . .                                | 1      |
| B-Water Conditions . . . . .                                  | 2      |
| C-Fires . . . . .   | 2      |
| II Wildlife   |        |
| A-Migratory Birds . . . . .                                   | 2-3-4  |
| B-Upland Game Birds . . . . .                                 | 4-5    |
| C-Big Game Animals . . . . .                                  | 5      |
| D-Fur Animals, Predators, Rodents and other Mammals . . . . . | 5-6    |
| E-Predaceous Birds . . . . .                                  | 6      |
| F-Fish . . . . .  | 6      |
| III Refuge Development and Maintenance                        |        |
| A-Physical Development and Maintenance . . . . .              | 6-7    |
| IV Economic Use   |        |
| A-Grazing . . . . .   | 8      |
| B-Building . . . . .  | 8      |
| V Field Investigation   |        |
| A-Banding . . . . .   | 8-9    |
| B-Range Survey . . . . .                                      | 9      |
| VI Public Relations   |        |
| A-Recreational Uses . . . . .                                 | 9 - 10 |
| B-Refuge Visitors . . . . .                                   | 10     |
| C-Refuge Participation . . . . .                              | 10-11  |
| D-Violations . . . . .  | 11     |
| VII Other Items   |        |
| A-Items of Interest . . . . .                                 | 11     |
| B-Photographs . . . . .                                       | 11     |

### NORTH PLATTE REFUGE

|                                  |       |
|----------------------------------|-------|
| I General . . . . .              | 1     |
| II Wildlife . . . . .            | 1-2-3 |
| III Refuge Development . . . . . | 3-4   |
| IV Economic Use . . . . .        | 4     |
| V Public Relations . . . . .     | 4     |

(NR forms at end of each refuge section)

## NARRATIVE REPORT

### CRESCENT LAKE NATIONAL WILDLIFE REFUGE

Period ending December 31, 1952

#### I. GENERAL

##### A. Weather Conditions:

This period was one of extremes. The abnormally dry and warm weather continued into this period from that of last report. With exception of a severe frost during early October, balmy weather prevailed until November 16 when king winter set in and beset us with blizzards that blocked roads and forced emergency care of wildlife and stock throughout the area.

After a week roads were finally broken out but travel was still restricted to jeeps and then with difficulty. After 3 weeks roads were such that one could travel by pickup. We had 2 mail deliveries during the 15 days following this storm.

Continued subfreezing weather retained the snow throughout the period. This was especially concerning to the stockmen as it meant feeding had to begin over 1½ months early due to the ranges remaining covered with snow. Sufficient hay was on hand for a longer than normal winter but should another '49 blizzard develop, this extra hay will be sorely missed.

The Weather Bureau station maintained by refuge personnel at refuge headquarters has supplied us with the following weather information:

|                  | Precipitation | Snow        | Maximum   | Minimum   |
|------------------|---------------|-------------|-----------|-----------|
| September        | 1.42          | 0.0         | 97        | 31        |
| October          | .45           | 0.0         | 79        | 9         |
| November         | .79           | 12.0        | 72        | -8        |
| December         | .07           | 1.0         | 48        | 0         |
| Total & Extremes | <u>2.73</u>   | <u>13.0</u> | <u>97</u> | <u>-8</u> |



### B. Water Conditions:

The levels of our ground water wells have not increased materially over those levels of last quarter. Likewise, lake levels have not risen as they usually do during this period. The prolonged dry summer and fall has had its effects on ground and lake water levels.

To this writing water levels have not dropped to a critical point. Apparently the greatest damage is a number of early muskrat houses being left high and dry or in shallow water such that the occupants will freeze out during the coming winter.

### C. Fires:

While our blizzards of mid-November caused some hardship, they were not without their blessings. We literally "sat on a tinder box" throughout the summer and fall months. In view of the hot drying months without moisture we were quite fortunate no fires got started to sweep the country. While the natives were quite fire conscious, lightning and travelers are not always so considerate.

## II. WILDLIFE

### A. Migratory Birds:

#### 1. Populations and Behavior:

Waterfowl populations remained static except for minor local movements until early September when Blue-winged Teal followed shortly by Pintail began moving in. Populations steadily increased until the first half of October when our peak populations were the highest by approximate 12% over those of last year.

In general, autumn migrations were retarded by the open warm weather. This weather was also detrimental to hunters since the ducks were not inclined to move and when they did flights were of safe heights.

Geese: Geese were not observed until the 20th of October when 30 were observed on Roundup Lake. This population increased until a peak population of 750 was reached during the week ending November 15. These birds remained until snow and ice forced them south during the last 10 days of November.

Whitefronted geese were reported several times and 55 were

observed on sandhill lakes but we did not observe any on the refuge. Roundup Lake remains the preferred area for geese on this refuge.

Canadian Goose Project: Two additions were made to our flock of pinioned geese to bring the potential breeding stock to a satisfactory level.

We were able to obtain 34 geese from the Lincoln County Sportsmen's Club at North Platte. Of these birds 10 were adults and 24 immature. These birds were pinioned without loss or ill effects though two died later in the period. We made post examinations but were unable to determine the exact cause of death in either instance.

A second group was added during November when 75 geese were trapped on the Swan Lake Refuge. We chose to take unpinioned birds directly from the net trap to lessen the risk of dividing previously mated pairs. These geese arrived in good condition. A number of these birds became semiparalyzed after pinioning as had been experienced at Swan Lake. While we were able to save several of the afflicted birds, we unfortunately lost 13. No doubt this condition with accompanying losses was aggravated by the long trip from Swan Lake and the cold blizzard conditions prevailing for a week after arrival at this station. Twenty four of these birds were adults immature.

At the end of the period we have 98 geese that are from all appearances, sound healthy birds and barring unforeseen trouble we should have a good breeding flock when the nesting season arrives.

Our flock of 98 birds is divided as follows:

|                |          |
|----------------|----------|
| Adult males    | 15       |
| Adult females  | 19       |
| Immature males | 31       |
| " females      | 33       |
|                | <hr/> 98 |

Food: Corn, wheat, alfalfa hay, native grass hay and rabbit pellets are available to the geese at all times. Preferences indicate corn to be preferred of the two grains. Wild grass hay was consumed in considerable quantities with lesser amounts of alfalfa. We observed the geese readily consumed leaves and more tender portions of fourth cutting alfalfa.

Consumption of rabbit pellets was greatest during temporary periods when appetites for grass hay and alfalfa waned. After studying the qualities of various prepared feeds, the ingredients of rabbit pellets were found to coincide most closely to those



foods normally consumed by geese in their natural state. We wouldn't be the least bit unhappy if these geese did happen to borrow a few pages from the rabbit book.

The birds were kept under fence at headquarters where we could readily provide their needs of food, grit and water and protect them from predators.

## 2. Food and Cover:

While water levels were not as high as those of a year ago, depths were sufficient to produce an abundance of aquatic and marsh vegetation. Only a part of this growth was utilized as food by resident and migrating waterfowl. Smith-Martin, Goose and Deer are the only lakes with appreciable amounts of cover. The remainder are of open water with emergent vegetation generally restricted to lake margins and marshes.

## 3. Disease:

We are fortunate in being able to report no further recurrence of the botulism outbreak of the preceding period.

## B. Upland Game Birds:

### 1. Populations and Behavior:

A warm dry summer with sufficient food and cover contributed to the low mortality of our upland game birds during this and the preceding period. While the past 6 weeks have been with continuous deep snow and cold, high winds have cleared enough snow to provide sufficient food at all times.

Ring-necked Pheasants: Warm dry weather did much to protect the pheasants and discourage hunters in the first hunting season this county has offered since the blizzard of '49. The sportsmen were given a 38 day season and a 4 cock daily limit. Many sportsmen wailed long and loud this exterminate the pheasants, however, this did not prove to be the case. It does seem if conditions could justify a season of that length and high bag limit, the sportsmen could have been offered the benefit of a limited season last fall.

Pheasant populations in the sandhills section of the county will never be very high. This sport will depend on the populations of the farming sections in the south half of the county.

Sharp-tailed Grouse: They have not suffered any abnormal losses from weather or predators during the period. This species has been gradually increasing and the day might not be too far distant when pop-

ulations may warrant limited hunting.

Prairie Chicken: Have increased as have all of our upland game birds during the past year. A gradual increase in number and spreading of their range indicate this species to be slowing coming back.

2. Food and Cover: Was amply provided until the blizzard of mid-November covered the ground with nearly a foot of snow which remained until the end of the period. Some supplemental feeding was done, however we did not find instances of starvation since the snow had been blown off the higher elevations by high winds.

3. Disease: We have not noted any indications of disease amongst the upland game birds.

C. Big Game Animals:

1. Populations and Behavior:

Mule Deer: None noticeably affected by winter storms. Our small herd is found in the vicinity of Island, Crane, Hackberry and Gimlet lakes except for a 3 month period beginning about the first of November. As the rut approaches the deer move to the west and northwest sectors of the refuge.

Antelope: They are scarce as their annual movements have taken them to the south where they winter on the bench lands of the North Platte Valley. These animals have made a remarkable increase since the coyotes have been controlled.

2. Food and Cover:

This factor of big game management is capable of supporting considerable increases in populations of both deer and antelope. Of these, shortage of browse would be our first restricting factor, primarily affecting mule deer. At the present antelope are far below the population this refuge could support.

3. Disease:

There was no evidence of disease during the period.

D. Fur Animals, Predators, Rodents and Other Mammals:

Muskrat: Possibly due to declining water levels since last June our muskrat populations are below those of a year ago. This decline appears to be general over the sandhills.

Pilot-biologist Smith arrived at this refuge to make a census on



December 12. A conservative count revealed active muskrat houses to have decreased from 696 last year to 363 this year. Accordingly, we decreased our quotas to 982 muskrats to be taken during this season. This will be sufficient to control our muskrats and still provide an ample carryover to insure future populations.

To the end of the period we have not found a suitable trapper. Our old trapper wanted to trap, then changed his mind when he compared fur prices against his wages and losing seniority on the railroad. The several who have expressed their desire to trap are all notable for their untrustworthiness or are chronic alcoholics. The permit will be filled when we find a suitable applicant.

Coyote: Positioning operations in this area were suspended when the 1080 stations of last winter were taken up and destroyed. These stations were on private lands but were sufficient to keep the coyotes well controlled on the refuge.

However, the coyote problem has already changed as we now see a coyote every few days and are entertained almost nightly by their serenading. Populations have not reached a point demanding control but anyone thinking the coyote has been exterminated is very much in error.

Pocket Gophers: Continue to be our number one undesirable on the refuge. These mammals do far more damage to our ranges than any other animal or group of animals and can nullify any and all efforts on range conservation.

To control them would be herculean task calling for no less manpower and funds available only during CCC days.

#### E. Predaceous Birds:

Migrating hawks and Golden Eagles took a heavy toll on our grouse and pheasant populations. These raptors seem to have a keen appetite for our pheasants and grouse since it is during the few weeks of their full migration the greatest tolls are taken.

#### F. Fish:

The condition of our lakes in regards to fish remains unchanged. Smith-Martin remains the only good fishing lake in the area. It is filled with large mouth bass and I am peppered with inquiries everytime I go to town as to when it will be opened.

### III. REFUGE DEVELOPMENT AND MAINTENANCE

#### A. Physical Development and Maintenance:

Equipment and improvements were repaired and serviced as necessary throughout the period. By and large this consisted of "greasing the wheel that squeaked the loudest". It seems to be a continual race to keep up the maintenance demanding immediate attention.

Following is a part of the work accomplished during the period.

1. Vehicles greased, welded, repairs and additions made as necessary.
2. Breaking out snowbound roads and blading them off.
3. Signs were removed from the former Box Butte Refuge. Crescent lake and North Platte Refuges were posted as necessary.
4. Coal was hauled and stored for winter use.
5. Waste disposal systems were constructed and installed at quarters No. 3 and 5.
6. A new hot water heater was purchased and installed in quarters #3 to replace a worn out and very hazardous old heater.
7. A new ceiling was installed in the kitchen of quarters #3. Storm windows were acquired to complete these fixtures for this residence.
8. A conversion unit was installed to change the refrigerator in quarters #1 from kerosene to bottled gas. This refrigerator is now working satisfactorily.
9. Two trips were made to Sand Lake Refuge by truck to obtain wheat and corn for feeding our Canada Goose flock, winter feeding of wildlife, baiting duck traps and refuge horses. All Canada geese obtained were pinioned and cared for. These birds are held in pens at headquarters.
10. Canada geese were hauled from North Platte and the Swan Lake Refuge.
11. A duck trap was constructed and operated for banding purposes.
12. A double deck goose rack was built for the pickup. We can haul 75 Canadians with this for long distances or 100 on trips of a few hours duration.
13. Upland game and small birds were fed as necessary.
14. The grain bin was cleaned and then rebuilt to accommodate a larger supply of small grains.



#### IV. ECONOMIC USE

##### Grazing:

Warm weather, an exceptionally good supply of ground water with warm rains ushered in the growing season for this years forage crop. During early June abnormally hot weather set in and rains ceased for the growing season. This resulted in a good grass crop in the valleys and low lands with average forage production on the hills and higher elevations.

Winter grazing began during mid October when permittees began turning cattle in on bunched hay. Nearly all permittees were forced to begin feeding after the blizzard conditions prevailing during the last two weeks of November, the pastures were covered with snow. This snow is still with us and a long severe winter could result in a serious shortage of hay. This storm has caused most ranches to begin feeding from one to two months early.

Much of the snow covered grass can still be grazed if the snow goes off. Stockmen find they can encourage grazing of old or weathered forage by supplementing their diet with high protein commercial feeds.

##### Buildings:

The ranch buildings remaining on the Boyd place were put up for sale by the General Services Administration. These buildings were of no further use to the Government and by selling them we gained in reserve and lost a fire hazard, also an eyesore.

Mr. Morris Peterson was the high bidder and received the buildings for a bid of \$4101.41.

#### V. FIELD INVESTIGATION

##### A. Banding:

Unfortunately, other duties prevented us from carrying out a large scale banding program as we would like.

We banded as opportunity afforded until mid-November when storms and ice forced all migrants far to the south. Following is a tabulation of the waterfowl banded during the period and year:

|                   | <u>Period</u> | <u>Year 1952</u> |
|-------------------|---------------|------------------|
| Mallard           | 99            | 102              |
| Gadwall           | —             | 3                |
| Green-winged Teal | —             | 1                |
| Pintail           | 69            | 120              |
| Redhead           | 6             | 7                |
|                   | <u>174</u>    | <u>233</u>       |

Coot - - 8

To date we have had returns on 7 mallards and 3 pintails. All of these birds were shot during the past hunting season.

| <u>Locality taken</u>          | <u>Airline distance</u> |
|--------------------------------|-------------------------|
| <b>Mallard:</b>                |                         |
| Kersey, Colo.                  | 150 miles               |
| Ogallala, Nebr.                | 75 "                    |
| Broadwater, Nebr.              | 25 "                    |
| Empire Lake, Colo.             | 200 "                   |
| Oshkosh, Nebr. (Blue Creek)    | 20 "                    |
| Goose Lake, Nebr. (2 mallards) | 1 "                     |
| <b>Pintail:</b>                |                         |
| Joplin, Missouri               | 550 "                   |
| San Diego, Calif.              | 1050 "                  |
| Joes, Colo.                    | 100 "                   |

#### B. Range Survey:

The range survey has not progressed awaiting a decision of policy within the Soil Conservation Service. It appears they have not determined the degree of detail in which range lands should be examined. This, coupled with a very busy local S.C.S. office appears to be slowing completion of our plan. We are hoping to have this plan completed in the near future.

### VI. PUBLIC RELATIONS

#### A. Recreational Uses:

Refuge visitors made use of the picnic facilities, occasionally tried our poor fishing lakes, but most were sightseers and interested in seeing the several large bucks that spent the summer and fall months in the Gimlet enclosure. Duck hunters were much in evidence prior to the season to look at the birds and ask where to go, if the birds would be here when the season started and a multitude of other interests.



An estimated 125 visitor days were spent fishing and 250 visitor days spent picnicing and sightseeing. Our poor roads do not attract travelers. We see only those traveling with a very definite purpose.

B. Refuge Visitors:

Neighbors and permittees frequently dropped in. Official visitors were somewhat scarce during the period.

- 9/5 Mr. Wm. Main, County Agent, range conditions.
- 9/10 Mr. Forest Carpenter, Asst. Refuge Supervisor, quarters appraisal and inspection.
- 9/24 Mr. Wm. McClure, Game Agent, Aerial waterfowl.  
Mr. Roy Hanson, Pilot-Agent, Survey.
- 11/12 Mr. Harvey Miller, State Biologist, Waterfowl conditions.
- 12/12 Donald Smith, Pilot-Biologist, Muskrat survey.

C. Refuge Participation:

The manager attended and participated in the following meetings as indicated.

- 9/28 Kowanda Lutheran Church group. Showed slides of Crescent Lake and Salton Sea Refuges. Attendance 50.
- 10/6-9 Nebraska State Fish and Game meeting at Lincoln. Attendance approximately 125.
- 10/21 Soil Conservation Service Field demonstration of range management at Valentine. Attendance approx. 25.
- 11/5 Western Nebraska Sportsmens Assn. at Lyman Nebr. Talk on waterfowl conditions and answer questions for 2 hours. Attend. 250.
- 12/17 Oshkosh Extension Club. Showed personally owned kodachrome slides and talk on Crescent Lake, Willipa Refuges and Columbia River. Attendance 40.
- 12/17 Oshkosh 4-H Club. Showed personally owned kodachrome slides and talk on Crescent Lake Refuge and Garden County, Attend. 15.
- 12/18 A group of Lewellen school children, showed personally owned kodachrome slides of Crescent Lake Refuge and misc. wildlife

slides. Attendance 15.

Weekly meetings of the Oshkosh Rotary were attended on Monday nights as official duty and opportunities afforded. Personally owned kodachrome slides were shown of the various refugees on 8 different occasions at private homes.

D. Violations:

No violations were apprehended that warranted prosecution during the period.

VII. OTHER ITEMS

A. Items of Interest:

The interest in oil seems to have died down. Two test wells were drilled several miles to the north of us during the past summer. The best founded rumor indicates they found no less than good indications of oil. Anyway, the companies involved filled the wells and left. Whether we will see the day when we have oil troubles is pure speculation this far.

Due to blizzard conditions during the last 2 weeks of November we were forced to get along with one mail delivery from November 15 to December 4. It doesn't help a bit, just prolongs the agony, in the end we had to answer it anyway.

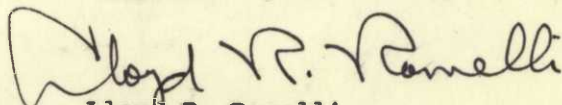
Mr. Howard Woon, refuge clerk was transferred to the Valentine Refuge and promoted to Junior Refuge Manager during the fore part of October.

To the end of the period we have been without a clerk. Final clearances are being made to appoint Mr. Frank Modlin of Scottsbluff to this vacancy. Needless to say, we will welcome him with welcome arms and a very full work basket.

B. Photographs:

The enclosed photographs were taken by the manager with his equipment during the course of refuge activities.

Respectfully submitted,



Lloyd R. Ramelli  
Refuge Manager

Date: \_\_\_\_\_

Approved by: \_\_\_\_\_



| (1)<br>Species      |  | (2)<br>First Migrants Seen |       | (3)<br>Peak Concentration |                 | (4)<br>Last Migrants Seen |       | (5)<br>Young Produced |                 | (6)                      |
|---------------------|--|----------------------------|-------|---------------------------|-----------------|---------------------------|-------|-----------------------|-----------------|--------------------------|
| Common Name         |  | Number                     | Date  | Number                    | Inclusive Dates | Number                    | Date  | Broods Seen           | Estimated Total | Estimated Waterfowl Days |
| 1. Swans:           |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Whistling swan      |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| 2. Geese:           |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Canada goose        |  | 80                         | 10/20 | 750                       | 11/9-18         | 280                       | 11/29 |                       |                 | 20,000                   |
| Cackling goose      |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Brant               |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| White-fronted goose |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Snow goose          |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Blue goose          |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| 3. Ducks:           |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Mallard             |  | 4,000                      | 9/21  | 18,000                    | 10/12-18        | 500                       | 11/20 |                       |                 | 500,000                  |
| Black Duck          |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Gadwall             |  | 75                         | 9/27  | 1,800                     | 10/12-18        | 100                       | 11/9  |                       |                 | 40,000                   |
| Baldpate            |  | 500                        | 10/4  | 250                       | 10/12-18        | 80                        | 11/15 |                       |                 | 7,000                    |
| Pintail             |  | 5,500                      | 9/7   | 5,000                     | 9/28-10/4       | 25                        | 11/9  |                       |                 | 120,000                  |
| Green-winged teal   |  | 500                        | 9/13  | 1,000                     | 9/14-30         | 10                        | 11/8  |                       |                 | 48,000                   |
| Blue-winged teal    |  | 1,800                      | 9/10  | 3,000                     | 10/5-11         | 50                        | 11/9  |                       |                 | 72,000                   |
| Cinnamon teal       |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Shoveller           |  | 500                        | 9/21  | 3,000                     | 10/15-25        | 150                       | 11/10 |                       |                 | 175,000                  |
| Wood duck           |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Redhead             |  | 200                        | 9/13  | 1,000                     | 10/12-25        | 55                        | 11/18 |                       |                 | 45,000                   |
| Ring-necked duck    |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Canvas-back         |  | 150                        | 9/27  | 1,800                     | 10/12-18        | 30                        | 11/8  |                       |                 | 35,000                   |
| Scaup               |  | 200                        | 9/27  | 500                       | 10/5-11         | 30                        | 11/5  |                       |                 | 18,000                   |
| Golden-eye          |  |                            |       |                           |                 |                           |       |                       |                 |                          |
| Buffle-head         |  | 30                         | 10/20 | 1,000                     | 11/2-8          | 100                       | 11/22 |                       |                 | 24,000                   |
| Ruddy duck          |  | 550                        | 9/20  | 1,800                     | 10/12-18        | 500                       | 11/1  |                       |                 | 52,000                   |
| 4. Coot:            |  | 5,000                      | 9/28  | 5,000                     | 9/28-10/11      | 250                       | 11/15 |                       |                 | 175,000                  |

3-1750

(Aug. 1952)

(over)

Form NR-1



## SUMMARIES

Total Production:Geese • •Ducks • •Coots • •Total waterfowl days use during period 1,440,000Peak waterfowl numbers 32,000Areas used by concentrations Refuge Lake areas

Principal nesting areas this season \_\_\_\_\_

No. of inventories this period 10 % of refuge covered 80Reported by Floyd R. RussellFloyd R. Russell  
Refuge Manager

## INSTRUCTIONS (See Sec. 7532, Wildlife Refuges Field Manual)

- (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance.
- (2) First Seen: The first refuge record for the species during the reporting period, and the number seen. This column does not apply to resident species.
- (3) Peak Concentration: Estimated number and inclusive dates when peak population of the species occurred.
- (4) Last Seen: The last refuge record for the species during the reporting period.
- (5) Young Produced: Estimated number of young produced based on 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 should be omitted.
- (6) Total: Estimated waterfowl days use (average population X no. of days present) of refuge for reporting period based. (See Sec. 7532, Wildlife Refuges Field Manual.)

Note: Only columns applicable to the reporting period should be used. It is desirable that the Summaries receive careful attention since these data are necessarily based on an analysis of the rest of the form.



3-1751  
Form NR-1A  
(Aug. 1952)

MIGRATORY BIRDS  
(Other than Waterfowl)

Refuge Crescent Lake

Months of Sept. to Dec. 1952

| (1)<br>Species                   | (2)<br>First Seen |      | (3)<br>Peak Concentration |                 | (4)<br>Last Seen |       | (5)<br>Production |               |             | (6)<br>Total  |
|----------------------------------|-------------------|------|---------------------------|-----------------|------------------|-------|-------------------|---------------|-------------|---------------|
| Common Name                      | Number            | Date | Number                    | Inclusive Dates | Number           | Date  | Number Colonies   | Total # Nests | Total Young | Estimated Use |
| I. Water and Marsh Birds:        |                   |      |                           |                 |                  |       |                   |               |             |               |
| Western Grebe                    | 300               | 9/1  | 500                       | 9/5-20          | 1                | 10/15 |                   |               |             | 13,500        |
| Hared Grebe                      | 250               | 9/1  | 250                       | 9/1-20          | 1                | 9/30  |                   |               |             | 8,000         |
| Double-crested Cormorant         | 25                | 9/1  | 75                        | 9/5-25          | 1                | 9/30  |                   |               |             | 2,000         |
| White Pelican                    | 99                | 9/1  | 250                       | 9/10-25         | 5                | 10/25 |                   |               |             | 4,000         |
| American Bittern                 | 50                | 9/1  | 99                        | 9/1-15          | 1                | 9/30  |                   |               |             | 1,500         |
| Great blue Heron                 | 200               | 9/1  | 200                       | 9/1-10          | 2                | 11/1  |                   |               |             | 4,500         |
| Black-crowned night Heron        | 50                | 9/1  | 100                       | 9/10-25         | 1                | 10/1  |                   |               |             | 1,500         |
|                                  |                   |      |                           |                 |                  |       |                   |               |             |               |
| II. Shorebirds, Gulls and Terns: |                   |      |                           |                 |                  |       |                   |               |             |               |
| Ring-billed Gull                 | 1,500             | 9/11 | 5,000                     | 9/15-17         | 75               | 10/15 |                   |               |             | 90,000        |
| Forsters Tern                    | 25                | 9/1  | 750                       | 9/5             | 1                | 9/25  |                   |               |             | 10,000        |
| Black Tern                       | 50                | 9/1  | 75                        | 9/7             | 2                | 9/10  |                   |               |             | 500           |
| Avocet                           | 100               | 9/1  | 500                       | 9/5-15          | 1                | 10/25 |                   |               |             | 15,000        |
| Western Willet                   | 150               | 9/1  | 200                       | 9/5-10          | 2                | 9/20  |                   |               |             | 2,000         |
| Long-billed Curlew               |                   |      |                           |                 |                  | 9/9   |                   |               |             | 0             |
| Killdeer                         | 150               | 9/1  | 500                       | 9/10-25         | 1                | 11/11 |                   |               |             | 25,000        |

(over)



| (1)                              | (2)                | (3)   | (4)     | (5)   | (6)    |
|----------------------------------|--------------------|-------|---------|-------|--------|
| III. <u>Doves and Pigeons:</u>   |                    |       |         |       |        |
| Mourning dove                    | 1,500              | 9/1   | 1500    | 9/1-5 | 1      |
| White-winged dove                |                    |       |         |       | 28,000 |
| IV. <u>Predaceous Birds:</u>     |                    |       |         |       |        |
| Golden eagle                     | 2                  | 11/14 | 6       | 11/15 | 2      |
| Duck hawk                        |                    |       |         |       | 12/11  |
| Horned owl                       | Year long resident | 25    | 12/1-31 | 25    | 12/11  |
| Magpie                           | 10                 | 9/1   | 25      | 12/11 |        |
| Raven                            |                    |       |         |       |        |
| Crow                             |                    |       |         |       |        |
| Reported by <u>W. R. Danelli</u> |                    |       |         |       |        |

# INSTRUCTIONS

(See Sec. 7532, Wildlife Refuges Field Manual)

- (1) Species: Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiformes)  
 II. Shorebirds, Gulls and Terns (Charadriiformes)  
 III. Doves and Pigeons (Columbiformes)  
 IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)
- (2) First Seen: The first migration record for the species for the reporting period.
- (3) Peak Numbers: Estimated number and inclusive dates when peak population of the species occurred.
- (4) Last Seen: The last refuge record for the species during the season concerned.
- (5) Production: Estimated number of young produced based on observations and actual counts.
- (6) Total: Estimated species days use (average population X no. days present) of refuge during the reporting period.



UPLAND GAME BIRDS

1613

Refuge Crescent Lake

Months of Sept.

to Dec.

, 1945

| (1)<br>Species          | (2)<br>Density                           | Acres<br>per<br>Bird | (3)<br>Young<br>Produced                           | (4)<br>Sex<br>Ratio | (5)<br>Removals |                     |                 | (6)<br>Total                           | (7)<br>Remarks   |
|-------------------------|--|----------------------|--|---------------------|-----------------|---------------------|-----------------|--|--|
| Common Name             | Cover types, total<br>acreage of habitat |                      | Number<br>broods<br>obs'v'd.<br>Estimated<br>Total | Percentage          | Hunting         | For Re-<br>stocking | For<br>Research | Estimated<br>number<br>using<br>Refuge | Pertinent information not<br>specifically requested.<br>List introductions here. |
| Ring-necked<br>Pheasant | 40,000                                   |                      |  |                     |                 |                     |                 | 250                                    |  |
| Sharptailed<br>Grouse   | 40,000                                   |                      |  |                     |                 |                     |                 | 2,000                                  |  |
| Prairie<br>Chicken      |  |                      |  |                     |                 |                     |                 | 750                                    |  |



# INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.\*

- |  | (1) SPECIES              | (2) DENSITY  | (3) YOUNG PRODUCED  | (4) SEX RATIO   | (5) REMOVALS   | (6) TOTAL  | (7) REMARKS   |
|--|--------------------------|--|---|---|--|--|---|
|  | Use correct common name. | 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. | Estimated number of young produced, based upon observations and actual counts in representative breeding habitat. | This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available. | Indicate total number in each category removed during the report period. | Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons. | 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.



3-1753  
Form NR-3  
(June 1945)

BIG GAME

Refuge Crescent Lake

Calendar Year 1952

| (1)<br>Species | (2)<br>Density                           | (3)<br>Young<br>Produced | (4)<br>Removals |                     |      |                 | (5)<br>Losses |         |                | (6)<br>Introductions | (7)<br>Estimated<br>Total Refuge<br>Population |                     | (8)<br>Sex<br>Ratio |
|----------------|--|--------------------------|-----------------|---------------------|------|-----------------|---------------|---------|----------------|----------------------|--|---------------------|---------------------|
|                |  |                          | Hunting         | For Re-<br>stocking | Sold | For<br>Research | Predation     | Disease | Winter<br>Loss |                      | At period<br>of<br>Greatest<br>use             | As of<br>Dec.<br>31 |                     |
| Common Name    | Cover types, total<br>Acreage of Habitat | Number                   |                 |                     |      |                 |               |         |                | Number               | Source   |                     |                     |
| Mule Deer      | 500 acres browse<br>40,000 " grassland   | 8                        |                 |                     |      |                 |               |         |                |                      | 30   | 25                  | 1:1                 |
| Antelope       | 40,000 acres grassland                   |                          |                 |                     |      |                 |               |         |                |                      | 200  | 0                   |                     |

Remarks:

Reported by Lloyd R. Ramelli

# INSTRUCTIONS

## Form NR-3 - BIG GAME

- (1) SPECIES: Use correct common name; i.e., Mule deer, black-tailed deer, white-tailed deer. It is unnecessary to indicate sub-species such as northern or Louisiana white-tailed deer.
- (2) DENSITY: 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 total number of young produced on refuge.
- (4) REMOVALS: Indicate total number in each category removed during the year.
- (5) LOSSES: On the basis of known records or reliable estimates indicate total losses in each category during the year.
- (6) INTRODUCTIONS: Indicate the number and refuge or agency from which stock was secured.
- (7) TOTAL REFUGE POPULATION: Give the estimated population of each species on the refuge at period of its greatest abundance and also as of Dec. 31.
- (8) SEX RATIO: Indicate the percentage of males and females of each species as determined from field observations or through removals.



DISEASE

Refuge Crescent Lake Year 19 52

Botulism

Lead Poisoning or other Disease

Period of outbreak 7/21 - 8/15

Period of heaviest losses 7/21-31/52

Losses:

|                | Actual Count | Estimated  |
|----------------|--------------|------------|
| (a) Waterfowl  | <u>148</u>   | <u>175</u> |
| (b) Shorebirds | <u>2</u>     | <u>10</u>  |
| (c) Other      | <u></u>      | <u></u>    |

| Number Hospitalized | No. Recovered | % Recovered |
|---------------------|---------------|-------------|
| (a) Waterfowl       | <u>13</u>     | <u>50</u>   |
| (b) Shorebirds      | <u>0</u>      | <u>-</u>    |
| (c) Other           | <u>0</u>      | <u>-</u>    |

Areas affected (location and approximate acreage) 10

Water conditions (average depth of water in sickness areas, reflooding of exposed flats, etc.

Receding feather edged waters.

Condition of vegetation and invertebrate life

Disease appeared to be worst where decaying vegetation in stagnant water was prevalent.

Remarks

Kind of disease N

Species affected O  
N

Number Affected E  
Species Actual Count Estimated

|         |         |         |
|---------|---------|---------|
| <u></u> | <u></u> | <u></u> |
| <u></u> | <u></u> | <u></u> |
| <u></u> | <u></u> | <u></u> |

Number Recovered

Number lost

Source of infection

Water conditions

Food conditions

Remarks

3-1756  
Form NR-6  
(April 1946)

FISH

Refuge Crescent Lake Year 195 2

| Species   | Relative Abundance | Sport Fishing    |              | Commercial Fishing |              | Restocking     |              | Number removed for Restocking |
|-----------|--------------------|------------------|--------------|--------------------|--------------|----------------|--------------|-------------------------------|
|           |                    | Man days Fishing | Number Taken | No. of Permits     | Pounds Taken | Number Stocked | Area Stocked |                               |
| Bullheads | 4%                 |                  |              |                    |              |                |              |                               |
| Crappie   | 1%                 |                  |              |                    |              |                |              |                               |
| Carp      | 95%                |                  |              |                    |              |                |              |                               |
|           | Total              | 125              | 250          |                    |              |                |              |                               |

REMARKS:



3-1757

Form NR-7

(April 1946)

PLANTINGS  
(Marsh - Aquatic - Upland)

Refuge Crescent Lake Year 1945

| Species | Location<br>of Area<br>Planted | Rate of<br>Seeding<br>or<br>Planting | Amount<br>Planted<br>(Acres or<br>Yards of<br>Shoreline) | Amount & Nature<br>of Propagules | Date of<br>Plant-<br>ing | Survival | Cause of<br>Loss | Remarks |
|---------|--------------------------------|--------------------------------------|--|----------------------------------|--------------------------|----------|------------------|---------|
| None    |                                | Heavy snows and                      | impassable roads delayed our planting                    | crested wheat, brome,            |                          |          |                  |         |
|         |                                | sweet clover seeds in the            | east end of the refuge.                                  | This seed will be                |                          |          |                  |         |
|         |                                | planted early                        | next period.   |                                  |                          |          |                  |         |

## TOTAL ACREAGE PLANTED:

Marsh and aquatic.....  
Hedgerows, cover patches.....  
Food strips, food patches.....  
Forest plantings.....

CULTIVATED CROPS.

Refuge Crescent Lake Year 1952

| Permittee<br>(If farmed by refuge<br>personnel, so indicate) | Permit<br>No. | Unit<br>or<br>Loca-<br>tion | Crops<br>Grown | Avg.<br>Yield<br>per<br>Acre | Permittee's<br>Share |                    | Government's Share or Return |     |             |     | Compensatory<br>Services, or<br>Cash Revenue |
|--|---------------|-----------------------------|----------------|------------------------------|----------------------|--------------------|------------------------------|-----|-------------|-----|--|
|  |               |                             |                |                              | Acres                | Bu. Har-<br>vested | Harvested                    |     | Unharvested |     |  |
|  |               |                             |                |                              |                      |                    | Acres                        | Bu. | Acres       | Bu. |  |
| N<br>O<br>N<br>E   |               |                             |                |                              |                      |                    |                              |     |             |     |  |

| Summary of Crops Grown:                      | Crop | Acreage | Permittee's Share |         | Government's Share |     | Total Revenue        |     |
|--|------|---------|-------------------|---------|--------------------|-----|----------------------|-----|
|  |      |         | Acres             | Bushels | Harvested<br>Acres | Bu. | Unharvested<br>Acres | Bu. |
| Interior Duplicating<br>Section, Wash. D. C. |      |         |                   |         |                    |     |                      |     |
|  |      |         |                   |         |                    |     |                      |     |
|  |      |         |                   |         |                    |     |                      |     |
|  |      |         |                   |         |                    |     |                      |     |
|  |      |         |                   |         |                    |     |                      |     |



DIRECTIONS FOR PREPARING FORM NR-8  
CULTIVATED CROPS

Cultivated Crops Report Form NR-8 should be prepared on a calendar-year basis for all crops harvested or utilized during the calendar year and submitted with the December 31 refuge report.

Permittee - List each permittee separately. If lands of the refuge are farmed by refuge personnel or hired labor, this should be indicated in the Permittee column.

Permit No. - List the number of the Special Use Permit issued to the individual.

Use or location - The Unit No. or name specified in the Economic Use Plan should be listed in this column.

Crops Grown - A separate line of the form should be used for each crop grown by each permittee or by refuge personnel. This is important, since if each crop grown by each operator is not specifically enumerated, the report will be of no value for statistical purposes.

Average Yield per Acre - It is important that the average yield per acre of each crop grown by each operator should be shown.

Permittee's Share - Only the number of acres harvested or utilized by the permittee for his own benefit should be shown under the Acres column, and only the number of bushels of farm crops harvested by the permittee for himself should be shown under the Bushels Harvested column. It is requested that all crops harvested be reduced to bushels wherever possible, or, as in the case with the harvesting of seed such as that of sweet clover, alfalfa, bromegrass, etc., the total harvested crop in pounds may be shown. Timothy, alfalfa, or other hay harvested by the permittee should be shown on Form NR-10 and should not be shown in the Permittee's Share column.

Government's Share or Return - Harvested - Show the number of bushels harvested for the Government and the acreage from which this share is harvested, both for grain raised by refuge personnel and by permittees. Unharvested - show the exact number of acres of crops allowed to remain unharvested as food and cover for wildlife. An estimate of the number of bushels of grain that is available for the wildlife in such unharvested crops should be shown in the Bushels column.

Compensatory Services, or Cash Revenue - Show other services received by the Government in cooperative farming activities, the number of acres of food strips planted for wildlife, the amount of wildlife crops not otherwise reported that are planted by cooperators for the Service, or the cultivation of wildlife plantations. If the permit is on a fee basis, the total cash revenue received by the Service.



REFUGE GRAIN REPORT

Refuge Crescent Lake

Months of Sept thru Dec. 194 52

| (1)<br>VARIETY | (2)<br>ON HAND<br>BEGINNING<br>OF PERIOD | (3)<br>RECEIVED<br>DURING<br>PERIOD | (4)<br>TOTAL | (5)<br>GRAIN DISPOSED OF |        |     | (6)<br>ON HAND<br>END OF<br>PERIOD | (7)<br>PROPOSED USE |      |       |
|----------------|--|-------------------------------------|--------------|--------------------------|--------|-----|------------------------------------|---------------------|------|-------|
|                |  |                                     |              | TRANS-<br>FERRED         | SEEDED | FED |                                    | SEED                | FEED | SURP. |
| Corn           | 0  | 70                                  | 70           |                          |        | 35  | 35                                 |                     | 35   | 0     |
| Wheat          | 15                                       | 200                                 | 215          |                          |        | 45  | 168                                |                     | 168  | 0     |
| Barley         | 4  |                                     | 4            |                          |        | 4   | 0                                  |                     |      | 0     |

- (8) Indicate shipping or collection points.....
- (9) Grain is stored at Headquarters grainery.
- (10) Remarks.....



REFUGE GRAIN REPORT

Report all grain in bushels. For the purpose of this report the following approximate weights of grain shall be considered equivalent to a bushel: Corn (shelled)--55 lbs., Corn (ear)--70 lbs., Wheat--60 lbs., Barley--50 lbs., Rye--55 lbs., Oats--30 lbs., Soy Beans--60 lbs., Millet--50 lbs., Cowpeas--60 lbs., and Mixed--50 lbs. In computing volume of granaries, multiply the cubic contents (cu. ft.) by 0.8 bushels.

- (1) List each type of grain separately: Corn, wheat, proso millet, etc. Include only domestic grains; aquatic and other seeds will be listed on NR-9.
- (3) Report all grain received during period from all sources, such as transfer, share-cropping, or harvest from food patches.
- (4) A total of Columns 2 and 3.
- (6) Column 4 less Column 5.
- (7) This is a proposed breakdown by varieties of grain listed in Column 6.
- (8) Nearest railroad station for shipping and receiving.
- (9) Where stored on refuge: "Headquarters grainary", etc.
- (10) Indicate here the source of grain shipped in, destination of grain transferred, data on condition of grain, unusual uses proposed.

COLLECTIONS AND RECEIPTS OF PLANTING STOCK  
(Seeds, rootstocks, trees, shrubs)

[illegible]



Refuge.....Crescent Lake.....Year 19..52

| Permittee               | Permit No. | Unit or Location | Actual Acreage Utilized | Animal Use Months | Tons of Hay Harvested | Period of Use From - To | Rate | Total Income | Remarks                   |
|-------------------------|------------|------------------|-------------------------|-------------------|-----------------------|-------------------------|------|--------------|---------------------------|
| Rounsborg, Donald       | 24 Cr. LK  | #18              | 2100                    | 292.24            |                       | 1/8-2/12/52             | 1.50 | \$438.36     | Summer, cont'd from 1951. |
| Bandy, J.L.             | 27 Cr. LK  | #19              | 1940                    |                   |                       |                         |      |              |                           |
| Douglas, Earl           | 34 Cr. LK  | #11              | 320                     | 140.13            |                       | 1/1-8/52                | 1.50 | 210.23       | Winter, cont'd 1951       |
| Douglas, Earl           | 33 Cr. LK  | #12              | 1375                    | 814.80            |                       | 1/9-2/22/52             | 1.50 | 1222.20      | " " "                     |
| Emerson, Dean           | 31 Cr. LK  | #13              | 4000                    | 1851.50           |                       | 1/1-4/15/52             | 1.50 | 2777.25      | " " "                     |
| Eldred, E.M.            | 30 Cr. LK  | # 1              | 1300                    | 1840.00           |                       | 1/1-4/2/52              | 1.50 | 2760.00      | " " "                     |
| Keller, W.H.            | 36 Cr. LK  | # 8              | 1520                    | 450.52            |                       | 1/1-4/15/52             | 1.50 | 675.78       | " " "                     |
| Keller, W.H.            | 37 Cr. LK  | #10              | 1300                    | 200.48            |                       | 1/1-2/9/52              | 1.50 | 300.72       | " " "                     |
| Peterson Bros.          | 15 Cr. LK  | # 6              | 4300                    | 2602.16           |                       | 1/1-3/17/52             | 1.50 | 3903.24      | " " "                     |
| Rounsborg, Donald       | 28 Cr. LK  | #21              | 160                     | 551.20            |                       | 1/1-4/14/52             | 1.50 | 826.80       | " " "                     |
| Sherfey, J.E.           | 26 Cr. LK  | #15              | 520                     | 708.00            |                       | 1/1-4/30/52             | 1.50 | 1062.00      | " " "                     |
| Dietlein, Geo. J.       | 47 Cr. LK  | # 2              | 1000                    | 367.74            |                       | 5/26-10/20/52           | 1.50 | 551.61       | Summer grazing            |
| Dietlein, & Son         | 46 Cr. LK  | # 3              | 840                     | 453.93            |                       | 5/29-10/15/52           | 1.50 | 680.90       | " " "                     |
| Keller, W.H.            | 48 Cr. LK  | # 7              | 1520                    | 651.23            |                       | 5/22-9/23/52            | 1.50 | 976.85       | " " "                     |
| Douglas, Earl           | 49 Cr. LK  | #14a             | 5000                    | 2086.46           |                       | 5/24-10/21/52           | 1.50 | 3129.69      | " " "                     |
| Emerson, Dean           | 50 Cr. LK  | #14b             | 4360                    | 1848.82           |                       | 6/2-10/7/52             | 1.50 | 2773.23      | " " "                     |
| Eldred, E.V.            | 44 Cr. LK  | #16              | 5000                    | 2195.58           |                       | 5/26-10/1/52            | 1.50 | 3293.37      | " " "                     |
| Sherfey, J.E. et al     | 45 Cr. LK  | #16b             | 3800                    | 1360.74           |                       | 5/27-9/30/52            | 1.50 | 2041.11      | " " "                     |
| Rounsborg, Donald       | 43 Cr. LK  | #17              | 560                     | 198.13            |                       | 5/26-8/15/52            | 1.50 | 297.20       | " " "                     |
| Rounsborg, Donald       | 42 Cr. LK  | #18              | 2100                    | 783.52            |                       | 5/27-8/31/52            | 1.50 | 1075.28      | Summer & Wint. graz.      |
| Sutton, LeRoy           | 40 Cr. LK  | #20              | 640                     | 250.00            |                       | 5/16-11/30/52           | 1.50 | 375.00       | On & Off permit           |
| Eldred, E.V.            | 41 Cr. LK  | #22              | 640                     | 150.00            |                       | 5/16-11/30/52           | 1.50 | 225.00       | " " "                     |
| Eldred, E.M.            | 57 Cr. LK  | # 1              | 1300                    | 387.10            |                       | 12/12-31/52             | 1.50 | 580.65       | Winter grazing            |
| Dietlein, Geo. J.       | 54 Cr. LK  | # 5              | 1360                    | 634.32            |                       | 10/24-12/31/52          | 1.50 | 951.48       | " " "                     |
| Peterson, Morris, et al | 62 Cr. LK  | # 6              | 4300                    | 2150.52           |                       | 10/23-12/31/52          | 1.50 | 3225.78      | " " "                     |

Totals:

Continued

Acreage grazed.....

Animal use months.....

Total income Grazing.....

Acreage cut for hay.....

Tons of hay cut.....

Total income Haying.....

HAYING AND GRAZING

(NR-10-2)

Refuge.....Crescent Lake.....Year 1952

| Permittee     | Permit No. | Unit or Location | Actual Acreage Utilized | Animal Use Months                              | Tons of Hay Harvested | Period of Use From - To | Rate | Total Income | Remarks        |
|---------------|------------|------------------|-------------------------|--|-----------------------|-------------------------|------|--------------|----------------|
| Keller, W.H.  | 59 Cr. LK  | # 8              | 260                     | 21.00  |                       | 12/1-31/52              | 1.50 | 31.50        | Winter grazing |
| Eldred, E.M.  | 61 Cr. LK  | # 9              | 330                     | (Off & on basis. 90 acre #297.00 full payment) |                       |                         |      |              | " "            |
| Keller, W.H.  | 60 Cr. LK  | #10              | 1300                    | 293.40   |                       | 11/7-12/31/52           | 1.50 | 440.10       | " "            |
| Douglas, Earl | 56 Cr. LK  | #11              | 320                     | 279.73   |                       | 11/13-12/31/52          | 1.50 | 419.60       | " "            |
| Douglas, Earl | 55 Cr. LK  | #12              | 1375                    | 305.19   |                       | 12/2-31/52              | 1.50 | 457.79       | " "            |
| Emerson, Dean | 58 Cr. LK  | #13              | 4000                    | 1119.51  |                       | 10/25-12/31/52          | 1.50 | 1679.27      | " "            |
| Sherfey, J.E. | 52 Cr. LK  | #15              | 520                     | 248.73   |                       | 11/20-12/31/52          | 1.50 | 373.10       | " "            |
| Bandy, J.L.   | 53 Cr. LK  | #19              | 1940                    | 350.00   |                       | 12/1-31/52              | 1.50 | 525.00       | " "            |
| Rounsberg, D. | 51 Cr. LK  | #21              | 160                     |  |                       | (not used to 12/31/52)  |      |              |                |

Totals:

Acreage grazed..... Animal use months 25,586.68..... Total income Grazing \$38,577.09.....  
 Acreage cut for hay..... Tons of hay cut..... Total income Haying.....



TIMBER REMOVAL

Refuge Crescent Lake Refuge Year 1952

| Permittee        | Permit No. | Unit or Location | Acreage | No. of Units Expressed in B. F., ties, etc. | Rate of Charge | Total Income | Reservations and/or Diameter Limits | Species Cut |
|------------------|------------|------------------|---------|---|----------------|--------------|-------------------------------------|-------------|
| N<br>O<br>N<br>E |            |                  |         |   |                |              |                                     |             |

Total acreage cut over.....

Total income.....

No. of units removed B. F. ....

Method of slash disposal.....

Cords.....

Ties.....

# N A R R A T I V E R E P O R T

## NORTH PLATTE NATIONAL WILDLIFE REFUGE

Period ending December 31, 1952

### I. GENERAL

#### A. Weather Conditions:

Fair weather prevailed until storms of blizzard proportions struck in mid-November. This storm, with the cold weather that followed kept the lakes frozen with exception of a small pool for the remainder of the season.

#### B. Water Conditions:

Lake Minatare was drawn down to satisfy irrigation needs to levels approaching the lowest in the history of this reservoir. Reportedly, only two times has this lake been lowered this far.

This was a direct result of a hot dry growing season making crop lands solely dependent upon irrigation. The remainder of the lakes were drawn down to their lowest levels as commonly practiced.

These levels had no apparent affect on waterfowl utilization during the hunting season.

#### C. Fires:

There were no fires on the refuge during this period.

### II. WILDLIFE

#### A. Migratory Birds:

##### 1. Populations and Behavior:

Waterfowl populations were restricted to approximately 50 Mallards at the beginning of the period. Local waterfowl movements became noticeable on September 12 when this number was doubled and 2 Pintails were noted.

These populations increased to 3125 ducks counted by Game Agents Hanson and McClure by aerial census on September 23rd. Populations increased until a peak was reached during the first two weeks of Nov-



ember. At this time 32,000 ducks were counted. We undoubtedly had more birds than this on the refuge at various times when we were not there to note them. An estimated peak of 35,000 waterfowl is conservative.

Canadian Geese: First observed on November 5 when we counted 250. We had reports of these geese being in 2 weeks before we observed them. Likewise, this number was undoubtedly lower than populations present for a limited time during our absence.

Waterfowl use was abruptly terminated when cold weather and blizzards of mid-November iced the lakes. Migrants were forced on south while residents made use of open water as occasionally found on local streams and the North Platte River.

## 2. Food and Cover:

Food is most plentiful during the fall of the year when the lakes are lowered to their winter levels, exposing animal life on the lake floor to feeding waterfowl. Lake Alice offers the greatest amount of this type of feeding.

Fortunately, this reduction of water level generally coincides with waterfowl use during the hunting season. This food cannot begin to supply the total amount necessary for our waterfowl populations.

Vegetative food and cover is lacking over the refuge, primarily due to high fluctuation of water levels.

## B. Upland Game Birds:

Of this group of game birds we have observed only the ring-necked and an occasional mongolian pheasant. They appear to be slowly increasing.

Available food and cover is capable of supporting far more of these birds than we now have. The more attractive farm lands draw many birds from the refuge.

## C. Big Game Animals:

Mule deer are occasionally noted during patrol of the more secluded and bushy areas. Signs are frequently noted. We estimate that approximately 15 deer use the refuge.

## D. Fur Animals, Predators:

Fur animals are negligible on the refuge. Occasionally a muskrat is noted and we have observed tracks of skunk and mink on the trails along the canal banks.

E. Predaceous Birds:

Magpies are common with greatest populations occurring during the winter months. Due to the limited nesting on the refuge, this menace to waterfowl is limited.

F. Fish:

Due to poor fishing success of the past summer our fishermen have not been quite as persistent as in the past.

One theory for the disappointing take of wall-eyed pike in Lake Minatare is the lack of protection for spawn and small fish. The bottom of this lake is devoid of all brusk or other means of protection. This enable a predaceous fish to take them practically at will thus satisfying his appetite without indulging in the various baits offered by nimrods.

Lake Minatare remains over-run with carp despite yearly efforts by the State seining crew to remove them. We understand the State intends seining this lake again when the ice will safely support vehicles and equipment.

III. REFUGE DEVELOPMENT

A. Physical Development:

All posting was checked, signs and post replaced and supplemented as necessary before the hunting season.

Fences were repaired and posting maintained during routine patrol of the refuge.

B. Planting:

Experimental planting of rye seed was made during September to determine the value of this type of supplemental feeding. This planting was made by broadcasting 1100 lbs. of seed on the beaches of Lake Alice.

Germination was good and waterfowl was readily attracted in large numbers. However, to gain the greatest value, the seed should be drilled or raked into the ground.

Prior to planting we contacted the Irrigation District for approval which they readily granted. At that time they did not anticipate having the water level raised again in their manipulation of



irrigation waters. Unfortunately this was not the case. It became necessary to raise the water in this lake for about 1 week during October. After the water receded an inspection disclosed the rye had been killed out by the submersion.

Waterfowl frequented the seeded areas for some time after the water went down.

#### IV. ECONOMIC USE

Economic use activities are controlled and administered by the Bureau of Reclamation.

#### V. PUBLIC RELATIONS

##### A. Recreational Use:

An estimated 30,000 visitor days were spent on the refuge during the year of 1952. Of this about 95% or 28,500 days were spent on Lake Minatare. Fishing occupied 8,000 of these visitor days.

Fishing was the most common use made of the refuge during the period. These activities were largely restricted to the bank fishing until ice came. This discouraged all but a few persistent souls who then could be seen out on the ice.

Boating, boat fishing, picnics and joyriders were common until the end of September.

##### B. Refuge Participation:

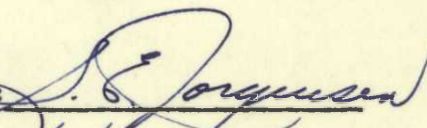
Activities attended and showing of personally owned kodachrome slides of this area were treated under this heading in the report on Crescent Lake Refuge.

##### C. Violations:

There were no prosecutions during the period.

Respectfully submitted,

Lloyd R. Ramelli

Approved: 

Date: 3/9/53



| (1)<br>Species   | (2)<br>First Migrants Seen   |  | (3)<br>Peak Concentration   |   | (4)<br>Last Migrants Seen   |   | (5)<br>Young Produced |                 | (6)   |
|--|--|--|---|---|---|---|-----------------------|-----------------|---|
| Common Name  | Number   | Date   | Number  | Inclusive Dates   | Number  | Date  | Broods Seen           | Estimated Total | Estimated Waterfowl Days  |
| 1. <u>Swans:</u><br>Whistling swan   |  |  |   |   |   |   |                       |                 |   |
| 2. <u>Geese:</u><br>Canada goose<br>Cackling goose<br>Brant<br>White-fronted goose<br>Snow goose<br>Blue goose   | 250  | 11/5   | 750   | 11/5-15   | 750   | 11/15   |                       |                 | 7,500   |
| 3. <u>Ducks:</u><br>Mallard<br>Black Duck<br>Gadwall<br>Baldpate<br>Pintail<br>Green-winged teal<br>Blue-winged teal<br>Cinnamon teal<br>Shoveller<br>Wood duck<br>Redhead<br>Ring-necked duck<br>Canvas-back<br>Scaup<br>Golden-eye<br>Buffle-head<br>Ruddy duck<br><del>Morgansers</del> | 100<br><br><br><br>2<br>500<br>100<br><br><br><br><br>5<br><br><br><br><br><br>100 | 9/12<br><br><br><br>9/12<br>10/11<br>10/11<br><br><br><br><br>9/23<br><br><br><br><br><br>9/23 | 26,000<br><br><br><br>50<br>2,500<br>4,000<br><br><br><br><br>250<br><br><br><br><br><br>15,000 | 11/1-15<br><br><br><br>10/1-11<br>11/1-10<br>10/20-30<br><br><br><br><br>10/15<br><br><br><br><br><br>10/14-11/15 | 250<br><br><br><br>50<br>500<br>3,000<br><br><br><br><br>0<br><br><br><br><br><br>0 | 12/31<br><br><br><br>10/11<br>11/15<br>11/5<br><br><br><br><br>10/28<br><br><br><br><br><br>11/15 |                       |                 | 1,500,000<br><br><br><br>750<br>48,000<br>25,000<br><br><br><br><br>8,000<br><br><br><br><br><br>55,000 |
| 4. <u>Coot:</u><br>3-1750<br>(Aug. 1952)   | 12   | 9/13   | 100   | 9/27-10/25  | 0   | 10/25   |                       |                 | 5,000<br>Form NR-1  |

(over)



## SUMMARIES

## Total Production:

Geese

Ducks

Coots

Total waterfowl days use during period 1,645,250Peak waterfowl numbers 45,000Areas used by concentrations Lake Minatare, Winter Creek & Alice

Principal nesting areas this season

No. of inventories this period 15 % of refuge covered 75

Reported by

*Lloyd R. Ramelli*  
 Lloyd R. Ramelli  
 Refuge Manager

## INSTRUCTIONS (See Sec. 7532, Wildlife Refuges Field Manual)

## (1) Species:

In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance.

## (2) First Seen:

The first refuge record for the species during the reporting period, and the number seen. This column does not apply to resident species.

## (3) Peak Concentration:

Estimated number and inclusive dates when peak population of the species occurred.

## (4) Last Seen:

The last refuge record for the species during the reporting period.

## (5) Young Produced:

Estimated number of young produced based on 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 should be omitted.

## (6) Total:

Estimated waterfowl days use (average population X no. of days present) of refuge for reporting period based. (See Sec. 7532, Wildlife Refuges Field Manual.)

Note: Only columns applicable to the reporting period should be used. It is desirable that the Summaries receive careful attention since these data are necessarily based on an analysis of the rest of the form.



3-1751  
Form NR-1A  
(Aug. 1952)

MIGRATORY BIRDS  
(Other than Waterfowl)

Refuge North Platte Months of Sept to Dec. 195 2

| (1)<br>Species<br><br>Common Name       | (2)<br>First Seen |      | (3)<br>Peak Concentration |                    | (4)<br>Last Seen |       | (5)<br>Production  |                  |                | (6)<br>Total<br>Estimated |
|---|-------------------|------|---------------------------|--------------------|------------------|-------|--------------------|------------------|----------------|---------------------------|
|   | Number            | Date | Number                    | Inclusive<br>Dates | Number           | Date  | Number<br>Colonies | Total #<br>Nests | Total<br>Young | Use                       |
| <b>I. Water and Marsh Birds:</b>        |                   |      |                           |                    |                  |       |                    |                  |                |                           |
| Western Grebe                           | 100               | 9/2  | 100                       | 9/2-15             | 0                | 10/3  |                    |                  |                | 500                       |
| Double-crested Cormorant                | 25                | 9/2  | 25                        | 9/2-15             | 0                | 10/3  |                    |                  |                | 250                       |
| Great Blue Heron                        | 20                | 9/2  | 20                        | 9/2-50             | 1                | 10/28 |                    |                  |                | 100                       |
| Black-crowned night Heron               | 5                 | 9/2  | 5                         | 9/2-15             | 1                | 9/16  |                    |                  |                | 100                       |
| <b>II. Shorebirds, Gulls and Terns:</b> |                   |      |                           |                    |                  |       |                    |                  |                |                           |
| Ring-billed Gull                        | 500               | 9/16 | 2000                      | 1/3-18             | 100              | 11/6  |                    |                  |                | 10,000                    |
| Forsters Tern                           | 500               | 9/8  | 500                       | 9/6-18             | 10               | 10/4  |                    |                  |                | 2,000                     |
| Black Tern                              | 500               | 9/8  | 500                       | 9/6-18             | 500              | 9/16  |                    |                  |                | 1,000                     |
| Avocet                                  | 25                | 9/6  | 200                       | 9/12-10/1          | 2                | 11/6  |                    |                  |                | 500                       |

(over)



| (1)                                 | (2) | (3) | (4) | (5) | (6) |
|-------------------------------------|-----|-----|-----|-----|-----|
| III. Doves and Pigeons:             |     |     |     |     |     |
| Mourning dove                       |     |     |     |     |     |
| White-winged dove                   |     |     |     |     |     |
| IV. Predaceous Birds:               |     |     |     |     |     |
| Golden eagle                        |     |     |     |     |     |
| Duck hawk                           |     |     |     |     |     |
| Horned owl                          |     |     |     |     |     |
| Magpie                              |     |     |     |     |     |
| Raven                               |     |     |     |     |     |
| Crow                                |     |     |     |     |     |
| Reported by <i>Royal P. Ronelli</i> |     |     |     |     |     |

# INSTRUCTIONS

(See Sec. 7532, Wildlife Refuges Field Manual)

- (1) Species: Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiformes)  
 II. Shorebirds, Gulls and Terns (Charadriiformes)  
 III. Doves and Pigeons (Columbiformes)  
 IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)
- (2) First Seen: The first migration record for the species for the reporting period.
- (3) Peak Numbers: Estimated number and inclusive dates when peak population of the species occurred.
- (4) Last Seen: The last refuge record for the species during the season concerned.
- (5) Production: Estimated number of young produced based on observations and actual counts.
- (6) Total: Estimated species days use (average population X no. days present) of refuge during the reporting period.

UPLAND GAME BIRDS

1613

Refuge North Platte

Months of Sept. to Dec., 194 52

Form NR-2 - UPLAND GAME BIRDS \*

| (1)<br>Species          | (2)<br>Density                           |                      | (3)<br>Young<br>Produced     |                    | (4)<br>Sex<br>Ratio | (5)<br>Removals |                     |                 | (6)<br>Total                           | (7)<br>Remarks   |
|-------------------------|--|----------------------|------------------------------|--------------------|---------------------|-----------------|---------------------|-----------------|--|--|
| Common Name             | Cover types, total<br>acreage of habitat | Acres<br>per<br>Bird | Number<br>broods<br>obs'v'd. | Estimated<br>Total | Percentage          | Hunting         | For Re-<br>stocking | For<br>Research | Estimated<br>number<br>using<br>Refuge | Pertinent information not<br>specifically requested.<br>List introductions here. |
| Ring-necked<br>Pheasant |  |                      |                              |                    |                     |                 |                     |                 | 60                                     |  |

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



# 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.

3-1753  
Form NR-3  
(June 1945)

# BIG GAME

Refuge North Platte

Calendar Year 1952

| (1)<br>Species | (2)<br>Density                           | (3)<br>Young<br>Produced | (4)<br>Removals |                     |      |                 | (5)<br>Losses | (6)<br>Introductions | (7)<br>Estimated<br>Total Refuge<br>Population |        | (8)<br>Sex<br>Ratio |                                    |                     |     |
|----------------|--|--------------------------|-----------------|---------------------|------|-----------------|---------------|----------------------|--|--------|---------------------|------------------------------------|---------------------|-----|
| Common Name    | Cover types, total<br>Acreage of Habitat | Number                   | Hunting         | For Re-<br>stocking | Sold | For<br>Research | Predation     | Disease              | Winter<br>Loss                                 | Number | Source              | At period<br>of<br>Greatest<br>use | As of<br>Dec.<br>31 |     |
| Mule Deer      |  |                          |                 |                     |      |                 |               |                      |  |        |                     |                                    | 15                  | 1:1 |

Remarks:

Reported by \_\_\_\_\_



INSTRUCTIONS

Form NR-3 - BIG GAME

- (1) SPECIES: Use correct common name; i.e., Mule deer, black-tailed deer, white-tailed deer. It is unnecessary to indicate sub-species such as northern or Louisiana white-tailed deer.
- (2) DENSITY: 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 total number of young produced on refuge.
- (4) REMOVALS: Indicate total number in each category removed during the year.
- (5) LOSSES: On the basis of known records or reliable estimates indicate total losses in each category during the year.
- (6) INTRODUCTIONS: Indicate the number and refuge or agency from which stock was secured.
- (7) TOTAL REFUGE POPULATION: Give the estimated population of each species on the refuge at period of its greatest abundance and also as of Dec. 31.
- (8) SEX RATIO: Indicate the percentage of males and females of each species as determined from field observations or through removals.

DISEASE

Refuge North Platte Year 19 52

Botulism

Period of outbreak N

Period of heaviest losses O  
N  
E

Losses:

|                | Actual Count      | Estimated         |
|----------------|-------------------|-------------------|
| (a) Waterfowl  | <u>          </u> | <u>          </u> |
| (b) Shorebirds | <u>          </u> | <u>          </u> |
| (c) Other      | <u>          </u> | <u>          </u> |

| Number Hospitalized | No. Recovered     | % Recovered       |
|---------------------|-------------------|-------------------|
| (a) Waterfowl       | <u>          </u> | <u>          </u> |
| (b) Shorebirds      | <u>          </u> | <u>          </u> |
| (c) Other           | <u>          </u> | <u>          </u> |

Areas affected (location and approximate acreage)           

Water conditions (average depth of water in sickness areas, reflooding of exposed flats, etc.)

Condition of vegetation and invertebrate life           

Remarks           

Lead Poisoning or other Disease

Kind of disease N

Species affected O  
N  
E

| Number Affected Species | Actual Count      | Estimated         |
|-------------------------|-------------------|-------------------|
| <u>          </u>       | <u>          </u> | <u>          </u> |
| <u>          </u>       | <u>          </u> | <u>          </u> |
| <u>          </u>       | <u>          </u> | <u>          </u> |

Number Recovered           

Number lost           

Source of infection           

Water conditions           

Food conditions           

Remarks



3-1756  
Form NR-6  
(April 1946)

FISH

Refuge North Platte Year 1952

| Species        | Relative Abundance | Sport Fishing    |              | Commercial Fishing |              | Restocking     |              | Number removed for Restocking |
|----------------|--------------------|------------------|--------------|--------------------|--------------|----------------|--------------|-------------------------------|
|                |                    | Man days Fishing | Number Taken | No. of Permits     | Pounds Taken | Number Stocked | Area Stocked |                               |
| Carp           | 91%                | 0                | 0            |                    |              |                |              |                               |
| Wall-eyed Pike | 2                  | 2500             | 2000         | (Estimated)        |              |                |              |                               |
| Northern Pike  | 1                  | 2500             | 1000         | "                  |              |                |              |                               |
| Trout          | 1                  | 1000             | 1500         | "                  |              |                |              |                               |
| White Bass     | .5                 | 100              | 100          | "                  |              |                |              |                               |
| Perch          | 2.5                | 1000             | 5000         | "                  |              |                |              |                               |
| Catfish        | 1                  | 400              | 1000         | "                  |              |                |              |                               |
| Bulhead        | 1                  | 500              | 2000         | "                  |              |                |              |                               |

REMARKS:

All data estimated.

On basis of more complete information, number of days and take were increased over last year.

3-1757

Form NR-7

(April 1946)

PLANTINGS  
(Marsh - Aquatic - Upland)

Refuge.....North Platte.....Year 194.52

| Species | Location<br>of Area<br>Planted | Rate of<br>Seeding<br>or<br>Planting | Amount<br>Planted<br>(Acres or<br>Yards of<br>Shoreline) | Amount & Nature<br>of Propagules | Date of<br>Plant-<br>ing | Survival | Cause of<br>Loss                            | Remarks |
|---------|--------------------------------|--------------------------------------|--|----------------------------------|--------------------------|----------|---|---------|
| Rye     | North beach<br>Lake Alice      | 30 bu./acre                          | 500 yds<br>shore line                                    | 1100 lbs.                        | 9/17/52                  | 95%      | During October flooding<br>killed out seed. |         |

## TOTAL ACREAGE PLANTED:

Marsh and aquatic.....  
Hedgerows, cover patches.....  
Food strips, food patches.....  
Forest plantings.....



[illegible]



DIRECTIONS FOR PREPARING FORM NR-8  
CULTIVATED CROPS

Cultivated Crops Report Form NR-8 should be prepared on a calendar-year basis for all crops harvested or utilized during the calendar year and submitted with the December 31 refuge report.

Permittee - List each permittee separately. If lands of the refuge are farmed by refuge personnel or hired labor, this should be indicated in the Permittee column.

Permit No. - List the number of the Special Use Permit issued to the individual.

Use or Location - The Unit No. or name specified in the Economic Use Plan should be listed in this column.

Crops Grown - A separate line of the form should be used for each crop grown by each permittee or by refuge personnel. This is important, since if each crop grown by each operator is not specifically enumerated, the report will be of no value for statistical purposes.

Average Yield per Acre - It is important that the average yield per acre of each crop grown by each operator should be shown.

Permittee's Share - Only the number of acres harvested or utilized by the permittee for his own benefit should be shown under the Acres column, and only the number of bushels of farm crops harvested by the permittee for himself should be shown under the Bushels Harvested column. It is requested that all crops harvested be reduced to bushels wherever possible, or, as in the case with the harvesting of seed such as that of sweet clover, alfalfa, brome grass, etc., the total harvested crop in pounds may be shown. Timothy, alfalfa, or other hay harvested by the permittee should be shown on Form NR-10 and should not be shown in the Permittee's Share column.

Government's Share or Return - Harvested - Show the number of bushels harvested for the Government and the acreage from which this share is harvested, both for grain raised by refuge personnel and by permittees. Unharvested - show the exact number of acres of crops allowed to remain unharvested as food and cover for wildlife. An estimate of the number of bushels of grain that is available for the wildlife in such unharvested crops should be shown in the Bushels column.

Compensatory Services, or Cash Revenue - Show other services received by the Government in cooperative farming activities, the number of acres of food strips planted for wildlife, the amount of wildlife crops not otherwise reported that are planted by cooperators for the Service, or the cultivation of wildlife plantations. If the permit is on a fee basis, the total cash revenue received by the Service.



## REFUGE GRAIN REPORT

Refuge North PlatteMonths of Sept through Dec., 195 2

| (1)<br>VARIETY*  | (2)<br>ON HAND<br>BEGINNING<br>OF PERIOD | (3)<br>RECEIVED<br>DURING<br>PERIOD          | (4)<br>TOTAL | (5)<br>GRAIN DISPOSED OF |        |     |       | (6)<br>ON HAND<br>END OF<br>PERIOD | (7)<br>PROPOSED OR SUITABLE USE* |      |         |
|------------------|--|--|--------------|--------------------------|--------|-----|-------|------------------------------------|----------------------------------|------|---------|
|                  |  |  |              | Transferred              | Seeded | Fed | Total |                                    | Seed                             | Feed | Surplus |
| N<br>O<br>N<br>E |  | All grains reported under NR8A Crescent Lake |              |                          |        |     |       |                                    |                                  |      |         |

(8) Indicate shipping or collection points \_\_\_\_\_

(9) Grain is stored at \_\_\_\_\_

(10) Remarks \_\_\_\_\_

\*See instructions on back.



## REFUGE GRAIN REPORT

This report should cover all grain on hand, received, or disposed of, during the period covered by this narrative report.

**Report all grain in bushels.** For the purpose of this report the following approximate weights of grain shall be considered equivalent to a bushel: Corn (shelled)—55 lb., corn (ear)—70 lb., wheat—60 lb., barley—50 lb., rye—55 lb., oats—30 lb., soy beans—60 lb., millet—50 lb., cowpeas—60 lb., and mixed—50 lb. In computing volume of granaries, multiply the cubic contents (cu. ft.) by 0.8 bushels.

- (1) List each type of grain separately and specifically, as flint corn, yellow dent corn, square deal hybrid corn, garnet wheat, red May wheat, durum wheat, spring wheat, proso millet, combine milo, new era cowpeas, mikado soy beans, etc. Mere listing as corn, wheat, and soybeans will not suffice, as specific details are necessary in considering transfer of seed supplies to other refuges. Include only domestic grains; aquatic and other seeds will be listed on NR-9.
- (3) Report all grain received during period from all sources, such as transfer, share cropping, or harvest from food patches.
- (4) A total of columns 2 and 3.
- (6) Column 4 less column 5.
- (7) This is a proposed break-down by varieties of grain listed in column 6. Indicate if grain is suitable for seeding new crops.
- (8) Nearest railroad station for shipping and receiving.
- (9) Where stored on refuge: "Headquarters granary," etc.
- (10) Indicate here the source of grain shipped in, destination of grain transferred, data on condition of grain, unusual uses proposed.





HAYING AND GRAZING

Refuge.....North Platte.....Year 1953

| Permittee        | Permit No. | Unit or Location | Actual Acreage Utilized | Animal Use Months | Tons of Hay Harvested | Period of Use From - To | Rate | Total Income | Remarks |
|------------------|------------|------------------|-------------------------|-------------------|-----------------------|-------------------------|------|--------------|---------|
| N<br>O<br>N<br>E |            |                  |                         |                   |                       |                         |      |              |         |

Totals:

Acreage grazed..... Animal use months..... Total income Grazing.....  
 Acreage cut for hay..... Tons of hay cut..... Total income Haying.....



TIMBER REMOVAL

Refuge.....North Platte.....Year 1952....

| Permittee        | Permit No. | Unit or Location | Acreage | No. of Units Expressed in B. F., ties, etc. | Rate of Charge | Total Income | Reservations and/or Diameter Limits | Species Cut |
|------------------|------------|------------------|---------|---|----------------|--------------|-------------------------------------|-------------|
| N<br>O<br>N<br>E |            |                  |         |   |                |              |                                     |             |

Total acreage cut over.....

Total income.....

No. of units removed B. F. ....

Method of slash disposal.....

Cords.....

Ties.....



Elk on Fort Niobrara Refuge - Oct. 1952



Net-trap catch - Sand Lake Refuge - Oct. 1952





Double-deck Goose Rack was constructed for hauling geese.



Part of our Refuge Flock. Good lawn mowers also.



Permittees moving stacks to yard



Spunky little Prairie Hog nose or Puff Adder  
defies closer scrutiny.

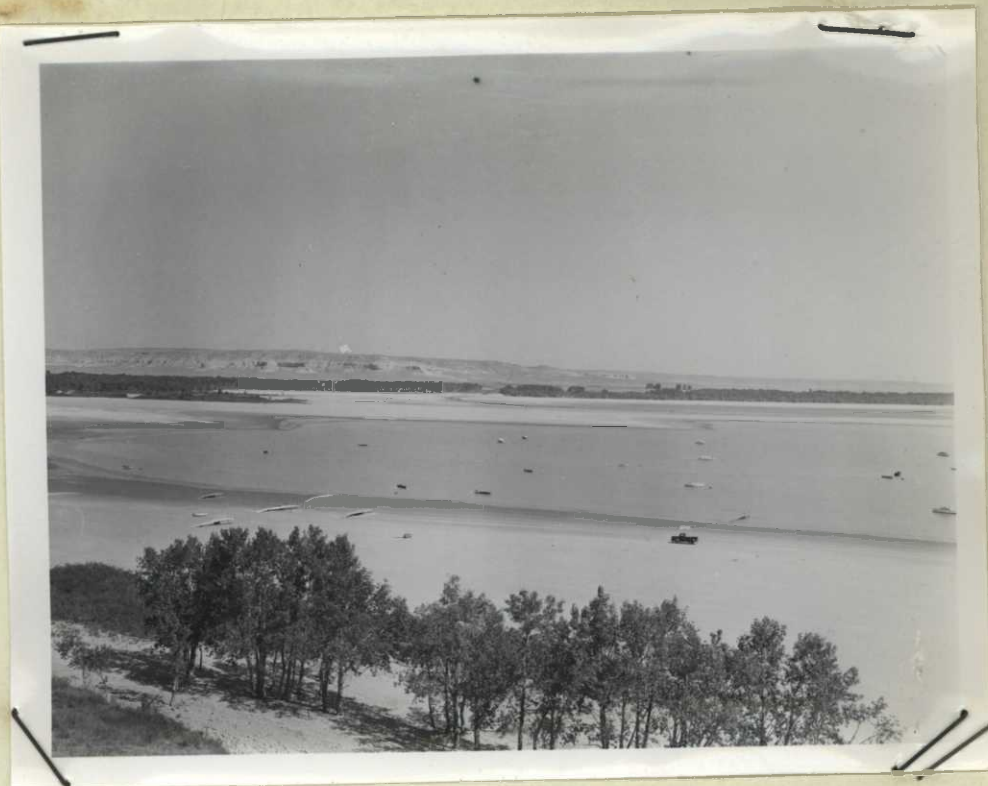




Kennedy removing signs from the now relinquished  
Box Butte Refuge.



Sowing rye seed, Lake Alice on North Platte Refuge.



Low water kept the navy of Lake Minatare well  
out in lake - - - North Platte Refuge.



Lake No. 2 is a beautiful recreational lake.  
North Platte Refuge.





Opening snowbound roads to Refuge - Dec. 1952