

ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: 1/30 1945

_____ MR. SALYER
_____ MR. ELMER

SECTION OF HABITAT IMPROVEMENT:

Mr. Griffith REG 2-3
Dr. Bourn WSB 2-5
Miss Cook WC 2-1-45

SECTION OF OPERATIONS:
Mr. ~~Krummes~~ WS 2/13
Mr. ~~Regan~~ WSR 2/11
Miss Baum _____

SECTION OF LAND MANAGEMENT:
Mr. ~~Foranhow~~ B
Mr. ~~Duhent~~ PAD 2/14

SECTION OF STRUCTURES:
Mr. ~~Taylor~~ WSR 2/27

STENOGRAPHERS:

REMARKS: North Dak. Basement - Dist. #6
Narrative
Sept-Dec. 1944

Return to: _____

NORTH DAKOTA EASEMENT REFUGES & DISTRICT No. 6.

BONE HILL CREEK

CHASE LAKE

HALF WAY LAKE

HOBART LAKE

LAKE GEORGE

STONEY SLOUGH

TOMAHAWK LAKE

The easement refuges in this area had a fair supply of water during the fall. The water levels were brought up by the rains during November, and as a result have a good carry over of water for next year. The marsh and aquatic plants in most of the units are as good as could be expected. Numerous waterfowl stopped on these refuges during the fall migration to feed both on the refuges and in the vicinity.

BONE HILL CREEK

The main pool back of the dam was about five feet below spillway crest during November. This dam has a leakage under the earth embankment amounting to about ten gallons per minute, which accounts for the low water back of the dam, except after heavy rains. The slough in the south west quarter of section 33 had a supply of water all fall, although during October it became rather shallow. The aquatics were represented fairly by smartweed, spike bulrushes, duckweeds, and a few round stem bulrushes. Due to livestock grazing on the area the plants do not make much of a showing.

Migratory birds made fair use of the area. Upland birds consist mainly of pheasants, grouse and hungarian partridge. Food is sufficient for all upland game birds as much of the land is cultivated and grain the main crop.

From indications a few muskrats are staying in the coulees back of the dam.

CHASE LAKE

The fresh water unit No. 1 froze over at about 1.4 feet below the crest of the natural spillway. The structures were in a good condition except for a few muskrat holes. These were dug up and refilled. No muskrats were found in the holes. There was only one muskrat house on the unit, and that house was not being used. We were unable to eliminate any of the muskrats present as they evidently were living in the banks. Plans have been made to take care of the muskrats in the spring. The aquatic and marsh plants are well represented on the fresh water unit;

they consisted of sago pondweed, milfoils, duckweeds, hardstem, prairie bulrush and spike rushes. Good nesting cover is available both on the refuge and in the vicinity.

The main lake or salt water unit had a higher water level at freeze-up than a year ago so that the water is considerably less saturated with salts. Waterfowl appear to use the lake as a resting place frequently.

The pelican and gull nesting island was visited on December 14, and 20 dead pelicans were counted that failed to mature before the cold weather set in. Coyotes had been feeding on the pelican carcasses.

No deer were seen but there were indications that several had been around.

HALF WAY LAKE

The unit froze over with a good supply of water present. There are no structures on the refuge making it difficult to determine the exact stage of the water. Food was plentiful for all diver ducks with plenty of food in the vicinity for surface feeding ducks that used the refuge as a resting place. Despite the fact that the water area is small many birds used the area - both migratory and upland birds.

HOBART LAKE

The south fresh water unit No. 1 froze over with ⁱⁿ about six inches of spillway crest. The water level in unit No. 2 appeared to be slightly higher than a year ago. The structures between the two units were in good condition except for a crack in the concrete along the crest of the spillway. This crack was filled with tar once during the summer but will need some more before the spring run-off.

Waterfowl made good use of the area during the fall migration. According to reports many geese were shot in the vicinity of the refuge during the fall.

About a half a mile north of the structures fifteen muskrat houses were counted in the bulrush area. The dam and spillway was checked for burrows but none could be found.

Plenty of food and cover was available for upland game birds present.

LAKE GEORGE

The fresh water unit No. 2 at the south end of the refuge was in a very excellent condition and a flow of about ten sec. ft. of fresh water was passing over the spillway on November 9th. The fresh water unit No. 1 at the north end continued to cover only about five acres of area due to the lack of a structure. The main natural bodies of water remained about the same.

Vegetation is fairly good over much of the refuge. Hardstem and Prairie bulrushes have fine stands in the south freshwater unit.

Numerous waterfowl again used the refuge during their migration to the South. Feeding in the vicinity was very good.

Sufficient food and cover is present for upland game birds. According to local hunters upland game hunting was considerably better this year in the vicinity of the refuge.

STONEY SLOUGH

All units on the Stoney Slough Refuge were about three-fourths full at freeze-up except for No. 1 and No. 2 which were dry. All dikes, control structures, spillways and ditches were in a very good condition. The vegetation about the refuge was very good even though some of the refuge lies in pastures. Waterfowl made very good use of the refuge during migration. Both duck and goose hunting was very fine in the vicinity of the refuge during the fall. Numerous whistling swan stopped on the refuge.

Trapping permits were issued to several farmers living on the refuge for the purpose of taking such fur-bearing animals as muskrats, mink, weasels, skunks, etc.

Through the cooperation of a farmer's son living on the refuge a violation case consisting of four hunters killing three geese on the Stoney Slough Refuge was reported to us. Edvick Nelson was convicted on January 20th on transporting geese that had been illegally shot on the refuge. He was fined \$20.00 and paid \$5.40 costs before a Justice of Peace at Valley City, North Dakota. The other cases are still pending.

TOMAHAWK LAKE

The structures at Tomahawk were in good condition, although some seepage has been noted on the lower side of the dike. According to Mr. Warren E. Hall's report on November 10th, 1944 the seepage likely comes from a sub strata rather than through the embankment. The water level was about three and one-half feet below the crest of the spillway.

Canvasbacks and redheads made good use of the sago pondweed on the area, especially on the water area at the north end of the refuge. The fall migration of waterfowl used the area extensively.

This refuge has a good supply of upland game birds for its size.

PHOTOGRAPHS: Attached.

January 26, 1945

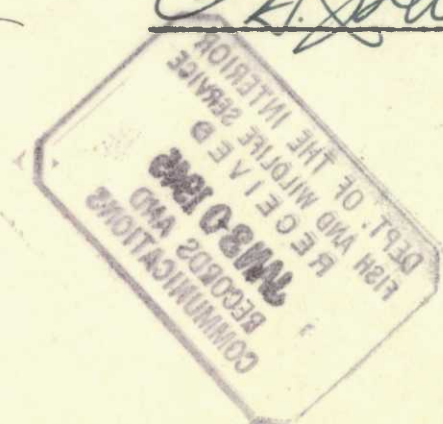
Submitted by:

Nelson B. Nelson
Refuge Manager

Approved by:

[Signature]

Remarks by Regional Office.



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PHOTOGRAPHS: Attached.

January 28, 1945

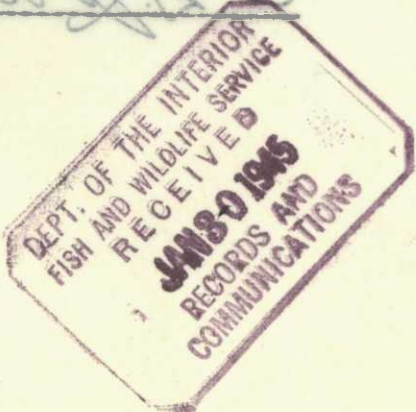
Submitted by:

Edvick Nelson
Refuge Manager

Approved by:

[Signature]

Remarks by Regional Office.





Chase Lake Easement Refuge; Dec. 14, 1944. View of Muskrat burrow dug out in dam. R-54-6.

Refuge ~~W. D. Munson~~ ~~Refuge Dist. No. 6~~ Months of September to December, 1944

(1) Species	(2) First Observed		(3) Became Common	(4) Peak Concentration		(5) Last Observed		(6) Young Produced			(7) Total	
	Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg. Size	Estimated Total	Number Using Refuge
BONE HILL CREEK												
Mallard											20	500
Gadwall											6	100
Baldpate											8	250
Pintail											35	400
Green Winged Teal											0	20
Blue "											15	500
Shoveler											10	50
Redhead											?	50
Canvasback											?	75
Lesser Scaup											?	100
Willetts											4	6
Marble Godwits											2	4
Avocets											12	20
Chase Lake												
White Pelican												2100
California Gulls											200	10
Ring-billed Gulls											1200	100
Mallard											100	2600
Gadwall											20	200
Baldpate											40	300
Pintail											75	2000

REMARKS: (Pertinent information not specifically requested)

INSTRUCTIONS

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

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

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

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

MIGRATORY BIRDS

Refuge N.D. Easement Refuges Dist. No. 6 Months of September to December, 1944

1612

(1) Species	(2) First Observed		(3) Became Common	(4) Peak Concentration		(5) Last Observed		(6) Young Produced			(7) Total
	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg. Size	Esti- mated Total	Number Using Refuge
Continued											
Green Winged Teal										1	0
Blue "										60	800
Shoveler										20	300
Redhead										1	100
Canvasback										1	250
Lesser Scaup										1	300
Wilson Phalarope										1	8
Willet										1	8
Avesot										10	40
HALF WAY LAKE											
Mallard										20	500
Baldpate										10	30
Pintail										30	300
Green Winged Teal										0	1
Blue "										10	200
Shoveler										5	40
HOBART LAKE											
Mallard										34	3000
Gadwall										15	200
Baldpate										15	350
Pintail										50	2000
Green Winged Teal										1	1

REMARKS: (Pertinent information not specifically requested)

INSTRUCTIONS

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

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

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

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

Refuge N. H. H. Refuge Dist. No. 6 Months of September to December, 1944

1612

(1) Species	(2) First Observed		(3) Became Common	(4) Peak Concentration		(5) Last Observed		(6) Young Produced			(7) Total
	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg. Size	Esti- mated Total	Number Using Refuge
Continued											
Blue Winged Teal										40	500
Shoveler										16	40
Redhead										16	150
Canvasback										24	300
Lesser Scaup										?	400
LAKE GEORGE											
Mallard										60	3000
Pintail										70	2500
Blue Winged Teal										50	1500
Lesser Scaup										?	1000
STONEY SLOUGH											
Mallard										150	6000
Gadwall										40	450
Baldpate										50	600
Pintail										100	4000
Green Winged Teal										?	?
Blue "										100	2000
Shoveler										40	800
Redhead										20	500
Canvasback										30	800
Lesser Scaup										?	1000
Willetts										4	8

REMARKS: (Pertinent information not specifically requested)

INSTRUCTIONS

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

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

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

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Refuge N. D. easement Refuges Dist. No. 6 Months of September to December, 1944

1612

(1) Species	(2) First Observed		(3) Became Common	(4) Peak Concentration		(5) Last Observed		(6) Young Produced			(7) Total
	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg. Size	Esti- mated Total	Number Using Refuges
Common Name											
Marble Godwits										4	8
Avocets										?	40
Lesser Yellow legs										?	10
Great Blue Heron										0	20
Buffleheads											
TOMAHAWK LAKE											
Mallard										40	1600
Baldpate										30	200
Pintail										60	1000
Green Winged Teal										?	?
Blue "										60	800
Shoveler										50	200
Redhead										20	200
Canvasback										30	400
Lesser Scaup										?	600

REMARKS: (Pertinent information not specifically requested)

INSTRUCTIONS

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

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

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

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Refuge N.D. Escamont Refuges Dist. No. 6 Months of September to December, 1944

(1) Species	(2) Density	(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
		Acres per Bird	Number broods obs'v'd.		Estimated Total	Hunting	For Re-stocking		
Common Name	Cover types, total acreage of habitat			Percentage			Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.	
<u>BONE HILL CREEK</u>	500 A. Crop and grass land								
Pheasants		5	25				100		
Grouse		25	5				20		
Partridge Hun.		50	8				10		
<u>CHASE LAKE</u>	20 A. Grass brush								
Pheasants		.4	20				50		
<u>HALF WAY LAKE</u>	100 A. Brush, crop land and grass								
Pheasants		2	20				40		
Grouse		6	10				15		
Partridge Hun.		10	5				10		
<u>HOBART LAKE</u>	600 A. Brush, crop and grass land.								
Pheasants		4	100				150		
Grouse		?	?				?		
Partridge Hun.		?	?				?		
<u>LAKE GEORGE</u>	1000 1000 A. Brush grass & crop land								
Pheasants		7	40				150		
Grouse		10	30				100		
Partridge Hun.		?	?				?		
<u>STONEY SLOUGH</u>	1000 A. Grass, Brush and crop land								
Pheasants		5	150				200		
Grouse		?	?				?		
Partridge Hun.		100	?				10		
<u>TOMAHAWK LAKE</u>	200 A. Grass, brush & crop land								
Pheasants		5	20				40		
Grouse		?	?				?		
Partridge Hun.		?	?				?		

Note all Grouse mentioned are sharp tail and plumated

INSTRUCTIONS

Form NR-2

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.

