

SLADE

NARRATIVE REPORTS

JANUARY-DECEMBER 1947

ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: 1-18 1948

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✓ ~~MR. KROENKE~~ WK 4/16
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~~Dr. Bourn~~ WSB 2-2
Miss Cook JWC 1-19

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~~Mr. Regan~~ _____

✓ SECTION OF LAND MANAGEMENT:

~~Mr. Kent~~ JK 2-24
~~Mr. Asher-Knecht~~ AK 2-24

✓ SECTION OF STRUCTURES:

~~Mr. Taylor~~ WY
Johnston g

STENOGRAPHERS:

REMARKS:

SLADE NARRATIVE REPORT

SEPTEMBER-DECEMBER 1947

Return to: _____

SLADE NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

SEPT - DEC 1947

UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

DAWSON, NORTH DAKOTA

SLADE NATIONAL WILDLIFE REFUGE
NARRATIVE REPORT
SEPT - DEC 1947

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UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

DAWSON, NORTH DAKOTA

Lester H. Dundas
Refuge Manager

SLADE NATIONAL WILDLIFE REFUGE
NARRATIVE REPORT
SEPT - DEC 1947

I. GENERAL

A. Weather Conditions

<u>1947</u>	<u>Snowfall</u>	<u>Precipitation</u>	<u>Temperature</u>	
			<u>Max.</u>	<u>Min.</u>
Sept	0.0	3.26	78	40
Oct	2.0	3.80	85	24
Nov	13.9	1.24	57	-12
Dec	4.0	0.15	39	-23
 <u>1946</u>				
Sept	0.0	3.87	88	28
Oct	.2	2.14	75	15
Nov	.05	0.17	61	- 9
Dec	5.6	0.51	46	-30

The data for the above listings were obtained from the weather observers in Dawson, Steele, and Bismarck.

The month of September was for the most part without precipitation of any note until the nite of the 27th when the rain that had been holding off came all at once. Slightly over three inches of rain fell here that day and nite. The fair weather continued thru most of October making ideal conditions for the harvesting of grain but leaving the poor duck hunters wishing for fowl weather. The average temperature for October was 7.7 above normal. Then came November and higher prices but the temperature skidded below freezing early in the month and all the ducks departed. Heavy snow came shortly after making roads almost impassable. Light snowfall and a light snowplow kept the roads to the outside in good condition during the last month. No storms or unusual disturbances were encountered.

B. Water Conditions

The water levels of Harker Lake and the contingent sloughs and pot holes were lowering with an ever increasing velocity until the heavy rain of September 27th brought them back to brimming full. From this time until the freeze up they lowered slightly and then remained stationary. Water conditions during migration were ideal, and many ducks made use of Harker Lake and the surrounding pot holes for resting and then made the usual flights twice a day into the fields of the hinterland.

C. Fires

In spite of the high temperatures and dry weather there were no fires on this area. Much good protection had been given the headquarter buildings by the personnel from Long Lake. It is felt that, if the relocation of headquarters becomes a reality, a double entrance to the headquarter site with the buildings thereby encircled will give adequate protection from fires from without and also prevent any small fires from the building area from spreading. It might be well to procure about a half dozen rubber, flapper type, grass, fire fighters.

II. WILDLIFE

A. Migratory Birds

1. Population and Behavior

Much of the time during the migration of waterfowl thru this area was consumed on activities either directly or indirectly with the repairing of the dam at Lake Moraine Easement. During the early morning and evening patrols of the refuge attention was given to the regular flights of ducks to the surrounding country to feed.

Some depredations on wheat were investigated two miles north of this area and a couple small flock of ducks were quickly ^{dispersed} one evening after dark. The damage was over rated as usual, and it did not appear to be serious upon the occasion of inspection.

No great flight of geese or sandhill cranes were noted at this refuge, but concentrations of various sizes were reported north and east of here for both of these species. Time did not present itself for personal investigations unfortunately. The identification of the Richardson's geese reported was substantiated by the examination of one killed in a field adjacent to the refuge. These small geese were easy to recognize when in the company of the larger Canada's.

In comparing population figures of this year with previous years, it is noted that a decrease in most species was prevalent. The biggest drop seems to have been in the mallards from their peak in 1945 as listed by Mr. Lawson. Nothing unusual was encountered other than the presence of migrating Buffleheads. No mention of many species was made last year because of the absence of qualified personnel during migration.

2. Food and Cover

Waterfowl were noted feeding on the refuge lands used for cultivation as well as those fields all around the refuge for several miles. In some instances the preferred feeding places were close to straw stacks of wheat or oats.

Plenty of natural cover was available in Harker Lake and the larger sloughs especially the slough in the north west corner. The Service controls only a small stretch of this slough, but it was one of the best of the habitats available to ducks this fall. There was a continual flow of water thru this slough, and if the thought of enlarging this refuge is ever entertained, this slough should receive high consideration.

3. Botulism

No evidence was uncovered either on the refuge or in the vicinity showing the presence of this disease.

4. Lead poisoning

Not present in this vicinity to our knowledge.

B. Upland Game Birds

1. Population and Behavior

The population given on the NR forms for these species have been determined since the snow has been on the ground which makes the birds more conspicuous. It is believed that a more complete and more accurate picture of the population is acquired. The pheasants, for the most part, are resident entirely upon the refuge, but the two species of grouse and the Huns move in and out of the refuge regularly as is their custom.

2. Food and Cover

The crops left in the field by the cropping plan plus the many acres of cooperator's crop of flax not harvested because of stands too thin to produce a margin of profit are present in sufficient abundance to adequately care for these species. Some large flax areas were planted where brome grass had formerly grown, and in most of these areas the brome grew back and took over. This has proved ideal winter food for the pheasants.

A volunteer area of standing sweet clover of about three acres in extent has proved a very good roosting ground for the pheasants so far this winter. Scattered thickets or small areas of sweet clover could be utilized in this respect on parts of the refuge barren of this type of cover at the present time.

3. Disease

No signs of disease were detected on the refuge during this quarter.

C. Big Game

1. Population and Behavior

It is believed that the winter period coincides with the time of maximum population of the white-tailed deer on the refuge. Deer are to be seen every day from refuge headquarters and only leave the surroundings with the appearance of personnel. Daily observations indicate the 45 deer are residents of the area during the winter and another 15 make frequent use of the area.

It was common to see from 15 to 20 deer each morning during the fall and early winter. Five bucks to twelve does ~~were~~ the ratio in the herd most commonly observed. One was a spike buck, three were well developed 5 pointers, and one was a monstrous buck that overshadowed all the others. At this writing most of the males have already dropped their antlers with the exception of one buck which proudly parades the vicinity of the refuge gate with the four members of his harem.

Deer have found the residence grove very much to their liking. The broken branches and stripped bark of the Caragana and the slashed box elders show the reason for their frequent visits. Some of the bucks jumped the fence at the big pump site to clean their antlers and leave their marks on the few enclosed trees. Caragana again proving to be the first choice for rubbing.

2. Food and Cover

The deer have been feeding in the unharvested flax fields and while so engaged they break up the snow

crust and thereby have earned a substantial following of pheasants in old 'election year policy.' Wheat and oats straw piles have received the attention of the deer, and in one instance where the oats was stored inside a snowfence-paper lined grainery near the refuge, the deer punctured the paper in four places and used the home made self feeders very satisfactorily until the grain was finally hauled away.

3. Disease

The diseases of this species did not account for any fatalities on the area, but two deer were reported found dead during the duck and pheasant season on land a short ways from the refuge. One appeared to have been hit by a car. The other was hit by buckshot.

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

1. Fur Animals

Most of the species under this heading have been reported on in the fur harvest plan submitted for this winter. In speaking of the fur animals, the badgers' presence has become the most conspicuous by his early winter diggings. These hills of dirt and gravel mark the places of his abode and show that occasional winter activity is one of his traits. Three of these elusive creatures have been seen on or near the refuge in the past month. The sand and gravel piled up by these miners are used to good advantage by the upland game birds. This species seems to be especially abundant this winter, and further records may show evidence that this year was the peak of their possibly fluctuating population. The mink and muskrat appear to be at low ebb, for little sign of either is present. Skunk were determined as common but not abundant.

2. Predators

The fox and coyote have their representatives on the area, but the taking of one or two pair of each will keep them in line with the activities of the refuge.

3. Rodents and Rabbits

A few cottontail rabbits have a scattered distribution throughout the refuge, and the white-tailed jack rabbit is present in only small numbers. Several Jacks have been seen dead on the roads in early winter; none were near the refuge. No opportunity presented itself to detect any diseases in this classification.

E. Predaceous Birds

1. Hawks and Eagles

This department has a good representation of species if not individuals as shown on NR form 1a. The pair of golden eagles have been harassing the pheasant population in frequent forays over the refuge. Although no kills have been made during the time these activities were under observation, success in these attacks is indubitably one of the stimulents which motivates the prepetration of these reoccurring pillages.

On Christmas Day an American roughleg hawk was seen trying to make off with a female pheasant. When the car stopped near the scene, the roughleg dropped the pheasant into the snow and made off. The pheasant crouched bewilderedly as a prairie falcon made a stoop on it while the observer was walking over to it. The falson missed, and the pheasant then ran toward its benefactor until sure the hawks had left. Then it made its way to the safety of some brush in the vicinity.

A duck hawk was seen once this fall on the refuge fence overlooking the slough. It was flushed at close range, and it was noted that several primaries were missing in the left wing causing it to have trouble to sustain flight. It was thought some hunter probably had been doing his good turn by attempting to liquidate this specimen.

A shot eared owl has met with good hunting at the refuge gate. It picks up the mice as they run from one side of the road to the other in their efforts to get to greener grass on the other side of the road.

F. Fish

No fish are known to be residents of this refuge.

III. REFUGE DEVELOPMENT MAINTENANCE

A. Physical

With the advent of new management on this area, the necessity of a winter road appeared paramount. The roadside of the existing roads were thoroughly mowed, and a winter road over the high cultivated land to the west was disced and dragged and then the sides were mowed.

The utilization of some of the space in buildings at headquarters was realized by the relocation of some obstacles and the cleaning up of other storage spaces.

B. Plantings

No operations under this heading.

IV. ECONOMIC USE OF REFUGE

A. Grazing

No grazing during this period.

B. Haying

The two permittees cut 56 ton of hay on the refuge. Inquiries from other interested parties have been advanced for next year already.

C. Cooperative Farming

With approximately 175 acres of land plowed for flax reverting to brome grass-flax mixture in addition to good results in speltz and wheat, the cooperative farming program was a success for wildlife. Some of the permittees got started late and these crops did not mature and were left in the field. Some 71,770 pounds of mixed grain were loaded and shipped to Sacramento Refuge from here during September.

D. Fur Harvest

The fur harvest plan was submitted and approved. It was advised that no fur bearers be harvested this year, but that four coyote and two fox could be taken on a trapper take all basis,

V. FIELD INVESTIGATIONS AND APPLIED RESEARCH

A. Waterfowl Census

Daily observations were recorded as other refuge activ-

ities were in operation, but no time could be found during this busy period to permit any thorough study of this important phase of the work. The waterfowl census period, now at its mid point (Jan 7-10), comes at a very poor time for the personnel at this station to participate. One week later would be much better.

B. Other Findings

The good condition of the pheasants on the area was substantiated by the autopsy performed on a male pheasant killed by flying into the power line between the residence and the barn. The crop was filled with the whole balls of flax and the back, legs, breast, and neck were heavily lined with fat.

VI. PUBLIC RELATIONS

A. Recreational and Educational Uses

The Regional Director, Mr. Janzen, the Chairman of the State Extension Service, eight County Agents, and the refuge manager met at the lodge on October 7th to formulate plans for the occupation of the lodge on a long time lease basis by the 4-H Clubs. A thorough discussion of the grounds, buildings, and plans for use were made. The final agreement is pending on the use of the basement and the installation of electric power. Six county agents are very enthusiastic over the prospects and are eagerly awaiting the final outcome.

The high schools of Dawson, Steele, and Tappen have been contacted in regards to the use of Service wildlife films. The limiting factor in most cases is the lack of a projector, but in every case interest was stimulated towards our project.

B. Offical Visitors

Mr. D. H. Janzen	Regional Director	September 19
Mr. D. H. Janzen	Regional Director	October 7
Mr. A. Huey	Regional Engineer	October 22
Mr. R. Wright	Engineer	October 31
Mr. D. H. Janzen	Regional Director	October 26
Mr. F. C. Gillett	Regional Supervisor	November 7-8
Mr. R. Wright	Engineer	November 7-8
Mr. C. Vogen	Refuge Manager	November 10
Mr. H. Jensen	Game Agent	December 12
Mr. C. Vogen	Refuge Manager	December 12
Mr. W. Hill	Refuge Clerk	December 17-19

C. Miscellaneous1. Utilities

The sewage system has been dug up and cleaned and the cess pool deepened. This has been necessary in order to make the residence livable. At the present time the water system is inadequate for household needs. In as much as a new point must be driven and a new sewage system installed in addition to the needs for telephone and power, the moving of headquarters has been investigated to determine the comparative costs. A statement of the findings will be completed and submitted soon.

VII. PHOTOGRAPHS

No equipment is available for this work at this station.

Respectfully submitted,

January 10, 1948

Lester H. Dundas

Lester H. Dundas
Refuge Manager

Approved: *J. P. [Signature]*

Acting Regional Director

Date:

JAN 13 1948

3-1750

Form NR-1

(Nov. 1945)

WATERFOWL

Refuge Slade National Wildlife Months of Sept 1, to Dec 31, 194 7

(1) Species Common Name	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total
	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Period
I. <u>Swans:</u> Whistling swan									
II. <u>Geese:</u> Canada goose Cackling goose Brant White-fronted goose Snow goose Blue goose Richardson	6	Oct 15	55	Oct 29	5	Nov 3			100
III. <u>Ducks:</u> Mallard Black duck Gadwall Baldpate Pintail Green-winged teal Blue-winged teal Cinnamon teal Wood duck Red head Ring-necked duck Canvas-back Scaup, Lesser Golden-eye Buffle-head Ruddy duck Shoveller	12	Oct 29	12	Oct 29	2	Nov 3			12
			5500	Oct 15-25	72	Nov 7			6500
			450	Oct 10-20	4	Nov 1			500
			500	Oct 10-20	2	Nov 1			500
			700	Oct 10-20	13	Nov 3			800
			12	Oct 11	12	Oct 11			25
			150	Oct 1-15	10	Oct 21			150
			300	Oct 10-25	5	Nov 5			400
			200	Oct 15-30	75	Nov 1			200
			300	Oct 15-30	3	Nov 5			300
			50	Oct 9-25	5	Oct 29			75
			30	Oct 20	1	Oct 27			30
			50	Oct 15	2	Oct 21			50
IV. <u>Coot:</u>			400	Oct 1-21	8	Oct 23			400

(over)

SUMMARIES

Total Production:

Geese.....

Ducks.....

Coots.....

Total waterfowl usage during period.....

Peak waterfowl numbers.....

Areas used by concentrations.....

Principal nesting areas this season.....

Reported by.....

INSTRUCTIONS

- (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 season concerned in the reporting period, and the number seen. This column does not apply to resident species.
- (3) Peak Concentration: The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge record for the species during the season concerned in 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 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 nature of the migrational movement.

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.

SLADE WILDLIFE REFUGE

MAY thru SEPTEMBER 1947

(1) Species	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production	(6) Total
	Number	Date	Number	Date	Number	date		Est. Number
I. Water and Marsh Birds: White pelican	1	Sept 21	1	Sept 21	1	Sept 21		1
II. Shorebirds, Gulls and Terns: Franklins gull	75	Sept 19	2100	Sep 29	21	Oct 17		2100
III. Doves and Pigeons:								
IV. Predaceous Birds:								
Golden eagle	1	Dec 11	2	Dec 31	1	Dec 31		2
American rough-leg	2	Nov 7	4	Dec 31				4
Prairie falcon	1	Oct 31	1	Dec 31				1
Duck Hawk	1	Oct 17	1	Oct 17	1	Oct 17		1
Crow	8	Sep 29	8	Sep 29	1	Dec 15		8
Marsh hawk	1	Sep 19	7	Oct 1	1	Oct 10		7

Reported by Lester H. Dundas

Refuge SLADE WILDLIFEMonths of Sept to December, 1947

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Pheasant	Brome grass, <u>Phragmites</u> , and native grasses 2400 acres.	2							1200	Daily observations.
Hungarian Partridge	Agricultural areas and native grasses, 1600 acres.	100							16	" "
Pinnated Grouse	Agricultural areas and native grasses, 1600 acres.	200							8	" "
Sharp-tailed Grouse	Agricultural areas, native grasses and areas of buckbrush, prairie rose, choke- cherry and thorn- apple. 1800 acres,	60							30	" "

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.

Form NR-3
(June 1945)

BIG GAME

Refuge SLADE WILDLIFE REFUGE Calendar Year 1947

(1) Species	(2) Density	(3) Young Produced	(4) Removals				(5) Losses			(6) Introductions	(7) Estimated Total Refuge Population		(8) Sex Ratio
			Hunting	For Re- stocking	Sold	For Research	Predation	Disease	Winter Loss		At period of Greatest use	As of Dec. 31	
Common Name	Cover types, total Acreage of Habitat	Number								Number	Source		
White-tailed Deer	All the refuge with the exception of the water areas. 2400 acres.	10	NONE					NONE		NONE	60	45	5 male to 12 female

Remarks:

Reported by Lester H. Dundas

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.

116000

Refuge SLADE WILDLIFEYear 1947

Botulism

Lead Poisoning or other Disease

Period of outbreak None

Period of heaviest losses _____

Losses:

	Actual Count	Estimated
(a) Waterfowl	_____	_____
(b) Shorebirds	_____	_____
(c) Other	_____	_____

Number Hospitalized	No. Recovered	% Recovered
(a) Waterfowl	_____	_____
(b) Shorebirds	_____	_____
(c) Other	_____	_____

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 No evidence was uncovered to indicate that any fatalities were due to these causes in this area.Kind of disease None

Species affected _____

Number Affected Species	Actual Count	Estimated
_____	_____	_____
_____	_____	_____
_____	_____	_____

Number Recovered _____

Number lost _____

Source of infection _____

Water conditions _____

Food conditions _____

Remarks _____

[illegible]

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

CULTIVATED CROPS

Refuge SLADE WILDLIFE Year 194 8

42675

Permittee (If farmed by refuge personnel, so indicate)	Permit No.	Unit or Loca- tion	Crops Grown	Ave. Yield per Acre	Permittee's Share		Government's Share or Return				Compensatory Services, or Cash Revenue
					Acres	Bu. Har- vested	Harvested		Unharvested		
							Acres	Bu.	Acres	Bu.	
Roy Wollschlaeger	17534	A-1	flax	8 bu	61	496	0	0	0	0	
			wheat	8 bu	32	251	32	251	0	0	
George Kemmet	17535	A-5	wheat	6 bu	48	231	12	76	0	0	
			barley	11 bu	74	902	24	270	4	44	
Jacob Kemmet	18089	A-2	flax	3 bu	254	782	0	0	0	0	
		A-3	spelts	16 bu	86	1359	80	1268	0	0	
	18107	A-7	wheat & spelts	7 bu	0	0	0	0	30	210	
George Briese	18108	A-6	millet	2 bu	0	0	0	0	20	40	
		A-8	flax	1 bu	92	70	0	0	0	0	
			spelts	2 bu	0	0	0	0	20	40	

Summary of Crops Grown:	Crop	Acreage	Permittee's Share		Government's Share				Total Revenue
			Acres	Bushels	Harvested		Unharvested		
					Acres	Bu.	Acres	Bu.	
	barley	98	74	902	24	270	4	44	\$ none -----
	flax	407	407	1327	0	0	0	0	
	millet	20	0	0	0	0	20	40	
	spelts	166	86	1359	80	1288	0	0	
	spelts-wheat	30	0	0	0	0	30	210	
	wheat	124	80	482	44	327	0	0	

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.

3-1570
NR-8a

REFUGE GRAIN REPORT

Refuge.....SLADE WILDLIFE.....

Months of SEPTEMBER thru DECEMBER 1947...

(1) VARIETY	(2) ON HAND BEGINNING OF PERIOD	(3) RECEIVED DURING PERIOD	(4) TOTAL	(5) GRAIN DISPOSED OF				(6) ON HAND END OF PERIOD	(7) PROPOSED USE		
				TRANS- FERRED	SEEDED	FED	TOTAL		SEED	FEED	SURP.
Barley	0	270	270	230			230	40		40	
Oats	300	0	300	0			0	300		130	200
Spelts	0	1268	1268	1268			1268	0			
Wheat	100	327	427	378			378	49		49	
ALL ABOVE FIGURES INDICATE BUSHELS.											

- (8) Indicate shipping or collection points.....Grain shipped from Dawson, N. D. via Northern Pacific R.R......
- (9) Grain is stored at.....Refuge Hdqts......
- (10) Remarks.....1268 bu. spelts, 378 bu. wheat, 230 bu barley were shipped to Sacramento Refuge, Calif......

REFUGEE GRAIN REPORT

NR-8a

REFUGEE 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 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.

3-1759
Form NR-9

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

Refuge SLADE WILDLIFE Year 1947

Species	Collections				Receipts		Total Amounts on Hand	Amount Surplus
	Amount	Date or Period or Collection	Method	Unit Cost	Amount	Source		
Brome grass	9900 lbs.	Oct 1947	threshed	cooperative basis 50:50			9900 lbs	9900 lbs
This operation was undertaken under permit # 18320 by George Hammet and the seed is stored at refuge hdqts.								

Refuge SLADE WILDLIFEYear 1947

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
Ted Fortner	18248	H-4 & H-5			32 tons		\$1.00	\$32.00	
John Canfield	18319	H-6			24 tons		\$1.00	\$24.00	
NO GRAZING DURING THIS PERIOD.									

Totals:

Acreage grazed _____

Animal use months _____

Total income Grazing _____

Acreage cut for hay 70Tons of hay cut 56Total income Haying \$56.00

Year 1947

State Minnesota

Refuge

Permittee	Permit No.	Unit or Location	Actual Acres Utilized	Actual Use Months	Tons of Hay Harvested	Period of Use From - To	Rate	Total Income	Remarks
John Carlson	12312	H-2			24 tons		\$1.00	\$24.00	
Ed Carlson	12313	H-2 & H-3			22 tons		\$1.00	\$22.00	
NO GRASSING DURING THIS PERIOD.									



Total income Grazing

Animal use months

Total income Hay Harvested

Tons of hay

Actual use for hay