	ROUTING S	ELIP	DIVISION OF WILDLIFE	REFÜGES DATE:	1/131945
		R. SALYER		SECTION OF HABITAT  Mr. Griffith  Dr. Bourn  Miss Cook	IMPROVEMENT:  DS 6 1-/6  DS 8 1/18  THE 1-16-45
	S	ECTION OF OPERAT	ions:	SECTION OF LAND MAN	AGEMENT:
		Mr. Regan	10 1/18/45	Mr. Bucookav	970 3/15
		Miss Baum			
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		Mr. Taylor	nov1 2/27	ak.4.12.4.5	
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	REMARKS	71.	midrara Pertender	Decem	tine 1944
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# FORT NIOBRARA NATIONAL WILDLIFE REFUGE. Valentine, Nebr.

Narrative Report- Sept. to Dec. 1944.

#### I. GENERAL.

# A. Weather Conditions.

	Snowfall	Precipitation	Max. Temp.	Min. Temp.
Sept.		.11	93	36
Oct.		•16	84	22
Nov.	3.6	2.81	73	-10
Dec.	2.3	•14	46	- 6
Totals	5.9	3.22	93	10

1944 closed with a total precipitation of 24.65 inches.
This is 6.28 inches above normal for the year. Most of the moisture fell during the first half of the year. The Fall was very dry until November when sufficient rain fell to put the ground in satisfactory condition for that time of year. The greatest depth of snow on the ground at any time was 2.3 inches. On December 31 only .5 inches remained on the ground.

Weather reports are obtained from the U. S. Weather Bureau Station at Valentine, Nebr. Temperatures at the refuge run from 5 to 10 degrees colder than those in Valentine. 15 degrees below zero was recorded at the refuge during November.

## B. Water Conditions.

All streams continued to flow at normal rates and ponds were maintained at maximum levels at all times.

## C. Fires.

No fires occured on the refuge during the period covered by this report.

## II. Wildlife.

- A. Migratory Birds.
- 1. Population & Behavior.

Few species of migratory birds use this refuge.

20 Eagles appeared on the refuge soon after slaughtering of buffalo was started. They were observed around the off-fall from the buffalo but left the refuge as soon as this was cleaned up.

2 Bluebirds were observed at headquarters on Dec. 4. This was very unusual as temperatures had been down to -15 degrees in November.

Approx. 3000 mallards used the refuge during November and December. They stayed on the refuge ponds until late afternoon when they left to feed in the cornfields.

## 2. Food & Cover.

Corn provided the majority of the feed for the ducks. The corn crop on the table lands north and east of the refuge was above average this year. Many mechanical pickers are used this year due to the shortage of labor. The mechanical pickers leave a larger percentage of the corn on the ground than hand pickers. The corn on the ground is usually "hoged-off", but due to OPA regulations the bog population has been cut down. This has left a fine place for the ducks to feed with no complaints having been received of depredations. Hunters have had fair shooting in the corn fields and have kept the ducks moving from field to field which also tended to keep down complaints of depredations. There are many fields of corn that have not been picked and therefore possibilities of receiving complaints now that the season has closed.

- B. Upland Game Birds.
- 1. Population & Behavior.

Sharp-tailed grouse and Prarie Chickens .--

Grouse and chickens do not appear to be as numerous as last year. Grouse outnumber the chickens. Both grouse/were found in single or small covies until the first of December. At that time they started gathering in larger covies and were found in covies of 15 to 20 at the end of December. The tops of the pine trees is a favorite spot for them when the snow is on the ground.

Ring-necked pheasant-

Pheasant population decreased 20% on the refuge this year. These birds know the refuge and the protection it affords. Soon after the season opens the birds run for the refuge when the hunters get out of thier cars. Few birds were killed within a mile of the refuge this year.

Hungarian Partridge- There were no huns observed on the refuge this year. Three covies were seen last year for the first time but apparently they did not stay on the refuge.

The decrease in the number of upland birds is considered due to the very poor hatching season this spring.

2. Food & Cover.

Cane and corn left on the Dineen tract have been utilized very little. Grouse, chickens, and pheasants located the corn on the ground where longhorn cattle are fed daily and have fed with the longhorns. There is an abundance of natural feed which the birds have utilized. A small patch of wheat and rye planted near headquarters has been worked heavily by pheasants. From this it appears that the pheasant preferres small grain to corn. It is planned to plant a few more small plots of small grain next year.

C. Big Game Animals.

Buffalo- 134 animals.

The buffalo herd were kept in the north pasture until the middle of December, when they were permitted to move to the east pasture which has beed reserved for winter feed. They moved to the east pasture for only one week and them moved back to the north pasture where there is an abundance of feed. Gates are kept open to permit their free travel from one pasture to the other. Preparations have been made for feeding when it becomes necessary.

One buffalo calf was found dead in the north pasture. Cause of death was unknown. It is possible that this animal could have been hurt in the squeeze box when branding.

Eleven adult buffalo were slaughtered under Secretary's approval. Of the eleven head slaughtered, three were old dry cows. Examination disclosed that two of the cows were carrying young. The third was not pregnant. Five old dry cows were marked with metal ear-tags. These will be checked next year in an effort to determine which cows are too old to breed, and form a basis for selection of females to slaughter. It is believed that many of the old cows are too old to breed and should be replaced with younger animals.

Three 2-year old bulls were shipped for breeding purposes. These went to City of Little Falls, Minn.; Dept. of Public Parks, South Bend, Ind.; and Department of Game, St. John, No. Dakota.

30 calves were put thru the squeeze box this fall and branded and vaccinated for Bangs disease. It was found that the calves were much easier to handle than the yearlings. They did not fight the corrals as the yearlings did. A remodeled squeeze box proved much more effecient than the old one, with the result that only one horn was injured on one calf.

Elk. - 35 animals.

Eleven elk were moved from the north pasture in order to corral a good bull for shipment. When these elk were put in with the elk in the exhibition pasture a great difference was noted in the condition of the animals. It was very apparent that the elk in the exhibition pasture were lacking something. It is believed that the lack of browse in the exhibition pasture is the cause of the rough appearance and generally poorer condition, of the animals in the exhibition pasture. After the live shipment had been made the elk in the exhibition pasture were moved to the east pasture for the winter. The east pasture will provide good protection from storms in the winter and has a good supply of browse. It is hoped that this will improve the condition of the animals that have been in the exhibition pasture. They will be moved back to the exhibition pasture in the spring.

The balance of the elk herd are in the north pasture where good feed and protection are afforded.

Four adult bull elk were slaughtered and sold under Secretary's approval. Two live bulls were shipped for breeding purposes. These were shipped to State of Kansas Dedartment of Game, and the Garden City Zoo, Garden City, Kansas.

Seven bulls were counted in the herd after this years disposal program had been completed. This gives not less than a 1 to 4 sex ration in the elk herd.

Longhorn Cattle- 55 animals.

The longhorns are maintained in two small herds with one bull to each herd. The bulls were kept with the cows from July 1 to November 1. April calves can be expected next year. This is one month earlier than this year and it is felt that the calves will be in better condition to start the winter with the additional month's growth on them.

The calves were weaned the first of November and held in the horse pasture where they could be observed until they were accust-omed to grain and hay feed. They were then moved to the winter quarters west of the river. The calves do not look as good this year as they did last year at this time. This is considered partly due to colder weather this year and partly to the fact that they do not get any sunshine down in the hole where they are wintered.

One old bull and a longhorn-herford heifer were sold at public auction. Three calves were sold to Mr. Ray Carr to form the nucleous of a longhorn herd on his ranch in South Dakota. It is planned to sell two of the big steers next year as they show sighs of stiffness in the joints at times.

One calf was found missing in the Stromber pasture and one

2-year old steer was found with a broken hind leg. The steer was slaughtered and donated to the Rosebud Indian Agency at So. Dakota for distribution among the indians. The carcass of the calf was never found. It is presumed that he died from natural causes.

Mule Deer .-

It is estimated that between 25 and 35 mule deer spend part of thier time on the refuge. Seven bucks have been seen at one time. The fences are no obstacle to the deer. They range up and down the river from the refuge and have been seen on the head-quarters lawn.

# 2. Food & Cover.

It has not been necessary to feed any of the animals hay todate. Preparations have been made for hauling hay when necessary. The longhorns have been fed four bushels of corn a day in the cold weather to supplement the range feed. This feeding has been done more to clean out the old grain on hand (some of which is 10 years old) rather than as a necessity. The longhorns take readily to the grain and are usually looking for the truck each morning. If they are not in sight they come on the run at the sound of the horn.

# D. Fur Animals & Predators.

Beaver, muskrat, skunk, and raccon are found on the refuge in limited numbers. They are not considered numerous enough to require trapping this year.

Coyotes are increasing on the refuge. More sign has been seen in the north pasture this year than last year. Trapping has not been possible in this area due to the buffalo and elk being in the pasture. It is planned to experiment with some coyote getters when the buffalo move to the east pasture for the winter.

## E. Predacious Birds.

Crows and magpies are found on the refuge in small numbers. These concentrate where animals are slaughtered in the fall but are not considered detrimental to the refuge.

## F. Fish.

The small ponds on the refuge are utilized by the State of Nebraska, Game, Fish, & Reforestation Commission, as rearing ponds. Fishing on the refuge is closed to the public.

# III. Refuge Development & Maintenance.

# A. Physical Development.

This phase of work has settled down to a straight maintenance job. No effort has or will be made to undertake any new development work for the duration.

Roads have been maintained and are now in as good shape as is possible without a major work problem. Bridges in the north pasture are considered unsafe for heavy loads due to the rotten condition of the timbers in the bridges. They are used only for light traffic and it is hoped that they will last until labor and materiels are available for rebuilding them.

Buildings have been maintained in a good state of repair. Linoleum was laid in the kitchen and bath of Residence #3.

Fences have been maintained and cattle feed racks rebuilt or repaired as needed.

The flagpole which was never moved from in front of the residence after the office was moved to the meseum building, was moved to the front of the museum building. It is now in front of the office where it properly belongs.

# B. Plantings.

16 bushel of Brome grass and Crested wheat grass were planted on 15 acres of land in the south pasture as an experiment to determine the value of such grasses in the sandy areas of the refuge.

Harvest on 51 acres under cooperative agreement with Mr. Claude Andrews has not been completed due to sickness in Mr. Andrews family. The cane crop did not mature and that part which was suitable was cut for fodder. 6 tons of fodder were cut and two tons figured as refuge share. It is estimated that the corn crop will produce 700 bushel. Five acres are to be left strading and the balance of the refuge share (approx 150 bushel) of picked corn will be delivered to the refuge. Mr. Andrews has been a very satisfactory sharecropper. The land was well taken care of and it is hoped that he will farm it next year.

IV. Economic Use of The Refuge.

## Grazing.

The grazing season closed on the fefuge Nov. 15. Pastures were in excellent condition at the close of the season. A total of 345 A. U. M. were grazed from July 15 to Nov. 15 at a total revenue of \$82.50.

# B. Haying.

All hay out under permits was measured and remittances forw warded to the Regional Office. 1511.90 tons of hay was harvested on a cash basis at \$1.00 per ton. In addition 415.16 tons were harvested under cooperative agreement with 2 or 103.79 tons as refuge share for feeding big game animals. A total of 1927.06 tons of hay was harvested on the refuge.

C. Fur Harvest.

None.

D. Timber Removal.

None.

#### V. Public Relations.

All assistance possible was given to the City of Valentine to put on a fitting celebration when Presidential candidate Thomas E. Dewey visited Valentine. Mr. Dewey's visite was considered a big event as he spent two days in this large city, and only one day each in the small places like Philadelphia and Seattle.

All. Ickes Hatch

Contacts and relations were maintained with ranchers and farmers in the locality.

There were no fishing or hunting areas on the refuge open to the public and no violations occured.

Official visitors at the refuge during the period were as follows-

10/13 M. Dederer, Seattle Fur Exchange -- 8 hrs.
10/13 Chas. Kellogg, Chicago 8 hrs.
10/28 Wm. T. Krummes, Chicago 8 hrs.
10/28 F. C. Gillett, Minneapolis. 8 hrs.
10/28 R. E. Griffith, Chicago 8 hrs.
11/11 Ben Hazeltine, Lower Souris Refuge 5 hrs.

VI. Other Items.

Personnel.

Mr. Albert Riley, Laborer Patrolman had the misfortune to fall when on duty and break his left arm. This occured the first week in December. Riley has been on sick leave since and will be on sick leave most of January. He is getting along very well and it is hoped that he is soon back on the job.

Photographs on following page.

APPROVED:

Respectfully submitted

Acting REGIONAL DIRECTOR



/ Longhorn cattle coming in for corn.



Longhorn cattle feeding on corn at the truck.



Longhorn Cattle feeding on corn.



/ 2-Yr old steer with broken leg just before being slaughtered.



Longhorn cattle satisfying thier curiosoty as a 2-yr old steer is butchered just below the hill.



Flagpole in new location in front of the office.

# MIGRATORY BIRDS

Refuge_				Months ofto			ico <sub>s</sub>	, 194			1612	
(1) Species	(2 First Ob		(3) Became Common	(4) Peak Concer	tration	(5) Last Obs	se <b>rve</b> d	(6) Young Produced			(7) Total	
Common Name .	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.			Number Using Refuge	
Mollard	260	10/14	m/s	3000	33/3	5000	12/29			S. F. Carlot	8000	
Housning dovo	*****	****	-	80	9/1	3	20/27				20	
Bonday look	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-		2000	0/1	1 2	n/s	of the country of the	THE PERSON NAMED IN		2000	
She bird		-	-	DAR	No.		12/4	TO THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TO THE PERSON NAMED IN COLUM	Street Street		n11	
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	and the state of t	Page 1		Tage (	100	4 2 6 6 6	5	34.00				

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

<sup>\*</sup> Only columns applicable to the period covered should be used.

would probably be the same in many cases.

Months of September to to , 194 Refuge Park Management (3) (4) (1) (7) (2) (5) (6) Sex Young Remarks Species Density Removals Total Ratio Produced Number broods obs'v'd. Estimated Total For Restocking For Research A CALLER Estimated Hunting number Pertinent information not THE PERSON NAMED IN Acres specifically requested. Cover types, total per using acreage of habitat List introductions here. Common Name Bird Percentage Refuge S ocules observed in 1945, Mariner Los East over this reste partir Man ress prais ne arottevreado Sharp-tailed Heavy July rokes billed may d bluods sasta Grace hard 10 -FITOUSO young birdse too Inuton bas anoth Satimated rumber SITUO Saco 40 6 (49a Ornes lend The Section of recto Chicken no stab shulon! Lote , sincane to , verbuch lous namelos aidi sell t safpegs radjo medicing bear Eing-necked Same an above Cramman's & heavy ower removed during rioned no dose at reduce Indicate total the report pariod. a during the report period. This as witer eds noter redsum Latot bejamitel birds also those migration into the reform during certain essens. nelade resident Indicate method used to determine population and area develed in survey. .bedsaupen vII t specific in noldumnolil themittee reito ebulan bear ed bluens are were being period bluen anulos yino \*

## INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.\*

(1)	SPECIES:	Use	correct	common	name.
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- 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.

<sup>\*</sup> Only columns applicable to the period covered should be used.

Year 194 Refuge (3) (1) (2) (4) (5) (6) (7) (8) Young Species Density Removals Losses Introductions Sex Ratio Estimated Produced Total Refuge Predation Cover types, total For Re-stocking For Research Population Common Name Disease Acreage of Habitat Winter Number Number Source as of Dec. 31 Percentage Sold 253 1 to 1.5 Enttale 1111 1-4 3 3 25 Parks Bank \$ 8 9 0 Longhorn FRENCH S bulls cottle REED 16 can Tofaco belience steers and younge the wood age soons lott -TLavos Minist Icens include astural leases of I calf which was power found and I built that was billed by eachter built-

#### 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: Applies particularly to those species considered in removal programs (public hunts, etc.) exclusive of fenced herds. Detailed data may be omitted for species occuring 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 as of December 31.
- (8) SEX RATION: Indicate the percentage of males and females of each species as determined from field observations or through removals.

Botulism

Refuge Year 194

Lead Poisoning or other Disease

Period of outbreak	Kind of disease
Period of heaviest losses	Species affected
Losses:  (a) Waterfowl (b) Shorebirds (c) Other  Actual Count Estimated	Number Affected Species Actual Count Estimated
Number Hospitalized No. Recovered % Recovered	Number Recovered_
(a) Waterfowl (b) Shorebirds (c) Other	Number lost Source of infection
Areas affected (location and approximate acreage)	Water conditions
Water conditions (average depth of water in sickness areas, reflooding of exposed flats, etc.	Food conditions
Condition of vegetation and invertebrate life	Remarks
Remarks	

defuge	His obsesses	Year	194	4
	Control of the last of the las			

			Fishing	Commercia			ocking	Number re-
Species	Relative Abundance	Man days Fishing	Number Taken	No. of Permits	Pounds Taken	Number Stocked	Area Stocked	moved for Restocking
		Market San Street						
othigo pendir age of	erabed as ren	ring made to	The State	of Hobrasi	m Departmen	0 08 8	Fish a Bofe	dobien.
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REMARKS:

# PLANTINGS (Marsh - Aquatic - Upland)

Refuge	Dott	101chman			Year	194	4

Species	Location of Area Planted	Rate of Seeding or Planting	Amount Planted (Acres or Yards of Shoreline)	Amount & Nature of Propagules	Date of Plant- ing	Survival	Cause of Loss	Remarks
2310-310	Nation part à S, af Ulliar part		16 A.		6/12	•	Date was old no results as for at least	e espected
Created Tasco gress	H. W. Habi pantura	d bu A.	25 A.		4/12	9	Same as eleg	••
Brane gross and Created whente	899913 000 89 2808 8251	R bes A	15		9/20	Tino wi	u toile	
Sheebo Contractions, 123 william to the	lionous pasturo	ge agast	al Aa		ල්ක	2005		

TOTAL ACREAGE PLANTED:

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

Refuge Year 194									
Permittee (If Farmed by Refuge, Indicate)	Permit No.	Unit or Location	Actual Acreage Cropped	Crops Grown	Avg. Yield Per Acre	No. Bu. Har- vested	Acres Left Stand- ing	Compensatory Services	Cash Receipts to Refuge
Claude Andrews	6958	3, 110	70	OCIDO CONTO	20 Bu Folds	e tes		890 3a *** 4 tones	
		Same 454 Politige Sa	cis 8 to	. That part us as a lite als	ida da da		do mes e.	a figure d'addition de Ca	the
									Tot#1
Summary of Crops Gro	own: Cro		Acreage	9 E	efuge S u.Harve	sted	Acres le Standing		
	*_Eath	atode Far	wat not o	camplebed due	to siels	ess to I	r. Andrea	s family.	

Refuge vor Morrow Year	19	4	
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			ctions	Rece	ipts	Total		
Species	Amount	Date or Period or Collection	Method	Unit Cost	Amount	Source	Amounts on Hand	Amount Surplus
No collections.							WALLEY I	The state of the state of
							The second	
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		N - 1 1 1 1 1 1						
	200							

Refuge Data Machinera

Year 194

Permittee	Permit No.	Unit or Location	Actual Acreage Utilized	Animal Use Months	Tons of Hay Har- vested	Period of Use From - To	Rate	Total Income	Remarks
James Ormoshor	4978	S. Sastare	820		134.15	1/10 to 4/15/40	2,00	EXAM	
John Sunnson	22456	S. Posturo	640		89.04	1/36 to 4/15/48	2.50	89,08	
Will Seroball	11704	7150 Lines	78		-	8/8 00 9/30/44	28	-	Not exercised.
Walter Sallard	11763	West side	220	205		8/5 to 11/A	.80	88,00	
Claude Andrews	21735	West side	200	82		8/b to 11/16	•50	36,00	
Re Re Sprague	4973	West side	80	28		7/16 to 11/15	<b>680</b>	24-00	
Do of Bobra Experience insulation	4979	West eide	380	350		7/18 to 9/15	He C		
Totals:  Acreage grazed Animal use months 545 Total income Grazing 62-50									

Acreage cut for hay 8025 Tons of hay cut 2027-06

Total income Haying 1811-50

Continued on next shoot,

Refuge Took Midways

Year 194 4

Permittee	Permit No.	Unit or Location	Actual Acreage Utilized	Animal Use Months	Tons of Hay Har- vested	Period of Use From - To	Rate	Total Income	Remarks
Shopard & Los	6977	So pasture	360		36,40	7/16 to 9/15	2.00	86,40	state.
He Re Sprague	4076	Marie Cree	e 20		22.00	7/20 to 12/53	2,00	12.00	
En En Anderson	4972	Se l'astare	100		66,60	7/26 to 4/25/25	3,00	44,40	
Henry Omeshor	armen.	S. Pasture	<b>600</b>		198,60	7/26 00 4/25/48	2,00	186,60	
Claude Antiques	4972	S. Parture	200		83	7/27 to 4/24/40	1-03	50,21	
Je Be Lovejoy	20.03	So Rustare	3200		TEN-CH	7/10 00 4/15/45	1,03	100,28	
To No Page	6978	S. Pasture	330		46,40	7/18 to 4/15/48	2,00	45.40	
Frank & Taylor	11476	S. Pasture	3200		206,26	7/28 to 4/25/48	1,00	266,26	
France & Taylor	11405	S. Pasture	2020		615-10	7/35 to 4/35/40	Shan	OF SP	208,79 Ocr, shor
Joe Connob	11762	In Pushing	<b>200</b>		63.60	7/26 to 22/2/46	1,00	81.60	
Thomas & Richards	en 11426	S. Parture	Teo.		31.19	7/38 00 4/35/48	2,00	51.10	
Benry Dellasyer	11/007	S. Instanc	989		284.27	7/35 to 4/35/40	1.00	206,27	
Corf. King	4076	Work olds	80		43.00	7/18 to 5/12/46	2.00	43,00	
Blok Rettinger	11489	S. Pasture	660		86,86	7/37 % 4/35/48	1.00	89,20	
Totals:	Animal	use months		Total	income Gr	razing			
A	creage cut fo	or hay		Tons of	hay cut		Total	income Ha	lying

Refuge	District Control	La Crasuciani		Year 19	94
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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
Name install								
								1

Total acreage cut over	Total income
No. of units removed B. F Cords Ties	Method of slash disposal