ROUTING SLIP	DIVISION OF WILD	LIFE REFUGES DATE: June 21, 191464
IR. SALYER		SECTION OF HABITAT IMPROVEMENT:
MR. DUMONT	PAD	Dr. Bourn WSB 6-25 Hiss Cook mc 7/16
SECTION OF OPERAT Lr. Regan Mr. Ball	'IONS:	SECTION OF LAND MANAGEMENT: Kent Mr. Provinces Ackerment
Riss Baum		
SECTION OF STRUC		STENOGRAPHERS:
	PPER MISSISSIPPI M ANUARY - APRIL 194	MARRATIVE REPORT AND ANNUAL SUMMARY

Return to:

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SUMMARIZATION OF ACTIVITIES ON THE UPPER MISSISSIPPI RIVER WILDLIFE AND FISH REFUGE FROM MAY 1, 1945 to APRIL 30, 1946

Temperatures averaged a few degrees below normal for May and June; normal in July; above normal in August, September, and October; below normal in November and December; and the monthly average for January through April varied up to 10.8 degrees above normal. December was the coldest December in 18 years, while March was the third warmest recorded. Temperatures ranged from a high of 102 to 17 below during the year.

Precipitation averages were above normal for May, June, and July, causing high turbidity, retarded vegetative growth, and limited muskrat production. Normal water levels prevailed during August, with precipitation averages slightly below normal. September and October were also below the average for precipitation, while November, December, and January were above normal due to unseasonable rains, and together with high temperatures provided sufficient runoff to more than bring the pools to normal level after the winter drawdown ended January 4. Freezing temperatures during this period covered the river bottoms with ice, providing unfavorable conditions for muskrat and deer. The January level at Grafton, Illinois, was the highest for several years.

Ice began breaking up on the river March 2 and 3, or twelve days earlier than last year.

Summer breeding population of 1945 was about normal, with wood duck predominating. The fall flight of 1945 again showed a decrease of 30%, with mallard, pintail, baldpate, scaup, and coot showing the greatest decline. The 1946 spring flight showed a decline of 15% from the previous spring, mallard, pintail, scaup, and coot showing the greatest decreases. The fall goose flight appeared to have increased slightly, which was also true of the 1946 spring, although there was a 50% decrease in Canadas in Pool 26.

The varying egret population was concentrated in Pool 26, with about 3,000 during late summer and fall and 200 in the Lansing district, which represents increased use in this district. No breeders were observed this season. A single bird near Winona was the only one reported for the 1946 spring season.

Stable high water during the spring and summer limited millet and smartweed production, while wild rice was more abundant than for several years. American pondweed continued to spread, as did the undesirable lotus. Sago, sagittaria, and burreed produced good crops. Food and cover in Pool 26 was improved from a year ago, cyperus, millet, smartweed, and sago predominating. Due to turbidity and silt deposits Swan Lake was barren. Spring food supplies were about normal and were available over the refuge due to the absence of floods.

Due to the limited amount of cover the refuge upland game bird population is very limited, with little change noticed except for a slight pheasant increase in the La Crosse district.

Deer continue to extend their range southward; and although the Wisconsin season tended to bring that portion of the refuge population down, it is estimated there is an excess of 250 deer on the area.

Due to the decrease in severity of the floods during the past year, conditions have been more favorable for muskrat, and a general increase, although slight, is noted. Winter drawdowns were also of a short duration this year, materially affecting the rat population.

A reasonably high population of mink was reduced by 975 during trapping season. Beaver continued a slight increase and extension of area utilized, although excellent trapping along adjoining areas was experienced the past season. Other furbearers remain about the same.

Commercial fishing continued on a large scale due to demand and high prices, and sport fishing was extremely popular although hampered by changing water levels. Winter fish loss due to drawdowns and weather severity appears to have been lessened due to unseasonable warm weather and precipitation.

Six hundred ninety pounds of aquatic seeds were planted on the refuge during the year, consisting principally of American pondweed, although including hard, soft and prairie bulrush, sago, and 4-square. Twelve bushels of sagittaria was collected for transfer.

Summary of economic use and fiscal remittances, including down payments made:

128 cords box bolts and fuel 1,420,298 bd. ft. timber	\$ 124.00 11.887.40
734 AUMs grazing	367.00
34 tons hay	55.50
5210 trap tags	521.00
7 garden plots	7.00
10 cabin permits	285.00
5 fishing headquarters sites	200.00
l sawmill site	25.00
1 marine railway use	10.00
1 pole storage	25.00
2 boathouse	30.00
Furs shipped	2.50 (Est.)
	\$13,539.40

Mr. Edward G. Wellein continued an investigation of effects of pool drawdown on wildlife. Mr. Clair T. Rollings was assigned studies pertinent to the development of the Carroll County unit. Mr. Harry E. Adams returned from military furlough and resumed investigations on the Lower Pools. Mr. David V. Black was assigned as Forester on timber management studies on this refuge and also throughout the region.

Seventeen violation cases were successfully prosecuted in State Courts, resulting in a total of \$625.00 fines and \$96.33 costs.

Bartlet aboster

Bartlett W. Foster, Clerk, Acting in Charge.

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Seventeen violation cases were successfully presected in State Courts, resulting in a total of \$625.00 fines and \$66.55 costs.

Bartlett W. Foster, Clork, Acting in Charge.

### UPPER MISSISSIPPI RIVER WILDLIFE AND FISH REFUGE NARRATIVE REPORT JANUARY, FEBRUARY, MARCH, APRIL, 1946

#### I. GENERAL

#### A. Weather Conditions:

Higher temperatures were recorded in January and April than a year ago. March was exceedingly mild, with only three days below normal. Temperatures averaged 12.9° above normal, with a monthly average at La Crosse, Wisconsin, of 44.4°, the third warmest March of record. At Dubuque, Iowa, the temperature ranged from a high of 81° on April 21 to a low of -11° on January 26. The most severe storm of the season occurred on March 8, when a snowfall of 9" was recorded, a high wind accompanying the snowfall.

Temperature and precipitation ranges are shown in the following table (Winona, Minnesota statistics):

			Temper	ature		Precip	itation
Month	Year	Max.	Min.	Mean	Normal	Total	Normal
January	1945	40	-14	15.8	14.1	.93	1.03
	1946	45	-17	18.15	14.1	1.68	1.03
February	1945	49 -	-10	20.55	18.9	4.50	1.01
	1946	51	-12	19.2	18.9	.52	1.01
March	1945	81 /	-2	43.29	32.3	2.06	1.62
	1946	80	4	43.1	32.3	1.91	1.62
April	1945	81	27	48.96	47.7	3.44	2.31
	1946	87	27	52.4	47.7	.61	2.31
Total	1945					10.93	5.97
	1946					4.72	

#### B. Water Conditions:

Winter drawdown of the pools was completed on January 4, and open river conditions prevailed. Unseasonable temperatures and heavy rains early in January restored the pools, and by the 10th normal pool levels or above were reached. Freezing temperatures covered the river bottoms with ice, and this condition proved unfavorable for muskrats and deer. The flood subsided by January 26.

Ice began breaking up on March 2 and 3, and within a few days the river was entirely free of ice.

The January flood was the highest recorded in that month at Grafton, Illinois, for several years--21.7 feet.

**II. WILDLIFE** 

A. Migratory Birds:

1. Populations and Behavior:

(a) Waterfowl:

#### General

There was a general decrease in waterfowl of 15% this spring as compared to the same period of 1945. Goldeneyes were the only species to show an increase, and this was a nominal 10%. Mallard showed the greatest decrease of any species--20%. Pintail were down 10%, scaup down 10%, and coot decreased 10%.

The peak concentration occurred at the Swan Lake area near Grafton, Illinois, on February 27, an estimated 500,000. The birds began moving north the first week in March. On Swan Lake 130 Canada geese were observed as against 300 last year.

Seventy whistling swans arrived in Pool 5 near Weaver, Minnesota the first week of March and remained until the last week of March. Approximately the same number of these birds have **fre**quented this same area for the past several years and remain about the same length of time.

#### Winona, Minnesota District

The arrival of spring migrants was about ten days earlier than normal, the first birds of any consequence arriving the first week of March. There was no marked movement of birds at any one time. A mallard nest with 10 eggs was observed April 15. The number of coot was definitely below normal.

#### La Crosse, Wisconsin District

Migrants began arriving the first week of March, and on March 13 the heaviest flights were observed. A survey of pools 5 to 10 was made by airplane on March 19, and concentrations of birds were observed in all areas with favorable habitat. By April 18 ducks were scarce, with the exception of blue-winged teal and wood duck. A nesting wood duck was observed occupying a nesting box in the Spring Slough area near Trempealeau. A flock of 40 snow geese and a few blue geese were in the Brice Prairie area for the greater part of April.

#### Lansing, Iowa District

Migrating ducks began arriving March 4. There were definitely less ducks than last year, except slightly more blue-winged teal.

#### Dubuque, Iowa District

The movement of migrating ducks began on March 4, and the reduction in numbers was notable. There appeared to be a slight increase in blue and snow geese. The absence of ducks on the river between Green Island in Jackson County and Turkey River in Clayton County was most unusual. It appears that for unknown reasons the birds by-passed this section of the river.

#### Lower Pools District (Pool 26)

Migrating mallards were observed on January 1, and increased in number until the peak concentration was reached on February 27. The numbers of ducks was some 10% less than last year. No swans were observed this year.

(b) Geese:

The spring flight of geese, never abundant, appears to have increased slightly, though there was a 50% decrease in Canada geese in Pool 26.

(c) Swans:

The spring migration of swans was about normal. Swans did not use the Spring Slough area this year, however. They were present in the Weaver bottoms of Pool 5 in about normal numbers. They appear to feed over Sagittaria beds.

(d) Egrets:

A single bird was observed near the Trempealeau Refuge on April 14, the only one reported during the report period.

(e) White Pelican:

No pelicans were reported to have been observed during the report period.

(f) Great blue herons:

No reports of early heron arrivals.

(g) Shore birds:

No change noted from reports.

2. Food and Cover:

Food appears to be in normal abundance. Food should have been available over most of the refuge because of the absence of floods. Mallards showed a preference for the timbered bottoms.

#### B. Upland Game Birds:

1. Populations and Behavior:

(a) Pheasants and Quail:

No change noted in pheasant and quail populations. The range for these birds is limited to a marked degree. Only a few margins afford favorable habitat.

(b) Ruffed grouse:

Few ruffed grouse occur on the Refuge as there is a very limited amount of suitable range.

C. Big Game Animals:

Deer continue to be abundant on the high ridges of the bottoms and on upland joining the refuge from Pools 4 to 10, inclusive. They seem to be extending their range southward.

D. Fur Animals:

(a) Muskrats:

The muskrat population continues low. However, conditions during the report period have been more favorable than for the past several years. We anticipate a substantial increase if conditions continue favorable. We do not anticipate an open trapping season during 1946.

(b) Mink:

The mink population should have been reduced as a result of the open trapping season. Conditions were favorable for trapping, and extremely high prices for pelts encouraged trappers. An average of \$25.12 per skin was paid, with prices as high as \$50.00 for a single skin. A total of 975 mink was taken on the refuge.

(c) Beavers:

Beaver continue to extend their range, though the number on the refuge has not materially increased.

During a Minnesota State open season of 20 days during December about 200 of these animals were taken on privately owned land adjacent to the refuge in Wabasha, Winona, and Houston Counties.

During the Wisconsin State season of 30 days approximately 1000 beavers were taken in Pepin and Buffalo Counties on privately owned land. Most of the animals were taken on streams tributary to the Mississippi River. (d) Skunks:

Skunks continue to be scarce on the refuge. High water and flooding of practically the entire refuge hold these animals to a minimum.

(e) Raccoon:

Raccoon continue to be common on the refuge. Normal fluctuation in abundance occurs from year to year. The hunting of these animals has shown little effect in reducing numbers.

(f) Otter:

Otter are reported in normal abundance. A few scattered colonies, including one new one, are reported in the Sni Magill bottoms near McGregor, Iowa. An increase is also reported in the Twelve Mile Island area near Guttenberg, Iowa, and also in the Dago Slough area of Grant County, Wisconsin.

(g) Foxes:

No change in the red and grey fox population noted.

F. Fish:

Fish losses from pool drawdown and winter kill appears to have been less during the report period due to a shorter duration of the winter drawdown, mild weather, January thaw, and early break-up.

IV. ECONOMIC USES.

C. Fur Harvest:

Mink trapping under permit and trap tag identification was authorized on the refuge during the respective open State seasons. We attach a complete report of mink trapping.

D. Timber Removal:

Eleven permittees were authorized to engage in merchantable saw log harvest during the report period, cutting a total of 721,015 board feet of logs, for which there was collected and remitted to the Treasurer \$6,091.43.

One permit authorized the cutting of box bolts, and 8 cords were cut. for which \$8.00 was collected and remitted to the Treasurer.

Thirteen permits were issued authorizing cutting and removal of firewood. Fifty-five cords were cut, for which \$53.50 was collected and remitted to the Treasurer.

#### E. Other Uses:

#### 1. Cabin:

Two permits for maintaining and occupying cabins for recreational purposes were renewed, one at \$25.00 and one at \$15.00, for which the sum of \$40.00 was remitted to the Treasurer. Five new permits were issued for the maintenance and occupancy of cabins for recreational purposes at a charge of \$25.00 each, \$125.00 being remitted to the Treasurer therefor.

#### 2. Commercial Fishing Headquarters:

One permit was renewed for intermittently maintaining and operating a commercial fishing headquarters site, for which \$25.00 was transmitted to the Treasurer. One new permit was issued for the operation and maintenance of a commercial fishing headquarters site, for which \$50.00 was transmitted to the Treasurer.

#### 3. Cottage frontage & boat landing:

One new permit was issued for the maintenance of cottage frontage and boat landing for recreational purposes, \$40.00 being transmitted to the Treasurer therefor.

#### 4. Garden:

Two permits were issued during this period for the maintenance of four garden plots, each approximately 50x100 feet. The sum of \$4.00 was remitted to the Treasurer for these permits.

#### V. FIELD INVESTIGATIONS.

Edward G. Wellein continued investigations relative to the effect of pool drawdown on wildlife. Shaler Aldous spent January 8, 9, and 10 on the refuge investigating the muskrat situation, winter mortality, effects of winter drawdown. Several conferences were held with representatives of the War Department regarding pool drawdown, and many meetings with sportsmen were held, to say nothing of conferences with individuals.

David V. Black, who is serving as Forester, was engaged in promoting timber sales and revising the timber use policy.

Harry E. Adams returned to duty from the Navy March 18 and began investigations on the Lower Pools, giving the Keithsburg Drainage project special attention regarding development of the area as a sanctuary.

Clair T. Rollings was assigned to studies and investigation of development of the Carroll County Drainage District unit.

#### VI. PUBLIC RELATIONS.

#### B. Refuge Visitors:

On January 8 and 9 Mr. Day, Acting Director, held a conference at Hannibal, Missouri, regarding the Lower Pool land administrative problem, attended by Mr. Feast of Colorado, Mr. Bodie of Missouri, Messrs. Noren and Mottsheard of Bodie's staff, and Steele of the Upper Mississippi Refuge. The party conferred with War Department officials at St. Louis January 10.

January 8, 9 and 10 -- Mr. Shaler Aldous and Mr. Waxlax and Lt. Nord of the Corps of Engineers at St. Paul, visited the refuge, and in company with Messrs Ferguson and Wellein of the refuge staff investigated conditions relative to the effect of pool drawdown on muskrats and other furbearers.

January 24 -- Messrs. Walters and Waxlax, Captain Thompson, Captain Hanney, and Lt. Nord visited the refuge headquarters and conferred regarding the Corps of Engineers Master Recreational Plan.

February 1 -- Mr. Gillett, Refuge Supervisor, and Mr. Bartlett W. Foster of the Des Lacs Refuge visited headquarters regarding the transfer of Mr. Foster to this station.

February 5 -- Messrs. Elkins and Eustis of the Regional Office staff called at the refuge office regarding proposed flood control on the Mississippi River.

February 15 -- Mr. Joe Lingle of the Minnesota Conservation Commission, St. Paul, visited the refuge headquarters and conferred regarding construction plans for patrol boats on the Mississippi River.

February 18-20 -- Messrs. Janzen and Baetkey of the Regional Office made an inspection of the refuge office.

March 6 -- Mr. Gillett, Refuge Supervisor, called at the Refuge office.

March 7 -- Lt. Nord and Mr. Waxlax called at the refuge office regarding the Corps of Engineers Master Recreational Plan for Mississippi River.

March 18 -- Mr. Deerwester of the Wisconsin Conservation Commission, Madison, called at the refuge office regarding proposed licensing of War Department land.

April 15 -- Mr. Harold Peters, Flyway Biologist, Atlanta, Georgia, delivered Vultee L5 plane #720 at Winona. Mr. John Ball of the Central Office also arrived, and during the day instructed pilots Wellein, Smith, Peters, and Ferguson regarding the operation and care of the planes, checking each of the pilots on test flights.

April 15 -- Harold Regan of the Central Office called at the office during the evening.

April 16 -- John Ball and the Superintendent flew to Minneapolis in the Vultee 720, returning to Winoma later in the evening after conferring with the Regional Director and his staff.

April 22 -- Edward G. Wellein, pilot-biologist, left Winona with the Vultee 729 for permanent station at the Souris Refuge, North Dakota.

April 26 -- Doren E. Woodward of the Portland, Oregon, Regional Office, called at the office. Mr. Woodward was at one time engaged in land acquisition on the Refuge. Mrs. Woodward is also a former employee of the refuge office.

April 29 -- Robert M. Rutherford of the Central Office called at the office. Mr. Rutherford was a pioneer on the Upper Mississippi Refuge, being one of the original land acquisition employees.

C. Refuge Participation:

January 2 -- The Superintendent conferred with the Badger State Sportsmen's Club and Congressman Stevenson at La Crosse, Wisconsin, regarding the winter pool drawdown by the War Department.

March 19 -- The Superintendent, Messrs. Wellein, Black, and Ferguson, attended an all-day meeting of the Technical Game Committee of the Mississippi River Conservation Committee at La Crosse, Wisconsin, the Superintendent being the executive secretary of the Committee.

March 29 -- The Superintendent attended a conference with officials of the War Department at St. Paul regarding land and water management.

April 1 -- The Superintendent conferred with State officials and addressed the Wisconsin Duck Hunters Association at Milwaukee.

April 10 -- The Superintendent conferred with Iowa conservation officials, representatives of Iowa State College, and Thomas Scott of the Cooperative Unit at the State College, re setting up studies of muskrats under a Pittman-Robertson program.

E. Fishing:

Commercial fishing was carried on as usual, catches being satisfactory during the report period.

#### F. Violations:

Two offenders were arraigned in Wisconsin State Courts for trapping muskrats out of season and were fined \$25.00 and \$125.00, respectively, with costs of \$7.93 and \$8.85.

One offender was fined \$50.00 with costs of \$4.50 upon arraignment in Wisconsin State Court for shooting muskrat. His companion was not prosecuted **due** to being on a 3-day Army pass.

Upon arraignment in Wisconsin State Courts, two offenders were fined \$50.00 each with \$4.25 costs for illegal use of bait nets. The case was appealed to Circuit Court, and a fine of \$75.00 and costs of \$9.50 was assessed against each violator.

Two offenders were charged in Minnesota State Courts with taking of blue geese out of season and paid fines of \$25.00 each and costs of \$3.25 each.

Not previously reported were two cases tried in Minnesota State Courts for taking of waterfowl after sunset, which resulted in fines of \$25.00 each being assessed, with costs of \$5.10 and \$6.10.

VII. OTHER ITEMS

B. Photographs:

See attached pages.

APPROVE

JUN 1

June 10, 1946.

Dictated by: Ray C. Steele Signed in his absence.

Clerk, Acting in Charge.



E. G. Wellein, pilot, gassing up the NC-720 at Winona, Minn. 4/22/46.



Insignia on the NC-720 at Winona, Minn. 4/22/46.



# NC-720 at Winona, Minn. 4/22/46.



NC-720 at Winona, Minn. 4/22/46.



NC-720 taking off for Minot, North Dakota 4/22/46.



Log pile, mill, and pile of railroad ties manufactured and ready for shipment at Hutchison Bros. mill, Prairie du Chien, Wis. It is contemplated this outfit will log the Glen Park area this coming season. March 1946.



Truck converted for use at mill, handling slabs. This type vehicle is also used to handle logs, cross-ties and other material. It can be used in the woods to assist in the logging operation. Hutchison Bros. mill. March 1946.



Ash stump cut on Pine Island logging operation. About 18" of log was butted to clear the log ofstump rot, showing that the rot did not extend very far in this tree. April 1946.



Logs piled for scaling and subsequent removal to the mill. Pine Island logging operation. April 1946.



Typical old elm den trees on Pleasant Creek Bottoms area. April 1946.



Showing low-cut elm stump on Pine Island logging operation. Stump is 24" across and has 70 annual growth rings. April 1946.



Slash after 1945-46 logging operation in Pleasant Creek Bottoms area on private land. Action of water and subsequent drying when water level drops will hasten rotting process. April 1946.



Slash of cottonwood tree in Pleasant Creek Bottoms. Picture taken April, 1946--2 months after tree was cut.



An unusual sight, caused by the current scarcity of lumber. The owner of this property, who is building his own home, has set up a sawmill, visible in the picture, and sawed out his building lumber on the site from logs he had purchased. He is using oak lumber, and it will not have to be air-dried before use because the logs had been cut about 2 years before he sawed them. Near Whitman, Minn. April 1946.



A partial view of the sawmill of Fred Wyss at Cochrane, Wis. on the Burlington R.R. Mr. Wyss is the operator logging the refuge Pine Island timber area. April 1946.



Willow timber that has died due to overflow conditions. Refuge land in vicinity of Whitman, Minn. Average size 8" d.b.h.



- Mixed dead timber of merchantable size, dead because of prolonged flooding. South of Weaver, Minn. The logging of such timber before it is killed will eliminate such waste. April 1946.



Overmature cottonwood that has died. Similar size green timber is now being cut to produce a revenue to the Government. Pine Island area. April 1946.



Double stump cut about 36" above ground level. This is often necessary where trees grow in this manner. The stump illustrated is of soft maple. Pine Island area. April 1946.



Typical timber stand in Pine Island area before cutting. April 1946.



Stand remaining after cutting has taken place in Pine Island Timber area.



Biltmore stick markings on marking axe to facilitate measuring tree diameters when marking trees for cutting.



Biltmore stick markings on marking axe to facilitate measuring tree diameters when marking trees for cutting.



Deck of logs covered with ice. Black River Bottoms, Wis. February 25, 1946.



Digging logs out with "cat". Note thickness of ice, top of pile showing through ice. Black River Bottoms, Wis. February 25, 1946.



Bucking logs out of ice with "cat". Black River Bottoms, Wis. Feb. 25, 1946.



Digging logs out of ice with "cat". Top of pile showing through ice. Black River Bottoms, Wis. Feb. 25, 1946.



Digging logs out of ice. This is all ice--no snow left on ground. Black River Bottoms. Feb.25,1946.



Deck of logs covered with ice as result of flood. Black River Bottoms, Wis. Feb. 25, 1946.



Digging logs out of ice with "cat". Black River bottoms. February 25, 1946.



Bucking logs out of ice with "cat". Black River bottoms. February 25, 1946.

## 3-1750 Form NR-1 (Nov. 1945)

# WATERFOWL

Cotal Production:

Refuge Upper Mississippi Months of January to April, 1946

	(1) Species	(2 First :	· · · · · · · · · · · · · · · · · · ·		5) centration	(4 Last S			(5) Produced	od (6) Total
	Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Perio
			-			11011001				
I.	<u>Swans</u> : Whistling swan	6	3/19	199	4/1	74	4/15	000	-	190
ТТ	Geese:	alistik di di di		tinne ende						5
±±,	Canada goose	150	3/5	1,500	4/4	35	4/18			1,500
	Cackling goose Brant		rted by							
	White-fronted goose									
	Snow goose Blue goose	200	3/13	200	3/13	20	4/20		-	200
		<b>50</b> Decurring of	3/15 zeroega	50 orm. other	3/15	8	4/20	bbs nI	pecies:	<b>50</b>
		Special at	spaces.		ni bebbs		hoired Bu	report		(J. J.
II.	Ducks: Mallard	200	\$/5	45,000	3/27	10 Still	here	· given		298,000
	Black duck	300	3/13	20,000	3/27	Still	here	The fir	Irst Seen:	40,000
	Gadwall Baldwate	to 05 esider	3/19	5,000	4/24	Still	C. O.C.C. Marris	period		20,000
	Baldpate Pintail	500	3/13 3/13	<b>30,000</b> <b>35,000</b>	3/27 3/27	150 Still	4/25	- arm		75,000
	Green-winged teal	15	3/13	4,500	3/27	ent Still	4/25	a- The gre	eak Concentra ion:	10,000
	Blue-winged teal Cinnamon teal	100	4/1 -	5,000	4/5	Still				50,000
	Wood duck	concerned	3/13	20,000	3/27	Tol broost	resident	The las	ast Seen:	20,000
	Red head	125	3/19	1,500	3/27	10	4/18	rootsed		7,000
	Ring-necked duck Canvas-back	1,000	\$/13	21,000	3/27	500			oung Produced	50,000
	Scaup	50 500	3/19 3/13	500 18,000	3/27 3/27	40 300	4/10	sentati		1,000
	Golden-eye	12	1/7	2,500	1/26	20	3/30	10% 01		140,000 2,500
	Buffle-head Ruddy duck	a edt 25 ing	3/13	25	3/27	10 1 5imua	4/18 00	Estimat	otalo	150
	Ruddy duck	tions, depe	\$/25	Masa 150 B	5/29	s me s than grational	14/19 <sub>(80</sub>	may or nature		5,000
	that the <u>Summaries</u>	destrable	ai fl .b		period sh		le to the	applicab	Only colum	etoN
IV.	Coot:	analysia o 2	3/13	25,000	(over)	100	4/29	reful atter	receive ca form.	100,000

Total	Production:				SUMMARIES
G	eese		.fo.April,		Total waterfowl usage during period
d (6) Total	Jucks	πυαΣ		(4 Last S	Peak waterfowl numbers 235,115
	oots	Brood	Date		Areas used by concentrations
			4/26	74	Principal nesting areas this season <b>Pools 13,10,9,8,7</b>
1,680			4/10		Reported by
					White-fronted goose
100			6/20	68 .	INSTRUCTIONS OF THE DESCENT OF THE D
(1) (2)	Species: First Seen:	reporti given f	ing period to those s rst refuge	l should be species of e record fo	isted on form, other species occurring on refuge during the added in appropriate spaces. Special attention should be local and National significance. In the species during the season concerned in the reporting n. This column does not apply to resident species.
(3)	Peak Concentra- tion:	The gre		ber of the	species present in a limited interval of time.
(4)	Last Seen:	The las period.	st refuge	record for	the species during the season concerned in the reporting
(5)	Young Produced:	sentati	ve breedi	ng areas.	produced based on observations and actual counts on repre- Brood counts should be made on two or more areas aggregating t. Estimates having no basis in fact should be omitted.
(6)	Total:	may or	may not b		the species using the refuge <u>during the period</u> . This figure n that used for peak concentrations, depending upon the movement.
Not	-				; period should be used. It is desirable that the <u>Summaries</u> ta are necessarily based on an analysis of the rest of the

3-1751 (3) Form NR-1A (Nov. 1945) Refuge	Upper Mi	ssissippi	(other		TRDS terfowl) of	RY	.to	97 <b>:11,</b> 1	(1) 94 <b>6</b> ba	
(1) Species	(2 First		(3) Peak Nur		(4 Last			(5) Productio		(6) 
Common Name	Number	Date	Number	Date	Number	Date	Number <u>Colonies</u>	Total # <u>Nests</u>	Total Young	Estimated Number
I. <u>Water and Marsh Birds</u> : Amorican egret White pelican	1 None r	4/14 eported d	Late sum wring peri		dents				twk owl	Duck h Horned Magpie Raven Crow
		leported								
II. <u>Shorebirds, Gulls and</u> <u>Terns</u> :	addition ig period species hes to Ci- tradritic s)	etc. In reporti to these (Gavilfor <u>Forns</u> (Ch	. 1.U. Chec "tern", during th d be given th Birds Gills and gons (Cul	"seagull for forge on shoul for and <u>Ma</u>	is found torms as marring o l strenti I Wate		blovA		, the i bea	2 (1)
	oerned	000 00589	for the s		d for the		rirst rori		ret Sven	(2) E
.asil	terval of	inited in	ent in a l	serd ser	the spec	to rédmu	greatest n		ak Numbel	ঀ (८)
	oncerned.		during the		for the	brooer e	last refug	The	ist Seen;	1 (4)
	isutos bu	a anoitara	on obser		nuë produ	er of yo	nated numb	Esti	noi i oubo	(ā) P
	iag the p	unp adnje	sing the r	(over)	of the s	1 number	nated tota	Esti	tal	r (a)

	(1)	(2)	(3)	(4)	(5)	(6) 1-6
III.	Doves and Pigeons: Mourning dove White-winged dove	.11 m (	Alon waterfow]) Nonths of Jammers	daning)	in the second	rorm nn-1A (Nov. 1945) Refuge
	(d) (d) Tota	(5) eeuPreduct	(4) Sera Last S	(3) sen Paak Nus	(2) First S	(1) Species
IV.	Predaceous Birds: Golden eagle	DateColoniesVests	Date Jusher	Date	Tadauk	
	Duck hawk Horned owl Magpie Raven Crow		nar rosidana d	with late and	is: Idene reg	1. Water and Marab Sire American agree Muta pelican
	CI OW					
				Reported	ł by	
	(1) Species:	order. Avoid genera form, other species priate spaces. Spec	l terms as "seagull occurring on refuge ial attention shoul s: I. <u>Water and Ma</u> II. <u>Shorebirds,</u> III. <u>Doves and Pi</u>	.O.U. Checklist, ", "tern", etc. during the repor d be given to those	In addition to ting period show se species of lo ormes to Ciconi: Charadriiformes nes) es, Strigiformes	uld be added in appro- ocal and National iformes and Gruiiformes) )
	(2) First Seen:	The first refuge rec	ord for the species	for the season c		
	(3) Peak Numbers:	The greatest number	of the species pres	ent in a limited	interval of tim	e.
	(4) Last Seen:	The last refuge reco	rd for the species	during the season	concerned.	
	(5) Production:	Estimated number of ;	young produced base	d on observations	and actual cou	nts.
	(6) Total:	Estimated total numb	er of the species v	sing the refuge <u>d</u>	uring the perio	d concerned.

### 3-1750 Form NR-1

(Nov. 1945)

х.

# WATERFOWL

**Cotal Production:** 

# Refuge cover Mississippi Poole Months of January to April, 194.

	(1) Species	(2 First S		(3 Peak Conc		(4 Last S		( Young P	5) roduced	(6) Total
	Common Name	Number	Date	Number	Date	<u>Number</u>	Date	Broods Seen	Estimated Total	Estimated for Period
Ι.	<u>Swans</u> : Whistling swan	ihis sea <mark>son</mark>	asers gi	ipal nesti	Princ			4		10
II.	Geese: Canada goose Cackling goose Brant White-fronted goose	25	<b>\$\1</b>	<b>85</b> Repo	2/19	25	3/4			139
	Snow goose Blue goose	50	1/2	<b>55</b>	2/19	55	2/19			105
III.	edt gninub eguler ed bluode noitmet Ducks:	scourring of Special at	spaces.	orm, other appropriate	added in		ng period	In add report:	pecies:	(1)
	Mallard Black duck	5,000	gni <b>S</b>	200,000	2/27	pectes of 1 25 record for	4/17	given '	lirst Seen:	<b>509, 260</b>
	Gadwall Baldpate Pintail	to concerned to cesiden 07	2/17 1/24	25,000 309,000	2/27 2/27	number seen <b>3</b> bei <sup>9</sup> of the	3/27 4/8	period,	eak Concentr	45,000 396,500
	Green-winged teal Blue-winged teal	50	4/3	5,000	4/16	200	4/30		ion:	10,990
	Cinnamon teal Wood duck Red head Ring-necked duck	concerned 20	2/27 od	4,000	3/12		REAL OF TO	and a seal	<mark>a</mark> st Seen:	5,000
	Canvas-back Scaup Golden-eye	300 25 12 12	3/20 1/2	300 5,000	3/20 2/19	50 30 51 10 10 30	3/28 4/30	d: Estimat sentati 10% of	oung Produce	350 10,700
	Buffle-head Ruddy duck	uring the p tions, depe	rest in the second s	s using the d for peak	that use		nay not b	may or	etal:	r, (Ə)
TV	that the <u>Summaries</u> f the rest of the tooD		d. It is	ould be use		reporting e these dat		ns applicab reful atter		Note:

Tot	al Production:			SUMMARIES	W				60 NR-1 . 1945)	
	Geese		of	Total	waterfowl	usage du	ring period.	1,277,945		
	Ducks	Youn	(4) Last Seen	Peak	waterfowl r	numbers	(2)	939, 410	906	
itimate				Areas	used by co	oncentrat	ions	Pool 26	0000	
				Paine	inol postir		thic coscor	ав зиал	<u>Swans</u> : Whistli	-I.
				FIIIC	ipai nestii	ig alleas				
			1 - X - 8	02/2	Repoi	rted by		goosen g goose		
								ronted goose		
	12-11	at/o	88	INSTRUCTIO	INS	8/12-	08		<del>Snow go</del> Blue go	
(1)	Species:	reporting per	to the birds li riod should be se species of l	added in	appropriate	e spaces.	Special at	tention shoul		.III
(2)	First Seen:		fuge record for the number seer					t species.	ting backing	
(3)	Peak Concentra- tion:	The greatest	number of the	species p		a limited		time. Iset begni Iset begn		
(4)	Last Seen:	The last refu period.	ige record for	the speci	es during t	the seasc	on concerned	in the report		
(5)	Young Produced:	sentative bre	nber of young p eding areas. reeding habitat	Brood cou	nts should	be made	on two or mo	counts on re re areas aggr	pre- egating	
(6)	Total:	may or may no	tal number of t ot be more than e migrational n	that use						
N			the reporting since these da						the	IV. 2

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3-1751 Form NR-1A (Nov. 1945) RefugeLour	r Mississi	ppi Pool	(other		BIRDS terfowl) of	ary.	(S) to <b>Apri</b>	<b>.</b>	94. <b>6</b>	
(1) Species	(2 First		(3 Peak Nur		(4 Last	1) Seen		(5) Productio	n	(6) Total
Common Name	Number	Date	Number	Date	Number	Date	Number Colonies	Total # <u>Nests</u>	Total Young	Estimated Number
I. <u>Water and Marsh Birds</u> : American egret	1	3/29	7	4/18		esidents			Swi Owl	Duck h Hondel 8 Magnie Raven
			1.14							
II. <u>Shorebirds, Gulls and</u> <u>Terns</u> :		etc. In s report! to those	. D.U. Obac "ters", Maring M d be given	TRUCTION A edi, ni Seaguli Sauter n Suber n Suber n Suber n Suber n	an found ferme as curring o	ci namen generel sectes oc Specia Groupal	te spaces	eaU ebro mroî ariq aria	289/000	
	aradrii fo a	(Ch imbiforme	2 119 200 2 2008 (001 1 20 (Falo		II. Shor III. Dove					
	Serned	esson con	e edit tob		edt tot b	nge recor	len tanti	off	List Seen	
	terval of	imited in	is ni to		the spec	To redmun	greatest	edi ist	ALK Numbe	
	, benzeono	session o	turing the		for the	ge record	last refu	The	ast Seen:	
	nd actual	vations a	aedo no b		ung produ	ser of yo	nated num	Esti	rodustion	
	ing the p	ub egule	a off gale	(over)	of the s	nedmun Is	tot betan	Es (1	; Lato	

	(1)	(2)	(3		(4	1)		(5)		(6)
III.	Doves and Pigeons: Mourning dove	to April.	ns rforl) f. January		MIG: (other	aloof Iq	i teo ine fil		uleA	
	White-winged dove	(5) Produc	(\$) Last Spen		(3) Peak Num		(2) First S		(1) becles	2
IV.	Predaceous Birds: Golden eagle	Number Total Cilogies Vest	Number Date		reduul		тедфий		email. uon	
	Duck hawk Horned owl							:abilt	den sM bi	
	Magpie Raven Crow		ramer recklorite		-				turge e	
				-						
						Reporte	d by			
	(1) Species:	order. Avoid form, other sp priate spaces. significance.	t names as found general terms as ecies occurring Special atten Groups: I. <u>Wa</u> II. <u>Sha</u> III. <u>Do</u> IV. <u>Pre</u>	s "sea <mark>g</mark> ul on refug tion shou ter and M prebirds, ves and P edaceous	A.O.U. Che l", "tern" e during ld be give <u>arsh Birds</u> <u>Gulls and</u> <u>igeons</u> (Co <u>Birds</u> (Fa.	", etc. the repor en to tho <u>s</u> (Gaviif <u>d Terns</u> ( olumbifor lconiform	In additi ting peri se specie ormes to Charadrii mes) es, Strig	on to the od should s of loca Ciconiifo formes) iformes a Pass	birds lis be added 1 and Nat rmes and 0	sted on in appro- ional Gruiiformes) eous
	(2) First Seen:	The first refu	ge record for the	he specie	s for the	season c	oncerned.			
	(3) Peak Numbers:	The greatest n	umber of the sp	ecies pre	sent in a	limited	interval	of time.		
	(4) Last Seen:	The last refug	e record for th	e species	during t	he season	concerne	d.		
	(5) Production:	Estimated numb	er of young pro	duced bas	ed on obs	ervations	and actu	al counts	•	
	(6) Total:	Estimated tota	l number of the	species	using the	refuge <u>c</u>	luring the	period o	oncerned.	

## Form NR-2

UPLAND GAME BIRDS

Refuge Upper Mastanippt

.

Months of January to April , 1946

1613

(1) Species	(2) Density	in rem species	(3) Young Produced	(4) Sex Ratio	R	(5) emovals	oEi A	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For R <del>e-</del> stocking For	Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Ring-necked pheasant Bob-white quail Ruffed grouse	5000 5000	22.2 14	f enn frad adet f aloca a er agri algene av h ortaalool	arvertice ag bid type av Aldienal Alteration atomatice atomatice atomatice atomatice	tie, stan there to c c c c c c c	to rdwod to to be active be active to coust to total o	an an an an an an	175 350 60	
	con Lentos bos atal	(avreed	o nog biss	produced b	oone editri	t to te	dind dist	h betenled n betenled	(3) TOURS PRODUCED
	. etc. Indiade dat	adrinense	tiq , miland	Mix of all	entri Idal			This column other speci	TOTTAR XRE (A)
	be report periods.	a patra	b beve more	ach dategory	at	inducer	Ind	Indtoste to	(5) ARMONALSI
	rt partod. This an foge during veriate				an - Lq a			Setimated t	(0) TOTAL
* onto			ben mittel officients	sermine pope dormation ne				Indicate me include oth	EXPLANEN (F)
			sede -	r ed bluods i	078		4 M	add od alda	* Only ediums applied e
tert									

#### 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.

1613

Form NR-2

UPLAND GAME BIRDS

1613

Refuge Lover Masianipol Peels

.

Months of January to April , 1946

(3)(4)(5) (7) (2) (6) (1)Sex Young Species Density Removals Total Remarks Ratio Produced Number broods obs'v'd. Estimated Total For Research For Re-stocking Estimated Hunting number Pertinent information not Acres specifically requested. using Cover types, total per List introductions here. Common Name acreage of habitat Refuge Bird Percentage Ring-nooked phoasast Marginal marsh 500 Bob-white quail Marginal margh 5.000 The Seal I dell and inches has another and soften one #Pdaz hilw of vill bard by, pleasable, etc. Include dat - being droger ad antit b menes proposed of the second want the refuse during the regurt partod. This as rodmu birds sile those signative into the refuge during carbida drift. used to determine population and area of wared in enrice, ndieste sebod reinent information and appointly represented. BU TR perfod covered should be t and aldebliggs assold the the

#### 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-4

SMALL MAMMALS

April 30, 194

Refuge Tipper Miasiasippi

mistrate, beaver, com, mink, (2) 5 3500 Lord a00 a berablan(3) seloege dose estimated to(1) population o (1)(5)Species Density Removals Disposition of Fur Total him . In ed Share Trapping Refuge Shipped Destroy Donated Popula-Predator Control ch Fur Harvest stocking rs Hunting Refuge tion Cover Types & Total Re For Resear Trappe: Share Refuge Income Acres Total Furs S Furs Furs usen old at actication to Per For Permit Common Name Acreage of Habitat Animal Number Tanlaght 50,000 10 5,000 9808 particularly Minic 50,000 16.66 3.000 eto.) Detalla . editi Beaver 20,000 22 900 Density to on the relies munacer as to COT PR Lody hidre obno templat add 1 1 1 at wood segnado drub'ilingis tor be de stould be detailed enough to furnish .eruitig farenes and erspace of Re s. reverting arricalture land, bottom locari and type symbols litered in Prath pr be used stars hoastble. Figures subblun titan put counts on representative io Lautas 17775-1 bible and and a se of store a state or areas should be S. Carl Kenne shou botsolbe under each date gory removed since invil 30 of him Laind edu edaolba RF ROV LS : (8)emonals not failing under heading listed, rocts ALEG TRAY MOOVE pergib manber, Granger's share, and refuge share and bequest-erane all OF FIRE DISPOSITION (2)adm on amount latos and bus TENTER OJ BROULD nedman edd as and furg taken or Straige by spectes, OBUIE sach species destroyed became DAT LAST or damaged Lunds B **REMARKS**: 1615

Indicate inventory method(s) used, size of sample area(s), introductions, an any other pertinent information not specifically requested.

STR AND

# INSTRUCTIONS

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (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, bottom land 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) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.

(4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of the primness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

#### (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS! Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

MINK TRAPPING DATA -- 1945-46 SEASON Seasons: Minnesota-12/1/45-1/29/46; Wisconsin-12/1/45-2/28/46; Illinois-12/1/45-1/15/56.

COTTEN	NO OF	P		A Property of Aller	-										
COUNTY	NO.OF	MINK	TRAPPERS		TOTAL	REFUGE	NO.	TRAP	AVERAGE	AVERAGE	AVERAGE	AVERAGE	AVERAGE COS		TOTAL
	REPORTS	TAKEN	TAKING MINK	PRICE	PRICE	TCTAL FUR		TAG**	TRAPS PER		CATCH PER	INCOME PER		TAGS	COST
	0.7	74		00 10	20.4.00	VALUE	USED*		MINK**	TRAPPER**	TRAPPER**				TAGS
Wabasha	21	34	12	27.17	924.00	924.00	285	28.50	8.3	23.8	2.8	77.00	2.38	285	28.50
Winona	26	64	19	29.92	1915.10		450	45.00	7.0	23.7	3.3	100.79	2.37	450	45.00
Houston	30	89	23	24.78	2205.98	2205.98	520	52.00	5.8	22.6	3.8	95.91	2.26	520	52.00
	XXXX				XXXX	XXXXX	XXX	XXX	XXXXX	XXXXXX	XXXXX	And in case of the local data and the local data an	XXXXXX		5.00
NO TRAFPING	x x x x	XXX			XXXX		XXX	XXX:	XXXXX	XXXXXX	XXXXX	XXXXX:	x x x z z m	370	37.00
TOTAL FOR MINNESOTA	77	187	54	26.98	5045.08	5045.08	1255	125.50	6.7	23.2	3.4	93.42	2.32	1675	167.50
Buffalo	24	68	16	26.55	1806.00	1806.00	345	34.50	5.0	21.6	4.2	112.87	2.16	345	34.50
Trempealeau	9	19	5	29.87	550.60	550.60	64	6.40	3.3	12.8	3.8	110.12	1.28	64	6.40
Crawford	24	150	20	22.19	3329.83	3329.83	440	44.00	2.9	22.4	7.5	166.49	2.24	440	44.00
Grant	19*	69	13	20.92	1.443.49	1443.49	229	22.90	3.3	17.6	5.3	111.03	1.76	229	22.90
LaCrosse	54*	339	45	26.02	8823.70	8823.70	1193	119.30	3.5	26.5	7.5	196.08	2.65	1193	119.30
Vernon	21*	138	16	24.64	3400.77	3400.77	317	31.70	2.2	19.8	8.6	212.54	1.98	317	31.70
NO REPORT	XXXX	XXX	ххххх	xxxx	XXXX	xxxxx	XXX	XXX	and the state of the	XXXXXX	XXXXX	and the second se	XXXXXXX		24.10
NO TRAPPING	xxx	XXX	XXXXX	XXXX	xxxx	XXXXX	XXX	xxx	XXXXX	XXXXXX	XXXXX	XXXXX	XXXXXXX	x 646	64.60
TOTAL FOR WISCONSIN	15 <b>1</b> *	783	115	24.71	19354.39	19354.39	2588	258.80	3.3	22.6	6.8	168.29	2.26	3475	347.50
Carroll	l	0	0	0.00	0.00	0.00	0	0.00					an: 110		
Whiteside	2	5	1	20.00	100.00	100.00	20	2.00	4.0	20.0	5.0	100.00	2.00	20	2.00
NO REPORT	хххх	XXX	XXXXX	XXXX	XXXX	xxxxx	XXX	XXXX	XXXX	XXXXXX	XXXXX	XXXXX	x x <b>x x x x</b> :	x 20	2.00
NO TRAPPING	XXXX	XXX	XXXXX	xxxx	XXXX	XXXXX	xxx	XXXX	XXXX	XXXXXX	XXXXX	XXXXXX	x x x x x x :	x 20	2.00
TOTAL FOR ILLINOIS	3	5	1	20.00	100.00	100.00	20	2.00	4.0	20.0	5.00	100.00	2.00	60	6.00
TOTAL FOR REFUCE	231	975	170	25.12 2	24499.47	24499.47	3863	386.30	3.96	22.7	5.73	144.11	2.27	5210	521.00
STÀTE	AVERAC	Æ	TOTAL	REFUGE	TOTAL	MINK	PERMI	TTS 1	PAPPING	UNUSED	NO REPOR	T UNCLAI	MED MAIL F	ERCENTAGE O	FRETURN
	PRICE	C	PRICE	FUR VA	LUE	TAKEN	ISSU	ED H	REPORTS	PERMITS**	SUBMITTE	D DECEAS	SED, ETC. OI	F REPORTS OI	N PERMITS
Minnesota	26.98	3	5045.08	5045.	.08	187	80	)	79	23	3		0	96.2	5
Wisconsin	24.73		9354.39	19354.	States and an extension of the second second second	783	15		143	37	12		3	90.3	the second se
Illinois	20.00		100.00	100.	the second s	5			3	2	2		0	60.00	and the second
Refuge Total	25.13		4499.47	24499.	The second s	975	240	)	223	62	17		3	91.6	
100 100 100 CL	-//			E-T-T//0			be TV		/					/=	

\* 8 of these reports represent a trapper reporting separately for activities in 2 or more counties.

\*\* All reports indicating no trapping or caught nothing classed as "no trapping" and excluded in tabulations. \*\*\* All reports indicating no trapping or caught nothing included in this category.

MINIC TRAFFERIO DATA -- 1945-46 BEASCH

Secons: Minnescta-12/1/45-1/29/46; Wisconsin-12/1/45-2/28/46; Illishois-12/1/45-1

Davelly		aVSRA48	2500 Ste	VA TART	.071	REFERE	LALOT	COASEVA .	130-141		10.01	X MUO
1.1001.	DAUCH PER							ZBIST				
					(BED)				11.11			
77.0	8.8	8.58	8.3	28.50	285	924.00	924.00	27.17	2.2		21 26	adason a
100.7	3.3	23.7	0.7	45.00	450	1915.10	1915.10	29,92	2.9	54	26	arto 1.
95.9	3.8	82.6	8.8	52,00	520	2205.98	2205.98	24.78	23	63	30	ouston
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44.1	5.75	22.7	39.7	386.30	3863	24499.47	FA. 9	DIRECTON *	170	975	231	
144.1	5.75	22.7	36.2	386.30	3863	24499.47	5A. 2	DRECTOR A	170	975	231	
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\* 3 of those reports represent trappage report and here and set wittee in 2 or more counties. \*\* All reports indicating no treping or coler, adding and an in trapping and excluded in tabulations. \*\*\* All reports indicating no treping or countly that a set in this category.