Planning and Accomplishment Narrative
Upper Mississippi River National Wildlife Refuge
Lansing, Iowa

Name	Personnel Title
Douglas M. Mullen	District Refuge Manager

Approved, Regional Office

_____
Signature

_____
Title

_____
Date

Submitted by:

Douglas M. Mullen
Signature

District Refuge Manager
Title

January 10, 1974
Date

PART I. REFUGE HIGHLIGHT STATEMENT - LANSING, IOWA

Temperatures averaged much above normal for most of the period, with only April and May averaging slightly below normal. March was very warm, with only one hard freeze during the month. Heavy rains and snow melt in March and again in April caused massive ice jams on the Upper Iowa River within the Refuge boundary. On April 9 a severe blizzard struck the area with 60 MPH winds and 15 inches of snow.

The river crested on March 21 at 8.50 feet above normal and 3.04 feet above last years peak. Heavy rains in April, May, and June caused three additional crests, and the river did not return to normal until June 27.

Waterfowl food supplies and availability were only fair due to the high water levels. Ground nesting waterfowl were hard pressed to find nesting cover, and most muskrats had their first litters in tree crotches or on floating mats of vegetation.

The Spring waterfowl migration peaked on April 21, two weeks later than last year. peak populations were down 17%, but total days use increased by 22%. The great blue heron - great egret rookery census was taken in February. Active nests increased from 814 in 1971 to 978 in 1972, or 20%. The northern bald eagle nest located in the Reno bottoms portion of the District was active again this year, but no young were fledged.

Iowa held a Spring muskrat trapping season on the Refuge from March 17 through April 8. Trappers reported taking 6,000 muskrats. Wisconsin held a January 20 through February 11 beaver trapping season. Trappers took 102 beaver.

Recreational use totaled 83,200 visits for the 6 month period, up 5% from 1972. Fishing accounted for most of the increase.

UM-1 Rev.
1964

B. Habitat Conditions
1. Water

POOL LEVELS

Pool No. 9 at Lansing, Iowa Normal: 20.00

MONTH	HIGHEST LEVEL	LOWEST LEVEL	AVERAGE LEVEL	DATES OF HIGH LEVEL	DATES OF LOW LEVEL
January	21.58	20.28	20.84	24	12
February	21.08	19.90	20.19	4	17
March	28.50	19.85	24.28	21	3
April	24.04	21.34	22.66	22	14
May	25.45	21.18	23.05	9	26
June	23.50	19.78	21.35	2	28
July	20.30	19.50	20.01	31	13
August	20.62	19.65	20.07	7	30,31
September	20.62	19.50	20.06	29	16
October	21.38	19.58	20.62	22,23,24	10
November	20.64	19.58	20.22	30	11
December	20.70	19.92	20.30	1	9

I. GENERAL

A. Weather Conditions

Weather data from Lock & Dam #9, Lynxville, Wisconsin.

MONTH	Precipitation			Temperature			
	Total	Normal	Snowfall	Max.	Min.	Mean Av.	Normal Mean Av.
January	1.03	1.06	4.00	54	-11	22.3	19.9
February	1.00	1.04	3.50	47	-9	26.3	22.5
March	3.96	2.16		66	22	42.2	33.1
April	7.72	2.59	14.50	71	22	46.52	48.1
May	6.84	3.39		79	33	56.2	59.9
June	3.22	5.01		91	54	71.0	69.6
July	2.35	3.86		94	57	74.3	74.4
August	4.56	4.11		93	53	73.4	72.1
September	4.27	3.61		89	38	62.7	63.7
October	1.48	1.93		80	33	57.2	52.1
November	1.61	1.77		62	16	37.4	36.1
December	1.84	1.03	4.50	59	-12	22.3	23.8
Annual Totals	39.88	31.56	26.50	annual extremes 94	-12	annual averages 49.3	47.94

UM-3

COMPARISON OF PEAK NUMBERS, PEAK DATES, AND TOTAL DAYS USE
Refuge: Upper Mississippi, Lansing, Iowa
Period: September through December

Species	Peak Numbers 1972	Peak Numbers 1973	Percent of Change Decrease	Percent of Change Increase	Peak Dates* 1972	Peak Dates* 1973	TOTAL DUCK DAYS USE 1972	TOTAL DUCK DAYS USE 1973	Percent of Change Decrease	Percent of Change Increase
Mallard	16550	12000	27		10/7	10/6	567750	613200		8
Black	2450	2000	18		10/14	10/13	83150	76650	8	
Gadwall	500	400	20		10/7	9/29	23100	21070	9	
Baldpate	29950	30000			10/7	10/13	878550	900200		2
Pintail	2300	1000	56		10/21	9/29	74000	42700	42	
G.w. teal	1850	4000		116	10/7	10/6	75400	96250		28
B.w. teal	5900	8000		36	9/9	9/29	188700	248150		31
Shoveler	400	300	25		10/7	9/22	17850	11970	33	
Wood duck	10000	15000		50	9/23	10/6	334150	582400		74
Redhead	2350	2000	15		11/11	10/20	75200	30940	59	
Ring-neck	2900	10000		245	10/28	11/17	96500	218400		126
Canvasback	15950	3000	81		11/11	11/24	330250	65800	80	
L. scaup	43750	15000	66		11/11	10/27	989350	442820	55	
Golden-eye	2250	5000		122	11/25	11/17	66500	66500		
Bufflehead	950	500	47		11/25	11/3	29750	19600	34	
Ruddy	200	50	75		10/28	10/6	4300	2030	53	
Mergansers	600	700		16	12/2	9/15	12450	21350		71
Old squaw										
Scoters	100		100		11/11		950		100	
Unident.										
TOTALS	~~138950~~	~~108950~~	~~21~~		10/7-~~11/25~~	10/6-~~11/17~~	3847900	3460030	10	

*Week ending.

Comments: 73,875 64,650 12

UM-3A

COMPARISON OF PEAK NUMBERS, PEAK DATES, AND TOTAL DAYS USE
Refuge: Upper Mississippi, Lansing, Iowa
Period: January through April

Species	Peak Numbers 1972	Peak Numbers 1973	Per cent of Change Decrease	Per cent of Change Increase	Peak Dates* 1972	Peak Dates* 1973	TOTAL DAYS USE 1972	TOTAL DAYS USE 1973	Per cent of Change Decrease	Per cent of Change Increase
Canada geese (lg.)	85	100		18	3/25	3/10	1700	1960		15
Cackling										
White-fronted	37		100		4/8		250		100	
Snow	1	10		900	3/25	3/17	5	217		4240
Blue										
TOTALS	~~123~~ 103	110	~~19~~	6	~~3/25~~ 4/8	~~3/10~~ 3/17	1955	2177		11

Comments:

Coot	7900	8000		1	4/15	3/31	173550	178570		3
Florida gallinule	60	60			4/22	4/21	840	840		

*Week Ending

Comments:

UM-3A

COMPARISON OF PEAK NUMBERS, PEAK DATES, AND TOTAL DAYS USE
Refuge: Upper Mississppi, Lansing, Iowa
Period: May through August

Species	Peak Numbers 1972	Peak Numbers 1973	Per cent of Change Decrease	Per cent of Change Increase	Peak Dates* 1972	Peak Dates* 1973	TOTAL DAYS USE 1972	TOTAL DAYS USE 1973	Per cent of Change Decrease	Per cent of Change Increase
Canada geese (lg.)	None	None								
Cackling										
White-fronted										
Snow										
Blue										
TOTALS										

Comments:

Coot	2400	2500		4	5/6	5/5	63600	70000		10
Florida gallinule	200	300		50	8/19	8/18	21600	38500		78

Comments: * Week Ending

UM-3A

COMPARISON OF PEAK NUMBERS, PEAK DATES, AND TOTAL DAYS USE
Refuge: Upper Mississippi, Lansing, Iowa
Period: September through December

Species	Peak Numbers 1972	Peak Numbers 1973	Per cent of Change Decrease	Per cent of Change Increase	Peak Dates* 1972	Peak Dates* 1973	TOTAL DAYS USE 1972	TOTAL DAYS USE 1973	Per cent of Change Decrease	Per cent of Change Increase
Canada geese (lg.)	90	300 ~~200~~		122	10/7	10/27	1500	8260		450
Cackling										
White-fronted										
Snow	4	100		2400	10/28	10/16	40	2170		5325
Blue										
TOTALS	~~94~~ 90	~~300~~ 400		~~219~~ 344	10/7- ~~10/28~~	~~10/16~~ ~~10/27~~ 10/6	1540	10430		577

Comments:

Coot	58750	40000	32		10/7	10/6	1898600	1033200	46	
Florida gallinule	250	500		100	9/9	9/8	6370	11350		78

Comments:

* Week Ending

PERCENTAGE COMPOSITION BY SPECIES OF TOTAL DUCK DAY USE

Refuge: Upper Mississippi, Lansing, Iowa
Period: January through April

Species	Percent of Total Duck Day Use					
	1971		1972		1973	
	% of Use	Order	% of Use	Order	% of Use	Order
Mallard	19.3	2	12.8	2	15.4	2
Black duck	.6	9	1.0	14	1.0	15
Gadwall	.1	14	.5	16	.1	17
Baldpate	4.2	4	4.1	7	3.8	7
Pintail	.5	10	1.1	13	2.0	12
G.w. teal	.1	15	1.6	12	1.1	14
B.w. teal	1.3	9	4.2	6	2.5	10
Shoveler	.4	11	3.3	9	2.1	11
Wood duck	3.2	7	2.4	10	4.6	6
Redhead	.1	13	2.0	11	2.9	9
Ring-neck	4.2	3	5.4	4	6.4	4
Canvasback	4.2	5	10.5	3	7.7	3
Lesser scaup	55.7	1	41.8	1	40.0	1
Goldeneye	2.4	8	3.5	8	3.0	8
Bufflehead	.2	12	.6	15	1.9	13
Ruddy	.1	16	.1	17	.5	16
Mergansers	3.4	6	5.1	5	5.0	5
Old squaw						
Scoter						

Comments:

PERCENTAGE COMPOSITION BY SPECIES OF TOTAL DUCK DAY USE

Refuge: Upper Mississippi, Lansing, Iowa
Period: May through August

Species	Percent of Total Duck Day Use					
	1971		1972		1973	
	% of Use	Order	% of Use	Order	% of Use	Order
Mallard	25.91	2	16.22	3	11.87	4
Black duck	.49	7	.72	8	.69	9
Gadwall			.01	15		
Baldpate	.77	6	2.75	5	1.74	6
Pintail	.14	8	.39	10	.43	10
G.W. teal			1.94	6	.83	8
B.W. teal	8.05	3	20.85	2	17.49	2
Shoveler	.01	10	.45	9	1.21	7
Wood duck	61.51	1	47.93	1	47.73	1
Redhead			.03	14	.06	14
Ring-neck	.11	9	.03	13	.16	11
Canvasback			.19	11	.16	12
Lesser scaup	.84	5	7.35	4	12.09	3
Goldeneye					.01	16
Bufflehead			.04	12	.10	13
Ruddy			.01	16	.06	15
Mergansers	2.17	4	1.08	7	5.37	5
Old squaw						
Scoter			.01	17		

Comments:

PERCENTAGE COMPOSITION BY SPECIES OF TOTAL DUCK DAY USE
Refuge: Upper Mississippi, Lansing, Iowa
Period: September through December

Species	Percent of total duck day use					
	1971		1972		1973	
	% of use	Order	% of use	Order	% of use	Order
Mallard	15.05	3	14.75	3	17.72	2
Black duck	.46	12	2.16	8	2.21	8
Gadwall	.13	15	.60	14	.61	14
Baldpate	24.60	2	22.83	2	26.07	1
Pintail	.85	11	1.92	11	1.23	11
G.w.teal	1.39	9	1.96	9	2.78	7
B.w.teal	3.06	7	4.90	6	7.17	5
Shoveler	.07	16	.46	15	.34	16
Wood duck	5.07	5	8.68	4	16.83	3
Redhead	.28	14	1.95	10	.89	12
Ring-neck	4.86	6	2.51	7	6.31	6
Canvasback	8.12	4	8.58	5	1.90	10
Lesser scaup	32.49	1	25.73	1	12.80	4
Golden-eye	1.36	10	1.73	12	1.92	9
Bufflehead	.44	13	.77	13	.56	15
Ruddy	.04	17	.12	17	.05	17
Mergansers	1.73	8	.32	16	.61	13
Old squaw						
Scoters			.03	18		

Comments:

WEEKLY DUCK POPULATIONS AND PEAK NUMBERS

Refuge: Upper Mississippi, Lansing, Iowa
Period: January through April

Week of Period:	1969	1970	1971	1972	1973
1	50	100	100	125	40
2	50	100	100	100	40
3	50	100	100	100	40
4	50	100	100	100	40
5	50	100	100	165	40
6	50	100	100	165	40
7	50	100	105	165	140
8	50	110	130	165	270
9	100	150	250	165	710
10	155	1085	250	175	8530
11	200	2695	1010	175	13880
12	2520	12150	3710	12000	30550
13	35950	34545	25590	42630	*45550
14	39780	33260	*59385	*66200	35450
15	*43280	*36430	29885	28645	36010
16	18450	27320	7085	24945	32200
17	10430	6020	4598	10200	24250
18					
TOTAL DAYS USE	792645	1080930	903496	1303440	1594460

* Indicates peak concentration

COMMENTS:

WEEKLY DUCK POPULATIONS AND PEAK NUMBERS

Refuge: Upper Mississippi, Lansing, Iowa
Period: May through August

Week of Period:	19 69	19 70	19 71	19 72	19 73
1	2190	2770	2730	9400	*16660
2	1870	1935	2045	5625	5620
3	1740	1560	1920	3430	4070
4	1640	1560	1920	3160	3540
5	1640	1560	1920	3090	3420
6	1640	1560	1920	3140	3310
7	1640	1560	1920	3135	3310
8	1640	1560	1920	3135	3310
9	1640	1560	1920	3135	3310
10	1640	1560	1920	3135	3310
11	5060	4300	6930	3135	3310
12	5060	4800	6930	3135	3310
13	5060	4800	6930	3135	3310
14	5060	4850	6930	3135	3310
15	5060	4850	7230	3285	3440
16	5260	5690	7500	5640	5890
17	*10450	*7950	*8850	8950	9100
18				*15820	14500
TOTAL DAYS USE	415530	380975	500045	606155	672210

* Indicates peak concentration

COMMENTS:

WEEKLY DUCK POPULATIONS AND PEAK NUMBERS

Refuge: Upper Mississippi, Lansing, Iowa
Period: September through December

Week of Period:	19 69	19 70	19 71	19 72	19 73
1	10550	6825	9325	22540	22400
2	11550	9125	11625	34300	32410
3	12380	9625	10850	43130	37650
4	13975	12275	14625	52130	50040
5	16685	23275	29700	66600	*64650
6	22600	24925	37360	47040	57550
7	20950	42465	*45700	41410	58650
8	26350	44575	35125	39180	46100
9	*28150	*46525	35675	54315	28300
10	23920	32765	38025	*73875	18830
11	25170	19435	39650	29540	32660
12	14825	9370	41750	35870	17800
13	1610	5350	14125	9580	15200
14	1140	5750	8125	70	9100
15	1200	1255	9190	40	2350
16	120	270	7035	40	550
17	100	100	1125	40	50
18					
TOTAL DAYS USE	1508470	1931665	2724470	3847900	3460030 [redacted]

* Indicates peak concentration

COMMENTS:

1965
UM-9A

Refuge: Upper Mississippi NWR Lansing, Iowa
Period: **Calendar Year** 1973

B. Upland Game Birds

SPECIES	POPULATION JAN. 1	YOUNG PRODUCED	NUMBER STOCKED	GREATEST NO. PRESENT	TAKE	LOSS	POPULATION DEC. 31
Ring-necked Pheasant	5	5		10		5	5
Ruffed grouse	60	60		100	20	20	60
Bob-white quail	None observed since 1969						
Gray partridge	None						
Wild turkey *	20			75			50

* Transient population

C. Big Game Animals (White-tailed deer)*

POPULATION JAN. 1	YOUNG PRODUCED	GREATEST NO. PRESENT	HUNTER TAKE	LOSSES	POPULATION DEC. 31
80	30	100	20	10	70

* Transient population

UM-
11A

VI. PUBLIC RELATIONS

A. Recreational Use

1973	FISHING	MISCEL-LANEOUS	HUNTING			TOTAL DAYS USE
			DUCKS	DEER	OTHER	
Spring	18,700	2,360			20	21,080
Summer	80,200	80,500				160,700
Fall	47,000	19,515	11,240	540	290	78,585
TOTAL DAYS USE	145,900	102,375	11,240	540	310	260,365

DAY USE COMPARISONS

YEAR	FISHING	MISC.	DUCKS	DEER	OTHER	TOTAL
1971	128,255	96445	15,100	60	45	239,483
1972	139,875	90340	14,380	380	230	245,205

UM-14
Rev.
1965

Refuge: Upper Mississippi NWR Lansing, Iowa
Period: Calendar Year 1973

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

SPECIES	POPULATION JAN. 1	YOUNG PRODUCED	GREATEST NO. PRESENT	TAKE	CON-TROL	LOSS	POPULATION DEC. 31
Muskrat	36,000	180,000	70,000	30,000		161,000	25,000
Mink	100	100	150	25		75	100
Beaver	2,600	1,300	3,500	450		650	2,800
Otter	15	25	30			15	25
Raccoon	200	300	450	100		200	200
Red Fox	40	30	60	30			40
Gray Fox	5		5				5
Skunk	30	70	50	10		60	30
Cotton-tail Rabbit	300	400	500	30		370	300
Opossum	50	200	150	20		180	50
Gray & Fox Squirrels	200	300	400	50		250	200
Woodchuck	15	30	30			30	15
Badger							

3-1758
Form [illegible]-8
(Rev. Jan. 1956)

Fish and Wildli[illegible] Service Branch of Wildlife Refuges

CULTIVATED CROPS - HAYING - GRAZING

Refuge Upper Miss. Refuge, Lansing - 1973 County Houston State Minnesota

Cultivated Crops Grown	Permittee's Share Harvested		Government's Share or Return				Total Acreage Planted	Green Manure, Cover and Water-fowl Browsing Crops Type and Kind	Total Acreage
			Harvested		Unharvested				
	Acres	Bu./Tons	Acres	Bu./ Tons	Acres	Bu. /Tons			
								Fallow Ag. Land.	

No. of Permittees: Agricultural Operations _____ Haying Operations _____ Grazing Operations 1

Hay - Improved (Specify Kind)	Tons Harvested	Acres	Cash Revenue	Grazing	Number Animals	AUM'S	Cash Revenue	ACREAGE
				1. Cattle	30	90	$90.00	90
				2. Other				
				1. Total Refuge Acreage Under Cultivation				
Hay - Wild				2. Acreage Cultivated as Service Operation				

3-1570
NR-89
(4/54)

REFUGE GRAIN REPORT

Refuge Upper Mississippi, Lansing, Iowa Months of January through December, 19~~5~~73

(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 or Suitable Use*		
				Transferred	Seeded	Fed	Total		Seed	Feed	Surplus
Hybrid Corn (shelled)	50	250	300			150	150	150			

(8) Indicate shipping or collection points

(9) Grain is stored at District warehouse site at Genoa National Fish Hatchery, Wisconsin.

(10) Remarks corn used as bait for wood duck banding.

*See instructions on back.

3-1761
Form [illegible]-11

TIMB[illegible] REMOVAL

Refuge Upper Mississippi, Lansing, Iowa Year 19~~4~~73

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
No timber removed from Refuge.								

Total acreage cut over.....

Total income.....

No. of units removed B. F.....
Cords.....
Ties.....
.....

Method of slash disposal.....

NATIONAL WILDLIFE REFUGE SYSTEM
WILDLIFE USE REPORT
(WATERFOWL ONLY)

FY-73

LANSING DISTRICT
03-3527-03-LND

SPECIES NAME	LINE CODE	***** USE DAYS JUL-SEP 72	OCT-DEC 72	JAN-MAR 73	APR-JUN 73	FY TOTAL *****	FY-NO. PRODUCED	FY-NO. HARVESTED	FY-PEAK POPULATION	DATE
WATERFOWL PRODUCTION										
NON-OUTPUT SPECIES										
AMERICAN COOT	080 2210	0	0	0	0	0	200	0	0	
SPECIAL RECOGNITION										
BIRDS										
AMERICAN COOT	711 2210	12000	0	0	0	12000	0	0	400	07/08
WATERFOWL MAINTENANCE										
SWANS										
WHISTLING SWAN	731 1800	0	1800	0	0	1800	0	0	180	11/25
GEESE										
LESSER-SNOW GOOSE	732 1690	0	60	0	0	60	0	0	4	10/28
WHITE-FRONTED GOOSE	732 1710	30	0	0	0	30	0	0	1	09/30
CANADA GOOSE	732 1720	750	0	0	0	750	0	0	65	09/30
DUCKS										
COMMON MERGANSER	733 1290	0	6000	0	0	6000	0	0	610	11/25
RED-BREASTED MERGANSER	733 1300	0	0	1200	0	1200	0	0	50	03/31
HOODED MERGANSER	733 1310	1500	0	0	0	1500	0	0	50	07/08
MALLARD	733 1320	15000	0	0	0	15000	0	0	500	07/08
BLACK DUCK	733 1330	600	0	0	0	600	0	0	20	07/08
GADWALL	733 1350	10500	0	0	0	10500	0	0	450	09/30
AMERICAN WIDGEON	733 1370	14100	0	0	0	14100	0	0	1550	08/31
GREEN-WINGED TEAL	733 1390	450	0	0	0	450	0	0	15	07/08
BLUE-WINGED TEAL	733 1400	10500	0	0	0	10500	0	0	350	07/08
SHOVELER	733 1420	1200	0	0	0	1200	0	0	100	08/31
PINTAIL	733 1430	2100	0	0	0	2100	0	0	200	08/31
WOOD DUCK	733 1440	66000	0	0	0	66000	0	0	2200	07/08
RED HEAD	733 1460	300	0	0	0	300	0	0	25	09/30
CANVASBACK	733 1470	0	63000	0	0	63000	0	0	3900	10/28
LESSER SCAUP	733 1490	300	0	0	0	300	0	0	40	09/30
RING-NECKED DUCK	733 1500	0	46500	0	0	46500	0	0	2900	10/28
COMMON GOLDENEYE	733 1510	0	13500	0	0	13500	0	0	1000	10/28
BUFFLEHEAD	733 1530	0	9000	0	0	9000	0	0	650	10/21
SURF SCOTER	733 1660	0	1500	0	0	1500	0	0	110	11/11
RUDDY DUCK	733 1670	300	0	0	0	300	0	0	40	09/30

NATIONAL WILDLIFE REFUGE SYSTEM
WILDLIFE USE REPORT
(WATERFOWL ONLY)

FY-73

LANSING DISTRICT
03-3527-03-LND

SPECIES NAME	LINE CODE	JUL-SEP 72	OCT-DEC 72	JAN-MAR 73	APR-JUN 73	FY TOTAL	FY-NO. PRODUCED	FY-NO. HARVESTED	FY-PEAK POPULATION	DATE
		*****-----USE DAYS-----*****								
WATERFOWL PRODUCTION										
DUCKS										
HOODED MERGANSER	803 1310	0	0	0	0	0	100	0	0	
MALLARD	803 1320	0	0	0	0	0	900	0	0	
BLACK DUCK	803 1330	0	0	0	0	0	20	0	0	
BLUE-WINGED TEAL	803 1400	0	0	0	0	0	600	0	0	
WOOD DUCK	803 1440	0	0	0	0	0	6250	0	0	
CONTROL TOTALS	995 0000	106050	0	0	0	106050	0	0	3535	07/00
CONTROL TOTALS	996 0000	0	0	0	0	0	8070	0	0	
	TOTAL	241680	141360	1200	0	384240	16140	0		

NATIONAL WILDLIFE REFUGE SYSTEM
WILDLIFE USE REPORT
(EXCLUDING WATERFOWL)

FY-73

LANSING DISTRICT
03-3527-03-LND

SPECIES NAME	LINE CODE	USE DAYS JUL-SEP 72	OCT-DEC 72	JAN-MAR 73	APR-JUN 73	FY TOTAL	FY-NO. PRODUCED	FY-NO. HARVESTED	FY-PEAK POPULATION	DATE
OTHER BIRD-MIG & RESDNT										
NON-OUTPUT SPECIES										
RUFFED GROUSE	071 3000	0	0	0	0	13000	0	0	100	06/30
MERRIAM TURKEY	071 3103	0	0	0	0	800	0	0	10	06/30
NON-OUTPUT SPECIES										
OPOSSUM	072 8005	0	0	0	0	13500	0	25	150	06/30
EASTERN COTTONTAIL	072 8040	0	0	0	0	125000	0	0	800	06/30
BEAVER	072 8100	0	0	0	0	420000	0	450	2500	06/30
WOODCHUCK (GROUND HOG)	072 8110	0	0	0	0	3100	0	0	25	06/30
GRAY SQUIRREL	072 8170	0	0	0	0	800	0	10	50	06/30
FOX SQUIRREL	072 8180	0	0	0	0	4700	0	25	300	06/30
MUSKRAT	072 8235	0	0	0	0	8200000	0	33000	60000	06/30
RED FOX	072 8290	0	0	0	0	1300	0	5	60	06/30
GRAY FOX	072 8315	0	0	0	0	1300	0	0	15	06/30
RACOON	072 8355	0	0	0	0	73000	0	40	600	06/30
MINK	072 8400	0	0	0	0	18000	0	18	150	06/30
SKUNK	072 8420	0	0	0	0	9000	0	0	60	06/30
RIVER OTTER	072 8445	0	0	0	0	2700	0	0	25	06/30
WHITE-TAILED DEER	072 8540	0	0	0	0	7200	0	10	50	06/30
THREATENED SPECIES										
ENDANGERED										
AMERICAN PEREGRINE FALCON	701 3561	10	0	0	0	10	0	0	1	09/02
STATUS-UNDETERMINED										
OSPREY	704 3640	406	175	0	80	661	0	0	10	09/02
SPECIAL RECOGNITION										
BIRDS										
HORNED GREBE	711 0030	0	0	0	120	120	0	0	20	04/20
PIED-BILLED GREBE	711 0060	23450	4900	1000	17150	46500	100	0	350	09/23
COMMON LOON	711 0070	0	0	0	40	40	0	0	2	04/27
HERRING GULL	711 0510	2100	3300	4700	3850	13950	0	0	200	04/10
RING-BILLED GULL	711 0540	18760	65250	14500	26690	125200	0	0	2100	10/21
BONAPARTE'S GULL	711 0600	2250	2170	0	1400	5820	0	0	100	09/30
CASPIAN TERN	711 0640	2150	1400	0	500	4050	0	0	100	09/16
COMMON TERN	711 0700	2800	2170	0	3780	8750	0	0	120	09/23
BLACK TERN	711 0770	5050	1600	0	1500	8150	20	0	200	09/16
DOUBLE-CRESTED CORMORANT	711 1200	0	2990	0	1000	3990	0	0	160	10/14
WHITE PELICAN	711 1250	0	0	0	1	1	0	0	1	05/03

NATIONAL WILDLIFE REFUGE SYSTEM
WILDLIFE USE REPORT
(EXCLUDING WATERFOWL)

FY-73

LANSING DISTRICT
03-3527-03-LND

SPECIES NAME	LINE CODE	USE DAYS JUL-SEP 72	OCT-DEC 72	JAN-MAR 73	APR-JUN 73	FY TOTAL	FY-NO. PRODUCED	FY-NO. HARVESTED	FY-PEAK POPULATION	DATE
AMERICAN BITTERN	711 1900	2590	250	0	1700	4540	20	0	40	09/19
LEAST BITTERN	711 1910	2730	280	0	1120	4130	20	0	50	09/23
GREAT BLUE HERON	711 1940	170800	12250	6000	83300	272350	1130	0	2500	08/26
COMMON EGRET	711 1960	36750	4200	1000	28300	70250	430	0	750	08/26
LITTLE BLUE HERON	711 2000	0	0	0	10	10	0	0	2	04/24
CATTLE EGRET	711 2001	0	0	0	30	30	0	0	1	05/16
GREEN HERON	711 2010	31150	3000	0	16200	50350	300	0	600	08/26
BLACK-CROWNED NIGHT HERON	711 2020	1890	210	0	800	2900	10	0	30	08/26
YELLOW-CROWND NIGHT HERON	711 2030	2170	140	0	1400	3710	20	0	40	08/26
SORA	711 2140	32250	10550	0	12600	55400	300	0	600	09/19
COMMON GALLINULE	711 2190	24150	1450	0	9600	35200	200	0	500	09/19
AMERICAN WOODCOCK	711 2280	5650	2500	100	1680	9930	0	0	400	09/30
COMMON SNIPE	711 2290	33600	8800	2000	0	44400	0	0	600	09/30
COMMON SNIPE	711 2300	0	0	0	21700	21700	0	0	250	04/22
LEAST SANDPIPER	711 2420	12950	1470	0	7000	21420	0	0	400	09/09
SEMIPALMATED SANDPIPER	711 2460	12950	5650	0	7000	25600	0	0	450	10/07
GREATER YELLOWLEGS	711 2540	18550	2700	0	12600	33850	0	0	600	09/09
LESSER YELLOWLEGS	711 2550	8050	11800	0	3850	23700	0	0	900	10/07
SOLITARY SANDPIPER	711 2560	12950	1650	0	7000	21600	0	0	400	09/09
SPOTTED SANDPIPER	711 2630	33600	18900	0	0	52500	100	0	1400	09/09
KILLDEER	711 2730	35350	8700	4500	25900	74450	200	0	450	10/07
SEMIPALMATED PLOVER	711 2740	12950	2050	0	7000	22000	50	0	400	09/09
MOURNING DOVE	711 3160	0	0	0	0	45000	0	0	500	06/30
TURKEY VULTURE	711 3250	3220	420	100	1360	5100	0	0	40	08/19
MARSH HAWK	711 3310	504	175	210	1190	2079	0	0	40	04/08
SHARP-SHINNED HAWK	711 3320	910	110	0	770	1790	0	0	10	07/08
COOPER'S HAWK	711 3330	0	0	0	770	770	0	0	10	04/22
RED-TAILED HAWK	711 3370	4760	4130	2500	6640	18030	20	0	150	04/22
RED-SHOULDERED HAWK	711 3390	910	175	0	630	1715	0	0	10	07/08
BROAD-WINGED HAWK	711 3430	1540	600	0	770	2910	5	0	30	09/09
BALD EAGLE	711 3520	182	2450	1800	370	4802	1	0	92	12/02
SPARROW HAWK	711 3600	798	110	250	880	2038	0	0	30	03/31
SHORT-EARED OWL	711 3670	546	150	0	540	1236	0	0	10	04/22
BARRED OWL	711 3680	2730	2730	500	2730	8690	20	0	60	03/31
SCREECH OWL	711 3730	1820	1820	0	1680	5320	15	0	20	07/08
GREAT HORNED OWL	711 3750	9100	9100	4050	9100	31350	60	0	100	07/08
CONTROL TOTALS	997 0000	575076	202475	43210	332331	10091492	3021	33583	64785	00/00
	TOTAL	1150152	404950	86420	664662	20182984	6042	67166		

NATIONAL WILDLIFE REFUGE SYSTEM

AVERAGE MONTHLY WATERFOWL POPULATIONS

LANSING DISTRICT

03-3527-03-LND

SPECIES NAME	JUL 72	AUG 72	SEP 72	OCT 72	NOV 72	DEC 72	JAN 73	FEB 73	MAR 73	APR 73	MAY 73	JUN 73
SPECIAL RECOGNITION												
BIRDS												
AMERICAN COOT	400	400	1,8850	36000	10400	0	0	0	1130	5250	0	200
WATERFOWL MAINTENANCE												
SWANS												
WHISTLING SWAN	0	0	0	0	60	0	0	0	20	13	0	0
GEESE												
LESSER-SNOW GOOSE	0	0	0	2	0	0	0	0	8	1	0	0
WHITE-FRONTED GOOSE	0	0	1	0	0	0	0	0	0	0	0	0
CANADA GOOSE	0	0	25	30	0	0	0	0	70	2	0	0
DUCKS												
COMMON MERGANSER	0	0	0	0	200	0	0	10	1250	200	0	0
RED-BREASTED MERGANSER	0	0	0	0	0	0	0	0	40	250	0	0
HOODED MERGANSER	50	50	100	80	10	0	0	0	350	750	0	200
MALLARD	500	1400	5800	10000	3550	40	40	210	5750	2750	0	500
BLACK DUCK	20	90	800	1550	500	0	0	20	375	150	0	10
GADWALL	0	0	350	350	100	0	0	0	40	15	0	0
AMERICAN WIDGEON	0	470	16650	14200	400	0	0	0	1375	775	0	0
GREEN-WINGED TEAL	15	270	1300	1300	100	0	0	0	215	425	0	0
BLUE-WINGED TEAL	350	2400	5100	1600	10	0	0	0	90	1375	0	400
SHOVELER	0	40	250	300	50	0	0	0	40	1175	0	0
PINTAIL	0	70	750	1550	300	0	0	10	525	650	0	0
WOOD DUCK	2200	2580	6900	4800	150	0	0	0	725	1875	0	2200
RED HEAD	0	0	10	700	1550	0	0	0	1150	525	0	0
CANVASBACK	0	0	0	2100	7750	0	0	0	2275	2125	0	0
LESSER SCAUP	0	0	10	7550	22250	3	0	30	6875	15750	0	0
RING-NECKED DUCK	0	0	0	1550	1500	0	0	0	1525	2125	0	0
COMMON GOLDENEYE	0	0	0	450	1500	10	0	10	1625	90	0	0
BUFFLEHEAD	0	0	0	300	600	0	0	0	350	750	0	0
SURF SCOTER	0	0	0	0	50	0	0	0	0	0	0	0
RUDDY DUCK	0	0	10	100	50	0	0	0	50	225	0	0
TOTAL SWANS	0	0	0	0	60	0	0	0	20	13	0	0
TOTAL GEESE	0	0	26	32	0	0	0	0	78	3	0	0
TOTAL DUCKS	3135	7370	38030	48480	40620	53	40	290	24625	31980	0	3310
TOTAL WATERFOWL	3135	7370	38056	48512	40680	53	40	290	24723	31996	0	3310

NATIONAL WILDLIFE REFUGE SYSTEM

PEAK MONTHLY WATERFOWL POPULATIONS

LANSING DISTRICT

03-3527-03-LND P

SPECIES NAME	JUL 72	AUG 72	SEP 72	OCT 72	NOV 72	DEC 72	JAN 73	FEB 73	MAR 73	APR 73	MAY 73	JUN 73
SPECIAL RECOGNITION												
BIRDS												
AMERICAN COOT	400	400	47250	58700	28800	0	0	0	3000	8000	0	200
WATERFOWL MAINTENANCE												
SWANS												
WHISTLING SWAN	0	0	0	0	180	0	0	0	30	30	0	0
GEESE												
LESSER-SNOW GOOSE	0	0	0	4	0	0	0	0	10	1	0	0
WHITE-FRONTED GOOSE	0	0	1	0	0	0	0	0	0	0	0	0
CANADA GOOSE	0	0	65	90	0	0	0	0	100	10	0	0
DUCKS												
COMMON MERGANSER	0	0	0	0	610	0	0	20	2000	500	0	0
RED-BREASTED MERGANSER	0	0	0	0	0	0	0	0	50	500	0	0
HOODED MERGANSER	50	50	180	220	40	0	0	0	500	1000	0	200
MALLARD	500	4200	9450	16500	5350	40	40	500	8000	5000	0	500
BLACK DUCK	20	300	1150	2450	850	0	0	50	500	300	0	10
GADWALL	0	0	450	500	180	0	0	0	100	50	0	0
AMERICAN WIDGEON	0	1550	23300	30000	910	0	0	0	2000	2000	0	0
GREEN-WINGED TEAL	15	700	1650	1850	280	0	0	0	700	1000	0	0
BLUE-WINGED TEAL	350	5800	5900	4000	30	0	0	0	200	2000	0	400
SHOVELER	0	100	400	400	210	0	0	0	100	3000	0	0
PINTAIL	0	200	1100	1700	870	0	0	20	800	1000	0	0
WOOD DUCK	2200	2900	10000	10000	430	0	0	0	1200	2000	0	2200
RED HEAD	0	0	25	1400	2340	0	0	0	2000	1000	0	0
CANVASBACK	0	0	0	3900	15970	0	0	0	5000	4000	0	0
LESSER SCAUP	0	0	40	14500	43730	10	0	100	16000	20000	0	0
RING-NECKED DUCK	0	0	0	2900	2050	0	0	0	5000	4000	0	0
COMMON GOLDENEYE	0	0	0	1000	2250	30	0	20	2000	100	0	0
BUFFLEHEAD	0	0	0	650	940	0	0	0	500	1000	0	0
SURF SCOTER	0	0	0	0	110	0	0	0	0	0	0	0
RUDDY DUCK	0	0	40	220	80	0	0	0	100	500	0	0
TOTAL SWANS	0	0	0	0	180	0	0	0	30	30	0	0
TOTAL GEESE	0	0	66	94	0	0	0	0	110	11	0	0
TOTAL DUCKS	3135	15800	53685	92190	77230	80	40	710	46750	48950	0	3310
TOTAL WATERFOWL	3135	15800	53751	92284	77410	80	40	710	46890	48991	0	3310

NATIONAL WILDLIFE REFUGE SYSTEM

WATERFOWL USE DAYS

LANSING DISTRICT

03-3527-03-LND

SPECIES NAME	JUL 1972-SEP 1972	OCT 1972-DEC 1972	JAN 1973-MAR 1973	APR 1973-JUN 1973	12 MONTH TOTAL
SPECIAL RECOGNITION					
BIRDS					
AMERICAN COOT	589,500	1,392,000	33,900	163,500	2,178,900
WATERFOWL MAINTENANCE					
SWANS					
WHISTLING SWAN	0	1,800	600	390	2,790
GEESE					
LESSER-SNOW GOOSE	0	60	240	30	330
WHITE-FRONTED GOOSE	30	0	0	0	30
CANADA GOOSE	750	900	2,100	60	3,810
DUCKS					
COMMON MERGANSER	0	6,000	37,800	6,000	49,800
RED-BREASTED MERGANSER	0	0	1,200	7,500	8,700
HOODED MERGANSER	6,000	2,700	10,500	28,500	47,700
MALLARD	231,000	407,700	180,000	97,500	916,200
BLACK DUCK	27,300	61,500	11,850	4,800	105,450
GADWALL	10,500	13,500	1,200	450	25,650
AMERICAN WIDGEON	513,600	438,000	41,250	23,250	1,016,100
GREEN-WINGED TEAL	47,550	42,000	6,450	12,750	108,750
BLUE-WINGED TEAL	235,500	48,300	2,700	53,250	339,750
SHOVELER	8,700	10,500	1,200	35,250	55,650
PINTAIL	24,600	55,500	16,050	19,500	115,650
WOOD DUCK	350,400	148,500	21,750	122,250	642,900
RED HEAD	300	67,500	34,500	15,750	118,050
CANVASBACK	0	295,500	68,250	63,750	427,500
LESSER SCAUP	300	894,090	207,150	472,500	1,574,040
RING-NECKED DUCK	0	91,500	45,750	63,750	201,000
COMMON GOLDENEYE	0	58,800	49,050	2,700	110,550
BUFFLEHEAD	0	27,000	10,500	22,500	60,000
SURF SCOTER	0	1,500	0	0	1,500
RUDDY DUCK	300	4,500	1,500	6,750	13,050
TOTAL SWANS	0	1,800	600	390	2,790
TOTAL GEESE	780	960	2,340	90	4,170
TOTAL DUCKS	1,456,050	2,674,590	748,650	1,058,700	5,937,990
TOTAL WATERFOWL	1,456,830	2,677,350	751,590	1,059,180	5,944,950