

NARRATIVE REPORT
UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE REFUGE

Cassville District

Fiscal 1974

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District Manager

UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE

Cassville, Wisconsin

CASSVILLE

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I. GENERAL

A. Weather Conditions

<u>MONTH</u>	<u>Precipitation</u>		<u>Snowfall:::Max.</u>		<u>Temperature</u>		
	<u>Total</u>	<u>Normal</u>			<u>Min.</u>	<u>Mean Av.</u>	<u>Normal Mean Av.</u>
July	4.34	3.51		91	58	72.3	72.6
August	1.54	3.73		93	55	72.3	70.5
September	7.27	3.74		90	39	62.5	61.7
October	0.73	2.74		79	31	55.6	50.7
November	2.09	2.59	Trace	60	14	38.0	34.8
December	2.42	1.90	6.7	61	-9	20.4	23.5
January	2.39	1.73	9.1	45	-22	17.6	17.7
February	1.38	1.26	13.5	43	-7	20.5	22.0
March	2.62	2.97	3.1	64	-3	34.2	32.2
April	4.21	4.15	0.5	80	23	49.2	47.5
May	7.39	4.67		82	31	54.8	58.0
June	7.74	5.29		87	44	63.8	67.5
Annual Totals	44.12	38.28	32.9	93	-22	46.8	46.6

On the evening of June 20, winds ranging from 60 to 85 mph hit the district. Many trees and power lines were downed. Numerous trees along the shoreline of the main channel and backwater sloughs were uprooted.

B. Habitat Conditions1. Water

POOL LEVELS

Pool No. 11 at Guttenberg, Iowa

Normal: 4.50

<u>MONTH</u>	<u>HIGHEST LEVEL</u>	<u>LOWEST LEVEL</u>	<u>DATE OF HIGH LEVEL</u>	<u>DATE OF LOW LEVEL</u>
July	5.90	3.89	4	26
August	6.48	4.36	27	6
September	6.09	4.00	30	23
October	8.33	4.90	24	12
November	7.21	5.03	30	14
December	7.46	5.20	5	13
January	6.45	5.21	1	19
February	6.48	5.26	25	17
March	9.22	5.02	12	26
April	12.38	6.88	21	2
May	11.02	8.00	1	12
<u>June</u>	<u>13.10</u>	<u>7.78</u>	<u>23</u>	<u>5</u>

Gauge reading: 8 a.m. tailwater reading L/D 10, Guttenberg, Iowa.

Water levels averaged above normal during every month of the year. During the year the gates at L/D 10 were out a total of 57 days.

2. Food and Cover

The cooperative farming program left 5 acres of grain sorghum and 2 acres of corn in the field as the refuge's share. The sorghum provided excellent cover, as well as food, for upland game and song birds. However, there was very little use by waterfowl in the spring.

The wild rice crop in the Bagley Bottoms was excellent. Waterfowl use in the fall was heavy.

II. WILDLIFE

A. Migratory Birds

1. Waterfowl

Fall--September-December: Fall migration peaked the last week in September with approximately 7250 ducks. This is three weeks earlier than the same period last year and down nearly 5,000 ducks. Total use for the period was 452,788 days. This year mallard replaced scaup as the predominant species, accounting for 32% of the use. Scaup and wood duck followed--each with 24% of the use. By the first week in December most of the ducks had moved south.

Snow and blue geese peaked at 50 during the second week in October and Canada geese peaked the same week at 50. Many geese pass over the District, but few stop for any length of time.

The fall migration of coot peaked at 1800 during the third week of September. The last coot left the District the third week of November.

Two whistling swans were observed during the first week of October.

Spring--January-April: The spring migration peaked the first week of April at 73,000 ducks. The peak last year was at about the same time but showed an increase this year of about 12,000 birds. Total use for the period was 1,562,995 days. Scaup was the number one species with 52% of the use. They were followed by mallard (20%), wigeon (7%), canvasback (5%), common merganser (3%), and wood duck (2.5%).

There were no snow or blue geese observed stopping in the District during this period. Canada geese peaked at 70 during the second week of April.

The spring migration of coot began the second week of March and peaked the second week of April at 8,500.

No whistling swans were observed during the spring migration.

Duck use for the entire year totaled 2,345,518 days. By species scaup was number one, followed by mallards and wood duck.

The following table lists use days and percentage of use by species for the entire year and each of the migration periods.

Species	Total Use	% of Total	Fall (Sept.-Dec.)	%	Spring (Jan.-Apr.)	%
Mallard	564,550	24.07	145,600	32.16	316,050	20.22
Black	16,520	0.70	10,290	2.27	6,230	0.39
Gadwall	6,650	0.28			6,650	0.43
Wigeon	120,505	5.14	11,900	2.63	108,605	6.95
Pintail	44,800	1.91	12,950	2.86	31,850	2.04
GW Teal	14,875	0.63	5,075	1.12	9,800	0.63
BW Teal	46,060	1.96	11,725	2.59	14,630	0.94
Shoveler	22,785	0.97	2,170	0.48	19,775	1.27
Wood Duck	348,075	14.84	108,500	23.96	41,475	2.65
Redhead	5,460	0.23	1,112	0.25	4,340	0.28
Canvasback	76,748	3.27	448	0.10	76,300	4.88
Ring-neck	38,185	1.63	3,990	0.88	34,195	2.19
Scaup	919,100	39.18	107,800	23.80	811,300	51.91
C. Goldeneye	31,115	1.33	11,900	2.63	19,215	1.23
Bufflehead	17,535	0.75	8,785	1.94	8,750	0.56
Ruddy	3,710	0.16	1,750	0.39	1,960	0.13
C. Merganser	46,480	1.98	3,675	0.81	42,805	2.74
Red Br. Merganser	6,860	0.29			6,860	0.44
Hooded Merganser	15,505	0.66	5,110	1.13	2,205	0.14
Total	2,345,518		452,788		1,562,995	

2. Other Water Birds

Egrets: Great egrets peaked on the district at 50 during the third week of April and continued at that number through the end of the reporting period. No egrets were observed nesting on either of the two rookeries on the district.

Hérons: Great blue herons peaked at 730 during the first week of July. An estimated 421 young were produced in the district's two rookeries. The last great blue herons were observed on the district during the third week of November. On June 20, winds gusting to 85 mph hit the district. The heron rookery in Pool 11 was heavily damaged. Nesting trees were toppled. Nests and young herons were blown out of nesting trees. Mortality was high with an estimated 50 birds killed.

Green herons are commonly seen on the district. Black-crowned night herons are observed occassionally.

Grebes: Pied-billed grebes were present on the district the last week of March and reached a peak of 200 the last week of April. The fall population was down with a peak of 50. One horned grebe was observed April 24 near Glen Haven.

Loons: One loon was observed on Gremore Lake the 4th of April.

Gulls and Terns: Ring-billed and herring gulls are common on the district. Ring-bills peaked at 800 during March, while herring gulls peaked at 600 during April. Common and black terns are common during the summer months.

3. Shorebirds: Nothing significant to report.

B. Upland Game Birds

Nothing significant to report.

C. Big Game Animals

Nothing significant to report.

D. Fur Animals

The muskrat population was estimated at 51,500 prior to the trapping season. This is up approximately 35% from last year. The beaver population took a nose dive, as little sign could be found on the district.

E. Eagles

Northern bald eagles were first observed the second week of October. They peaked at 30 the third week of February and were last observed the second week of April.

F.. Other Birds

From two to five ospreys were observed on the district during the summer and fall months.

G. Fish

Nothing significant to report.

H. Reptiles

Nothing significant to report.

I. Disease

Dutch elm disease is progressing at a rapid rate. Within a very few years the elms will be gone in the river bottoms.

J. Rare and Endangered Species

Nothing to report.

III. REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development

Main channel boundaries were checked and signs replaced where needed. Closed area signs along the tracks at Dago Slough were replaced after the railroad brush cutter went through. Canoe trail signs were replaced where needed and others were brushed out. Various refuge routed signs were retained. A new wingboard was constructed for use during waterfowl ID classes. Fill was hauled to Bertom Landing to be used for additional parking. The overhead doors at the district warehouse were repaired. Repaired high water damage to the Dago Slough farm unit road.

B. Plantings1. Aquatic and Marsh Plants

Nothing significant to report.

2. Trees and Shrubs

Nothing to report.

3. Upland Herbaceous Plants

Nothing to report.

4. Cultivated Crops

Permittees harvested 10 acres of corn this year. The government's share was 5 acres of grain sorghum and 2 acres of corn. The largest acreage in Dago Slough area was not farmed due to wet field conditions.

C. Collections and Receipts1. Seeds and other Propagules

None

D.

2. Specimens

None

D. Control of Vegetation

Other than the approved use of sprays by cooperative farmers for control of weeds on refuge cropland, control of vegetation through the use of chemicals was not attempted.

E. Planned Burning

None

F. Fires

None

IV. RESOURCE MANAGEMENT

A. Grazing

None

B. Haying

None

C. Fur Harvest

This trapping season 155 permits were issued. A total of 17,501 muskrats were taken on the district. The average price per rat was about \$2.45, making the total of \$42,901.76 realized by muskrat trappers. Only 13 mink were harvested. Their average price was \$17.38 each. Raccoons brought an average price of \$7.78. Only 52 were reported trapped.

It was felt by the district refuge managers in Wisconsin that the beaver population was too low to stand a beaver trapping season. Consequently, the season was closed on all Federal lands. The closed season helped tremendously as the beaver have come back strong.

D. Timber Removal

None

E. Commercial Fishing

Nothing significant to report.

F. Other Uses

None

V. FIELD INVESTIGATION OR APPLIED RESEARCH

A. Wood Duck Management Studies1. Wood Duck Flight Counts

Wood duck spring flight counts were down approximately 13% from last year. Because of schedule conflicts, the counts were run later than usual and this probably accounts for the reduction. Through general observations and comments from other waterfowlers, it is felt that the district's wood duck population is as high or higher than last year.

2. Brood Counts

The brood counts were run during the first week of July. A total of 15 broods were observed on the transect. All but one brood were wood ducks. The other brood was a mallard. On the basis of these transects, wood duck production was estimated at 1,000. It was felt that due to high water and motor noise, a number of broods were not seen.

Mallard production was estimated at 225 which was down approximately 25% from last year.

3. Fall Roost Counts

Because of various meetings, activities and bad weather, the fall roost counts were not completed. From the two counts that were run there was an indication that there was a slight increase over last year.

B. Wood Duck Banding

This years banding activities got underway on July 27. A total of 309 wood ducks were banded. The breakdown on the number and age classes is listed below:

AHYM	AHYF	HYM	HYF
14	6	155	134

C. Waterfowl Hunter Bag Checks

A total of 189 hunters were checked this season. They averaged 1.25 ducks per day. Blue-winged teal made up about 65% of the bag. Wood Ducks were next (14%), followed by mallards (10%).

D. Vegetative Transects

A vegetative transect was run on Bing Pond on 9/6/73. The gauge reading was 4.00. Drawdown was accomplished in August, but the river rose again in the latter part of August and water topped some of the mud flats. Predominant species were arrowhead, spike rush, rice-cut grass, and manna grass. Present this year and not last was smartweed and wild millet.

VI. PUBLIC RELATIONS

A. Recreational Use

<u>Fiscal 1974</u>	<u>Fishing</u>	<u>Miscellaneous</u>	<u>Hunting</u>			<u>Total Visits</u>
			<u>Ducks</u>	<u>Deer</u>	<u>Other</u>	
Spring	22,000	9,625				31,625
Summer	35,771	51,805		55	50	87,681
Fall	26,938	6,149	2,562	180	730	36,559
<u>Total Visits</u>	<u>84,709</u>	<u>67,579</u>	<u>2,562</u>	<u>235</u>	<u>780</u>	<u>155,865</u>

B. Hunting

Small game hunters had a good squirrel and rabbit season this year with high populations of both squirrel and rabbit. There were a few grouse hunters, but birds are not too abundant and hunting pressure is light.

Waterfowl season opened again this year with higher than normal water levels. Many blinds were flooded and unusable. Wisconsin went to the point system for the first time this year. Most hunters appeared to favor the system; however, they were disgruntled over not being able to shoot until sunrise.

C. Violations

Four apprehensions were made during the waterfowl season. One was for taking gulls, another for taking a grebe, another for taking a redhead, and one for transporting a loaded shotgun in a boat.

D. Safety

It was another good year for the district's safety record. There were no lost-time accidents involving district personnel this year. The summer assistants and N.Y.C. students were given safety instructions throughout the summer months.

VII. OTHER ITEMS

A. Items of Interest

Student assistants this year were Pat Brown (July-August, 1973) and Craig Beauduy (June, 1974). Pat just graduated from high school and was an Isaac Walton League referral. Craig was a graduate of the University of Minnesota.

B. Credits

Report written by Robert E. Wilson and typed by Sue Wilson.

SIGNATURE PAGE

Submitted by:

Robert E. Wilson
(Signature)

Date: February 14, 1975

Robert E. Wilson
District Manager
Title

Approved, Regional Office:

Date: _____

(Signature)

Regional Refuge Supervisor

DISTRICT: CassvilleMONTH: JulyF.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 7/7	7/14	7/21	7/28	MONTHLY TOTAL	AVERAGE
COOT	4,200	150	150	150	150	600	150
SWAN							
CANADA GOOSE							
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE							
MALLARD	25,200	900	900	900	900	3,600	900
BLACK							
GADWALL							
WIDGEON							
PINTAIL							
G.W. TEAL							
B.W. TEAL	4,480	160	160	160	160	640	160
SHOVELER							
WOOD DUCK	50,400	1,800	1,800	1,800	1,800	7,200	1,800
REDHEAD							
CANVASBACK							
RING-NECK							
SCAUP							
GOLDENEYE							
BUFFLEHEAD							
RUDDY							
OLD SQUAW							
SCOTER							
COMMON MERGANSER							
RED BR. MERGANSER							
HOODED MERGANSER	2,520	90	90	90	90	360	90
TOTAL DUCKS	82,600	2,950	2,950	2,950	2,950	11,800	

DISTRICT: CassvilleMONTH: AugustF.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 8/4	8/11	8/18	8/25	9/1	MONTHLY TOTAL	AVERAGE
COOT	5,250	150	150	150	150	150	750	150
SWAN								
CANADA GOOSE								
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE								
MALLARD	33,600	900	900	900	900	1,200	4,800	960
BLACK								
GADWALL								
WIDGEON								
PINTAIL								
G.W. TEAL								
B.W. TEAL	11,200	300	300	300	300	400	1,600	320
SHOVELER								
WOOD DUCK	65,800	1,800	1,800	1,800	1,800	2,200	9,400	1,880
REDHEAD								
CANVASBACK								
RING-NECK								
SCAUP								
GOLDENEYE								
BUFFLEHEAD								
RUDDY								
OLD SQUAW								
SCOTER								
COMMON MERGANSER								
RED BR. MERGANSER								
HOODED MERGANSER	3,150	90	90	90	90	90	450	90
TOTAL DUCKS	113,750	3,090	3,090	3,090	3,090	3,890	16,250	

DISTRICT: Cassville

MONTH: September

F.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 9/8	9/15	9/22	9/29	MONTHLY TOTAL	AVERAGE
COOT	33,250	150	1,000	1,800	1,800	4,750	1,188
SWAN							
CANADA GOOSE							
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE							
MALLARD	47,600	1,200	1,200	1,900	2,500	6,800	1,700
BLACK	4,690	100	100	170	300	670	168
GADWALL							
WIDGEON	5,250	50		350	400	750	188
PINTAIL	7,350	50	100	400	500	1,050	262
G.W. TEAL	2,975	50	75	100	200	425	106
B.W. TEAL	8,400	200	200	200	600	1,200	300
SHOVELER	1,855	100	100	35	30	265	66
WOOD DUCK	69,300	2,200	2,500	2,600	2,600	9,900	
REDHEAD							
CANVASBACK							
RING-NECK							
SCAUP							
GOLDENEYE							
BUFFLEHEAD							
RUDDY							
OLD SQUAW							
SCOTER							
COMMON MERGANSER							
RED BR. MERGANSER							
HOODED MERGANSER	3,920	140	140	140	140	560	140
TOTAL DUCKS	151,340	4,040	4,415	5,895	7,270	21,620	

DISTRICT: Cassville

MONTH: October

F.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 10/6	10/13	10/20	10/27	11/3	MONTHLY TOTAL	AVERAGE
COOT	37,800	1,300	1,100	1,000	1,000	1,000	5,400	1,080
SWAN	14	2					2	
CANADA GOOSE	504	12	50				72	
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE	504	12	50				72	
MALLARD	44,100	1,500	1,500	1,300	1,000	1,000	6,300	1,260
BLACK	2,100	100	100	100			300	50
GADWALL								
WIDGEON	5,250	200	150	150	150	100	750	150
PINTAIL	4,900	300	200	150	150	80	700	140
G.W. TEAL	2,100	150	100	50			300	60
B.W. TEAL	3,325	100	100	100	100	75	475	95
SHOVELER	315	25	20				45	9
WOOD DUCK	38,500	2,000	1,000	1,000	800	700	5,500	1,100
REDHEAD	1,120		50	50	30	30	160	32
CANVASBACK	448		4	20	20	20	64	13
RING-NECK	3,290		20	100	150	200	470	94
SCAUP	106,400	1,000	1,200	4,000	4,000	5,000	15,200	3,040
GOLDENEYE								
BUFFLEHEAD	560		20	20	20	20	80	16
RUDDY	1,750		75	75	50	50	250	62
OLD SQUAW								
SCOTER								
COMMON Merganser								
RED BR. Merganser								
HOODED Merganser	1,190	100	50	20			170	34
TOTAL DUCKS	215,348	5,475	4,589	7,135	6,370	7,195	30,764	

DISTRICT: Cassville

MONTH: November

F. Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 11/10	11/17	11/24	12/1	MONTHLY TOTAL	AVERAGE
COOT	7,700	1,000	100			1,100	275
SWAN							
CANADA GOOSE							
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE							
MALLARD	42,000	3,000	1,000	1,000	1,000	6,000	1,500
BLACK	3,500	300	100	50	50	500	125
GADWALL							
WIDGEON	1,400	200				200	50
PINTAIL	700	100				100	25
G.W. TEAL							
B.W. TEAL							
SHOVELER							
WOOD DUCK	700	100				100	25
REDHEAD							
CANVASBACK							
RING-NECK	700	100				100	25
SCAUP	1,400	100	100			200	50
GOLDENEYE	4,900		200	200	300	700	175
BUFFLEHEAD	6,650	50	300	300	300	950	237
RUDDY							
OLD SQUAW							
SCOTER							
COMMON MERGANSER	1,750		50	100	100	250	63
RED BR. MERGANSER							
HOODED MERGANSER							
TOTAL DUCKS	63,700	3,950	1,750	1,650	1,750	9,100	

DISTRICT: Cassville

MONTH: December

F.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 12/8	12/15	12/22	12/29	MONTHLY TOTAL	AVERAGE
COOT	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
SWAN	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
CANADA GOOSE	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
WHITE FRONT	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
SNOW/BLUE	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
OTHER	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
TOTAL GEESE	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
MALLARD	11,900	1,000	500	200		1700	425
BLACK	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
GADWALL	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
WIDGEON	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
PINTAIL	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
G.W. TEAL	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
B.W. TEAL	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
SHOVELER	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
WOOD DUCK	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
REDHEAD	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
CANVASBACK	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
RING-NECK	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
SCAUP	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
GOLDENEYE	7,000	400	300	200	100	1,000	250
BUFFLEHEAD	1,575	100	50	50	25	225	56
RUDDY	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
OLD SQUAW	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
SCOTER	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
COMMON MERGANSER	1,925	100	75	75	25	275	69
RED BR. MERGANSER	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
HOODED MERGANSER	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::	:: ::
TOTAL DUCKS	22,400	1,600	925	525	150	3200	

DISTRICT: Cassville

MONTH: January

F.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 1/5	1/12	1/19	1/26	2/2	MONTHLY TOTAL	AVERAGE
COOT	:	:	:	:	:	:	:	:
SWAN	:	:	:	:	:	:	:	:
CANADA GOOSE	:	:	:	:	:	:	:	:
WHITE FRONT	:	:	:	:	:	:	:	:
SNOW/BLUE	:	:	:	:	:	:	:	:
OTHER	:	:	:	:	:	:	:	:
TOTAL GEESE	:	:	:	:	:	:	:	:
MALLARD	:	:	:	:	:	:	:	:
BLACK	:	:	:	:	:	:	:	:
GADWALL	:	:	:	:	:	:	:	:
WIDGEON	:	:	:	:	:	:	:	:
PINTAIL	:	:	:	:	:	:	:	:
G.W. TEAL	:	:	:	:	:	:	:	:
B.W. TEAL	:	:	:	:	:	:	:	:
SHOVELER	:	:	:	:	:	:	:	:
WOOD DUCK	:	:	:	:	:	:	:	:
REDHEAD	:	:	:	:	:	:	:	:
CANVASBACK	:	:	:	:	:	:	:	:
RING-NECK	:	:	:	:	:	:	:	:
SCAUP	:	:	:	:	:	:	:	:
GOLDENEYE	:	490	50	:	10	10	70	14
BUFFLEHEAD	:	:	:	:	:	:	:	:
RUDDY	:	:	:	:	:	:	:	:
OLD SQUAW	:	:	:	:	:	:	:	:
SCOTER	:	:	:	:	:	:	:	:
COMMON MERGANSER	:	175	25	:	:	:	25	5
RED BR. MERGANSER	:	:	:	:	:	:	:	:
HOODED MERGANSER	:	:	:	:	:	:	:	:
TOTAL DUCKS	:	665	75	:	10	10	95	19

DISTRICT: CassvilleMONTH: FebruaryF.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 2/9	2/16	2/23	3/2	MONTHLY TOTAL	AVERAGE
COOT	:	:	:	:	:	:	:
SWAN	:	:	:	:	:	:	:
CANADA GOOSE	:	:	:	:	:	:	:
WHITE FRONT	:	:	:	:	:	:	:
SNOW/BLUE	:	:	:	:	:	:	:
OTHER	:	:	:	:	:	:	:
TOTAL GEESE	:	:	:	:	:	:	:
MALLARD	:	:	:	:	:	:	:
BLACK	:	:	:	:	:	:	:
GADWALL	:	:	:	:	:	:	:
WIDGEON	:	:	:	:	:	:	:
PINTAIL	:	:	:	:	:	:	:
G.W. TEAL	:	:	:	:	:	:	:
B.W. TEAL	:	:	:	:	:	:	:
SHOVELER	:	:	:	:	:	:	:
WOOD DUCK	:	:	:	:	:	:	:
REDHEAD	:	:	:	:	:	:	:
CANVASBACK	:	:	:	:	:	:	:
RING-NECK	:	:	:	:	:	:	:
SCAUP	:	:	:	:	:	:	:
GOLDENEYE	:	2,170	20	60	200	310	77
BUFFLEHEAD	:	:	:	:	:	:	:
RUDDY	:	:	:	:	:	:	:
OLD SQUAW	:	:	:	:	:	:	:
SCOTER	:	:	:	:	:	:	:
COMMON MERGANSER	:	840	:	20	100	120	30
RED BR. MERGANSER	:	:	:	:	:	:	:
HOODED MERGANSER	:	:	:	:	:	:	:
TOTAL DUCKS	:	3,010	20	80	300	430	107

DISTRICT: CassvilleMONTH: MarchF. Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 3/9	3/16	3/23	3/30	MONTHLY TOTAL	AVERAGE
COOT	8,365	15	30	150	1,000	1,195	299
SWAN							
CANADA GOOSE							
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE							
MALLARD	183,050	2,550	4,000	8,700	10,900	26,150	6,538
BLACK	4,130	15	100	275	200	590	148
GADWALL	3,325	125	250	50	50	475	119
WIDGEON	65,135	2,180	3,000	2,225	1,900	9,305	2,326
PINTAIL	19,250	450	600	400	1,300	2,750	688
G.W. TEAL	1,400	25	50	25	100	200	50
B.W. TEAL	980	15	50	25	50	140	35
SHOVELER	4,375	25	100	125	375	625	156
WOOD DUCK	5,775	25	50	150	600	825	206
REDHEAD	140		20			20	5
CANVASBACK	25,200	200	200	1,000	2,200	3,600	900
RING-NECK	6,545	235	300	200	200	935	233
SCAUP	485,800	10,000	15,000	19,700	24,700	69,400	17,350
GOLDENEYE	15,855	500	600	815	350	2,265	566
BUFFLEHEAD	7,000	350	300	250	100	1,000	250
RUDDY	1,400		30	70	100	200	50
OLD SQUAW							
SCOTER							
COMMON MERGANSER	40,250	800	1,000	2,550	1,400	5,750	1,438
RED BR. MERGANSER	910	15	30	35	50	130	33
HOODED MERGANSER	805			35	80	115	29
TOTAL DUCKS	871,325	17,510	25,680	36,630	44,655	124,475	

DISTRICT: Cassville

MONTH: April

F.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 4/6	4/13	4/20	4/27	MONTHLY TOTAL	AVERAGE
COOT	149,100	6,800	8,500	4,000	2,000	21,300	5,325
SWAN							
CANADA GOOSE	490		70			70	18
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE	490		70			70	18
MALLARD	133,000	15,800	1500	1,000	700	19,000	4,750
BLACK	2,100	300				300	75
GADWALL	3,325	450		25		475	119
WIDGEON	43,470	6,000	200		10	6,210	1,552
PINTAIL	12,600	1,700	100			1,800	450
G.W. TEAL	8,400	1,150	50			1,200	300
B.W. TEAL	13,650	450	800	400	300	1,950	490
SHOVELER	15,400	1,550	500	100	50	2,200	550
WOOD DUCK	35,700	1,200	1,300	1,300	1,300	5,100	1,275
REDHEAD	4,200	600				600	150
CANVASBACK	51,100	6,300	1,000			7,300	1,825
RING-NECK	27,650	3,300	500	100	50	3,950	990
SCAUP	325,500	32,600	9,400	3,000	1,500	46,500	11,625
GOLDENEYE	700	100				100	25
BUFFLEHEAD	1,750	100	150			250	63
RUDDY	560	60	20			80	20
OLD SQUAW							
SCOTER							
COMMON MERGANSER	1,540	200	20			220	55
RED BR. MERGANSER	5,950	850				850	212
HOODED MERGANSER	1,400	80	40	40	40	200	50
TOTAL DUCKS	687,995	72,790	15,650	5,965	3,950	98,285	

DISTRICT: Cassville

MONTH: May

F.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 5/4	5/11	5/18	5/25	6/1	MONTHLY TOTAL	AVERAGE
COOT	2,450	100	100	50	50	50	350	70
SWAN								
CANADA GOOSE								
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE								
MALLARD	24,500	700	700	700	700	700	3,500	700
BLACK								
GADWALL								
WIDGEON								
PINTAIL								
G.W. TEAL								
B.W. TEAL	2,625	100	100	75	50	50	375	75
SHOVELER	840	50	50	20			120	24
WOOD DUCK	45,500	1300	1300	1300	1300	1300	6,500	1300
REDHEAD								
CANVASBACK								
RING-NECK								
SCAUP								
GOLDENEYE								
BUFFLEHEAD								
RUDDY								
OLD SQUAW								
SCOTER								
COMMON MERGANSER								
RED BR. MERGANSER								
HOODED MERGANSER	1,400	40	40	40	40	40	200	40
TOTAL DUCKS	74,865	2,190	2,190	2,135	2,090	2,090	10,695	

DISTRICT: Cassville

MONTH: June

F.Y. 74

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 6/8	6/15	6/22	6/29	MONTHLY TOTAL	AVERAGE
COOT	1,400	50	50	50	50	200	50
SWAN							
CANADA GOOSE							
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE							
MALLARD	19,600	700	700	700	700	2,800	700
BLACK							
GADWALL							
WIDGEON							
PINTAIL							
G.W. TEAL							
B.W. TEAL	1,400	50	50	50	50	200	50
SHOVELER							
WOOD DUCK	36,400	1,300	1,300	1,300	1,300	5,200	1,300
REDHEAD							
CANVASBACK							
RING-NECK							
SCAUP							
GOLDENEYE							
BUFFLEHEAD							
RUDDY							
OLD SQUAW							
SCOTER							
COMMON MERGANSER							
RED BR. MERGANSER							
HOODED MERGANSER	1,120	40	40	40	40	160	40
TOTAL DUCKS	58,520	2,090	2,090	2,090	2,090	8,360	2,090

NATIONAL WILDLIFE REFUGE SYSTEM PUBLIC USE REPORT

VISITS BY MONTH

CASSVILLE DISTRICT
03-3527-05-CSD

ACTIVITY NAME JUL-73 AUG-73 SEP-73 OCT-73 NOV-73 DEC-73 JAN-74 FEB-74 MAR-74 APR-74 MAY-74 JUN-74 12 MONTH
TOTAL

INTERPRETATION

EXHIBITS-DEMONSTRATIONS
CONDUCTED
OTHER PROGRAMS

26 20 1200 12 15 26
1247

EDUCATION

STUDENTS
TEACHERS

16 14 14 60 160 248
16

RECREATION-WILDLIFE WILDLANDS

HUNTING MIGRATORY BIRDS

DUCKS

2472 90
85

2562
85

GENERAL WATERFOWL
HUNTING RESIDENT GAME

UPLAND GAME BIRDS

BIG GAME, DEER-GUN

WHITE-TAILED DEER

BIG GAME, DEER-BOW

WHITE-TAILED DEER

SMALL GAME

FISHING

WARMWATER

CLAMS, CRABS, OYSTERS

WILDLIFE OBSERVATION

AUT

BUFF (NONMUTORIZED)

WILDLANDS APPRECIATION

FOOT

AUT

PHOTOGRAPHY

7090 15671 7160 9600 7400 4563 5375 4900 4000 8200 5850 84709
70 400 210 200 440 200 185 1000 1500 1900 6975
80 205 120 85 380 360 200 80 135 200 905
32256 48371 24000 30000 15000 775 3875 140 2400 5100 4790
100 95 80 100 80 80 80 180 250 200 162507
1515

RECREATION NON-WILDLIFE

CAMPING

PICNICKING

SWIMMING

BOATING

WATER SKIING

4843 5128 1750 210 40 725 3707 16403
2012 2658 40 670 1959 7339
4415 5687 40 190 3994 14286
4636 6205 400 1750 4272 18588
2313 3274 120 2166 7873

TOTAL INTERPRETATION

TOTAL EDUCATION

TOTAL HUNTING

TOTAL FISHING

TOTAL OTHER W/M RECREATION

26 16 20 1200 12 15 1273
105 2857 330 210 160 264
7160 15671 7160 9600 7400 4563 5375 4900 4000 8200 5850 3662
32836 48881 24400 30625 16055 4820 1170 1360 2000 2860 4285 7400 84779
176692

NATIONAL WILDLIFE REFUGE SYSTEM
PUBLIC USE REPORT

VISITS BY MONTH

WILDLIFE DISTRICT
527-05-CSD

ACTIVITY NAME	JUL-73	AUG-73	SEP-73	OCT-73	NOV-73	DEC-73	JAN-74	FEB-74	MAR-74	APR-74	MAY-74	JUN-74	12 MONTH TOTAL
TOTAL WILDLIFE ORIENTED	39996	64568	31691	43082	23785	9593	6705	6280	7214	7786	12560	13410	266670
TOTAL NON-WILDLIFE ORIENTED	18219	22952	2625	390	70				200	480	3455	16098	64489
TOTAL PUBLIC USE	58215	87520	34316	43472	23855	9593	6705	6280	7414	8266	16015	29508	331159
NU. VISITS TO REFUGE	19712	33071	10490	12836	8855	8913	5955	5430	5914	6666	13615	24408	155865

NATIONAL WILDLIFE REFUGE SYSTEM PUBLIC USE REPORT

ACT HRS BY MONTH

WILLE DISTRICT
527-05-CSD

JUL-73 AUG-73 SEP-73 OCT-73 NOV-73 DEC-73 JAN-74 FEB-74 MAR-74 APR-74 MAY-74 JUN-74 12 MONTH
TOTAL

INTERPRETATION

EXHIBITS-DEMONSTRATIONS
CONDUCTED
OTHER PROGRAMS

39 20 1200 12 15 1638
1247

EDUCATION

STUDENTS
TEACHERS

48 14 224 120 1280 1638
48

RECREATION-WILDLIFE WILDLANDS

HUNTING MIGRATORY BIRDS

DUCKS

7416 270
255

7686
255

GENERAL WATERFOWL
HUNTING RESIDENT GAME

UPLAND GAME BIRDS

160 160

320

BIG GAME, DEER-GUN

WHITE-TAILED DEER

BIG GAME, DEER-BOW

WHITE-TAILED DEER

SMALL GAME

FISHING

WARMWATER

CLAMS-CRABS-OYSTERS

WILDLIFE OBSERVATION

AUTO

BOAT (NONMOTORIZED)

WILDLANDS APPRECIATION

FOOT

PHOTOGRAPHY

RECREATION NON-WILDLIFE

CAMPING

PICNICKING

SWIMMING

BOATING

WATER SKIING

58116 61536 21000 5040 480 8700 44484 199356
6036 7974 120 2010 5877 22017
8830 11374 380 7988 28572
20862 27923 900 1800 7875 19224 83647
4626 6548 240 4332 15746

TOTAL INTERPRETATION

TOTAL EDUCATION

TOTAL HUNTING

TOTAL FISHING

TOTAL OTHER W/W RECREATION

39 20 1200 12 15 1286
48 14 224 120 1280 1686
420 8871 1230 840 224 120 12001
32220 43200 33300 20534 22050 36900 26325
32115 70515 32220 43200 33300 20534 24188 18000 22050 36900 26325
33146 49434 24760 30945 18500 16565 1430 2120 4930 8100 194805

NATIONAL WILDLIFE REFUGES SYSTEM PUBLIC USE REPORT

ACT HRS BY MONTH

WILDLIFE DISTRICT
27-05-CSD

ACTIVITY NAME	JUL-73	AUG-73	SEP-73	OCT-73	NOV-73	DEC-73	JAN-74	FEB-74	MAR-74	APR-74	MAY-74	JUN-74	12 MONTH TOTAL
TOTAL WILDLIFE ORIENTED	65261	120001	57439	83016	53030	37939	26258	23655	21334	25576	41965	35705	591179
TOTAL NON-WILDLIFE ORIENTED	98470	115355	24938	5850	315				900	2400	19205	81905	349338
TOTAL PUBLIC USE	163731	235356	82377	88866	53345	37939	26258	23655	22234	27976	61170	117610	940517
NO. VISITS TO REFUGE	19712	33071	10490	12836	8855	8913	5955	5430	5914	6666	13615	24408	155865