ROUTING SLIP	BRANCH OF LILDLIFE REFUGES DATE: 9/13 1949
MR. SALYER _	SECTION OF HABITAT IMPROVEMENT:
MR. KRUMMES	MR. GRIFFITH 80 10-20
MR. DUMONT	DR. BOURN LOS 8 10 - 8
MISS BAUM _	MISS COOK
SECTION OF OPERATION	SECTION OF LAND MANAGEMENT:
MR. BALL _	- MR. KENT
MR. REGAN	HR. ACKERKNECHT COL
DR. MORLEY	C. CEPNIOCD A DURDO.
SECTION OF STRUCTURE	S: STENOGRAPHERS:
MR. TAYLOR	
MR. JOHNSTON _	
	NARRATIVE REPORT
REFUGE:	CALHOUN
PERIOD:	MAY - AUGUST 1949

CALHOUN AND BATCHTOWN REFUGES NARRATIVE REPORT MAY, JUNE, JULY, AUGUST, 1949



I. GENERAL

A. Weather Conditions:

This was a warmer summer than 1948, with maximum temperatures higher in every month but June. July and August had maximums of 99 and 96 respectively, compared to 94 and 96 in 1948. Rainfall for the period was 1.43 greater than last year although July and August were drier. Relative readings are shown below:

Month	Year	Maximum	Minimum	Precipitation
May	1948	82	45	2.99
	1949	92	43	3.26
June	1948	96	55	3.96
	1949	94	53	7.30
July	1948	94	56	9.28
	1949	99	61	7.36
August	1948	86	53	.45
	15th) 1949	96	57	.19
			1948 Total	s 16.68
			1949 Total	s 18.11

B. Water Conditions:

The river stages were about the same this year compared with 1948. There was no prolonged high water this season. One flash rise in the early part of July did not last long enough to do any damage to food.

The high reading for the summer of 1948 was 16.2 compared to 16.1' this season.

The fluctuation in pool levels due to dam manipulations was not as bad as last year, but still undesirable particularly as it happened over week-ends, causing lots of complaints from fishermen. Low water this year favored plant life, and vegetation is much better than last year, which was considered good.

The comparison of pool levels with the same period in 1948 is shown below:

1948					1	949
Month	High	Low	Difference	High	Low	Difference
May	15.8	14.7	1.1	15.5	14.6	.9
June	15.4	14.3	1.1	15.8	14.8	1.0
July	16.2	14.7	1.5	16.1	14.9	1.2
August	15.3	14.8	.5	15.9	14.8	1.1

Maximum monthly variation in 1948 and 1949 was the same--4.2. Water levels this year can be considered favorable, with fairly stable conditions throughout the period.

II. WILDLIFE

A. Migratory Birds:

1. Populations and Behavior:

(a) Waterfowl:

Most ducks had left the area by the beginning of this report period, except for a limited number that remained all summer. For the first time, small numbers of scaup were observed at different areas during the period, but no young of this species was observed. Wood duck showed an increase in broods this year, with some large broods being observed. Favorable weather and water conditions contributed to increased production in this area, and almost all islands and other areas checked had more broods than last year. As was the case last year, several broods were observed back in the hills.

In 1948, 68 broods were observed, consisting of 66 broods of wood ducks and 2 mallard broods. This year 89 broods of wood ducks and 3 broods of mallards were seen. A comparison of 1948 and 1949 is shown in the following table:

Broods Seen			Young Seen		
Species	1948	1949	1948	1949	
Wood duck	66	89	531	837	
Mallard	2	3	12	29	
Totals	68	92	543	866	

(b) Geese:

Geese had left the area by the beginning of this report period, and none were observed during the period.

(c) Swans:

No swans were observed during the period.

(d) Egrets:

Egrets have returned to this portion of the river in larger numbers this year. In 1948 the peak number was 200 compared to 300 at present. It is estimated that 1600 of these birds used the area compared with 1500 in 1948. An estimated 75 egrets nested in the area.

(e) Shorebirds:

More favorable water levels this summer contributed to an increase of shorebirds over last year. Several Wilson snipe were observed the early part of the period compared to none last year.

(f) Other Water Birds:

Blue heron increased this year. An estimated 221 used the area during the period, while an estimated 100 nested on private land adjacent to the refuge.

2. Food and Cover:

Food and cover are better than last year on the Lower Pools, although last year was very good. Areas in Pools 25 and 26 have abundant vegetation, while the Stump Lake area is one solid mass of food and cover. Pond lily has made a big growth in Stump Lake. There is plenty of sago, American pondweed, millet, cutgrass, and smartweed in Pool 26. Sagittaria has made a bigger growth in all the marginal areas than last year.

The Batchtown area even looks better than last year, and last year was one of the best. There is an abundance of smartweed on all the ridges; lots of sago and American pondweed in the water areas; while millet and outgrass were also abundant in the marginal areas.

B. Upland Game Birds:

None were observed on refuge land as the area is mostly water and marsh, with little upland habitat.

C. Big Game Animals:

None were seen in this portion of the river bottoms.

D. Fur Animals: (a) Muskrats:

Muskrat signs have increased over last year, probably due to two consecutive years of favorable water conditions. All indications point to an increase in this species. It is believed that as long as the pools are fluctuated this species will not be here in any big numbers.

(b) Mink:

Mink are showing up in the bottoms this summer due to low water conditions. Several have been seen during the day carrying food to young. It is believed this species is on the increase in the lower pools.

(c) Skunk:

No signs of skunk have shown up on the refuge this year. The area does not have the right habitat for this species.

(d) Beaver:

A beaver house has been located on Portage Island, and signs of cutting have been observed on most of the islands as far north as Dardenne Island on the Mississippi River. A bank den was located on Mason Island in the vicinity of Grafton, Illinois.

(e) Raccoon:

Raccoon sign is general throughout the bottoms, and the general opinion is that this species is still on the increase. The hunting pressure on this species has been low the last few years because of the low price offered for pelts.

(f) Foxes:

Foxes are so numerous in this area that Jersey County has put a \$2.00 bounty on them. It is common to see them in the refuge areas during the day.

E. Predaceous Birds:

Eagles had left the area before the beginning of this report period. Red-tailed hawks are observed daily and show a little increase over last year. It is estimated that 30 are in the vicinity of the refuge, compared with 25 last year.

Turkey vultures are about the same as last year. Twentynine were observed, compared to 30 last year.

F. Fish:

In the early part of the period fishing was very good. Some fishermen came in with good catches of crappie and bluegill, but the pool fluctuations, while not of too great proportion, have created unfavorable fishing conditions off and on through the summer the same as last year. The drawdowns in Pool 26 often occurred on week-ends, which causes more complaints from anglers as those are the big fishing days. Fishing pressure is continually increasing in this area, and all boat liveries are doing a good business. In the last part of the period success lessened as the weather has been hot. Bass fishing has been poor all summer.

III. REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development:

The red lands in this vicinity have approximately 66 miles of boundary still to be posted. In the three closed areas (Gilbert Lake, Swan Lake, and Batchtown) there is a total of 26 miles of boundary line. These have all been posted, but require annual maintenance. At the present time Gilbert Lake and Swan Lake closed area lines have been reconditioned. Closed area lines required considerable brushing this summer. A few signs were lost by ice and had to be replaced. The Batchtown area has not been worked on as yet because of the proposed change in this area. The entire 26 miles of closed area boundary will be checked shortly before the hunting season to make sure that all signs are in place and in good condition.

Boat 628 was painted and repairs were made on the stern. The 21-foot boat was painted with two coats of paint early this spring, and during the last part of the period the bottom was painted again.

B. Plantings: 4. Cultivated Crops:

Eight permits for sharecropping were issued during the period as follows:

Permittee	Address	Acres	Use	
John Sherman	Grafton, Ill.	30	Corn	
August Toppmeyer	Deer Plain, Ill.	10	Corn	
Robert La Marsh	Deer Plain, Ill.	6	Corn	
Henry C. Weigal	Golden Eagle, Ill.	20	Corn	
W. F. Duncan	Grafton, Ill.	6	Corn	
H. G. Bimslager	Golden Eagle, Ill.	80	Corn	
Joe Navarre	Deer Plain, Ill.	6	Corn	

A good prospect for a big corn crop is in the making on these permits.

VI. PUBLIC RELATIONS

A. Recreational Use:

A lot of camping, fishing, boating, swimming, and picnicking was done on both the Illinois and Mississippi Rivers this summer. It is estimated that 300 pleasure boats are using Pool 26. There is more activity on the rivers than for several years.

B. Refuge Visitors:

During the period Mr. Cloe from the Illinois Department of Conservation worked in the Batchtown area checking for public shooting grounds. On June 16 Superintendent Steele, in company with Mr. Arthur, visited the Batchtown area.

D. Hunting:

There was no season during the period.

E. Fishing:

1. Sport:

Bass fishermen have not been very successful this year as the weather got hot after the season opened and some hard rains kept the water muddy. Good catches of crappie and bluegill were made in Swan Lake.

2. Commercial:

Commercial fishing was good in this area during the months of May and June, but slackened off during the last part of the period with the advent of very hot weather.

F. Violations:

No violations occurred on the refuge areas this period.

Superintendent, Upper Mississippi River Wildlife and Fish Refuge.

September 1, 1949.

REGIONAL DIACO

SEP 8 1949

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

WATERFOWL

Total Production:

(1) Species	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		Total	
Heat Lake, and the	ons Stump,		used by c	Beza			Broods	Estimated	Estimated	
Common Name	Number	_ Date	Number	Date	Number	Date	Seen	Total	for Period	
I. Swans:			S. 4993	APTA.						
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II. Geese:			.00	Pool				1		
Canada goose	51-154-10	The state of								
	A branch A	yd bet	Repor							
Brant_								Barrier -		
White-fronted goose										
Snow goose Blue goose		The state of	SN	MSTRUCTIO						
							44		173	
ed bluede neitnet	o garrango	species o	nenso .mro	E No best	at blunds 13	oj nosj	LE GOOD	Species:	(1)	
III. Ducks:	s Isloade	vecata ten	appropriate	has Island	to salaser	a agoust or	t navte			
Mallard	9	5/18	29	6/15	10 seloeq	8/5	3	29	50	
Black duck								ineed Jania	(2)	
Gadwall saloada in	to reside	glogs fon	seob mmulo	This o	number seen	and the	period			
Baldpate										
Pintail	interval o	besimil	s al Jaeser	species p	ent to med	atest num	ory edT -t	Feak Concentr	(8)	
Green-winged teal Blue-winged teal	6	0/2	100	0/0	300	0/0		inoi:	200	
Cinnamon teal		8/3	100	8/8	100	8/8	-		(4)	
Cinnamon teal Wood duck	pantennoo (5/9	837	6/30	150	8/8	. bol 89	837	926	
Red head		-1-					. DOT SOIL			
Ring-necked duck	autho has	ann I tavra	edo no beza	d beaution	a vauov ta	nedmon be	I: Estimat	Prodice	(5)	
Canvas-back	m TO OW D	o ebam od	bluoda ato	Brood dou	ng. areas.	lboord ev	sentati			
Scaup bestime ed black	de fost at	alasd on	galvad sol	. Estima	ing habitat	the breed	10 E01			
Golden-eye	}	1		1						
Buffle-head	uring the	refuge d	edl galau s	aloega ed	J lo redmus	Intot be	Estimat	lotal:	(9)	
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3-1750

Total Production:

Total	Ducks 866	(4). Last Seen Youns	Peak waterfowl numbers	(1) 390
betsmilte	Coots	Bronds	Areas used by concentrations Stump.	Swan Lake, and all
or Period	1 IstoT	Number Date Seen	areas in Pool 26.	Common Name
			arone in room see	rana :
			Principal nesting areas this season	Scattered over
			Pool 26.	:ease)
	B32		F001 &0.	anada goose
			Reported by Edward A	. Davisezoog gailson
				hits-fronted goose
		Ī	NSTRUCTIONS	now goose
				lue goose
		given to those species of 1		ttention should be
(2)	First Seen:	The first refuge record for	ocal and National significance. the species during the season concerned. This column does not apply to residen	d in the reporting
(2)		The first refuge record for period, and the number seen The greatest number of the	the species during the season concerned. This column does not apply to resident species present in a limited interval of	d in the reporting nt species.
(2)	First Seen: Peak Concentra-	The first refuge record for period, and the number seen The greatest number of the	the species during the season concerned. This column does not apply to residen	d in the reporting at species. f time.
(2) (3) (4)	First Seen: Peak Concentration:	The first refuge record for period, and the number seen The greatest number of the state of the	the species during the season concerned. This column does not apply to resident species present in a limited interval of the species during the season concerned.	d in the reporting of time. In the reporting of time. In the reporting of time.

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention since these data are necessarily based on an analysis of the rest of the form.

(TOVO)

3-175	51
Form	NR-1A
(Nov.	1945)

MIGRATORY BIRDS

Refuge Calhoun and Batchtown

(other than waterfowl)

Months of May to August, 194.9

(1) Species	First		Peak Nu		Last	4) Seen		(5) Production	n begnis	(6) Total
Common Name	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number
I. Water and Marsh Birds:										Duck h
Blue heron Egrets	4	5/3 5/23	150 600	5/14	2 24	8/5	1	75 75	100	1600 YOT 1600
										WOID
nival A bay	25 Edin	Reported								
			SIA	NSTRUCTIC						
II. Shorebirds, Gulls and	addition	nI .ore	"maej" ,	'LLugaea'	terms as	Istenes	BLOVA .7		:E0losc	5 (1)
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Passeriformes)	oerned.	eason con	edf tol	apioeqa	edf wol b	nge recor	ler faill	odT :	irst Seen	(2)
time.	to Lavret	nt belimt	l n al ja	den pres	the spec	to redmun	greatest		edwyll slee	(5)
	begreeno	nonne	odf gaitu	species	for the	broost eg	ulon tasi	adT	ast Seen:	(4)
counts	laujos bm	vations.	on obser	ead bas	ung produ	ber of yo	nun belan		roduction	(a)
begreened believe	n and and	Africa An	adt make							*

(1)	(2)	(3)	(4)	(5)	(6)
II. Doves and Pigeons: Mourning dove White-winged dove	to Augus	(Iwoliejsw asd)	rodfo)	ge Callson and Bas	Nov. 1945)
IstoT golfaghe		(4) Ders Last S	en Peak Num	(2) First S	(1) Species
IV. <u>Predaceous Birds</u> : Golden eagle	Number T	Date Number	Date Number	Number	Common Name
Duck hawk Horned owl Magpie Raven Crow	All year residents	8/16 1/11 26	002 8/0 003 82/0	:abr18	Mater and Marsh films herem 10000
			Reporte	d byEdward A. D	avis

(1) Species:

Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiiformes)

II. Shorebirds, Gulls and Terns (Charadriiformes)

III. Doves and Pigeons (Columbiformes)

IV. <u>Predaceous Birds</u> (Falconiformes, Strigiformes and predaceous Passeriformes)

(2) First Seen: The first refuge record for the species for the season concerned.

(3) Peak Numbers: The greatest number of the species present in a limited interval of time.

(4) Last Seen: The last refuge record for the species during the season concerned.

(5) Production: Estimated number of young produced based on observations and actual counts.

(6) Total: Estimated total number of the species using the refuge during the period concerned.

Months of May to August Refuge Calhoun and Batchtown , 194 9 (3) (4) (1) (2) (5) (6) (7) Young Produced Sex Species Density Removals Total Remarks Number broods obs'v'd. Estimated Total For Restocking Estimated Hunting number Pertinent information not Acres Cover types, total using specifically requested. per Common Name acreage of habitat Bird Refuge List introductions here. Percentage There is nothing to report under this.

INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.*

(1) 8	SPECIES:	Use	correct	common	name.
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(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.