



ROUTING SLIP

BRANCH OF WILDLIFE REFUGES

DATE:            195

MR. SALYER                     

MR. KRUMMES                   

MR. DUMONT                   

MISS BAUM                   

SECTION OF HABITAT IMPROVEMENT:

~~MR. GRIFFIN~~ REG

~~DR. BOURN~~ WSP

SECTION OF OPERATIONS:

MR. BALL                   

MR. REGAN                   

DR. MORLEY                   

SECTION OF LAND MANAGEMENT:

MR. ACKERKNECHT                   

STENOGRAPHERS:

NARRATIVE REPORT

REFUGE: CALHOUN AND BATCHTOWN

PERIOD: SEPT - DEC., 1950

CALHOUN AND BATCHTOWN REFUGES  
NARRATIVE REPORT  
SEPTEMBER, OCTOBER, NOVEMBER, DECEMBER, 1950

I. GENERAL

A. Weather Conditions:

The maximum temperature during this period was higher in every month except December, 1949. The minimum temperature was lower in every month except October, 1949. Rainfall was 4.63 less this period, compared with the same period last year.

Relative readings are shown below:

Month	Year	Maximum	Minimum	Precipitation
September	1949	89	39	3.51
	1950	91	36	1.77
October	1949	87	29	6.22
	1950	90	35	.98
November	1949	80	22	trace
	1950	88	6	2.69
December	1949	70	15	1.14
	1950	68	2	.80
1949 Total				10.87
1950 Total				6.24

B. Water Conditions:

River stages were about the same as last year, with no big changes occurring during the period. Fluctuations this year happened during the first of the week instead of week-ends, as was the case last year. This was better for fishermen, but hunters complained as usual.

The comparison of pools with the same period in 1949 is shown below:

Month	Year	High	Low	Difference
September	1949	15.3	14.4	.9
	1950	15.4	14.0	1.4
October	1949	15.5	14.4	1.1
	1950	15.4	14.6	.8
November	1949	15.2	14.5	.7
	1950	15.1	14.5	.6
December	1949	15.2	14.4	.8
	1950	15.1	14.3	.8



Maximum monthly variation in 1950 was 1.4, compared with 1.1 in 1949.

## II. WILDLIFE

### A. Migratory Birds:

#### 1. Populations and Behavior:

##### (a) Waterfowl:

Ducks started to come into the area on September 11 in fair numbers. Blue-wing teal were here in good numbers by August 23, which was earlier than usual. Some pintail showed up on September 20, and the peak concentration occurred November 19, compared with December 13 last year. The peak concentration last year was 400,000, compared with this year's peak concentration of 150,000. This year we had two cold waves during the hunting season, and ducks were pushed out and did not pile up in refuge areas as in other years. The Batchtown area peak concentration was 79,400, compared with last year's peak of 100,000. Ducks did not feed in cornfields as much as last year, and those that did would not come out until after shooting hours. Hunters complained that ducks were harder to decoy this year.

##### (b) Geese:

Canada geese started to come into refuge areas on October 9, compared with September 6. Last year's peak was on September 20, with 500, compared with this year's peak of 200 on November 12.

Blue and snow geese showed a decrease this year, with a peak concentration of 4,000 birds on November 12, compared with last year with 10,000 birds on December 13. By December 7 all geese had left the area.

##### (c) Swans:

None were observed.

##### (d) Egrets:

Egrets were here in goodly numbers during the early fall. The peak concentration was August 23, with about 800 birds in the area. Soon after the hunting season opened up, most all birds pulled out. I would say that egrets are increasing in this area.

(e) Shorebirds and Other Water Birds:

Wilson snipe seem to be down some this year, when not as many were observed as last year. Last year 100 were observed, compared with 50 this year. Killdeer showed some increase over last year, and about 400 were seen.

2. Food and Cover:

Food and cover was about the same as last year in both areas. There were ample amounts present for the season was short; that is, the concentration of ducks using the closed areas lasted a shorter period compared with other years due to the cold waves during the period. Ducks did not use cornfields as much as last year, indicating that they were getting feed on the refuges. There should be plenty for the spring flight.

B. Upland Game Birds:

No upland game birds are present on either the Calhoun or Batchtown areas.

There is ample food and cover present on both areas to sustain fair numbers of upland game, but for some reason none of these birds use the areas.

C. Big Game Animals:

No big game animals are present on either area.

D. Fur Animals:

(a) Muskrats:

Muskrats have increased some in the areas, but the limited habitat area is not conducive to much of an increase in muskrats.

(b) Mink:

Trappers that trap in open areas say mink are about the same as last year. Some have been caught, but most all lakes are frozen up, and trappers report that there will be plenty left after this season.

(c) Skunk:

No sign of this species is noted in refuge areas as the land is too low for dens.



(d) Beaver:

It is thought that beaver are increasing in this area. There are signs of them on most islands along the Mississippi and Illinois Rivers.

(e) Otter:

None here.

(f) Raccoon:

A good number of raccoon are being caught along the Illinois and Mississippi Rivers. Trappers say they don't want them, but when they set traps for mink they get a raccoon. Raccoon appear to be holding strong compared with last year.

(g) Foxes:

Foxes are about the same as last year, and are plentiful in all areas.

(h) Others:

Nothing under this.

E. Predaceous Birds:

Eagles were here in good numbers, and about the same numbers were observed as last year. It is estimated that 25 are present. Hawks are about the same as last year. Red-tailed are observed almost every day. I would say this species is holding its own. Owls in the timbered areas were more plentiful than last year.

F. Fish:

Fishing was a little better than last year and goodly number of crappie, bluegill, and bass were taken. Fishing pressure was greater this year than last year. All boat liv-eries had a good year.

## IV. ECONOMIC USE OF REFUGE

E. Other Uses:

Eight permittees for sharecropping report results as follows:

Permittee	Permit	Acres	Permittee share	Govt. share
John Sherman	113	30 corn	360	120 left-field
W.F.Duncan	110	6 corn	120	60 left-field
John Held	159	8 beans	23.49	7.83 sold
August Toppmeyer	158	10 beans	120	40 sold
Henry C. Weigel	112	20 corn	375	125 sold
Joe Navarre	114	6 corn, not through yet		
Robert La Marsh	111	6 beans, not through yet		
Harry G. Bimslager	160	80 beans & corn, not through yet		
Total permittees share corn			855	180 left-field
Total permittees share beans			143.49	172.83 sold

The Government's share was sold for \$210.95 and money orders were sent to the Winona office.

## VI. PUBLIC RELATIONS

### A. Recreational Uses:

Lots of boating and picnicking was observed on the Mississippi and Illinois Rivers. A lot of fishing was also done on these rivers this fall, with fair results.

### B. Refuge Visitors:

Dr. W. E. Green was here during the first few days of the hunting season, checking on hunting pressure and making bag checks.

### C. Refuge Participation:

On October 17 the Refuge Manager attended a conference with War Department and Fish and Wildlife Service personnel from the main office, Mr. Steele from the Winona office, and Regional Office personnel.

### D. Hunting:

The hunting was not so good this year due to two cold waves that kept the lakes frozen up about two weeks. This kept a lot of hunters out of the field. The last two weeks of hunting was confined to the river channel. The total number of hunters in all the areas checked was 8059, compared with 8695 last year. The total number of ducks killed this year was 8999, compared with last year's 12,905.



Duck kill checks are shown below:

Batchtown Area

Hunters in field . . . . .	1512
Hunters checked. . . . .	1512
Ducks in bag checked . . . . .	2189
Av. ducks in bag . . . . .	1.4
Total ducks killed in area . . . . .	2189

Stump Lake Area

Hunters in field . . . . .	5992
Hunters checked. . . . .	1419
No. ducks checked. . . . .	1409
Av. bag per hunter . . . . .	0.99
Estimated total killed . . . . .	5931

Diamond Island

No. hunters in area . . . . .	184
No. hunters checked . . . . .	184
No. ducks checked . . . . .	257
Av. bag per hunter. . . . .	1.3
Estimated total kill. . . . .	257

Reds Landing Club-Blackwell

No. hunters in area . . . . .	106
No. hunters checked . . . . .	106
No. ducks checked . . . . .	202
Av. bag per hunter. . . . .	1.9
Estimated total kill. . . . .	202

Gilead Club

No. hunters in area . . . . .	68
No. hunters checked . . . . .	68
No. ducks checked . . . . .	200
Av. bag per hunter. . . . .	2.9
Estimated total kill. . . . .	200



Bachelor Club (south of Gilead Club)

No. hunters in area . . . . .	197
No. hunters checked . . . . .	197
No. ducks checked . . . . .	220
Av. bag per hunter. . . . .	1.1
Estimated total kill. . . . .	220

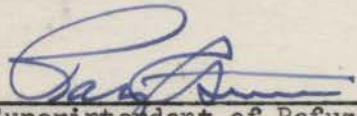
E. Fishing:

Bass, crappies and bluegill were fair through the fall up to November 3. Most fishing stopped then.

Commercial fishing was just fair this fall, with no big catches reported. Most of them have quit for winter as there is too much ice.

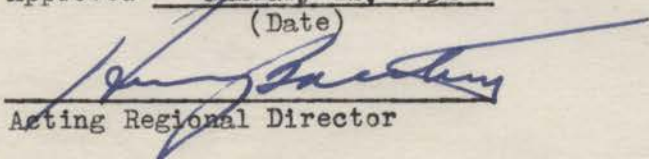
F. Violations:

Two cases were turned over to State wardens and settled in State court. Total fines were \$50.00, with costs of \$8.00.

  
Superintendent of Refuges

January 10, 1951

Approved January 12, 1951  
(Date)

  
Acting Regional Director

## WATERFOWL

Refuge CalhounMonths of Septemberto December, 1950

(1) Species  Common Name	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total
	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for period
I. Swans: Whistling swan									
II. Geese:									
Canada goose	15	10/9	200	11/12	100	12/1			250
Cackling goose									
Brant									
White-fronted goose									
Snow goose	10	10/9	2,000	11/12	2,000	12/1			2,500
Blue goose	10	10/9	2,000	11/12	2,000	12/1			2,500
III. Ducks:									
Mallard	25	9/12	136,000	11/19	99,000	12/1			187,600
Black duck	100	10/6	1,000	11/12	200	12/1			2,000
Gadwall	25	10/9	200	11/12	200	11/12			500
Baldpate	500	9/20	2,000	11/6	2,000	11/29			3,000
Pintail	20	9/20	10,000	11/12	250	12/1			15,000
Green-winged teal	150	10/30	600	11/19	100	12/1			1,000
Blue-winged teal	500	8/23	6,000	10/9	50	11/12			10,000
Cinnamon teal									
Shoveller									
Wood duck	2,000	8/23	2,000	8/23	25	11/12			2,500
Redhead									
Ring-necked duck									
Canvas-back	50	12/1	50	12/1	50	12/1			100
Scaup	200	10/30	5,000	11/19	100	12/1			10,000
Golden-eye	100	12/1	100	12/1	100	12/1			150
Buffle-head									
Ruddy duck	25	10/16	100	11/3	100	11/3			150
IV. Coot:	2,000	10/9	7,000	10/16	150	11/19			9,000



SUMMARIES

Dates waterfowl counts made \_\_\_\_\_

Total waterfowl usage during period 237,250

Percent of waterfowl area covered \_\_\_\_\_

Peak waterfowl numbers 167,250

Dates brood counts made \_\_\_\_\_

Areas used by concentrations Swan and Gilbert Lakes

Percent of area covered in brood counts \_\_\_\_\_

Total production: \_\_\_\_\_

Principal nesting areas this season \_\_\_\_\_

Geese \_\_\_\_\_

Ducks \_\_\_\_\_

Coots \_\_\_\_\_

Reported by Edward A. Davis

INSTRUCTIONS

- (1) Species: 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.
- (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
- (3) Peak concentration: 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 in the reporting period.
- (5) Young produced: Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact should be omitted.
- (6) Total: Estimated total number of the species using the refuge during the period. This figure may or may not be more than that used for peak concentrations, depending upon the nature of the migrational movement.

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



## WATERFOWL

 Refuge Batchtown Months of September to December, 1950

(1) Species  Common Name	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total
	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for period
I. <u>Swans:</u> Whistling swan									
II. <u>Geese:</u> Canada goose Cackling goose Brant White-fronted goose Snow goose Blue goose	100	10/27	100	10/27	100	10/27			100
III. <u>Ducks:</u> Mallard Black duck Cadwall Baldpate Pintail Green-winged teal Blue-winged teal Cinnamon teal Shoveller Wood duck Redhead Ring-necked duck Canvas-back Scaup Golden-eye Buffle-head Ruddy duck	25 1,000 20 200 100 300 3,000  500   200	9/12 10/27 10/9 10/9 10/9 11/2 10/9  8/23   11/2	20,000 1,000 100 4,000 50,000 500 3,000  500   200	11/2 10/27 11/2 11/2 11/2 11/17 10/9  8/23   11/14	3,000 50 100 300 3,000 500 100  10   50	11/17 11/17 11/2 11/17 11/17 11/17 11/2  11/14   11/17			20,000 1,000 100 4,000 50,000 500 3,000  500   200
IV. <u>Coot:</u>	500	10/9	5,000	11/2	100	11/14			5,000



SUMMARIES

Dates waterfowl counts made \_\_\_\_\_

Percent of waterfowl area covered \_\_\_\_\_

Dates brood counts made \_\_\_\_\_

Percent of area covered in brood counts \_\_\_\_\_

Total production:

Geese \_\_\_\_\_

Ducks \_\_\_\_\_

Coots \_\_\_\_\_

Total waterfowl usage during period 79,400

Peak waterfowl numbers 79,400

Areas used by concentrations Batchtown closed area

Principal nesting areas this season \_\_\_\_\_

Reported by Edward A. Davis

INSTRUCTIONS

- (1) Species: 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.
- (2) First seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
- (3) Peak concentration: 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 in the reporting period.
- (5) Young produced: Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact should be omitted.
- (6) Total: Estimated total number of the species using the refuge during the period. This figure may or may not be more than that used for peak concentrations, depending upon the nature of the migrational movement.

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



3-1751

Form NR-1A  
(Nov. 1945)MIGRATORY BIRDS  
(Other than waterfowl)Refuge CalhounMonths of September to December, 1950

(1) Species	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production			(6) Total
Common Name	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number
I. <u>Water and Marsh Birds:</u>										
Blue heron	150	8/23	150	8/23	1	12/1				
Egrets	100	8/14	800	8/23	10	11/4				
Cormorants	20	10/1	500	11/4	3	11/20				

(over)



(1)	(2)	(3)	(4)	(5)	(6)
III. <u>Doves and Pigeons:</u> Mourning dove White-winged dove					
IV. <u>Predaceous Birds:</u> Golden eagle Duck hawk Horned owl Magpie Raven Crow					
	here all year around				
					Reported by _____

#### INSTRUCTIONS

- (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 Gruiformes)  
II. Shorebirds, Gulls and Terns (Charadriiformes)  
III. Doves and Pigeons (Columbiformes)  
IV. Predaceous Birds (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.



3-1752  
Form NR-2  
(April 1946)

## UPLAND GAME BIRDS

1613

Refuge Calhoun Months of September to December, 1950

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
	Nothing to report under this.									



## 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.



Refuge CalhounYear 1945

(1) Species	(2) Density	(3) Young Produced	(4) Removals				(5) Losses			(6) Introductions		(7) Estimated Total Refuge Population as of Dec. 31	(8) Sex Ratio
Common Name	Cover types, total Acreage of Habitat	Number	Hunting	For Re- stocking	Sold	For Research	Predation	Disease	Winter Losses	Number	Source		Percentage
Nothing to report under this.													



## INSTRUCTIONS

### Form NR-3 - BIG GAME

- (1) SPECIES: Use correct common name; i.e., Mule deer, black-tailed deer, white-tailed deer. It is unnecessary to indicate sub-species such as northern or Louisiana white-tailed deer.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) exclusive of fenced herds. Detailed data may be omitted for species 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 total number of young produced on refuge.
- (4) REMOVALS: Indicate total number in each category removed during the year.
- (5) LOSSES: On the basis of known records or reliable estimates indicate total losses in each category during the year.
- (6) INTRODUCTIONS: Indicate the number and refuge or agency from which stock was secured.
- (7) TOTAL REFUGE POPULATION: Give the estimated population of each species on the refuge as of December 31.
- (8) SEX RATION: Indicate the percentage of males and females of each species as determined from field observations or through removals.

Refuge CalhounYear 1945

## Botulism

## Lead Poisoning or other Disease

Period of outbreak \_\_\_\_\_

Period of heaviest losses \_\_\_\_\_

## Losses:

	Actual Count	Estimated
(a) Waterfowl	_____	_____
(b) Shorebirds	_____	_____
(c) Other	_____	_____

Number Hospitalized	No. Recovered	% Recovered
(a) Waterfowl	_____	_____
(b) Shorebirds	_____	_____
(c) Other	_____	_____

Areas affected (location and approximate acreage) \_\_\_\_\_

Water conditions (average depth of water in sickness areas, reflooding of exposed flats, etc.) \_\_\_\_\_

Condition of vegetation and invertebrate life \_\_\_\_\_

Remarks \_\_\_\_\_

Kind of disease \_\_\_\_\_

Species affected \_\_\_\_\_

Number Affected Species	Actual Count	Estimated
_____	_____	_____
_____	_____	_____
_____	_____	_____

Number Recovered \_\_\_\_\_

Number lost \_\_\_\_\_

Source of infection \_\_\_\_\_

Water conditions \_\_\_\_\_

Food conditions \_\_\_\_\_

Remarks None observed as yet.



Refuge CalhounYear 1950

Species	Relative Abundance	Sport Fishing		Commercial Fishing		Restocking		Number removed for Restocking
		Man days Fishing	Number Taken	No. of Permits	Pounds Taken	Number Stocked	Area Stocked	
Nothing to report under this.								

REMARKS:

PLANTINGS  
(Marsh - Aquatic - Upland)

Refuge CalhounYear 1945

Species	Location of Area Planted	Rate of Seeding or Planting	Amount Planted (Acres or Yards of Shoreline)	Amount & Nature of Propagules	Date of Plant- ing	Survival	Cause of Loss	Remarks
Nothing to report under this.								

TOTAL ACREAGE PLANTED:

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







DIRECTIONS FOR PREPARING FORM NR-8  
CULTIVATED CROPS

Cultivated Crops Report Form NR-8 should be prepared on a calendar-year basis for all crops harvested or utilized during the calendar year and submitted with the December 31 refuge report.

Permittee - List each permittee separately. If lands of the refuge are farmed by refuge personnel or hired labor, this should be indicated in the Permittee column.

Permit No. - List the number of the Special Use Permit issued to the individual.

Use or Location - The Unit No. or name specified in the Economic Use Plan should be listed in this column.

Crops Grown - A separate line of the form should be used for each crop grown by each permittee or by refuge personnel. This is important, since if each crop grown by each operator is not specifically enumerated, the report will be of no value for statistical purposes.

Average Yield per Acre - It is important that the average yield per acre of each crop grown by each operator should be shown.

Permittee's Share - Only the number of acres harvested or utilized by the permittee for his own benefit should be shown under the Acres column, and only the number of bushels of farm crops harvested by the permittee for himself should be shown under the Bushels Harvested column. It is requested that all crops harvested be reduced to bushels wherever possible, or, as in the case with the harvesting of seed such as that of sweet clover, alfalfa, brome grass, etc., the total harvested crop in pounds may be shown. Timothy, alfalfa, or other hay harvested by the permittee should be shown on Form NR-10 and should not be shown in the Permittee's Share column.

Government's Share or Return - Harvested - Show the number of bushels harvested for the Government and the acreage from which this share is harvested, both for grain raised by refuge personnel and by permittees. Unharvested - show the exact number of acres of crops allowed to remain unharvested as food and cover for wildlife. An estimate of the number of bushels of grain that is available for the wildlife in such unharvested crops should be shown in the Bushels column.

Compensatory Services, or Cash Revenue - Show other services received by the Government in cooperative farming activities, the number of acres of food strips planted for wildlife, the amount of wildlife crops not otherwise reported that are planted by cooperators for the Service, or the cultivation of wildlife plantations. If the permit is on a fee basis, the total cash revenue received by the Service.



COLLECTION AND RECEIPTS OF PLANTING STOCK  
(Seeds, rootstocks, trees, shrubs)

Refuge Calhoun Year 1945

3-1760  
Form NR-10  
(April 1946)

HAYING AND GRAZING

Refuge Calhoun Year 1945

Permittee	Permit No.	Unit or Location	Actual Acreage Utilized	Animal Use Months	Tons of Hay Harvested	Period of Use From - To	Rate	Total Income	Remarks
		Nothing to report under this.							

Totals:

Acreage grazed.....	Animal use months.....	Total income Grazing.....
Acreage cut for hay.....	Tons of hay cut.....	Total income Haying.....



Ties.....