

BLACKWATER

NARRATIVE REPORTS

JANUARY - DECEMBER 1946

ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: January 22 1947.

MR. SALYER

SECTION OF HABITAT IMPROVEMENT:

MR. BLAIR

Mr. Griffith REG 3-10

MR. KRUMMES

Dr. Bourn WSB 1/31

MR. DUMONT

PAD 3/4

Miss Cook Inc 2-6

SECTION OF OPERATIONS:

SECTION OF LAND MANAGEMENT:

Mr. Regan

Mr. Kent
Mr. Krummes

Mr. Ball

Mr. Ackerman WA 3-27
Mr. Dalton

Miss Baum

SECTION OF STRUCTURES:

STENOGRAPHERS:

Mr. Taylor WV 5/15

AK 3-11-47

REMARKS:

BLACKWATER NATIONAL WILDLIFE REFUGE

NARRATIVE REPORT

SEPTEMBER - DECEMBER 1946.

Return to:

Blackwater National Wildlife Refuge
Narrative Report

September, October, November and December, 1946



I. GENERAL

A. Weather Conditions

	<u>Snowfall</u>	<u>Rainfall</u>	<u>Max.</u> <u>Temp.</u>	<u>Min.</u> <u>Temp.</u>	<u>Prev.</u> <u>Winds</u>
September		3.21	88	42	N.E.
October		1.94	82	36	N.E.
November		3.32	76	22	N.W.
December	4.0	2.23	70	12	N
	4.0	10.70	88	12	N.E.

The weather conditions during the past fall have been fairly mild with less than normal rainfall. Compared with U. S. Weather Bureau averages (1898-1932), September precipitation was 0.18 inches above normal, October precipitation was 1.37 inches below normal, November - 0.71 inches above normal, and December - 1.15 inches below normal, or a deficiency of 1.63 inches for the quarter. Average monthly temperatures (45 year period) at Cambridge, Md. are as follows: September 67.5° F; October 59° F; November 47.9° F.; and December 38.2° F.

The average date of the first killing frost for this section is October 31, but the first freeze in the fall of 1946 did not occur until November 13. Temperatures of 32° F. or below were recorded on six occasions in November and seventeen days in December.

As a whole, both weather and tide conditions have been favorable for muskrat production and we are looking forward to a successful and profitable trapping season.

B. Water Conditions.

During this period water levels on all fresh water impoundments and ponds were slightly below normal in spite of a total of 10.70 inches of rainfall for this period. Sufficient water supply was available for the waterfowl during the concentration period. The last week of December water levels reached a high of 3.30 in #3 Pond indicating 0.42 inches below normal.

C. Fires.

No fires have been discovered on the Refuge during this period.

During the first part of the next period our regular burning program will take place on Units 1, 2, 3, 4, 5, 6, 7, 10, 13 and 27.

II. WILDLIFE

A. Migratory Birds.

1. Population and Behavior. Waterfowl in general has shown a 30% decrease under that of last year for this same period on the Refuge area. The peak concentration of Canada geese appeared on the Refuge on November 20 when 6,000 were estimated, showing a decrease of about 50%. This species have changed their habits of feeding this year. They appeared on the Refuge fields on December 21st, that being the first and only day during this entire period that this occurred. We have failed to definitely find the reason for this but it is assumed that the areas restricted during the war adjacent to the Refuge prohibited the waterfowl from feeding and resting on these areas and since the restrictions have been lifted and bombing practice discontinued the waterfowl have returned to the natural feeding areas. It might be mentioned that during the period of restriction on these areas the aquatics made an excellent growth and there is now an abundance of natural food available.

The main concentration of geese on the Refuge is Meekins Creek area. During this period the Deadwoods marsh area, Wolfpit Pond, Colsten Pond, Twin Pond and No. 3 Pond at CCC water impoundment were also points of concentration. About one week the Canada geese used Harpers Pond daily and then moved over to Short's Creek Pond for three days.

The common Mallard duck has shown a decrease of about 15% compared with that of last year for this same period. The peak concentration appeared on the Refuge the first week in November when 3,400 were estimated. This species seem to congregate on most all ponds and creeks of the Refuge but the main concentration appeared on Headquarters Ponds.

The common Black duck has shown a 20% decrease on the refuge for this period. The peak concentration appear on the second week of November when 4,450 were estimated.

Baldpates were first observed on the Refuge October 17 and the peak concentration appeared November 20. Estimated total 4,450 showing a 15% decrease compared with last year for this same period.

Pintails have also shown a decrease in this area. Their first appearance on the Refuge was October 17 and the peak concentration occurred on November 7 when 11,340 were estimated, showing a decrease of 10%.

Green-winged Teal appeared on the Refuge area October 17 and a total of 400 were estimated.

Blue-winged Teal has shown a 5% increase over that of last year for this same period. This species indicates a good come-back in population in this area and they are well distributed on the entire Refuge. A total of 3,700 were estimated at the peak concentration on November 6.

The Wood duck shows an increase on the Refuge area for this period. A total of 300 were estimated in the month of September near headquarters on No. 2 Pond. It is very interesting to note that this species has shown a good increase in this area.

The Goldeneye has made a slight increase over that of last year on the Refuge area. An estimated total of 700 were observed December 10 indicating a 15% increase.

The Bufflehead has also made a 5% increase on the Refuge area. An estimated 400 were observed on December 10, this being the peak concentration for this species.

The Shoveller appeared on the Refuge in small numbers during this period. They were first observed on December 15 and the peak concentration appeared about December 27 when 100 were counted.

2. Food and Cover. The presence of food on the Refuge has been in abundance for waterfowl this period. Aquatics have made a wonderful growth over the entire area. Refuge Field E was planted in soybeans and 5 acres were harvested for seed. The remainder was left for waterfowl and upland game. After the waterfowl did not use this field it was decided by our Refuge Supervisor that we should harvest the remaining part of this field but inclement weather prevented us from having the soybeans combined. Refuge fields F & I were planted in rye. Field F made a good growth but the waterfowl failed to come in for browsing. Fields C and T were planted in rye also but the waterfowl refused to use these fields this season as was expected. Refuge Field D, consisting of 14 acres, was planted in soybeans by our Share-cropped John Luthy and when this field was harvested a good amount of beans were left on the ground, making wonderful food for the waterfowl but they also failed to use this field. Additional grain (corn) was placed on these fields in question to encourage the waterfowl to become accustomed to their former habits but this also resulted with no success. Natural food seems to be so plentiful on other areas of the Refuge the waterfowl refuse to come in for supplementary feeding. 7½ acres of rye was planted in Refuge Field O and at the end of this period no waterfowl had used this area.

3. Botulism. None discovered on the Refuge for this period.

4. Lead-Poisoning and other Diseases. None to report from the Refuge for this period.

B. Upland Game Birds

1. Population and Behavior. The quail population indicates about the same numbers as of last year for this period. The average covey was 10 and they were observed along the Old Mill Road, No. 3 dike, McGraws Island, Refuge T, F, I, R, S, O, L, K, E, C, and D. Estimated total population for this period was 600.

2. Food and Cover. There has been sufficient food and cover available for the upland game during this period and supplementary feeding has not been necessary.

3. Diseases. None discovered on the Refuge for this period.

C. Big Game Animals.

Evidence of deer has been observed on the Refuge during this period in the vicinity of Bull Point. Several adjacent land owners have reported observing deer and probably they are the same herd that occasionally visit the Refuge.

D. Fur-bearing Animals, Predators, Rodents and other Mammals.

1. The annual muskrat house count was completed December 5 by the

Fur Animal Field Station Staff and the information was received in this office on December 10. We immediately submitted our recommendations for trapping of Units 1 to 10, 12 to 16, 20, 27 to 32, 34, 35, 35a and 36. At the end of this period the program had been approved, the skinners and Assistant Trapping Inspector contacted and trappers for all units except 13, 14, 20, 36 and 32 had been assigned. The unassigned units were isolated hunts and the muskrat population is not too great to cause any damage to the marsh area if left untrapped. We were very fortunate in obtaining the 10 trappers as most local trappers had not trapped for several years and had either sold their trapping equipment or it was in such poor condition that a complete new trapping equipment would have to be purchased. Several trappers looked over these isolated units and stated that the population was not sufficient to justify the purchase of the necessary equipment they would need. Also, the present shanty on Units 32, 29, 23 & 25a were in such poor condition that living conditions during winter months would not be too pleasant. New shanties should be erected to accommodate at least two trappers prior to the opening of next season on the above mentioned four units. This proposal for the erection of shanties will be included in the 1948 trapping operation estimates.

2. The rabbit population seems to be about the same as of last year for this same period. Several could be observed from headquarters to the former CCC Camp along the Old Mill Road, around headquarters residences 1 and 2. The total estimated population on the Refuge area is 300.

3. There seems to be a slight decrease in the population of the Bryant fox and gray squirrel during this period. An estimated total of 300 of both species ^{are} on the Refuge area.

4. The evidence of raccoon and red fox population has increased to the extent that some action was necessary to remove a limited number of these predators to make an effort to improve muskrat production and marsh management. The removal of raccoon and fox was included in the trapping program for the 1947 season.

5. Several common house cats were removed during this period.

6. Some evidence of otter has been observed on the Refuge area namely, Deadwoods (#16) unit and Lower Jabex Gut (#7) unit.

7. There seems to be an increase of the eastern beaver (flat tail) on the Refuge in the vicinity of #3 Pond. These "engineers" keep the Refuge Personnel busy clearing debris from the flood gates during the near normal water level. Two beavers, male and female, escaped from the Fur Animal enclosures about 3 years ago and later they were discovered in the new water impoundment. At the present time it is estimated that 15 are on the Refuge area.

E. Predaceous Birds, Including Crows, Ravens and Magpies.

Red-tailed hawks have been observed on the Refuge during this period but they do not seem to have any detrimental effect on wildlife in general.

The American Eagle population has increased on the Refuge area this period. It is very common to see 5 or 6 at one time. This species often molest the waterfowl at #3 Pond, Colsten Pond, Raymond Pond and Headquarters Pond.

F. Fish.

There seems to be an abundance of fish in the waters of the Refuge. No fishing has been permitted on the Refuge during this period. Species present on the area consist of carp, perch, striped bass (rock), herring, shad and catfish.

III. REFUGE DEVELOPMENT

A. Physical Development.

A new project was set up during this period to raise and resurface the road on the north end of No. 3 pond. At the time the equipment was received wet weather arrived and working conditions were poor at times. However, at the end of this period the project was about 50% completed. 1644 cu. yds. of fill has been deposited on the road and 550 bushels of oyster shells. Two 24 inch concrete culverts have been installed which were furnished gratis by the State Roads Commission. Ditches on either side of the road were cleared out with the road grader and D-6 Caterpillar.

Other work on the Refuge consisted of storing grain, maintenance of roads, dikes, boats, motor vehicles, farming and heavy equipment. The fur house floor had deteriorated due to lack of ventilation in the foundation when the building was erected. Temporary repairs were made on the floor for this trapping season. The repair to this building will be a major job and an estimate will be submitted in our estimate for Fiscal Year 1948.

B. Plantings.

1. Aquatics and Marsh Plants. None planted for this period.
2. Trees & Shrubs. None planted for this period.
3. Upland Herbaceous Plants. None planted for this period.

4. Cultivated Crops. Cultivated crops were successful this year and at the end of this period all grain had been harvested and stored. Refuge Fields A, C, and $7\frac{1}{2}$ acres of R were planted in corn and a total of approximately 1500 bushels were harvested and stored in our corn bins. Refuge field D was planted in soybeans by our Share-cropper John Luthy and 40 bushels were received for the Government's share (15%). A portion ($7\frac{1}{2}$ acres) of Refuge field R was planted in corn by our Share-cropper Russell Insley and 320 bushels were received and stored for the Government's share (15%) and $7\frac{1}{2}$ acres of rye planted in field O for the Government, making a total of 15% of the total acreage received from the Share-cropper Insley.

Refuge field E was planted in soybeans consisting of 18 acres. 5 acres were combined for seed and 13 acres were left unharvested for waterfowl, upland game and other wildlife in general. After the corn was harvested from Field C, rye was drilled in for waterfowl browsing. Refuge Fields A, C, T, E, F and I, consisting of a total of 77 acres were cultivated and planted by Refuge personnel.

C. Collections.

1. Seed or other Propagules. None for this period.

2. Specimens. None

D. Receipts of Seed and Nursery Stock.

None

IV. ECONOMIC USE OF REFUGE

A. Grazing. None for this period.

B. Haying. None for this period.

C. Fur Harvest. None for this period.

D. Timber Removal. None for this period.

V. FIELD INVESTIGATIONS OR APPLIED RESEARCH

A. Progress Report. A total of 5 Green-winged teal, 4 common Black ducks and 1 Mallard were banded during this period. Trapping conditions were very poor this season.

VI. PUBLIC RELATIONS

A. Recreational Uses. None available on the Refuge.

B. Refuge Visitors. Approximately 53 visitors registered at headquarters during this period. The following officials also visited the Refuge:- Mr. Johnson, Chicago Office; Mr. Miller, Refuge Supervisor; Agent Alan W. Souder, Deputy Gall & Robbins, and Refuge Managers Spinner and Buckalew.

C. Refuge Participation. None for this period.

D. Hunting. Not permitted on the Refuge

E. Fishing. None for this period.

F. Violations. None to report for this period.

VII. OTHER ITEMS

A. Items of Interest. None to report

B. Photographs. None available.

Respectfully submitted,

Cornelius W. Wallace
Cornelius W. Wallace
Refuge Manager

CWW:LLW

APPROVED:

Regional Refuge Supervisor

E. Bailey

Acting Regional Director

Date

1-20-47.

Date

WATERFOWL

Refuge Blackwater National Wildlife Refuge Months of September to December 1946

(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	26	10/17	6,000	11/20					6,150
III. <u>Ducks:</u> Mallard Black duck Gadwall 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	200 50 75 50 2 15 10 4 2	10/10 10/10 10/17 10/17 10/17 12/15 11/17 11/17 10/17	3,400 4,450 4,450 11,340 400 3,700 100 300 700 400 200	11/7 11/15 11/20 11/7 10/17 11/6 12/27 9/27 12/10 12/10 11/7		20 20 2	11/15 10/17		3,900 4,950 4,450 11,400 500 4,000 100 400 700 400 200
IV. <u>Coots:</u>	7	10/17	300	12/10					300

SUMMARIES

Total Production:

Geese 6,150
Ducks 31,000
Coots 300

Total waterfowl usage during period 37,450
Peak waterfowl numbers 31,290
Areas used by concentrations Meekin Cr., Wolfpit,
Colsten Pond, Harpers Pond, Raymonds Pond, No. 1, 2
and 3 Pond, Deadwoods Marsh and Barbados.
Principal nesting areas this season _____

Reported by Refuge Manager

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 data are necessarily based on an analysis of the rest of the form.

Refuge Blackwater National Wildlife Refuge Months of September to December, 1946

(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'v'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Quail		2			55% males				600	Personal observations afield.
Mourning Dove		4			unknown				300	" " "

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.

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.

REFUGE GRAIN REPORT

REFUGE Blackwater National Wildlife Refuge

PERIOD Sept. - Dec. 1946

Variety	On Hand Beginning of Period	Rec. During Period	Trans- ferred	Grain Disposed of			On Hand End of Period	Proposed Use		
				Seeded	Fed	Total		Seed	Feed	Surp.
Ear Corn	0	1520 bu.	30	0	45	75	1445	0	300	1145
Soybeans	0	105 bu.	0	0	0	0	105	70	0	35
Mixed Grain	0	1500 lbs.	0	0	920	920	580	0	580	0

1. Indicate shipping or collection points Cambridge, Maryland
2. Grain is stored at Grain bins at refuge headquarters.
3. Remarks

Approved by:

Submitted by:

Candace M. Wallace
Refuge Manager

3-1751

Form NR-1A

(Nov. 1945)

MIGRATORY BIRDS
(other than waterfowl)Refuge BlackwaterMonths of September to December 194⁶

(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>										
Common Loon	3	11/21	30	12/15						30
Pied-belled Grebe	8	11/21	75	12/15						75
Great Blue Heron			70	10/15	1	12/23	3	8	12	85
Black-crowned night Heron			100	10/15	2	11/15				100
Eastern Least Bittern			75	10/15						75
Florida Gallinule	2	10/15	2	10/15	2	10/15				2
II. <u>Shorebirds, Gulls and Terns:</u>										
Killdeer			200	9/20	6	12/15				200
Wilson Snipe			60	9/20	20	11/21				60
Lesser Yellow-legs			500	9/20	5	12/15				500
Least Sandpiper			400	9/20	35	11/21				400
Semipalmated Sandpiper			300	9/20	16	11/21				300
Sanderling			200	10/15	20	11/21				200
Herring Gull			75	10/15						75
Laughling Gull			100	10/15						100
Forster's Tern			125	9/25	6	10/15				125
Caspian Tern			60	9/20	3	10/15				60

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. Doves and Pigeons:					
Eastern Mourning dove		160	10/15		160
White-winged dove					
IV. Predaceous Birds:					
Golden eagle					15
Duck hawk	2	10/15	10	11/15	15
Horned owl			15	11/15	15
Magpie					
Raven					
Crow			1000	11/15	1000
Bald Eagle			25	12/23	25
Eastern Goshawk	3	10/15	30	12/2	30
Sharp-shinned Hawk	10	10/16	75	11/15	75
Coopers Hawk	6	10/16	35	11/15	35
Eastern Red-tailed Hawk			75	12/2	75
Broad-winged Hawk	2	10/15	25	11/15	25
Marsh Hawk			60	12/2	60
Sparrow Hawk	6	10/15	75	11/15	75

Reported by Cornelius W. Wallace

Refuge Manager

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.

