

## ROUTING SLIP

## DIVISION OF WILDLIFE REFUGES

DATE: 5-19 1941☒ MR. SALYER① ☒ ~~MRS. WOODEN~~ Nbw☒ ~~MR. ELMER~~ ace☐ MRS. GARVIN☒ ~~MR. DUMONT~~ PAD

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## SECTION OF OPERATIONS:

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## SECTION OF ERA:

☒ ~~Mr. Regan~~ sojre☒ ~~Dr. Bourn~~ WSB☐ Mrs. Fishman☒ SECTION OF LAND MANAGEMENT:☒ ~~Mr. Barnshaw~~ g☒ ~~Mr. Ackerly~~ wre

## STENOGRAPHERS:

☐ Miss Price☒ ~~Miss Whorley~~ V.W.☒ SECTION OF STRUCTURES:☒ ~~Mr. Taylor~~ wry☒ ~~Mr. Gustafson~~ plb

## REMARKS:

Blackwater Leasiterly  
February - April '41

Return to:

Cook

## INDEX

	<u>Page</u>
I. General.	
A. Weather Conditions	1
B. Water Conditions	1
C. Fires	1
II. Wildlife.	
A. Waterbirds	2
1. Populations and behavior	2
2. Food and Cover	3
B. Upland Game Birds	3
1. Populations and behavior	3
D. Fur-bearing Animals, Predators, Rodents, and other Animals	4
1. Populations and behavior	4
III. Refuge Development and Maintenance	4
A. Physical Development	4
B. Plantings	5
IV. Public Relations	5
A. Recreational Uses	5
V. Economic Uses of Refuge	
C. Timber Removal	6
E. Fur Harvest	7
G. Corn Fodder	7
H. Snapping Turtles	7
VII. Photographs	8



Blackwater National Wildlife Refuge  
Quarterly Narrative Report  
February, March, April, 1941

I. General.

A. Weather Conditions.	<u>Snowfall</u>	<u>Rainfall</u>	<u>Max. Temp.</u>	<u>Min. Temp.</u>
February	10"	.6	56	17
March	6"	1.1	63	18
April		3.7	88	42
Total	16"	5.4	Extremes 88	17

The month of February was normal insofar as weather conditions were concerned. There were some cold days, and one good snowfall.

March was the coldest month of winter, with the most prolonged cold weather.

April was not normal because there were only a few days of rain. However, a total of 3.7 inches was sufficient for sustaining the growing crops. For 1940, there were rains almost every day in April, and January and February and March were all cold months with plenty of snow and freezing weather. There were high waters in the marshes in 1940, but in 1941 for this period, the water levels were generally low in the rivers and marshes.

B. Water Conditions. Lower water levels prevailed this period than in 1941, but in April they approached normal. The lack of sufficient water in the rivers and consequently in the bordering marshes was due to lack of sufficient precipitation, and the fact that the prevailing winds were northwest, thus blowing the water out to the bay, and not allowing it to come back with the tides.

C. Fires. In the early part of February, there was one fire in the Northeast part of the refuge. This covered 110 acres, of which 77 acres were marsh, and 33 acres brush. The fire was part of a 1000 acre fire which was set by unknown parties, probably to burn over their marshland. The remaining burned area was outside of the refuge boundary. - During the month of April, the refuge personnel in part, and most of our WPA crew assisted in extinguishing two fires in the lower part of the county, covering about 800 acres altogether. Our WPA crews on these fires constituted the main fire-fighting forces on the area. We cooperated with State Forest Service officials.

## II. Wildlife.

### A. Waterbirds.

#### 1. Populations and behavior.

(a) Species. Pintail were at the refuge this period in greater numbers than in past years. These birds remained over winter in part, and many came in February. At the peak, there were 6000 Pintail. The bulk of them had left by the end of April.

Blue-winged Teal also were here in greatest numbers this year. At the peak concentration, toward the latter part of April, there were about 15,000 birds on the refuge. About 1000 of these birds are nesting.

Black Ducks are not so numerous this year, a situation similar to 1940. At the end of April there were about 3000 of this species on the refuge, many of them nesting.

Canada Geese also seem to be on the increase in this area. Each year we have had a few more. This year they fed on local farmers' wheat fields, and the farmers inform me that they have never seen so many geese in this locality. We believe that our refuge flock was one of the main factors in attracting other Canada Geese here. We had 1000 geese here at one time in the early part of March.

Green-winged Teal were more in evidence this year than ever before. There were some 5000 of them at peak concentration in the latter part of March. By the end of April, the Green-winged Teal had left for the North.

Peak concentration of Baldpate was 4000 about the middle of February. They were all gone on their migration by the first week in April.

In addition to the above, there were also on the refuge the following waterbirds: Common Loon, Pied Bill Grebe, Great Blue Heron, Little Green Heron, American Merganser, Hooded Merganser, Swan, Shovellers, Coots,



a very rare spring migrant on the Atlantic coast. probably the Black-bellied Plover

Gadwall, Scaup, Wilson's Snipe, Lesser Yellowlegs, Greater Yellowlegs, Virginia Rail, Golden Plover, Spotted Sandpiper, Solitary Sandpiper, Killdeer, Dowitcher, Herring Gull, Ring-billed Gull, Laughing Gull,

(b) Groups. Waterfowl in general appear to be increasing in this area, and have shown a larger jump in population this year than in previous years. Of the migrant species, most tend to congregate in flocks of their own kind, although some species are often found in mixed flocks, like Baldpate and Black Ducks and Pintail. Feeding is still mainly on wigeon grass, which appears to be much desired, and is found in most of our small quiet ponds. Greater yellow-legs were in much greater abundance this year, while most other shore-bird populations remained about the same. The popularity of this area for shore and wading birds is probably due to the abundance of food preferred by them to be found in the shallow waters, and gradually-sloping stream and pond banks.

2. Food and cover. There was abundant cover on the refuge for waterfowl, and food was available in fair amounts during this period. Canada Geese fed for the most part on nearby grain fields, although they too made good use of wigeon grass to be found in the ponds. Supplementary feeding of corn and wheat was made to some extent, much of this being for use in trapping and banding operations.

#### B. Upland-game birds.

1. Populations and behavior. Woodcock are still not very abundant here, but appear to be slowly increasing. There is sufficient natural food and cover and possibly the species will continue to increase in coming years.

Quail too, which for the past year have been very scarce, are slowly coming back in numbers. The severe storms last year, during the winter accounted for the greatest loss of this species, partly because the birds were exposed to predation by hawks. Part of it too, may be due to possible ~~known~~ cycles of increase and decrease.



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

1. Population and behavior. Raccoons, foxes, rabbits, squirrels and opossum, are maintaining about their usual numbers on the refuge. Young foxes were observed April 1st. Populations do not seem to be either on the increase or decrease at this time, although we can tell better when the present young are grown. Muskrats show better signs than last year, and it is expected that they will account for an appreciable increase this year. However, this too, cannot be definitely established until later in the year. No especially serious predation problems appear to be present at this time.

2. Control. No control was practiced this period.

III. Refuge Development and Maintenance.

A. Physical Development.

1. About 40 WPA men worked on the refuge each month during this period, and accomplished the following work:

Built 21,200 cubic yards of dike  
Remodeled headquarters residence, completing 77% of the work, and making the job 85% complete.

Moved 1 farm building from the old CCC group to the farmer's group at the state road.

Made additional repairs and remodeling on the farmer's dwelling, by adding a back porch.

Removed from the woods, and transplanted trees and shrubs, along fence rows, and around farm fields.

Permanently laid out muskrat-trapping areas in the marsh, to be used during hunting seasons.

Started construction of a root storage cellar for the Fur Animal Field Station, and completed 20% of the work.

Fought forest fires in the county, when urgently needed.

1. The NYA accomplished the following work, with a total crew of five men, working intermittently:

Mowing of headquarters lawns - about 3 acres

Layed 2 metal culverts in roads

Cleaned truck motors

Started clean-up work in cemetery at headquarters

Started construction of fences around lookout-towers

B. Plantings

2. Cultivated crops.

Ten acres at headquarters were planted to lespedeza (*Lespedeza sericea*). The seed was sown in early spring in the wheat now growing there. It is expected that by next year, there will be a fair stand of this plant, and by the following year, a good stand. Plowing for corn was also done by refuge personnel, for the crops to be planted in May.

IV. Public Relations.

A. Recreational Uses.

4. Number of visitors. During this period, ~~there~~ there were some 188 visitors, the furthest ones coming from Cambridge, England, Connecticut, and New York. Official visitors included the following:

Mr. John H. Sutherlin was here February 4, 13, and 14, and April 15, 16 and 20. We discussed the problems of management on the refuge, and checked conditions in the field.

Mr. Bailey of the Back Bay refuge was here a half day on February 4th to check up on our methods of trapping and handling muskrat operations, and again on April 24th with Clayton Ewell to receive a pick-up truck, and gasoline pump.

Mr. Schaefer of the Brigantine Refuge stopped in with Mr. Sutherlin on February 4th to check over our muskrat operations.

Mr. Locke was here on February 14th for a discussion of activities.



Mr. Ennio Abbiati visited the refuge April 14 and 15, and made field surveys for the Division of Land Acquisition of land desired to round out the refuge holdings.

Richard Griffith stopped in on February 20th to observe and help with the marsh burning project under way here.

Both Mr. Ashbrook, and Mr. Kellogg of the Wildlife Research Division were at the refuge March 13th to confer with the refuge manager and Dr. Dozier on the muskrat-trapping operations.

Mr. VanHuizen, refuge manager of the Sacramento Refuge at Willows, Cal., visited us on April 3rd, while on his vacation.

On April 7th, Robert K. Enders, and Dr. Scott of Swarthmore College, stopped in to confer with Dr. Dozier, and experiment with blood samples of muskrats.

The curator of the Philadelphia Zoo, Mr. Roger Conant, visited the refuge on April 11th.

Messrs. Albert Stadlmeier and John F. Herholdt stopped in on the 21st of April, and we helped them secure a supply of eelgrass for replanting at the Brigantine Refuge.

#### V. Economic Uses of Refuge.

##### C. Timber Removal.

Permittee- John W. Creighton - 1 cord of stump wood, pine, oak and gum, already cut in pond area. Permit #3559. Amount \$2.00.

D. Co-Operative Farming. Spring planting of ~~xxx~~ lespedeza and clover was made by permittees in small-grain fields, to be cut during the following season, and then turned under to enrich the soil. Plowing was done for corn, soy beans, and tomatoes.



E. Fur Harvest.

10,029 muskrats were caught on the refuge under the supervision of refuge personnel. Of these, 9895 were caught by trappers hired during the season, and 134 were caught before the season under special permit, by Dr. Davis, working in cooperation with the Division of Wildlife Research under Mr. Ashbrook.

2,563 muskrats were sold for \$4,281.19 after the commission of 5% had been deducted. 9,113 carcasses were sold for \$901.50, after a commission of  $12\frac{1}{2}$  percent had been deducted.

G. Corn Fodder.

Permittee	No.	No. of Corn Shocks	Price per shock	Total Price
O.R.C. Gore	#3557	10	.25	2.50
O.R.C. Gore	#3536	10	.25	2.50
L.L. Jones	#3554	4	.25	1.00
L.L. Jones	#3790	20	.25	5.00
Lewis Riggins	#3550	4	.25	1.00
John A. Parks	#3551	8	.25	2.00
Irvin Cooper	#3542	6	.25	1.50
Bernard P. Murphy	#3783	7	.25	1.75
Albert F. Kirwan	#3764	12	.25	3.00
Totals		81	.25	\$20.25

H. Snapping Turtles.

Permittee - Joseph A. Willey, #41-228. All the turtles trapped were taken in April, and no charge was made by the Government. There were caught 81 turtles weighing a total of 497 pounds, which were sold by Mr. Willey for \$23.92.

Respectfully submitted,

*David V. Black*  
David V. Black  
Refuge Manager

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*ms.*



Showing use of Crawler Tractor with marsh cleats in burning of muskrat marsh. The Tractor is run around the outside of the area to be burned, making an excellent fire lane by crushing the marsh growth and allowing water to fill in the tracks.



Showing use of fire lane made by Tractor, in marsh burning project.

Taken February 22, 1941  
 Roll 18, Exposure 2  
 Exposure 1 (above)





Burned marsh area showing border where fire was stopped  
at tractor fire lane



View of mars burning project. This is a 50% burn for  
the trapping area shown.

Taken February 22, 1941

Roll 18, Exposure 4

Exposure 3 (above)



Showing almost 100% burn on part of a trapping area.



Muskrat houses after a burn showing their resistance to fire damage.

Taken February, 22, 1941  
 Roll 18, Exposure 5  
 Exposure 6 (above)



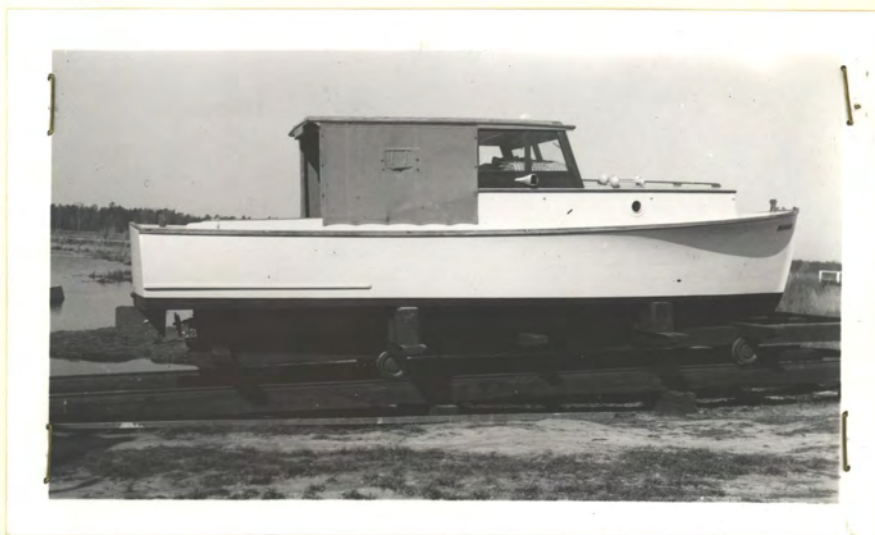


View of Refuge Managers Hdqtrs. Residence after application of siding shingles.



Foundation for root cellar showing structural steel in place.

Taken April, 30, 1941  
 Roll 19 Exposure 2  
 Exposure 3 (above)



Motorboat Peet-Weet on marine railway for coppering bottom  
and check-over.

Roll 19, Exposure 3





Banding Black Duck at Refuge.  
Roll 19 Exposure 4



Left. Outdoor stand built at Refuge to hold visitor register. Roll 19, Exposure 5



Right. Direction sign set up on highway to guide visitors to Refuge. Roll 19, Exposure 6