

ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: 11-20 1940

☒ MR. SALYER yes ☒ SECTION OF HABITAT IMPROVEMENT:
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SECTION OF ERA:

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Mr. Regan

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SECTION OF LAND MANAGEMENT:

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 Mr. Gustafson KE

REMARKS:

Brigantine Quarterly
August - October 1940

Return to:

Cook

Brigantine National Wildlife Refuge

Quarterly Narrative Report

August, September and October, 1940

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I. General.

A. Weather Conditions.

	Rainfall		Temperature		Mean 1940	Normal	Mean	
	1940	Normal	Max.	Min.	Max.	Min.	Max.	Min.
Aug.	4.18	4.49	82°	55°	76.4	67.2	78.2	66.8
Sept.	1.55	2.65	90°	44°	74.0	59.3	73.6	50.2
Oct.	1.48	3.20	72°	30°	60.6	47.0	63.6	50.2
Total	7.21	10.34						
Extremes			90°	30°	76.4	47.0	78.2	50.2

The above readings were taken from the Atlantic City station of the U. S. Weather Bureau, located on the Steel Pier, over the Ocean. Summer temperatures average about 5° higher on the mainland than the official readings. In the winter, temperatures average about 5° lower on the mainland. For instance; on October 20 the weather report indicates a trace of snow that melted as it touched the ground but on the mainland there was about an inch of snow that lasted for several hours. The mean temperature of 53.8° for the month of October is a record that has been equaled or lowered only 10 times in the 66 year history of the Atlantic City station.

B. Water Conditions.

While we have no fresh water ponds on the proposed refuge at the present time, Lilly Lake is the source of supply for our proposed ponds and is, therefore, of interest. Due to the large deficiency of precipitation during the months of September and October, the water level in Lilly Lake has fallen to the lowest observed during the past year. Unless this condition continued

for a longer period, it appears that there would be sufficient water to supply our needs.

Water levels in the salt ponds have maintained themselves and frequent high tides have continued to keep the ponds clean and free from objectional growths. The ditch closed off by the timber plug remains in good condition and I believe this type of plug will give very satisfactory results if used over the balance of the area to be conditioned in this manner.

C. Fires.

No fires have occurred on the refuge during this quarter.

II. Wildlife

A. Waterbirds.

1. Populations and Behavior

(a) Species.

On page 3 are listed all of the birds observed on the refuge during the past quarter, showing dates and numbers counted. 8 species are marked with an asterisk denoting new records for this refuge. None of the 8 are rare and all were observed at close range with field glasses.

The first [✓]Brent arrived on October 29 and were observed over Grassy Bay. Several days later they were rafted-up in Great Bay.

Black Ducks started to increase early in October but almost immediately stopped. On October 16, the first day of the open season, I observed only 300 Blacks in 6 hours of patrol.

SUMMARY OF ORNITHOLOGICAL OBSERVATIONS

Species	8/1	8/2	8/7	8/8	8/20	9/2	9/17	9/23	10/8	10/16	10/23	10/29
✓ Horned Grebe											2	
✓ Double-crested Cormorant						4	1		2			
✓ Great Blue Heron	1	3	17	14	6		17		11			
✓ American Egret	2		10	8		37	2		3			
✓ Little Blue Heron	2		2	2	2							
✓ Green Heron					1	3						
✓ American Brant												1000
✓ Black Duck		2	1		2	3	11		250	300		
*✓ Pintail Duck									2			
✓ Red-breasted Merganser			1						2			
✓ Turkey Vulture					11	1	2		2			
✓ Bald Eagle					1							
✓ Marsh Hawk	1		1		2		3		3			
*✓ Ruffed Grouse									1			
✓ Clapper Rail	2	1	3	2			1		1			
*✓ Semi-palmated Plover			150				6					
✓ Killdeer				6								
✓ Black-bellied Plover			6				300		300			
✓ Hudsonian Curlew		50	50	107	38							
✓ Greater Yellowlegs					1	1	16		10			
✓ Least Sandpiper			52			10			25			
✓ Semi-palmated Sandpiper			52				500		500			
*✓ Sanderling						2						
✓ Herring Gull			21		25	9	92		24			
✓ Laughing Gull	100		234	12	200	5	111		27			
✓ Common Tern		2	46	8	4	5						
✓ Least Tern	1		28		4	1	5					
✓ Black Skimmer		9	9	1	1	1						
✓ Belted Kingfisher				1	1		2					
*✓ Downy Woodpecker					1							
*✓ Crested Flycatcher								1				
*✓ Tree Swallows							50					
✓ Barn Swallows	8	7	7	40		14						
✓ Blue Jay	1			5	3			10	3			
✓ Crow	4		6		5		8		4			
✓ Brown Thrasher	1				2			5				
✓ Robin	1		2		1		2		1			
*✓ Wood Thrush			1									
✓ Starling				50								
✓ English Sparrow			4									
✓ Meadowlark				1								
✓ Red-winged Blackbird	6		6									
✓ Purple Grackle							300	50				
✓ Red-eyed Towhee								1				

* First report for this refuge

Hudsonian Curlews appeared on their southward migration on August 2, reaching a peak on August 8 and were last seen on August 20. Black-bellied Plovers and Greater Yellowlegs were increasing rapidly in September and large numbers are still on the refuge.

The two Pintail Ducks made an interesting record since they are seldom seen in this vicinity. They were observed flying inland over the Inland Waterway near Black Point.

(b) Groups.

Waterfowl have been slow in arriving this year in comparison with last years records. Many hunters have complained that the season opens too early in this part of New Jersey, and this year, at least, they have justification for this attitude.

The migration of shorebirds has continued during most of this quarter, lasting much longer than the spring migration. Concentrations in the spring were much heavier than this fall, though this may be more apparent than real because of fewer observations or because the movement is spread over a longer period of time.

During this quarter, the Laughing Gulls started to decrease in numbers and the Herring Gulls are showing an increase.

2. Food and Cover.

Though eel grass (Zostera marina) has been reported, investigations have failed to reveal any beds on the refuge, either

at the places reported or in the bays where it was once abundant. The Pacific Coast eel grass has entirely disappeared from the pond in which it was planted.

Widgeon grass (Ruppia maritima) in the salt ponds still comprises the principal source of waterfowl food, and is present in abundance. None was transplanted to the artificial ponds because of the lack of an planting program for the refuge.

will be
taken up
field
AEC

B. Upland-game Birds.

No specific observations of upland game birds have been made, but Pheasants and Bob-whites have been reported. The Ruffed Grouse reported on October 8 was observed along the Leeds Point Road, about in the center of the proposed refuge.

III. Refuge Development and Maintenance.

A. Physical Development.

The CCC Camp, stationed at Port Republic, N. J., continued to perform all of the development work on the refuge during this quarter. Six additional artificial salt ponds have been completed and 2 more were under construction at the end of the quarter. The spoil from the ponds is thrown up into nesting islands, as in the past, and 12 more islands have been completed. The ponds and islands mentioned above are located on that part of the Little Beach Investment Co. tract southwest of the old railroad grade and southeast of Turtle Cove.

Work was begun on the dike on September 14 and by the end of the quarter the camp reported 1.2% or 4,540 cubic yards com-

pleted. The dike was started on the north side of Great Creek Road, where it curves around Turtle Cove Creek.

Following is a tabulation of man-days, by work projects, as given me by the camp superintendent:

	Aug.	Sept.	Oct.
Surveys	12		1
Water Control Structures	7		
Levees, Dikes, Etc.	708	1866	754
Marking Boundaries	1	4	
Lake & Pond Development	1944	230	1010
Equipment Repair, etc.	102	90	105
General Cleanup (camp)		56	82
State Projects			330
Totals	2774	2297	2282

In October I made a topographic survey of the proposed administrative site. The details of a plot plan are being worked up and will be submitted during the next quarter. It is also anticipated that building plans will be submitted and such changes as seem necessary will be requested in the near future.

I have obtained figures showing that we can expect to obtain an adequate water supply at our administrative site. The well driller estimates that a $4\frac{1}{2}$ inch well with about 15 feet of strainer will deliver about 15 to 20 gallons per minute at a depth of 150 to 200 feet. The cost is estimated between \$589. and \$739., depending upon the depth of the well. Price includes developing well, casing, strainer and pumping until free of sand.

B. Equipment Maintenance and Repair.

The Chevrolet Coupe, USDI-79, was transferred to the Back Bay Refuge on August 29. The Ford Coupe, which as been

inactive for about a year, is being traded in on a passenger car for the Washington Office. This leaves only one Chevrolet pickup for this refuge, and a new one has been ordered for use of the patrolman to be assigned here on January 15th.

The sea dory, BBS-501, and the outboard motor have been used by Land Acquisition engineers for the entire quarter. The motor is in poor shape and consideration should be given to the purchase of a new motor early next year.

In order to have the use of it during most of the winter months, the Brant, BBS-187, will have copper sheathing attached to the hull during the early part of November.

C. Plantings.

The bushel of eel Grass, planted in the nursery pond last January, has disappeared completely. As has been stated in previous reports, this is probably due to a combination of circumstances, particularly the adverse conditions under which the planting was done.

IV. Public Relations.

A. Visitors.

1. General Public.

Mr. and Mrs. Wm. H. Mayer of Buffalo, N. Y., inspected the proposed refuge area by car and boat on August 8.

2. Officials.

8/11 - Regional CCC Inspector Lundeen inspected the refuge area by boat and car and conferred with the Refuge Manager.

9/20 - Assistant Regional Director Tonkin conferred with me and inspected the work projects and headquarters site.

9/29 - Regional Refuge Inspector Sutherlin inspected the refuge by car and conferred with the refuge manager.

10/7 - Regional Acquisition Inspector Radway arrived for conference concerning the status of land acquisition activities.

10/9-10 - Messrs. Taylor, Terhune and Lundeen inspected the work projects and conferred on the future work program for this refuge.

10/12 - Superintendent Martinsen of the Moosehorn CCC Camp visited the refuge and work projects by car and boat.

10/23-28 - Refuge Inspector Sutherlin inspected the work projects, and headquarters site and discussed the proposed water supply with Mr. A. C. Schultes, well driller, and myself. On the following morning, after contacting Messrs. Reimer and Schmidt of the Division of Land Acquisition, Mr. Sutherlin and I proceeded to the Susquehanna Refuge, Maryland. Enroute we made a reconnaissance trip around the Killcohook Refuge, New Jersey. From the 25th to the 28th we assisted Mr. Wallace at the Susquehanna Refuge and inspected the proposed refuge area at Carroll's Island, Maryland.

V. General.

During this quarter I have made 4 trips, totaling 15 days, to the Susquehanna Refuge, Maryland, to assist Mr. Wallace with the administration of his WPA project and the regular refuge work.

Enclosed to follow up

The work being accomplished there is summarized in the Quarterly Report for that refuge. In addition, I interviewed prospective Laborer-Patrolmen in Camden, Salem and Mays Landing, New Jersey, and Philadelphia, Pa., for a 2-month temporary position at the Susquehanna Refuge. The man selected, Guy A. Shearer, reported for duty on October 28.

Acquisition of additional lands is still the most urgent need on the Brigantine Refuge. I have requested that certain upland areas be acquired by condemnation and declaration of taking as soon as possible, so we can proceed with headquarters construction and provide other upland work for the CCC Camp. Until the headquarters site is actually acquired, there is little development work that we can undertake.

During the next quarter, the office will be moved from Northfield to Absecon, N. J., some 3 or 4 miles nearer the refuge. My residence address will be changed to 209 Seminole Ave., Absecon, N. J. effective December 1st. It is difficult to locate suitable office space in or near Absecon, but we hope to find something in the near future.



Nest of Clapper Rail on marsh near artificial salt pond. Egg in upper right-hand corner has started to open. 7/10/40



Same nest as above - 2 hours later - egg now appears at right-hand corner of nest. 7/10/40



Clapper Rail fledglings near nest on marsh at
artificial salt pond. 7/10/40



Clapper Rail fledglings at same location as above.
7/10/40



Dike sod banks under construction, north of Great Creek Road, looking northerly. 9/16/40.



Drag line in operation on dike north of Great Creek Road. 9/16/40



Taken from a point east of dike, looking westerly toward the upland, along Great Creek Road, 2 hours after high tide, during northeaster. 10/1/40



Taken from a point on Great Creek Road, looking northerly toward dike, 2 hours after high tide, during northeast storm. 10/1/40



Picture shows plugged mosquito ditch about 2 hours
before low tide. Located south of Great Creek Road.
11/11/40



Same ditch as above - 11/11/40



Taken from the dragline near the first natural, looking
toward Great Creek Road along the partially completed dike.
11/11/40



Taken from same location as above picture, looking
easterly along sod-banked dike. 11/11/40

Respectfully submitted

Walter P. Schaefer



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Assistant Refuge Manager

November 14, 1940



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