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Berenhey 27, 1941

Mr. S. B. Looks, Regional Director 1140 Park Square Building Boston, Massachusetts

Hear Mrs Looks

In reviewing the Mentesses August-Detaber quarterly report
Mr. Redway's comments indicating makent "Damage to diluse can be
controlled with concentrated trapping of oce kind or mether for
the time being," were noted. It is stated in the report that
twenty animals were live trapped and shipped to the Patement Bafege
during the quarter, homeon, there is no other indication that
control has been exercised during the period to prevent damage to
refuge diluse which was called to our attention last spring following an inspection of the refuge by Mesors. Griffith and Sutherlin.

We would appreciate being advised of what action has or is being taken to properly protect the refuge dikes.

Yory truly yours

Robert H. Smith in Charge Section of Habitet Improvement Division of Wildlife Refugne

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United States Department of the Interior Fish and Wildlife Service

Montezuma National Wildlife Refuge Seneca Falls, New York

> Quarterly Narrative Report August, September, October 1941.

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UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE MONTEZUMA NATIONAL WILDLIFE REFUGE SENECA FALLS, NEW YORK

QUARTERLY NARRATIVE REPORT AUGUST, SEPTEMBER, OCTOBER, 1941

I. General

A. Weather Conditions.

Following is a summary for the period as taken from the records of the New York State Canal Division:

1941	Snowfall	Rainfall	Max. Temp.	Min.	Temp.
August		1.62	90		48
Septem	ber	1.58	91		36
Octobe	r	2.94	85		27
Total	/	6.14	91		27
2	B. Water Co	nditions.			

Very dry conditions have continued thru most of this period, no heavy rains having been received until the last of October. The nearby Cayuga Lake was drawn to a level below normal while on the refuge mud flats only were left in Black Lake until the last of the period. Only several small ponds and the borrow channels maintained standing water.

C. Fires.

During the quarter no fires were suffered although large dry grass areas presented a serious hazard.

II. Wildlife.

- A. Water Birds.
 - 1. Population and Behavior.
 - a. Species.

Mallard

An estimated 25 mallard ducks have entered into the flights on the refuge during the latter part of the quarter.

Black Duck

On account of very low water during the season and very little water area on the refuge, it is believed that fewer black ducks nested on the refuge this year than usual. However, an estimated 25 families of black duck probably existed on the refuge according to observations made. During the first part of September, blacks began concentrating in the few water areas on the refuge in numbers of about 300.

Green Winged Teal

No evidence of broods of this species were seen on the refuge this year.

Blue Winged Teal

Four separate broods of blue winged teal were seen on the refuge, one being adjacent to Route 414 in a small ditch. It is believed that the blue wings entering into the fall flocks here have consisted entirely of those raised on the refuge.

Pintail Duck

Although no pintails, of course, nested on the refuge, the fall concentrations included from 50 to 100 pintail ducks. Some feeding was done by pintails in refuge fields from which the grain had been harvested.

Wood Duck

This species is one of the most important on the refuge and from personal observations and reports of employees, it is believed that at least twenty broods were produced on the refuge this season. During the first part of October, wood duck were seen along the Clyde River at the north end of the refuge in flocks of 50 to 200 birds. At the junction of Black Brook with the Clyde River an estimated 200 woodies were seen congregated, some in trees, some in the water and some along the banks. Thirty to fifty were commonly seen during the latter part of the summer in the old Erie Canal at the south end of the refuge. During the clearing of timber for the dike line along Route 414, the remains of a wood duck nest was found in an old stump about five feet from the ground. Although over thirty wood duck nesting boxes were placed last winter, no evidence of their use by ducks has been found. It is believed that there are sufficient natural cavities for the present number of resident wood ducks. However, with an increased number of breeding birds, it is assumed that the nest boxes will serve some use.

Great Blue Heron

An increased number of great blues has been seen on the refuge. It is believed that at least 25 pair of these birds make their home on the area. Individuals are habitually seen along the shores of the borrowpit channels and the old Back Channel.

Black Crowned Night Heron

It is apparent that a small colony of these birds living across the canal off the refuge from the headquarters spend their nights fishing on the shallow water areas of the refuge. It is estimated that between 25 and 50 of these birds are habitually seen crossing on to the refuge each evening.

American Bittern

On account of the habits of this bird, it is difficult to make an estimate of numbers but it is believed that probably fifty pairs of bittern have nested on the marshy areas of the refuge. Frequent individuals have been seen along the edges of cattail marshes. Remains of their nests have been found.

(b) Groups.

Less waterfowl than usual used the refuge during the period due probably to low water. The several ponds existing and parts of the new channels were extensively used. Black ducks constituted the greater share of waterfowl in the ponds.

At least fifty shorebirds believed to be least semipalmated and possibly the solitary frequented the channel shores where shells are abundant during September and October.

2. Food and Cover

For the present waterfowl population the food and cover is sufficient. However, planting of additional aquatics and marsh species for food will be necessary with the flooding of the main, 1500-acre pool next spring. Desirable effects may also be possible with controlled burning.

3. Disease

No evidence of disease has been observed.

B. Upland Game Birds

Ring necked pheasants apparently had a fairly good year on the area. In the course of reconnaissance thru the marshes, however, it is noted that only the edges of the main marsh should be considered in taking census of this bird. It is believed that the State Conservation Department should be allowed to remove a maximum of 200 birds during the coming winter season. It is our opinion that 500 would be a fair estimate of their population on the main pool unit.

C. Big Game Animals

White tail deer on the sanctuary are becoming increasingly numerous and it is believed that only one or two years will pass before the State opens the season on the animal in Seneca County. Hunting deer is allowed this year in Cayuga County adjacent to the refuge on the east. Deer continue to be a menace on the highway and arrangements with the State Traffic Commission have resulted in the placing of warning signs along the Mays Point road as shown in picture No. one. An estimated sixty deer frequent the refuge.

On one occasion during a reconnaissance of the swamp north of Route 20, a large 8-point buck was met by the writer at a distance of less than fifty feet. The animal, apparently fearless, stood there poised for several minutes before leaping away thru the swamp.

D. Fur-bearing Animals, etc.

Muskrats on the area have been forced to migrate somewhat on account of lack of water.

Many have concentrated in bank burrows adjacent to newly excavated channels. During the trapping of live specimens six were caught from one den. It is believed that actual trapping of the animal for

fur should be delayed in the light of recent observations. Damage to dikes can be controlled, no
doubt, with concentrated trapping of one kind or
another for the time being. Twenty muskrats were
live trapped during the quarter and shipped to the
Patuxent Research Refuge and the U. S. Fur Animal
Field Station. (See Picture No. 2).

Skunks, woodchucks, rabbits and field mice are all on the increase on the refuge. Wood-chucks have been controlled along the dike and an attempt may be made to live-trap cottontails for release to the State. Rabbits as well as field mice have done considerable damage to field planted trees. Hasty examinations by employees of the Division of Predatory Animal and Rodent Control have indicated that with the sites and type of cover involved little can be done to prevent the damage from field mice.

A single male sparrow hawk was seen along Route 414 thru the refuge, a rather uncommon record. During a visit of the Refuge Inspector, Mr. Sutherlin, in August a pair of birds, which appeared to be pigeons, were observed at the dike gap north of headquarters. Mr. Sutherlin ventured that they looked like pigeon hawks. Observation of the pair at the same point several times since indicates that they were pigeon hawks.

Turkey vultures are becoming more frequent on the sanctuary, a few having been seen all thru the summer and a flock of fifty gliding around over the marsh was commonly seen during October.

III. Refuge Development & Maintenance.

A. Physical Development.

Following is a list of jobs worked on by CCC during the quarter:

- 1. Cleaning, grading of patrol road around south unit. (See pictures 4 and 5)
 - 2. Completing and erecting six large standard signs. (See picture No. 6)
- 3. Construction of exhibition pool fence and gate.
- 4. Excavation of circulation channel and throwing up nesting island at N. E. corner.
- 5. Construction of dike across gap of main pool.
- 6. Additional fill in low place on dike at north end.
- 7. Surfacing with clay and gravel mixture of mile and half of main pool dike and inner slope.
- 8. Driving culvert under highway 414 and excavating of lead in and out.
- 9. Clearing of half mile of dike strip and stumping of quarter mile.
- 10. Construction of quarter mile of boundary fence.
- 11. Construction of large loading trap.

An average of less than fifty CCC boys has been available on the job thru most of the period and it is believed that very good progress has been made with the obstacles encountered, low labor and difficulty of obtaining repairs.

Several new projects -- exhibition pool fence, south patrol road, and nesting island-were completed along with the continuation of the main and storage pools. Lands were acquired enabling us to fill the plug in the main pool dike so that this one unit will be partially operable during the coming season. During the last of November when the camp was scheduled to close, work was pushed on the connecting spillway so that only the concrete work is yet to be done.

About a half mile of fire lane strips were plowed and disced and another half mile was partially completed. (See picture No. 7). About 21 miles of boundary were posted by refuge personnel.

B. Planting Aquatic and Marsh.

During October about fifty pounds of wild celery seed pods were planted in the deepest parts of the main pool natural and borrow channels. This pool will be flooded next spring. Additional sowing of smartweed and wild millet seed and planting of bulrush rootstalks is planned for November. Tree and Shrub.

No planting was done during the quarter but it will again be repeated that final survival of previous plantings was reduced to an average of 50% by the activities of mice, deer and rabbits. Although no planting was possible due to lack of

labor, about 50,000 trees of white and red cedar, white pine and white oak in a temporary nursery should be planted in the spring of 1942 at the latest. If funds for hiring labor or labor itself is not available, consideration should be made to transferring the stock where labor is available.

C. Collections.

A summary of those made and their disposition follows:

Species		Quantity	Co	ost	,	Disposi	itio	n
Vallism Spira (seed p		400 lb./	\$1	12.00	1	Shipped		western
		50 lb.				Planted-		tezuma
Scirpus (root	acutus stalks)	5,000 rootstalks		4.50	/	Trucked Mattam		et.

D. Distribution of Nursery Stock.

No stock was transferred but about 50,000 plants as indicated above might be surplus for next spring's planting.

IV. Public Relations.

It is estimated that at least 500 fishermen have taken advantage of our recreational area at Mays Point and informal contacts have indicated that the development is well received.

It is believed that probably 500 visitors have stopped at the refuge during the period. This

number includes several students groups from both

Syracuse and Cornell Universities. Only a few were
asked to sign in the register. These included several

State Game Protectors, several U. S. Game Management
Agents, Mr. Locke, Regional Director, Messrs. Dykstra,

Sutherlin, Radway and Lay from the Regional Office,
and U. S. Attorney Goodman A. Sarachan.

When special publicity efforts are made with the flooding of our first pool next spring, however, the number of visitors is expected to increase.

V. Economic Uses.

A. Grazing.

Five head of dry cattle were grazed on about twenty acres with a total revenue of \$15.

B. Haying.

About two tons of poor timothy hay constituted the sales in this classification. These cuttings not only improved wildlife habitat, but promoted relations with nearby farmers.

C. Timber Removal.

Only small quantities of timber were cut by CCC on account of low strength and sales have consisted primarily of scattered piles resulting from development, pipe lines or telephone lines.

D. Cooperative Farming.

This method has not been entirely satisfactory on this area. Plans can be made and agreements entered into, but then it is necessary to follow up each permittee continually. However, we have managed to keep a supply of wheat and buckwheat on hand. It is planned to handle certain crops with refuge equipment next year.

VI. Applied Research.

No banding of birds has yet been undertaken but with the flooding of the first 1500-acre pool next spring plans are now being made to begin the operation of a trap at that time.

VII. Other Items.

A. General

Most important in the period is the loss of our CCC Camp FWS-1 due to continued lack of enrollees during the defense program. Although important work is yet to be accomplished, the bulk of the program fortunately was completed.

In September Mr. Good was detailed for two weeks in the posting of the Missisquoi Delta Refuge in Vermont.

The Refuge Manager was absent nearly a week during attendance of the conference at the Regional Office in Boston. A great deal of business was handled, important matters were discussed and the meeting seemed to be a great success.

merton Radura.



No. 1 - Deer Warning Sign Along Rt. 414



No. 2 - Cage Trap in Muskrat Burrow



No. 3 - Muskrat Burrow in Channel Bank



No. 4 - South End Patrol Road



No. 5 - Improved Tow Path



No. 6 - Entrance Sign



No. 7 - Strip of Refuge Fire Lane

Motorsony Necessary Reference

