

ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: May 23 194 7

MR. SALYER
MR. KRUESS WT 8/14
MR. DUMONT PRD 6-16
MISS BAUM

SECTION OF HABITAT IMPROVEMENT:

Mr. Griffith REG 6-5
Dr. Bourn WTB 5/26
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SECTION OF OPERATIONS:

Mr. Hall J. H. B.
Mr. Regan WT 8/29

SECTION OF LAND MANAGEMENT:

Mr. Kent JK 1/2
Mr. Ackerknecht WT 7-23

SECTION OF STRUCTURES:

Mr. Taylor WT 9/26

STENOGRAPHERS:

REMARKS:

MONTEZUMA NATIONAL WILDLIFE REFUGE NARRATIVE REPORT

JANUARY - APRIL 1947

and

SUMMARY OF YEAR'S ACTIVITIES

Return to: MISS COOK

Montezuma National Wildlife Refuge
May, 1946 to April, 1947

Wildlife - During the fall migration the refuge had the largest waterfowl usage to date - an estimated 30,000 ducks and geese. The decline so far is hardly noticeable on this area even in the spring flight. The relative newness of its optimum development, however, together with the fact that it is one of the few stabilized sites in the vicinity probably are primarily responsible. In other words our usage probably is not indicative of the flyway in general. The pheasant continued scarce on the refuge as it did thruout the State.

The year's fur harvest, again nearly normal, should net the usual 10 to 15 thousand dollars, in addition to the sale of meats and predator furs. Nearly 7000 muskrats were removed.

Development & Maintenance - The maintenance of structures, builddings and equipment was launched with funds provided for the purpose and accomplishments are summarized as follows:

- 1 - Repairs to foundations, buildings, signs, and the painting of all buildings & signs except the barn at Secondary.
- 2 - Hauled several hundred truck loads of cinders and gravel for roads.
- 3 - With tractor & carryall placed 2500 yards fill to repair dike.
- 4 - Kept in repair 4 trucks, tractors, graders, water pumps & small tools.
- 5 - Constructed culvert and approach to south end road.
- 6 - Many hours on plans and accomplishment reports.
- 7 - Many hours on preventive patrol.
- 8 - Many hours addressing clubs and organizations.
- 9 - The many small jobs too numerous to mention.

The year also saw the damage to the east main pool dike from waves reaching hazardous proportions. No equipment is on hand with which repairs can be effected.

Publicity - During this period the refuge has more and more become the center of activities of various Audubon Clubs, college groups, sportsmens clubs, and scientific individuals from all over the State and is also visited by people from many other states. The attraction is not only the proximity of our waterfowl concentrations and nesting to many large cities and towns but also the many species of songbirds and other wildlife on the area. The Refuge is also one of the few sites of this type that has been improved instead of being lost thru drainage.

May 6, 1947

Merton Radway
Merton Radway, Refuge Mgr.

Patricia J. Miller

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Montezuma National Wildlife Refuge
Seneca Falls, New York

January - April, 1947

I - GENERAL

A - Weather Conditions are summed up as follows, the data being from the Mays Point State Lock:

<u>Period</u>	<u>Snow</u>	<u>Rain</u>	<u>Max.T.</u>	<u>Min.T.</u>
January	.72	2.55	51	5
February	1.04	.07	45	4
March	1.57	.95	59	14
April	1.10	1.73	72	29
Totals	4.43	5.30	72	4

Precipitation was near normal for the period but was heavier than for 1946. There was less variation in temperatures but there were less warm days than in the same period of 1946. Roads and terrain dried up slowly, growth started late and field work was delayed considerably.

B - Water Conditions - Pool levels are satisfactory and are about normal, both being at the planned level for the season. Flood conditions reached the usual proportions and wave damage to the east dike continued as in past years. Runoff this spring was normal and no further floods are expected.

II - WILDLIFE

A - Migratory Birds - Waterfowl dropped only slightly from the 1946 migration but the composition changed. While last year black ducks and pintail made up the bulk, this year blacks, bluebirds and bluebills took first place in numbers. However, several thousand pintails did frequent fields where grain was left near the refuge. In considering the migrations several factors should be kept in mind. Geese stopping at the refuge may vary from several hundred to 7 or 8 thousand since a large spring migration stops in the Finger Lakes Region for several months. Next, the refuge, being rather recently developed to good condition, might not be expected to reflect the general decline in the country because the usage has not become stabilized. While the estimate on coots is lower than last year it is believed that because of the late season they have not yet arrived. Feeding and concentrations took place mainly in the vicinity of cattail or some protective cover.

Waterbirds and shorebirds continued in about the same category except that fewer shorebirds stopped in this year. Great blue heron continued the primary species. First observation of an osprey is included in this report.

2 - Food & Cover is fairly satisfactory except that we feel there is too much open water. Principal usage is of the areas fringing some kind of cover. Plenty of marsh and aquatic feed exists in both sites. Blacks, mallards, widgeon, teal and shovellers fed in fields and puddles near the pools also where scattered grain was left.

B -

Upland Game Birds consisting of pheasants furnish nothing to report except their absence. We can estimate no more than 60 at the most on the refuge. This is similar to the condition thruout the State as explained in previous reports.

C - Big Game Animals, white tailed deer remain about the same, our estimated population being 75. Plenty of ideal food and cover is present. The herd increases each year with some of the number migrating to nearby areas. Carcasses of two were found on the shore of the main pool indicating that dogs may have chased them onto the ice at a time when it was unsafe. Possibly due to changes in territory fewer were killed on the highway than usual. Some are very tame and walk by the door of the Hq residence in the morning and evening.

D - Fur Animals, Predators, etc. - While plans included the removal of a slightly larger quota than usual weather conditions were the cause of our muskrat removal being about a thousand less than usual. Hides were of A-1 quality, prices were good, carcasses were in good shape and were again shipped to market. One muskrat concentration in the storage pool was reduced to a point that the cattail cover would not be too greatly eaten out. Other populations were scattered but still heavy.

We were able to trap more raccoon than usual, probably due to the season. Hides were not the best and the market is still very poor. About the usual number of fox and mink were trapped in the predator program. We believe that these animals are now being held to as nearly the proper balance as possible. Raccoon and fox are a hazard to most birds during the nesting season and raccoon interfere at times with the banding operations. It might be pointed out that a campaign is now under way to control rabies in foxes in nearby Onondaga and Cortland counties but so far the disease has not been reported in this county.

Woodchucks are again present in great numbers in the dikes and gassing and other methods are already being carried out to reduce the population.

E - Predaceous Birds includes primarily the thousands of crows that frequent the refuge from nearby rookeries. Some loss of nesting is known to be caused by these vandals but little can be done about it unless cooperation can be gained to control them in the rookeries.

F - Fish in the pools consist mainly of carp, bullheads and minnows. It is difficult to induce operators to take carp because the the vegetation prevents seining in the shallow areas and only a few can be captured at the spillways and by fencing at the channels. Little damage has resulted so far but as the smaller carp attain size the damage is expected to be greater to the vegetation and consistency of the water.

III REFUGE DEVELOPMENT and MAINTENANCE

A - Physical Development & Maintenance included no major jobs this period. Most of the work was maintenance or reorganization as follows:

- Painting and repairs in two dwellings and the office.
- Drilling well at Patrolman's residence (only salt water found)
- Cleared out service bldg. & equip't shed; moved all supplies to old CCC bldg.
- Constructed new parts bin in service bldg. work shop.
- Installed 2 new sinks and repaired 2 kitchen counters.

- Repaired and improved plumbing at Secondary residence.
- Maintained 4 trucks and Caterpillar 22 tractor.
- Graded all dike roads and south unit road.
- Hauled 10 loads of cinders for roads.
- Cleaned out barn and burned old lumber piles in vicinity.
- Completed exhibition pond fence.

B - Plantings - None this period. Aquatic and marsh vegetation have an abundant growth. Cultivated crops consisted of about 15 acres of winter wheat, which came thru the winter very well.

C - Collections - None this period.

D - No Seed Stock received.

IV ECONOMIC USE of REFUGE

A - Grazing - None.

B - Haying - None.

C - Fur Harvest was as nearly normal as possible. We had three trappers on the fall predator program and six trappers on the muskrat trapping, all operating on a share basis. On account of several layers of ice trapping conditions were the poorest in several years. Removal was about 1000 short of plans, the total being a little under 7000. Hides were A-1 and local prices on those from the refuge ranged from \$3 to \$4.25 according to reports from the trappers.

D - Timber Removal included a few thousand B.F. of popple sawlogs which were in demand on account of the high cost of lumber, and about 100 cords of firewood. Logs were sold for \$10 per M.B.M. on the stump and firewood from \$.50 to \$1.00 per std. cords. Benefits from the cutting are the resulting openings in the low class swamp timber to allow for a fuller utilization by wildlife.

V RESEARCH

Weight and sex data were again tabulated on all the muskrats taken in the fur harvest. Weights and sex ratio continue on about the same keel.

VI PUBLIC RELATIONS

A - Recreational - A few individuals used our fishing area at Mays Point during the last of April but the fishing season had not really started yet.

B - Refuge Visitors included many individuals and groups of sportsmen or scientific clubs to see the fur operations or the spring waterfowl migrations. Pertinent visitors were as follows:

2/26, Arthur Miller, Reg. Refuge Supervisor - refuge inspection.
4/12, Elmon Radway, Boston Office - land lease negotiations.
4/22, Mr Webb, NY St Forestry College - with student group to refuge.

C - Refuge Participation - Service movies were shown and talks were given to the following groups:

Married Peoples Club of Presbyterian Church - Seneca Falls
Northern Seneca County Sportsmens Club - Junius

F - Violations - None This period.

VII OTHER ITEMS

A - Travel was somewhat handicapped during a heavy snowstorm the first week of March since no snow moving equipment was on hand. Considerable time was required in gathering data and assembling plans for trapping, economic use, and share cropping. The muskrat trapping program, fur and meat shipments required some work intermittently. The main pool dike is badly in need of repair but what heavy equipment we did have has been removed to other refuges. The season has been very late and cold weather and rains have ensued during the last of the period. No funds were made available for even the usual extra laborer that we have usually had. Personnel consists of the Manager and the Laborer-Patrolman.

B - Photographs - Several are included on the following pages in connection with conditions on the refuge.

May 6, 1947

Merton Radway
Merton Radway, Refuge Mgr.

9/12/47
Date

Arthur J. Mullen
Regional Office



Entrance Road to Hq After Neighbors Helped
Plow It Out Following Early March Storm



Storage Pool Spillway With Level Just Above Pool



Greasing Controls on Black Brook Spillway Gate



Completed Exhibition Pond Fence



Section of Storage Pool and Dike at Black Brook



Storage Pool Dike After Road Grading

WATERFOWL

Refuge Montezuma Months of January to April 1947

(1) Species	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total
Common Name	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	15	3/26	300	4/10					1000
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	3 1 2 2 2 10 4 2 1 2 1 25 2 1	3/15 3/15 3/13 3/13 4/23 4/7 4/9 3/14 4/23 4/10 3/29 4/15	400 1000 2500 500 10 100 25 300 1 2500 10 50	4/30 4/30 4/19 4/12 4/30 4/30 4/23 4/30 4/23 4/19 4/12 4/25	Still Present Still Present Still Present Still present Still present Still present Still present Still present 1 1 Still present	4/26 4/23			500 2000 3000 800 200 500 3000 300 500
IV. <u>Coot:</u> Florida gallinule American coot	25 1	4/23 4/19	300 500	4/30 4/30	Still present Still present				300 500

3-1750
(July 1946)

(over)

Form NR-1

SUMMARIES

Total Production:

Geese _____

Ducks _____

Coots _____

Total waterfowl usage during period 11,800

Peak waterfowl numbers 6000

Areas used by concentrations Principally adjacent to
cattail cover

Principal nesting areas this season _____

Reported by _____

Morton Radway, Refuge Mgr.

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.

3-1751

Form NR-1A
(Nov. 1945)MIGRATORY BIRDS
(other than waterfowl)Refuge MontezumaMonths of January to April194 7

(1) Species - Common Name	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production		(6) Total Estimated Number
	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young
I. Water and Marsh Birds:									
 pied billed grebe	3	4/15	50	4/30	Still present				
 common loon	1	4/18	No peak		1 4/21				
 great blue heron	3	4/12	200	4/30	Still present				
 bl. cr. night heron	1	4/21	50	4/30	Still present				
 northern clapper rail	1	4/23	50	4/30	Still present				
II. Shorebirds, Gulls and Terns:									
 herring gull	Present all the time up to an estimated 500 max.								
 greater yellow-legs	6	4/28	50	4/30	Still present				1000
 killdeer	10	4/23	200	4/30	Still present				100
									200

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. Doves and Pigeons:					
Mourning dove	2	4/18	50	4/30	Still present
White-winged dove					
IV. Predaceous Birds:					
Golden eagle					
Duck hawk					
Horned owl					
Magpie					
Raven					
Crow					
V - OTHER					
turkey vulture	4	4/23	No peak		
marsh hawk	1	4/10	15	4/30	Still present
cooper's hawk	1	4/29	No peak		
osprey	2	4/29	No peak		
Present all the time from nearby rookery					10,000
Reported by					Morton Radway, Refuge Mgr.

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.

, 1947

[illegible]

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 MontezumaApril 30, 194 7

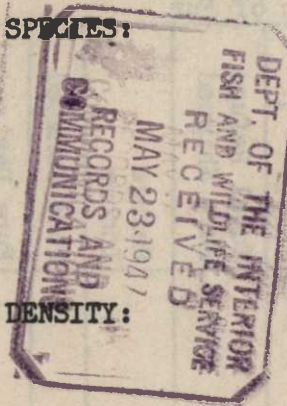
(1) Species	(2) Density		(3) Removals					(4) Disposition of Fur						(5) Total Popula- tion
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Share Trapping			Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destroyed
								Permit Number	Trappers' Share	Refuge Share				
Fox (red & gray)	Entire refuge			13				T-3209	8	8	8			
				12				T-3210	7	6	6			
				2				T-3211	1	1	1			
Mink	Entire Refuge			21				T-3209	13	8	8			
				12				T-3210	7	6	6			
				2				T-3213	1	1	1			
				3				T-3220	2	1	1			
Raccoon	Entire Refuge			73				T-3209	44	29	29			
				23				T-3210	14	9	9			
				18				T-3211	8	6	6			
				1				T-3213		1	1			
				6				T-3214		6	6			
				1				T-3216		1	1			
				1				T-3220		1	1			
				10				T-3209		10	10			
Muskrat	Cattail Dominant 500 acres Dikes, shoreline, etc 10 mi. plus			4				T-3210		4	4			
				1500				T-3212	750	750	750			
				1475				T-3213	739	736	736			
				932				T-3214	473	459	459			
				1201				T-3216	601	600	600			
				1219				T-3216	610	609	609			
				574				T-3220	287	287	287			

REMARKS: One fox killed on the highway was skinned and the pelt also sold with the above refuge furs.

INSTRUCTIONS

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

(1) SPECIES:



Use correct common name. Example: Striped skunk, spotted skunk, short-tailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good reference, is now out of print, although a revision is scheduled for publication in the near future.)

(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, bottom land 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) REMOVALS:

Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.

(4) DISPOSITION OF FUR:

On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimeness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

(5) TOTAL POPULATION:

Estimated total population of each species reported on as of April 30.

REMARKS:

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.