

ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: 9-26 1942

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 _____ MRS. WOODIN _____
☒ MR. ELMER 11/13 _____
 _____ MRS. GARVIN _____
☒ MR. DUMONT PAD 1/9/43 _____
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 Mr. Smith _____
 Mr. Griffith REG 10/1/42
 Miss Cook File 12-1-42

☒ SECTION OF OPERATIONS: _____
~~Mr. Krummel~~ 11/2/43
~~Mr. Satterfield~~ 11/11/43
 Miss Baum _____
 Mrs. Kricun _____

☒ SECTION OF ERA:
~~Mr. Regan~~ NRIC 3/3/43
~~Dr. Bourne~~ WSB 1/9/43
 Mrs. Fishman _____

☒ SECTION OF LAND MANAGEMENT: _____
~~Mr. Tamm~~ 3-4
~~Mr. Ackert~~ Reed 3-4-43

 STENOGRAPHERS:
 Miss Whorley _____

☒ SECTION OF STRUCTURES: _____
~~Mr. Tamm~~ 11/12/43

REMARKS: MONTEZUMA NATL WILDLIFE REFUGE NARRATIVE REPORT
MAY - AUGUST 1942

Return to: Miss Cook

UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE

MONTEZUMA NATIONAL WILDLIFE REFUGE
MAY, JUNE, JULY, AUGUST, 1942

I - General

A - Weather Conditions were tabulated as follows:

Month	Snowfall	Precipitation	Max. Temp.	Min. Temp.
May	---	3.79	80	34
June	---	.71	88	46
July	---	3.88	88	47
August	---	<u>2.15</u>	<u>86</u>	<u>46</u>
Totals	---	<u>10.53</u>	<u>88</u>	<u>34</u>

B - Water Conditions - This was the first year of operation for the main pool and then without a feeder system, since the storage pool is not yet operable. By the end of August the main pool was still only 8 inches below spillway at 382.5 and has promoted very satisfactory marsh conditions. This maintenance of water may be attributed partly to above normal rainfall for the period and below normal temperatures.

II - Wildlife

A - Migratory Birds

1 - Populations and Behavior - With the filling of the main pool waterfowl have increased 900 % for the present period. It is estimated that probably 50 % of the population consisted of migrants or stray birds that did not nest. Most of the ducks consisted of mallards and blacks with blue wing teal, wood duck and pintail comprising the balance. No green wing teal were seen this year while in the past 1 or 2 broods were reared here. Small islands and inner marsh areas were preferred for nesting. Early summer feeding occurred on the pondweeds, grasses and miscellaneous vegetation in the marsh, while later feeding took the ducks to adjacent private grain fields where grain was left on the ground.

Other waterbirds have also increased at least 500 % and include the Florida gallinule's first appearance on the refuge. On the basis of broods observed it is estimated that at least 25 broods of "water chickens" were reared with an average size of 5. The balance of the group consisted of great blue heron, American coot, American bittern, little green heron, black crowned night heron, and 3 visitors of American egret along with the pied billed grebe, black tern and herring gulls. About 200 terns took charge of sections of the marsh during mid-June and some remained until mid-July although no nests were observed.

Mourning doves continued about the same on the sanctuary. On the basis of songs heard it is estimated that at least 20 pairs mated this year. Three woodcock were seen and singing demonstrations were heard in at least 10 other locations.

It is believed that the flooding of the pools will enhance the value of marginal areas for woodcock, since some evidence has already been observed. Woodcock were seen in a new location this year in the edge of the swamp adjacent to the main pool near highway 20.

From observations possible the success of the survival of broods of all species seems to have been very good. This is natural since this is the first year in which much nesting occurred and predators, etc. have not yet developed a concerted action. However, some damage apparently by red fox was observed.

Data on individual species is tabulated on page 3.

2 - Food and Cover conditions have developed through the season to be very satisfactory. Some cattails areas could be reduced or broken up to provide more effective usage and more scattered availability of food plants. However, the expansion and production of sago pondweed, water and semi-aquatic smartweeds, chufa, bulrush, wild millet and duckweed have been astonishing. Apparently conditions have been optimum for their development. There will be no problem of food production; the big problem will be cattail control. During the month of August flights of ducks were seen nights and mornings going east and west from the sanctuary to feed in private fields where some grain was left after harvesting.

B - Upland Game Birds - This seems to have been a good season for pheasants and the size of the broods was good, the average being eight. No evidence of predation was seen but fox and skunk no doubt have taken some toll, both of which are increasing on the refuge. Natural food and cover are ideal. A fair diversity of cover types exists as well as plenty of food bearing shrubs, vines, weeds and grasses. Specific data on the ring neck pheasant occurs on page 4.

C - Big Game Animals - Deer constitute the population in this category and 75 are estimated to frequent the area. Good browse plants and forage are available, although feeding is of course intermittently extended to private lands. It is believed that little damage occurs on private lands in the vicinity except occasionally in orchards. No evidence of disease has been seen. Several highway casualties occurred during the season.

D - Fur Animals, Predators, etc. - Muskrats increased this season in great number because of the new habitat created. It is believed that with the young produced we will have at least 7 or 8 thousand. On the basis of litters removed from burrows in the dikes the average size is 8 and it is known that in many cases 3 litters were produced. Recommendations for trapping will probably be made later in the fall.

Weasels and mink are prevalent and should be included in any trapping program. A photograph included in this report shows a weasel after killing a rabbit at the end of a half hour chase around the refuge headquarters observed by the refuge manager. The rabbit was diseased; however, the weasel was killed a few minutes later.

Form NR-1

MIGRATORY BIRDS

Refuge Montezuma Months of May to August, 194²

1612

(1) Species Common Name	(2) First Observed		(3) Became Common	(4) Peak Concentration		(5) Last Observed		(6) Young Produced			(7) Total
	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg. Size	Esti- mated Total	Number Using Refuge
Pied billed grebe	2	6/1	7/1	50	8/1	-	-	3	2	25	50
Herring gull	7	8/17	-	7	8/31	-	-	-	-	-	7
Black tern	25	6/10	6/15	200	6/15	100	7/23	-	-	-	200
Mallard	-	-	-	2000	8/31	-	-	4	6	100	2000
Black duck	-	-	-	2500	8/31	-	-	5	6	100	2500
Blue wing teal	-	-	-	50	8/31	-	-	2	5	30	50
Pintail	8	8/8	8/15	500	8/22	-	-	-	-	-	500
Wood duck	-	-	-	125	8/14	-	-	3	10	90	125
American bittern	-	-	-	-	-	-	-	-	-	-	150
Great blue heron	-	-	-	-	-	-	-	-	-	-	75
American egret	1	6/22	-	3	6/29	3	7/3	-	-	-	3
Green heron	-	-	-	-	-	-	-	-	-	-	10
Black crowned night heron	-	-	-	-	-	-	-	-	-	-	50
Florida gallinule	3	6/14	6/30	100	7/2	-	-	6	5	75	200
American coot	-	-	-	-	-	-	-	-	-	-	100
Woodcock	-	-	-	-	-	-	-	-	-	-	25
Mourning dove	-	-	-	-	-	-	-	-	-	-	40

REMARKS: (Pertinent information not specifically requested)

INSTRUCTIONS

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

* Only columns applicable to the period covered should be used.

Refuge MontezumaMonths of May to August, 1942

(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 specificioally requested. List introductions here.
Ring necked pheasant	Reverting agric. land (grass, weeds, cattails) 1000 acres	2	10	200	-	-	-	-	500	
	Grass-Brush 200 acres	1	-	75	-	-	-	-	200	

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.

Skunk, coon and fox are increasing and should also be included in an existing trapping program. Although no damage to eggs or wildlife has been seen, it probably occurs to some extent and it is believed their numbers should be kept down.

Over 50 woodchucks have been shot along the dike and vicinity and more than 200 dens have been treated with monoxide or bombs. A continual effort is necessary to remove woodchucks and ~~msk~~ muskrats burrowing in the dikes of which we have about six miles.

E - Predacious Birds, etc.

Crows from adjacent rookeries are frequent over the pool areas. No doubt some damage to nests has occurred and will increase with the nesting of waterfowl. It is believed that some control may be found to be necessary in the near future.

III - Development and Maintenance

A - Physical Development - This period marked the completion of the concrete connecting spillway, including rip rap and grading. The main pool equalizer spillway was also completed. The latter consisted of cutting down a section of dike, placing stone runway and rip rap. The piling and concrete cap cutoff wall at White Brook was completed and still needs only a quantity of dirt fill and the stone rip rap shoved into place. Some leveling and smoothing of dike sections was done with the bulldozer. All work was accomplished with refuge personnel and force account labor.

The biggest maintenance job of the period has been mowing the slopes of the six miles of dike. This was exceedingly difficult due to the logs and stumps left on the dike by floods, the large size of some tree reproduction and the irregularity of the slope in certain places. However, this will be necessary for several years to keep out tree growth and to promote the establishment of a good sod.

The exhibition pond was brought into better condition. All weeds and tree reproduction in the fenced area and vicinity were cut. Trees and brush were cut out of the fenced area. Ten of the Canada geese were pinioned for part of the pool population.

The development of a strip of the main pool adjacent to Route 20 was started. Cattails, trees and brush were cut from the strip and will be burned when sufficiently dry. The strip will then be disced and sowed with millet, smartweed, etc.

Other maintenance work has consisted of grading, fence repair, water pump repairs, mower repairs, replacement of damaged signs along the river and building a fence for a pasture for the refuge horse.

B - Plantings

4 - Cultivated Crops consisted of soy beans and winter wheat. The wheat averaged 20 bushels per acre of which the refuge received 5 %. Some of the soy beans will be left in the field for winter feeding.

IV Economic Use of Refuge

A - Grazing - Only one field is rented out for this purpose and its use helps provide additional diversity of cover.

B - Haying - We have some demand for small quantities of hay which is of poor quality. One dollar per ton is a fair price for this type of material. Small areas cut here and there break up the cover types and provide more diversity for wildlife.

D - Timber Removal - Cutting from the storage pool area has been promoted at the minimum price of \$.25 per standard cord in order to remove all possible material from the area before flooding it next spring.

V Field Investigation - None.

VI Public Relations

A - Recreational Uses - On the basis of occasional counts it is estimated that over 1000 people used the Mays Point Recreational Area for fishing and picnicing. Several groups used the refuge for combination hiking and wildlife observation. However, there was much less activity than in previous years due to the emergency.

B - Refuge Visitors - Very few visitors entered the refuge this season on account of the emergency conditions. Among the few, however, was H. Wesley Curran from Queens University, Kingston, Ontario, Canada.

F - Violations - No federal violators were apprehended but a considerable amount of educational patrol was accomplished in coordination with other refuge activities. Refuge personnel cooperated with State officials and other Federal men on several violations.

VII Other Items

During this period a great amount of time has been required in checking, selling and transferring CCC property and equipment. On August 26 CCC Camp FWS-1 at Port Byron, New York was transferred to the QMC of the War Department at Fort Ontario, New York.

Due to the curtailment of funds and likewise labor and since very vital development and maintenance work had to be done this season the refuge manager has put every possible effort into the completion and proper care of all projects.

Following are selected photographs of activities and wildlife conditions.

Merton Radway

Merton Radway, Refuge Manager

September 2, 1942

[Signature]
Regional Office



Incomplete Connecting Spillway - March, 1942



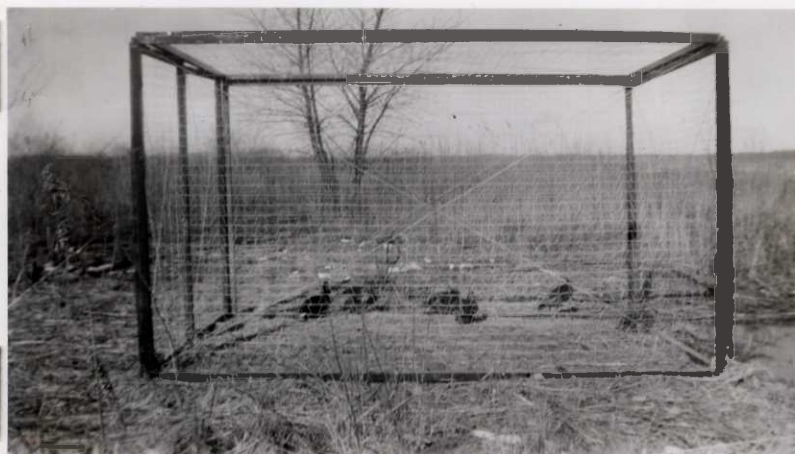
Completed Connecting Spillway - July, 1942



White Brook Cutoff Wall - July, 1942



Mowing Popple Along New Dike Slope - August, 1942



Duck Trap Used In April, 1942



Weasel Ready to Remove Rabbit - August, 1942



Young Florida Callinules - August, 1942



Rehabilitation of Muskrats - June, 1942



Skunks Are Becoming a Nuisance - May, 1942

3614

Young Florida alligators - August, 1942



Rehabilitation of habitats - June, 1942

Stomachs and feces of a bird - May, 1942