

ROUTING SLIP

BRANCH OF WILDLIFE REFUGES

DATE: 194

MR. SALYER

SECTION OF HABITAT IMPROVEMENT:

~~MR. KROMMES~~

~~MR. GRIFFITH~~

MR. DUMONT

~~DR. BURN~~

MISS BAUM

~~MISS COOK~~

SECTION OF OPERATIONS:

SECTION OF LAND MANAGEMENT:

~~MR. BAIL~~

~~MR. KENT~~

~~MR. REGAN~~

~~MR. ACKERKNECHT~~

SECTION OF STRUCTURES:

STENOGRAPHERS:

~~MR. TAYLOR~~

MR. JOHNSTON

NARRATIVE REPORT

REFUGE:

CHAUTAUQUA

PERIOD:

MAY - AUGUST 1948



CHAUTAUQUA NATIONAL WILDLIFE REFUGE
NARRATIVE REPORT - MAY - JUNE - JULY AND AUGUST - 1948

I GENERAL

A. Weather Conditions; Climatological data is obtained from the local weather bureau station located in Havana, Illinois, eight miles South-west of refuge headquarters.

	<u>Precipitation</u>	<u>Max. Temp.</u>	<u>Min. Temp.</u>
May	1.73	87	40
June	3.24	95	50
July	8.05	95	53
August	2.48	96	52
Total	15.50	Extremes 96	40

Rainfall for the whole period was .19 inches less than for the same period of 1947. We normally have the greatest amount of rain during May and June, accompanied by flood conditions, whereas this period we had more rain during July and August, with high waters throughout the whole period but not reaching the previous high elevations of flood stages.

Monthly rainfall comparisons for the years 1948 and 1947 follow;

	<u>Rainfall</u>		<u>Rainfall</u>
	1948	Increase Decrease . over	1947
May	1.73	2.83	4.56
June	3.24	6.54	9.78
July	8.05	7.53	.52
August	2.48	1.65	.83

B. Water Conditions; We were to draw our pool waters down to elevation 433.5 for the period of May 1 thru September 1, but were unable to do so on account of the heavy rainfall and high river waters all thru the period. It was necessary to raise our pool waters as soon as the outside waters rose so as to maintain an equal level and avoid further damage to our levee's, particularly the South levee that had suffered extensive erosion and has numerous low spots. Pool waters are to be raised to elevation 435.0, as soon as the outside waters permit.

From present plans it is proposed to raise the south levee to an elevation of 440.0 for its entire length and thereby eliminate the danger of further serious erosion and we will then be able to draw our pool waters down to a desired Summer elevation and try to encourage aquatic vegetation growth.

C. Fires; No brush or timber fires occurred in the area this period.

WATERFOWL

Refuge ChautauquaMonths of May to August 1948

(1) Species Common Name	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total
	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									
III. <u>Ducks</u> : Mallard	30	8/2	200	8/15					200
Black duck									
Gadwall									
Baldpate									
Pintail	27	8/8	27	8/8/					27
Green-winged teal									
Blue-winged teal	50	7/22	3000	8/31					3000
Cinnamon teal									
Shoveller									
Wood duck	60	5/1	300	8/16					360
Redhead									
Ring-necked duck									
Canvas-back									
Scaup									
Golden-eye									
Buffle-head									
Ruddy duck									
IV. <u>Coots</u> :	8	8/8	8	8/8					8

3-1750
(July 1946)

(over)

Form NR-1

SUMMARIES

Total Production:

Geese 0

Wood Ducks 79

Coots 0

Total waterfowl usage during period 3595

Peak waterfowl numbers 3595

Areas used by concentrations Entire Refuge

Principal nesting areas this season Nesting Boxes maintained in Bluff and Mels Slough Timbers

Reported by Louis H. Ellebrecht

Refuge Manager

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 the data are necessarily based on analysis of the rest of the form.

(1)	(2)	(3)	(4)	(5)	(6)
III. Doves and Pigeons:					
Mourning dove	30	5/1	150	7/26	
White-winged dove					
IV. Predaceous Birds:					
Bald Golden eagle	2	7/18	5	8/31	5
Duck hawk	2	7/20	2	8/31	2
Horned owl	4	5/1	4	8/31	4
Magpie					
Raven					
Crow	30	5/1	30	8/31	30
Coopers Hawk	5	5/1	5	8/31	5
Red Tail Hawk	8	5/1	8	8/31	8
Rough Legged Hawk	3	5/1	3	8/31	3
Sparrow Hawk	2	5/1	2	8/31	2
Reported by <u>Louis H. Ellebrecht</u> Refuge Manager					

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.

II WILDLIFE

A. Migratory Birds;

1 Populations and Behavior;

a. Waterfowl; Except for a few Wood Ducks, our refuge did not have much of a population between May 1 and July 22. On July 10, we observed 18 White or American Egret and 26 Great Blue Heron on the south end of the refuge. On July 22, we observed the first flight, it being 50 Blue Wing Teal, these increased to 1500 by August 16, and 3000 by August 31. Six Cormorants were seen on August 11, The first Mallards, 30 in number, were seen on August 2, these increased to 200 by August 15. Twenty-seven Pintails and Eight Coot were first observed on the refuge on August 8.

Wood Duck nesting results this year continued to be very poor, the final survey shows that; (1) - 14 nests were used; (2) - 126 eggs were laid; (3) - 79 eggs hatched; (4) - 18 eggs did not hatch and (5) - 29 eggs were destroyed by predators. None of the nests had been abandoned. All predation was by Squirrels. These results show; (1) - A decrease of 3.8% in the number of nests for 1948 over 1947; (2) - A 5.9% decrease in the number of eggs laid and a 5.4% decrease in the number of ducks hatched in 1948 over 1947.

b. Other Waterbirds; The average number of Blue Heron, American Egret, Cormorant and Ring Billed Gulls, is about the same for this period as in 1947.

c. Shorebirds; Due to the continued high waters all of this period, we have had a noticable decrease in the Quiver - Clear Lake and River Bottom area's.

2. Food and Cover; Suitable aquatic plants are nil at this station. We had one cluster of eight shoots of Arrow Head apper on the pool side of our south levee, they were a poor stand. We planted two sacks of mixed Smart Weed and Wild, Millet along the south levee, but the late water rise destroyed all of this planting. Our Sago pond weed growth was normal and at this time is still very prominent in the lake whereas in previous years it was uprooted by the wave action. We had very little wave action during this period.

Our Lotus growth appears to be under controll, we have only had about 36 shoots that surfaced their leaves this year, no blossoms have appeared on them to date.

B. Upland Game Birds; We had a slight increase in the Bob White Quail population in this immediate area. The State Conservation Department and Organized Sportsmens Clubs have released birds during the past several years. Pheasants were released again this period but do not show any progress. An adequate supply of food and cover exists to support our present Quail population. Pheasants do not seem to like the high humidity of this area.

Refuge ChautauquaMonths of May to August, 1948

(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'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Bob White Quail	Lespedeza, Berry Patches and Hard- woods - 300 acres		8	90						Observed while on patrol and working around the refuge
" " "			10	100						Released by State Conservation Dept. and Sptsms. Clubs.
		1.6	18	180						
Ring-necked Pheasant	" " " " "	60							5	Four Hens and One Cock were released by State Conservation Dept. and Sptsms. Clubs.

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.

C. Fur Animals, Predators, Rodents and other Mammals;

Raccoon; A slight decrease is evident to date this year.

Mink; None have been observed on the refuge for the second year. None were reported caught by the trappers on the Quiver and Clear Lake area's.

Red Fox; From the present Rabbit populations we look for some Fox to migrate into the area this year. One Squirrel hunter this season, shot a Squirrel out of a tree and a Red Fox ran out of the brush and took off with the Squirrel. The hunter shot the Fox but could not locate the Squirrel. The Fox was a male and poorly fed.

Woodchuck; The bumper corn crop this year seems to have encouraged a heavy production of Groundhogs as we have noticed a considerable increase in the adjacent farm area's. They are not too numerous on the refuge levee's to date but we expect them to become a nuisance as soon as cold weather arrives. The County pays a bounty on them and the farmers do destroy them on every occasion to collect this bounty. Our Chucks are becoming proficient tree climbers and we have seen them in trees along the south levee on several occasions this year. Messrs. Jeffers and Johnson, of the Omaha, Nebraska office of the National Park Service Park Planners, were most doubtful that it was a Woodchuck they saw run down the trunk of a cottonwood tree while here on an inspection trip April 15, 1948.

Red Fox Squirrel; Our population is abundant and normal although hunting success since the opening of the season on August 15, has been poor due to the heavy foliage and food supply in the high trees of this area.

Muskrats; For the second straight year, no huts, Houses or indications of their working have been seen on the refuge proper. The Quiver Creek and Clear Lake area's show the same conditions.

D. Predacious Birds including Crows, Ravens and Magpies; Five Bald Eagle - Two Duck Hawks - Four Horned Owls - Thirty Crows - Five Coopers Hawks - Eight Red Tail, Three Rough Legged and Two Sparrow Hawks, have been seen on the refuge proper during this period.

E. Fish; Sport and Commercial fishing results to date for the calendar year have been most discouraging. The State Conservation Department's Game Fish removal results have been just as bad. It is our thoughts that since this condition has prevailed in numerous other States and Area's so far this year, we can expect a vast improvement with good results for the balance of the year. We have a good population and they can be seen working. For the past six weeks we have had a minor plague of grasshoppers and our lake is heavy with Sago Pond Weed, that looks like it is moving from the heavy grasshopper crop covering this weed. The few fish being caught are well fed and all were found to have been feeding on the hoppers. We are still confident that our fishing results for the year will be normal when tabulated for our next report.

III Refuge Development - Maintenance

A. Physical Development; Refuge personnel during this period widened and partially graded the old harrow lane, 7/8 mile in length, leading into the refuge headquarters from the Township Road.

B. Plantings; We planted two sacks of mixed Smart Weed and Wild Millet seed along a newly exposed portion of our south levee. We broadcast the seed by hand on that portion of the shore line which was exposed for a distance of about ten feet due to the lowering of our pool water elevation for the purpose of trying to encourage aquatic plant growth. The late high waters of July and August inundated this seed and the results are nil.

IV Economic Use of the Refuge

Three boat yards are privately operated on the refuge under Special Use Permits. One of them being a permit without a fee, the two others pay an annual fee of \$1.00 for each boat operated. No trapping of Fur harvesting has been possible since the 1943 floods due to the scarcity of Fur bearing animals.

V Public Relations

A. Recreational Use; Sport fishing is the only active recreational use made of the refuge with a small amount of picnic groups visiting the boat yards during the year. Some 5000 sport fishermen make use of the services rendered thru the boat yard operations. We are having a good yearly increase in the Nature Study interests by small groups and large conducted classes of students from High Schools and Colleges.

B. Refuge Visitors;

Karl G. Kobes, Mgr. Rice Lake Refuge, Visit while on A.L.	5/28	1½ Hrs
Messrs. Taylor and Huey, R.O. & C.O. Engr's. Inspection	6/3	6 "
J.R. Wright, R.O. Engr. Survey	6/18	6½ "
Dr. H.B. Mills, U. of Ill., Chief, Survey Div.	8/5	1 "
F.C. Gillett, R.O. Supervisor, Inspection	8/24	4 "

C. Violations; No violations were observed or reported during the period.

VI Other Items

The Illinois Natural History Survey and University and Western Cartridge Company are financially and cooperatively conducting an extensive research program at the Survey's Laboratory on the Refuge, to learn all that is possible about lead poisoning of Waterfowl from lead shots and to try to find a remedy to correct this hazard. They expect the program to be in operation for about twelve to eighteen months with an anticipated use of 16000, White Pekin Ducks in the tests.

September 5, 1948

Louis H. Ellsworth

Approved

[Signature]
Acting Regional Director

Refuge Manager

SEP 7 1948