

REMARKS:
CALHOUN NATIONAL WILLIE REFUGE NARRATIVE REPORT JANUARY - APRIL 1947 and

Summary of Year's Activities

Return to: Miss Cook

Weather throughout the year was slightly subnormal, with cool weather prevailing. This spring temperatures were cool and delayed spring growth of vegetation.

A heavy rain in late August broke a dry spell when $9^{\prime \prime}$ fell in 11 hours. In the fall period $17.61^{\prime \prime}$ of rain fell, while the spring period had 10.15". February was extremely dry.

Pool levels were fairly constant all year, with only mild fluctuations of less than $1^{\prime}$ until the March rise of $9.9^{\prime}$. This exceeded the January 1946 rise by 2.2'. There was no winter drawdown.

Swan Lake is silting in badly and should be protected by dikes if it is to be maintained as a waterfowl area.

Wood ducks made up the bulk of nesting ducks. Thirty-eight broods were observed, totaling 321 young, compared to 462 in 1945. Only two broods of mallards were seen.

The fall flight through this area was much larger than in 1945. The peak concentration of $1,051,200$ on November 3 exceeded the peak of 500,000 in 1945 by more than double the 1945 figure. A good idea of the waterfowl picture is illustrated by the fact that this spring only 400,330 birds appeared at peak concentration, compared to 540,800 in 1945. Coot were extremely low, with a peak of only 5,000 , compared to 400,000 in 1945.

The goose flight was about the same, except for an increase in blues and snows.

On opening day of the duck season last fall 600 hunters were out in the vicinity of Swan Lake. Ninety-four were checked, and they averaged 1.21 birds each.

About 20,000 mallards overwintered in the open river between Swan and Gilbert Lakes .

Food and cover conditions were improved, with good stands of sago in Swan Lake. Good marginal stands of smartweed, millet, and rice cut-grass developed.

Fur animals continued low except for raccoon, which increased somewhat.

A minor outbreak of lead poisoning occurred in January, when several ducks were found dead.

Eight violations were tried in State courts. Total fines of $\$ 650.00$ and total costs of $\$ 23.00$ were assessed.

Egrets continued common, and 1,200 occurred on Swan Lake during the summer peak.

## CALHOUN REFUGE

NARRATIVE REPORT
JANUARY, FEBRUARY, WARCH, APRIL, 1947

## I. GENERAL

A. Weather Conditions:

Temperatures were cooler than for the same period last year, with maximum readings lower all four months and minimum readings lower in all months but April. February and March were much colder than in 1946.

Relative readings are shown below:

| Month | Year | Maximum | Minimum |
| :--- | :---: | :---: | :---: |
| January | 1946 | 60 | 5 |
| February | 1947 | 56 | 2 |
| March | 1946 | 68 | 24 |
|  | 1947 | 59 | 5 |
|  | 1946 | 89 | 34 |
| April | 1947 | 63 | 12 |


| $\frac{\text { Precipitation }}{1.60}$ |
| :---: |
| .00 |
| $\frac{5.95}{10.15^{\mathrm{II}}}$ |

February was extremely dry.
B. Water Conditions:

High water did not occur this year until April, while January 1946 had high water. Prior to the April rise the river fluotuated mildly, from a few inches to one foot. Comparison with 1946 is shown in the following table:

|  | 1946 |  |  | 1947 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | High | Low | High | Low |  |
|  | 21.7 | 14.0 |  | 15.4 | 14.6 |
| January | 21.7 |  |  | 15.5 | 14.5 |
| February | 15.8 | 14.4 |  | 15.9 | 14.5 |
| March | 19.4 | 14.9 |  | 24.6 | 14.7 |

The March rise of $9.9^{\text {t }}$ was greater than the January 1946 rise, which reached $7.7^{\prime}$. In 1946, however, the January low of $14.0^{\prime}$ was .7' less than the March 1947 low.

## II. WIIDLIFE

A. Migratory Birds:

1. Populations and Behavior:
(a) Waterfowl:

Waterfowl in general showed a decrease this spring, except in canvasback and scaup, where an increase was noted. Mallards overwintered, with 20,000 present in the area on January 2. The peak concentration of mallards was 150,000 on March 14 as compared with 200,000 last year. By April 25 most mallards were gone.

Decreases occurred in mallards, baldpate, pintail, blue-winged teal, and woodies, while increases were noted in green-winged teal, redheads, canvasback, and scaup. However, because of the limited number of birds represented in the latter category the increases are not significant.

The following table shows arrival dates, departure dates, peak concentration, and comparison with 1946:

| Speoies | Arrived | Departed | $\begin{gathered} \text { Increase or } \\ \text { Decrease } \\ \hline \end{gathered}$ | $\begin{gathered} \text { Peak Con } \\ 1946 \\ \hline \end{gathered}$ | $\begin{gathered} \text { entration } \\ 1947 \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mallard | Winter resident | April 25 | decrease | 200,000 | 150,000 |
| Black duck | Feb. 7 | April 4 | same | 1,500 | 1,500 |
| Gadwall | March 13 | March 18 | -- | -- | 500 |
| Baldpate | March 13 | March 31 | decrease | 25,000 | 10,000 |
| Pintail | Jan. 27 | April 8 | decrease | 300,000 | 200,000 |
| G.W.teal | Jan. 27 | March 28 | increase | -- | 2,000 |
| B.W.teal | March 6 | still here | decrease | 5,000 | 2,000 |
| Wood duck | March 17 | still here | decrease | 4,000 | 1,000 |
| Redhead | Jan. 2 | Feb. 14 | increase | -- | 30 |
| Ring-neek | -- | -- | -- | -- | 8,000 |
| Canvasback | Jan. 2 | April 7 | increase | 300 | 5,000 |
| Scaup | Jan. 2 | April 28 | increase | 5,000 | 20,000 |
| Goldeneye | Jan. 2 | April 7 | -- | -- | 300 |
| TOTAL |  |  | $\begin{gathered} \text { Decrease of } \\ 139,470 \\ \hline \end{gathered}$ | 540,800 | 400,330 |
| Coot | March 15 |  | Decrease | 400,000 | 5,000 |

(b) Geese:

Although Canada geese did not stop at Swan Lake in any numbers good flights passed through. They were first observed on January 10. The peak concentration of 100 occurred on March 20.

Blue and snow geese showed an increase. The first arrival was February 18, and the March 20 peak concentration was 500 , compared to 105 in 1946.
2. Food and Cover:

Food was plentiful for waterfowl this spring. Many machine picked cornfields were flooded and considerable corn was thus made available to ducks.
D. Fur Animals:
(a) Muskrats:

Muskrats, never very plentiful, are decreased somewhat over last spring and are only rarely seen.
(b) Minks:

The mink population continues very low.
(c) Raccoon:

This species increased somewhat. Because of low prices last year few were taken. The district ranger observed some trappers releasing raccoon after trapping them because of low fur value.
E. Predaceous Birds:

Hawks and owls remained static. Eagles were common, with 50 being observed in a single day.
VI. PUBLIC RELATIONS
B. Refuge Visitors:

January 9 -- Frank Bellrose, Illinois Natural History Survey, checked on lead poisoning.

January 14 -- Jerome H. Stoudt, Fish and Wildlife Service, checked on lead poisoning.

February 25 -- C. C. Swears, Pittman-Robertson, checked on leased land.
F. Violations:

In cooperation with State Wardens, four men were apprehended hunting ducks in closed season and possessing wild ducks. Upon entering pleas of guilty, each of the four men was fined $\$ 100.00$ and costs of $\$ 3.00$.

One man, apprehended shooting a duck with a rifle, plead guilty in State Court and was fined $\$ 25.00$ and costs of $\$ 3.00$.

## VII. OTHER ITEMS

In January dead ducks were observed in the vicinity of Swan Lake. Sportsmen, thinking starvation was responsible, invested considerable money to buy feed. The district ranger, however, diagnosed the cause as lead poisoning and satisfactorily handled the public relations angle. No ducks examined showed evidence of starvation, and most were full of corn.

On January 14 the outbreak was checked by Biologist Jerome H. Stoudt. Eighteen mallards were examined and averaged 5.6 shot per duck. Many shot were worn down very thin, indicating that most of the lead had been assimilated. Mr. Davis, the district ranger, suggested that shot had been picked up in nearby Stump Lake, which has been heavily hunted in the past few years. Ducks from Swan Lake moved into Stump Lake after the hunting season closed.

May 16, 1947.


## APPROVED:



MAY 211947


Peak waterfowl numbers.
.492 .050
Ducks..............

MIGRATORY BIRDS
(other than waterfowl) Months of...... January..........to.........April. ....... 1947. $=$

III. Doves and Pigeons:

| Mourning dove |
| :--- |
| White-winged dove |

IV. Predaceous Birds:
Golden eagle
Duck hawk
Horned owl
Magpie
Raven
Crow
$\qquad$ to April $\qquad$ , 1947


Form NR-2 - UPLAND GANE BIRDS.*
20 adjand
(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 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 No. 7 should be used where possible. Figures submitted should be based on actual No. 7 should be used where possible. Figures submitted should be based on actua size of sample area or areas should be indicated under Remarks.
(3) YOUNG PRODUCED:
(4) SEX RATIO:
(5) REMOVALS:
(6) TOTAL:
(7) REMARKS:

Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.

This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.

Indicate total number in each category removed during the report period. Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons. Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

## SMALL MAMMALS

Refuge Calhoun $\qquad$ April 30, 1947

| (1) <br> Species | (2) <br> Density |  | (3) <br> Removals |  |  |  |  | (4) <br> Disposition of Fur |  |  |  |  |  |  | (5) <br> Total <br> Popula- <br> tion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Common Name |  |  |  |  |  |  |  | Share | rappi |  |  |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |
|  | Cover Types \& Total Acreage of Habitat | Acres Per Animal |  |  |  |  |  | Permit <br> Number |  |  |  |  | Furs Donat |  |  |
| luskrat | Most all bank rats. Cut grass, smartweed, mila millet, deed timbor areas. 2900 aeres in Swan and Gilbert Lakes. | 19 |  |  |  |  |  |  |  |  |  |  |  |  | 150 |
| Raesoon | Timber around the lakes. | 29 |  |  |  |  |  |  |  |  |  |  |  |  | 100 |
| 10ink | Timber around the lakes. | $100$ |  |  |  |  |  |  |  |  |  |  |  |  | 30 |

## INSTRUCTTONS

Form NR-4 - SMALL MAMMAIS (Include data on all species of importance in the management program; 1.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:
(2) DENSITY:
(3) REMOVALS:
(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 peltz of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.
(5) TOTAL POPULATION: REMARKS

Estimated total population of each species reported on as of April 30.
Indicate inventory method(s) used, size of sample area (s) introductions, and any other pertinent information not specificaliy requested.

