ANNUAL REPORT

OF



UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF BIOLOGICAL SURVEY

UPPER SOURIS MIGRATORY WATERFOWL REFUGE

FOR

MAY, JUNE AND JULY, 1938

SUBMITTED BY

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REFUGE MANAGER

SEPTEMBER 24, 1938

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GENERAL CONDITIONS

The weather for this period was the best it has been in quite a few years with frequent showers and cool weather. The crops made a good showing and the corn, barley and wheat planted as food crops are doing well.

Water continued to come from Canada in quantities enough to supply a flow over Dam 41 until June 15th and it was only .3 of a foot from full at the end of the fiscal year.

The marsh units below Dam 83 have been held full at a constant water level and this seems to have helped the marsh vegetation materially. (The many mud flat edges along the shores of the ponds in the marsh units have disappeared and are now covered with aquatic vegetation.

Lake Darling at its present level is what we might term a large marsh and harbors thousands of waterfowl.

Large concentrations are found at many points on the lake and especially our large smartweed bed of over 500 acres which stands in just a solid mass has an exceptionally large number of birds.

II Wildlife

A. Waterfowl

While no nesting studies were carried on on the refuge this year observations of the broods showed that we had a good hatch. Broods could be noted all over both the marsh and Lake Darling some with as many as eleven ducklings.

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Looking over Pond A from the control of Dam 83.



The flashboard control below Dam 83.



Pelican on Unit 87, Bulrush plantings may be seen along the shore line.



Another part of Unit 87.



A part of Unit 41 just above the dam. Small islands may be seen.



Another island in Unit 41.

Scoup, Red-head and Canvasback nested in both the marsh and Lake Darling but the surface feeders were the most plentiful.

Many western grebe nested on the marsh and many in Lake Darling as well as the Pie billed, horned and eared grebe.

Avacets and terns nested on the gravel islands and on the dikes and the black tern nested in the marsh.

A colony of black capped night herons nested in the trees along Unit 96.

Double crested cormorants stayed here but did not nest.

White pelican have also been here this season but have not nested.

(At the close of July duck sickness was noted in Lake Darling for a distance of approximately three miles up stream from Dam 83.)

B. Upland game birds

Hungarian Partridge, Sharptail grouse, Prairie chicken and Ring neck pheasants all nested here this year and have a good hatch. They can be found all over the area and no large concentrations have been noted at any one point.

C. Bird Banding

Banding traps were kept closed during this period but the following young birds were banded in the nest

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A part of Lake Darling. Many ducks may be seen swimming out into the lake.



Another part of Lake Darling where the birds were very thick.

Note the many specks (birds) in the water.

35 Crows

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27 Black crowned night herons

2 Marsh Hawks

4 Ferrugenous Rough leg Hawks

III Refuge Development and Maintenance

A. Structural Improvements

1. Truck trails

Work has been carried on by both camps on the construction of truck trails for the period. Earthwork on the trails in the BF-5 area was completed and graveling was carried on. The balance of the graveling in this area on truck trails will be completed in less then a month.

Truck trails were constructed across the First

State Bank of Carpio tract east of headquarters and across
the Parker buffalo pasture by camp BF-1. The trail on the
west side of Lake Darling was gone over and the trail
completed except for gravel as far north as William Bloms
a distance of approximately 4 miles by trail.

The east side trail running along units 87 and 96 was graveled.

2. Fence

Fence was constructed along the roads that will be left open in the BF-5 area and in the BF-1 area. A mile of fence was constructed on the Robert Bryons tract.



Headquarters as it looks from the Tower, Dam 83 is on the left.



The sign has been placed at the entrance to Headquarters.



This sick Pelican seems to be getting well.



The warning sign at the tower.

3. Repairs to Buildings

The trappers cabin was completed and painted. Sub Headquarters was completed and landscaped by constructing rock terraces filling and placing notive cut sod on the lawn.

- 4. A boat house was constructed at Greemans the Patrolmans quarters by remodeling a salvage granary.
- 5. Work was done in repairing the granary on the Galvin tract.
- 6. A granary at Fatrolmans quarters was placed on a foundation and repair work is being done.
- 7. Work on the Fump and boat house at headquarters was continued and the forms placed for pouring the walls and roof.
- 8. The headquarters buildings were painted and the residence porch enclosed.
- 9. A cistern was constructed in the Sub headquarters residence.

B. Plantings

1. Food and Cover

40 acres of wheat, 180 acres of barley and 80 acres of corn were planted this period and considerable feed and seed will be harvested from this.

2. Aquatic Plantings

7 sacks of wild rice were planted in unit 87 and we have a fine stand in one place and scattered plants at other places.

21 truck loads of hard stem bullrush rootstalks were planted along the shore line of unit 96 and around the islands in both this and unit 87.

21 truck loads were also planted on the shore lines of unit 41.

The bullrush is doing fine and has seeded.

3. Trees and Shrubs

In the coulees in the BF-5 area 17000 small trees and shrubs were planted and are doing quite well.

The plantings consisted of the following:

1000 Chinese elm /

7000 Cottonwood

7000 Choke Cherry

2000 Juneberry

In the lower area old farm groves were under planted and trees were set out in the coulees by planting the following:

1462 Caragana

1090 Cottonwood

1784 Green Ash

3396 Chinese Elm /

126 Snowberry /

73 Juneberry /

At the patrolmans quarters (Greemans)

254 small ash and 29 large ash

22 small and 22 large elm

11 thornapple /

76 rosebushes

72 box elder

39 Red Dogwood

191 Carogana

264 Juneberry/

153 Chinese Elm

72 Cottonwood

37 Silverberry

were planted in the windbreak.

At the close of this period all seemed to be doing well except the Chinese elm and this was due to poor planting stock for the trees were moldy when received.

IV PUBLIC RELATIONS

(A) Recreational Uses

It is nothing uncommon to see 25 cars in the recreational area at a time on Sundays and holidays.

Club picnics have been held here on several occasions with as many as four and five hundred in attendance.

(B) Refuge Violations

A violator was taken into county court by

Game Management Agent Leo Childers, convicted and find

\$20.00 for trespassing on the refuge with a gum.