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# UNITED STATES DEPARTMENT OF AGRICULTURE BUREAU OF BIOLOGICAL SURVEY

IN REPLY REFER TO

R\*Crescent Lake

Mumper, Nebraska July 28, 1933.

Chief,

Bureau of Biological Survey, Washington, D.C.

Dear Sir:

I am inclosing herewith Report on Reservation Wild Life and Activities Appurtenant Thereto for the above designated refuge covering the Fiscal Year 1933.

Very truly yours,

Acting Supervisor,

Crescent Lake Migratory Bird Refuge.

William J. Frances

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# CRESCENT LAKE MIGRATORY BIRD REFUGE

ANNUAL REPORT ON RESERVATION WILD LIFE AND ACTIVITIES
APPURTMENT THERETO

#### FISCAL YEAR 1933

I. Report on the wild life observed during the year.

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1. Birds - It is estimated that there is almost a hundred percent increase in the number of birds observed on the refuge during the 1933 nesting season as compared to the 1932 season. On June 30 observations indicated that the crop of young waterfowl would be 80-100 per cent greater than in 1932. An estimate made near the end of June indicated 2400 pair of ducks, 2500 pair of grebes, and 3000 pair of coots on the refuge. Of this number about 50-60 per cent would nest. Blue-winged teal were the principal nesters among the ducks with smaller numbers of pintail, mallard, gadwell, ruddy, redhead, shoveller, and baldpate. Some canvas-backs are summering on the refuge but did not appear to be nesting.

Curlew have shown a decided increase over last year. Tho they are widely scattered over the refuge the increase is believed to be from 75-100 per cent. The 1933 nesting season is the second successive season without a disastrous hail storm and as a consequence upland nesters have shown considerable increases.

The southern migration during the fall of 1932 was not heavy, the main flight of canvas-backs, red-heads, and ascaup ducks missed the refuge entirely and stopped on the North Platte River 30 miles south of the Refuge. In the northern flight this spring the percentage of deep water ducks was higher than for the last five years. During the second and third weeks in August the curlew began to bunch up in the dry sand hills a few miles south of the refuge and left there on the southern flight during the last week in August. The first curlew were seen this spring just before March 1. Baldpates and shovellers, only occasional nesters on the refuge appeared in large numbers during the latter part of september and stayed until Movember some not leaving until after December 1. The Blue-winged teal left on the southern flight shortly after October 1. The main northern flight showed up about November 1 and remained until ice closed the lakes in December. At the height of the flight counts of 26,000 and 27,000 were made on the refuge. From the first week in December until after March 1 the lakes on the refuge are frozen and no waterfowl are present. Large

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numbers of upland game birds (prairie chicken and sharp-tailed grouse) winter on the refuge. Waterfowl began to return to the refuge after March 1 with the main flight of northern birds going thru during late March and early April. The blue-winged teal returned about the secongd week in April.

Spring rains brought water levels in the lakes to a point higher than in the spring of 1932 but lack of rain since then has caused a rapid lowering of water levels.

Birds observed and definitely identified during the year.

Note: Underlined species found nesting during the 1933
season. Symbol:legend: (A\*) Abundant during migration
flight only; (A) Abundant; (F) Frequent; (C) Common;
(O) Occasional; (AMC) Abundant during migration flight
only, common during rest of season; (AO) Abundant during
the season but only occasional nesters.

# Waterfowl

Mallard (A)
Pintail (A)
Gadwell (F) Blue-winged teal (A) Green-winged teal (A\*) Cinnamon teal (0\*) Canvas back (AMO) Red-head (AMC) Scaup (AMO) Baldpate (C) Shoveller (AMC) Ruddy (F) American merganser (A\*) Red-breasted merganser (C\*) Hooded merganser ()\*) American golden-eye (0\*) Buffle-head (C\*) Coot (A) Western grebe (C) Horned grebe (A) Pied-billed grebe (A) Black tern (A) Common tern (C) White pelican (0) Canada goose (F\*) Snow goose (F\*) Whistling swan (0\*) Sabine gull (0\*) Herring gull (C)

## Shore Birds

Avocet (A)
Long-billed curlew (A)
Willet (C)
Stilt (O)
Western sandpiper (A)
Marbled godwit (O\*)
Lesser yellow-legs (F)
Upland plover (C)
Rail (C)
Wilson phalarope (A)
Wilson snipe (F\*)
Killdeer (A)
Semi-palmated plover (O)
Greater Blue heron (C)
Black-crowned night heron (A)
American bittern (F)

## Game Birds

Prairie hen (F)
Sharp-tailed grouse (F)
Ring-necked pheasant (C)
Mourning dove (A)

## Birds observed (Cont)

#### Insectivorous

Red-winged blackbird (A) Yellow-headed blackbird (A) Brewer blackbird (F) Meadow lark (A) Horned lark (A) Lark bunting (0) Bob-o-link (F) Red-headed woodpecker (0) Red-shafted flicker (0) Night hawk (C) Kingbird (F) Magpie (0) Blue jay (C\*) Crow (C\*) Baltimore oriole (0\*) Vesper sparrow (C) White crowned sparrow (0) Slate-colored junco (0) Towhee (C\*) Northern shrike (0\*) White-rumped shrike (C) Oven-bird (0) Mocking bird (0) Brown thrasher (C) Robin (0\*)

## Birds of Prey

American eagle (0)
Golden eagle (0)
Burrowing owl (C)
American goshawk (C)
Marsh hawk (C)
Sparrow hawk (0)
Prairie falcon (C)

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#### 2. Animal Life

- (a) Muskrats Muskrats have been increasing in numbers since the lakes now in the refuge have been closed to trapping. This spring five lakes were opened to trapping under permit. Six permits were issued and the rats taken numbered 484. Several other lakes should be trapped this next season to prevent overstocking. At the present time muskrats are being trapped at regular intervals for the purpose of studying prime fur conditions.
- (b) Coyotes Coyotes are plentiful on the refuge and some method of control should be instigated. Unless some control work is done in the near future the refuge will become a haven for the coyotes while they range the adjacent ranges destroying livestock. Two instances of coyote destruction of nests was noted during nesting studies this spring.

(c) Badgers - Badgers are on the increase within the refuge.

I have not been able to ascertain if they do any appreciable damage to nesting birds.

## II Other Activities

(1) Grazing

Under grazing reservations the number of cattle which the Abbott Company can run on the refuge is limited to 4000 head. Three successive dry years have lowered the carrying capacity of the summer range (east end of the refuge) to anextent where the number of cattle summered there should be decreased. Arrangements with the Abbott Company to this effect will be made. The use of the winter range is limited to the amount of hay available for feeding so that a dry year with its decreased hay yield necessarily causes a decrease in the number of cattle wintered.

(2) Protection.

Patrolling on the refuge has been extensive but no violations have been observed during the past year. The fall and x spring fire seasons were passed without a single fire.

(3) Improvements and Developments

During the last year the Harris Tract of 2000 acres has been added to the refuge. This tract is especiaaly valuable as it joins the two divisions of the refuge.)

On Meeker Lake within the east division of the refuge a portion of the lake and meadow were fenced to determine the possibility of increased waterfowl nesting activities when meadows are protected from cattle during the nesting season. No definite results can be presented for this year as delay in accepting bids for fencing materials set back fencing until after May 1. Cattle were already feeding on Meeker meadow at the time fencing was started. Many of the ducks had a started to lay their eggs.before May 1. An increase was noted in the number of shore birds nesting on the protected area over the numbers observed last year. Several grouse and prairie chicken used the protection of the taller grasses within the fenced area to hide their young until large enough to take care of themselves.

Recreational areas were set aside on Crane, Island, and Hackberry lakes. These lakes are the most popular fishing areas in western Nebraska. Some 800 trees were planted at the Island Lake Recreational Area this spring and a fence was built to keep cattle from the camp ground. About 800 more trees were planted around headquarters. Part of these will be transplanted in a year or so to the north shore of Gimlet Lake as an experimental windbreak to determine the

effect of protection on vegetation in the lake.

Improvements added to headquarters during the year follow.

A tile drain was put in leading from the headquarters building to the marsh; a combination garage, workshop, and coalshed has been constructed; a vegetable cellar built; underground gasoline storage tank with pump; the grove of willows has been cleaned and pruned and extensive grounds around the headquarters building cleaned and put in park-like shape.

Materials are on hand for putting in a woven wire fence ar around the headquarters site.

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- The small ineffective boundary posts originally used have been replaced, when necessary, with larger, protected posts that will withstand cattle damage.
- An extensive study of nesting activities on the refuge was started during the 1933 season and will be covered in a separate report.
  - A part time deputy has been appointed to assist in the protection of the east end of the refuge. Deputy Keenan's ranch borders the refuge on Phillips Flat a favorite resting and nesting area for ducks. This area is adjacent to a main roadway so that Deputy Keenan is ideally located to prevent trespassing from this point of entry.
  - The Division of Land Acquisition made a contour man survey of the drainage course which runs from the north to the south thru the west end of the refuge, the object being to determine the possibility of dams to increase water and marsh areas within the drainage.

# (4) Public Relations

- Allowing public access to the fishing areas within the refuge by means of designated Recreational Areas has been accepted very favorably by people in this locality.
- The tree planting on Island Lake Recreational Area was carried out thru the cooperation of the Oshkosh, Nebraska Chamber of Commerce and Boy Scouts.

## (5) Miscellaneous Activities

An attempt is being made at the present time by irrigators along the North Platte River to lower the level of the present headgate on Crescent Lake. It is the general belief that any lowering of Crescent Lake will effect the levels of the other lakes in this vicinity and thus decrease the effectiveness of

the refuge. Trips have been made to Lewellyn and Bridge-port Nebraska to investigate status of the ditch company and to determine their exact plans. All information obtained has been turned over to the Department of Justice and the Survey.

Respectfully submitted,

Acting Supervisor,

Crescent Lake Migratory Bird Refuge.

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Respectfully submitted,

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