

MARRETIVE REPCRT

REFJGE: NORTH DAKOTA EASEMENT REFUGES - DISTRICT NO. 6

FERIOD: MAY - AUGUST 1949

## NORTH DAKOTA RASEMENT REFFGES - DISTRICT NO. 6

BONEHILL CREEK
CHASE LaKE
HALPHAY LAKE
hobart lake
LAKE GEORGE
STONEY SLOUGH

## TOMAHARKIK LaKTE

The small spring rum-off caused the water supply on many of the easement refuges as well as other ponds and sloughs to drop below the normal of the past five years during the first part of May. It was fortune, however, that the summer brought several heavy rains enough to refill several areas to spillway orest.

Most of the grain orops about the refuges were poor due to the rains not coming when badly needed. Many grain fields around the refuges were not harvested.

The waterfowl picture also looked very poor up until birds began ooming in the last of July. It is apparont that sinoe there was a poor water supply early this spring the ducks didn't stay but moved northward; in April it appearred to be more ducks around than previous years.

## BONEHILL CRBBK

This unit had a good rum-off in the spring but the water dropped fast. Rains that came in June and July holped to bring the water back up to where it was attractive to waterfowl. The water oontrol structures are in a good condition.

The slough in the Sw had a fair amount submerged squatios and mumerous bunchos of roundstom bulrushes but grazing was heavy so that the plants did not get vory far. The oover along the ditoh and along fence lines was good.

Due to the shift in the duck breeding area not as many nested on the refuge or locally as last year, although this unit was not affected as badly as others.

Upland game birds made very little moticeable inorease due to the low breeding population of pheasants last spring. Food and oover conditions besides favorable weather should have brought forth an increase.

The only predatory animal that appearred to be on the increase were the skunks and badgers. The market value of the slounk and badger pelte
have been neat to nothing; the only time any are killed is when thoy begin to bother around the poultry yards or if the farm boys go out to dig them out for the sport that is in it.

## CHASE LAKE

There was not much ohange in the water levels on the main lake nor in the fresh water unit over last yoar. The spring run-off in this vicinity was better than on some of the other areas - that and some fair rains kept the water levels up.

The duck nesthg population was down sone over last year; pelicans were up while Callfornia's and Ring-billed gullit were about the same. Several duck nests were found on the pelican island - several of which wore gadwalls.

When the refuge was visited on July lith it was estimated that the total population of old and young pelicans was over 4,000; this was the largest number of adult pelieans ever observed on the refuge - about 1100 young pelicans were raised. Thrse huadred young pelicans were banded. The pelican diet consisted of about 95 per cont salamanders and balance minnows, carp, bullheads and orayfish.

On Jume 17 th a group of 4-H Club boys from Kensal acoompanied the refuge personnel to study birds and to assist with the banding. One hundred California gulls and four hundred ring-billed gulls were banded besides a fow pelioans. The gull hatchwas good; the riag-billed gulls were also nesting on the sandbar to the west of the island but due to the wave action the success was not too great.

Upland game birds which consist of pheasants, sharptail, prairie ohickens and Huggarian partridges in the area did not show any appreoiatable increase. Food and cover oonditions were very good.

No deer were observed on or near the refuge but no doubt there are some around as tracks to the fresh water unit were observod.

Predatory and fur animals are below normal apparently. There are fow farm places in the vioinity. Sheep raising is given way for more grain farming.

## BALFWAY LaKE

The oonditions on this area remained about the same as a year ago. A nice refuge and for its size handles meny birds. Marsh conditions are very good besides many submerged squatios furnish good for divers.

The nesting population of ducks was down some but this was not due to any condition on the refuge but to the general shift of the nesting ducks to the north.

There is no apparent increase in upland game birds. Pheasants
are the most common.
Predatory animals are on the inorease, especially skunk, badgers and red foxes; mostly the first two. Crows that nest in the groves on the east side of the lake, no doubt destroy some duck nests.

## HOBART LAKE

Conditions looked bad for this area in April and May since the spring runcoff did not bring any water in. However, several heavy rains abovo normal, later filled the fresh water unit to spillway crest. Water continued flowing over the spillway slowly for soveral weoks. One severe rain storm brought about four inches, davaging many orops besides oreating sloughs in grain fiolds.

The north alkali lake area which had begun to dry up in many places was mach benefitted by the rain also, although the drainage to this area is not as great.

The poor water conditions in the spring materially aided in outting down the number of nesting ducks and also the mon-mesters. This area had the lowest duck population it has had in several years. Nesting conditions were very good and the food supply both upland and in the water units was fair.

Opland game birds remain about the sme even though nesting conditions were very favorable. An increase in the popnlation of pheasants should be noticoable since several hons were observed on the east side in the heavy covered waste land. The west side of the north unit also has mach waste land which makes a good mesting area.

Predatory animals are on the increase especially slounks.
The spillway was given its first tryout after the repair work done last fall at which time piling was put in back of the spillway wall in order to stop the seopage. It was inspeoted several times this summer after the rains brought onough water to fill the fresh water unit above spillway orest. There were no signs of any seopage.

LAKE GRORGE
The south fresh water unit was very good again this summer - with a good stand of rushes, excelleat oover and a fair smount of submorged aquatics. The main lake water level was about the same as a year ago by the end of the period.

The nesting population of ducks dropped some but not as much as on some of the other refuges in this distriot. There was plenty of food both upland and in the fresh water units available.

Some predatory animals such as foxes, skunks and badgers appear to be on the increase. Coyotes are held down by local farmers and by the trappers from the Predator and Rodent Control Division since there are quite a fow sheep raised in the vicinity.

It is believed that a few doer are staying on the refuge most of the time acoording to local farmers. Cover and browsing material are not too good for deer.

## STONEY SLOUGH

This area recoived very little apring run-off water and as a result, before the raiss came, the ponds wore quite low on water. A oloudburst through the area in June filled the ontire refuge to full eapacity by keoping the oontrol gate olosed and diverting it to units 2 to 5. The water in units 1 and 2 was slowly drained so as not to damage pasture and hayland; only the ohannels were left filled with water.

The duck mesting population was extremely low - no doubt because of the poor water conditions on the refuge as well as in the area surrounding the refuge. However, on August 25th when the arca was inspeoted, it was surprising to find suoh an influx of ducks that oarly. It is ostimated that nearly 23,000 ducks wore on the three main units - mostly in unit $3 ;$ about 6,000 were mallards and 8,000 pintails.

About 250 black orowned night herons were observed in the trees bordering unit 3. Several great blue herons were also noted.

A fow pheasants were observed but no noticeable ohange over last year. Nosting and food conditions were very favorable.

Predatory animals are similar to last year, it is belioved. Crows possibly were the biggest destroyer of eggs since several groves of trees aro not too far from the refuge. Some of the sportsmen from Hastings, Morth Dakota, including the postmaster destroy quite a few crows about these groves.

## TOMAHANK LAKE

The water levels on this area held up good all summor. The water control structure was in good condition. A fow yards of saall rook was hamled on the face of the dam to further protect the top portion; this was put on by the township.

The duck nesting population though was not what was expecteds this area followed the sano trend as the other refuges in this district. Food and cover conditions wore very favorable.

No upland game birds have been observed on the refuge while cheoking it, but no doubt a fow pheasants frequent the area sinoe some have been observed only a half a mile south of the dam.

Mudkrat aotivity appears to be pioking up but none as yot are woriding near the dam.

Photographs and NR Forms Attached


$\qquad$ to $\qquad$ AUGUST 1949


## SUMMARIES

## Total Production:



Total waterfowl usage during period $\qquad$
Peak waterfowl numbers $\qquad$
Areas used by concentrations

| 6 |
| :--- |
| 0 |


(1) Species:
$\frac{n^{3} 1 j 520}{D+0}$
(2) First Seen:

дтом Booae
(3) Peak Concentration:
(4) Last Seen:
(5) Young Produced:
(6) Total:

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.

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.

The greatest number of the species present in a limited interval of time.

The last refuge record for the species during the season concerned in the reporting period.

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.

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 t'e data are necessarily based of analysis of the rest of the form.
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Total Production:

|  | Geese |
| :---: | :---: |
| Ducks |  |
| * | Coots |
| Csilnse-prok |  |
| BTサลิ-Jookeg giok |  |
| B6¢) |  |
| moog grok |  |
| 2jpaejuel. |  |
| CTUMSMOI fesj |  |
| BJTe-4TuReq fest |  |
| Cxeers-mutieg fers |  |

SUMMARIES


Total waterfowl usage during period
$\qquad$ 0 2

## INSTRUCTIONS

(1) Species:

## 

(2) First Seen:

јгощ Booae
(3) Peak Concentration:
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z 1949




INSTRUCTIONS
(1) Species:
(2) First Seen:

200月 Roose
(3) Peak Concentration:
(4) Last Seen:
(5) Young Produced:
(6) Total:

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REFUGE HOBART HT MONTHS OF $\_1$ to 1 AUGUST 1949

SUMMARIES

Geese $\qquad$
Ducks $\qquad$

- Coots $\qquad$

Areas used by concentrations $\quad$ P



## INSTRUCTIONS

(1) Species:

NSTJSLG
(2) First Seen:
aroM Booee
(3) Peak Concentration:
(4) Last Seen:
(5) Young Produced:
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$\qquad$
$\qquad$ to AUGUST
$\qquad$ $-$

1. Swans:

Whistling swan
2. Geese:

Canada goose
Cackling goose
Brant $\qquad$
White-fronted goose
Snow goose
Blue goose
3. Ducks:

Mallard
Black Duck
Gadwall
Baldpate
Pintail
Green-winged teal
Blue-winged teal
Cinnamon teal
Shoveller
Wood duck
Redhead
Ring-necked duck Canvas-back
Scaup
Golden-eye
Buffle-head
Ruddy duck
4. Coot

3-1750
(June 1949)


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$\qquad$ to august
$\qquad$ , 1942




Chase Lake Refuges 6-17-49 - Banding a fow pelicans on the island. R83-1.


Chase Lake Refuge: 6-17-49 - Gulls and pelioans on Chase Lake Refluge. R83-2.


Chase Lake Rofuges 7-11-49 - View of Chase Lake from the west. R84-1.


Chase Lake Refuges 7-11-49 - Shows pelicans and gulls on Chase Lake island in baokground taken from the west. R84-2.


Chase Lake Refuges 7-11-49 - The east shoreline of the island on Chase Lake - gulls and pelicans in background. R84-3.


Chase Lake Refuges 7-11-49 - One group of young pelicans on the island and also showing the largemmber of adults in the background. R84-4


Chase Lake Refluges 7-11-49 - Banding party at Chase Lake eating lunah on the island. R84-5.


Chase Lake Refuges 7all-49 - Adult pelicans in background - shows heavy growth of marsh elders where pelicans nested. R84-6.


Hobart Lake Refuges 8-25-49 - View of east shoreline on the north alkali unit just north of the dam. Numerous birds present. R88-5.


Hobart Lake Refuges
8-25-49 - Proteotive cover along south side of the dam - looking west. R89-1


Stoney Slough Refuge: 8-25-49 - Unit No. 5 nearly full of water. R89-2.


Stonoy Slough Refuges 8-25-49 - Unit No. 3 where several thousand ducks were staying. A colony of black crowned night herons nested in the trees in the foreground. R89-3.

