

Annual Report – July 1, 1938 to June 30, 1939

UNITED STATES DEPARTMENT OF INTERIOR
~~UNITED STATES DEPARTMENT OF AGRICULTURE~~
BUREAU OF BIOLOGICAL SURVEY

ANNUAL REPORT

WAUBAY MIGRATORY WATERFOWL REFUGE

For the fiscal year July 1, 1938 to June 30, 1939 incl.

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Wildlife:

During the fall of 1938 the waterfowl migration paralleled the fall migration of 1937. The potholes and lakes were filled with water on the refuge and on the surrounding territory. There was abundant food for the birds in the potholes and in the food patches and the corn fields surrounding the refuge. The waterfowl population remained rather constant during August and September. During the later part of September and during October, thousands of mallards and pintails moved in the area and fed in the food patches and in corn fields near the refuge.

A combination of the opening of the hunting season and cooler weather caused the number of ducks to increase rapidly. During the first part of October, the duck population on the refuge was estimated to be over 100,000 birds. When the ducks would raft up on Spring and Waubay Lakes, there was estimated to be between 50 and 100 acres of ducks on these lakes. The birds that were in majority on the refuge during hunting season were gadwall, mallards, baldpates and ruddies. Blue-wing teal were very abundant early in October and green-wings were fairly common during the last part of October. Many canvasback, redheads and ruddies fed on the sago pondweed and widgeon grass behind the dikes in Spring Lake.

During August, September and the first part of October, Franklin gulls concentrated on the refuge. These birds would feed in the open fields during the afternoon and congregate on Spring and Waubay Lakes during the evenings and mornings. It was estimated that groups of these birds would cover 160 acres of lake area. During November, flocks of lesser scaup and small flocks of goldeneyes and buffleheads were seen.

Hundreds of geese stopped at this refuge to rest and feed during the fall. White-fronted geese were the most common species that stopped with the lesser snow and the Canada goose also quite plentiful, with some blue geese stopping. This is the first time that the snow and blue geese have stopped during the fall migration.

The coming of winter left the refuge with about 200 mallards which stayed at the open water of the spring the entire winter. A few Canadas and one Hutchin's remained the entire winter with the pinioned geese at this refuge.

Spring migration of waterfowl was estimated to be normal. There was a notable increase in redheads over previous years. Baldpates, buffleheads, ruddies and blue-wing teal showed some increase. Swans were more numerous than in the past years. Blue, snow and Canada geese were present in larger numbers this year probably due to the decoying of them by the pinioned geese at this refuge.

The number of birds nesting on the refuge and the surrounding country was estimated to be about the same as last year. There appears to be an increase in the number of nesting blue-wing teal, ruddies and redheads on the refuge, and a decrease in the number of nesting goldeneyes and it is thought that there are no nesting black ducks.

A number of pinioned Canada geese have nested and between 25 and 30 goslings have hatched. There was also one pinioned blue goose that nested on the refuge and two goslings hatched.

The ring-necked pheasants are very plentiful on the refuge due to favorable conditions that prevailed during the winter and many large broods were successfully hatched during the nesting season.

During the summer months, practically no European partridges are seen on the refuge, but are quite common on the surrounding farm lands. During the winter months, a number of the birds migrate to the refuge and feed at the upland game shelters where grain is placed.

Prairie chickens are occasionally seen on the refuge and it is believed that some of them nested this last year. This bird is much more common on the refuge than on the surrounding area.

No sharp-tailed grouse are seen on the refuge during the summer months but are commonly seen during the winter months feeding at the upland game shelters on the refuge.

The list of mammals for this refuge include three species of ground squirrels, grey squirrels, fox squirrels, jumping mice, meadow mice, pocket mice, grasshopper mice, woodchuck, racoons, jackrabbits, cottontails, coyotes, red fox, badger, mink, weasels, skunk, muskrats and white-tailed deer.

There is a remarkable increase in the numbers of cotton-tails and jackrabbits. Red fox have also increased on the refuge. Coyotes, badger, mink, weasels and skunk are rare on the refuge due to predator control during the winter.

The only reptiles found are the painted tortoises, which are common in the lakes, and a few of the garter snakes. The skink is the only lizard seen on the refuge. Frogs, toads and the tiger salamander are abundant.

Use Made of the Refuge:

Of the 23 nesting boxes placed for ducks only one was used by goldeneyes this year. This is a decrease of the number of ducks using these boxes over last year. These boxes were also used by grey squirrels, fox squirrels, long-eared owls, screech owls and flickers for nesting.

The nesting islands were used for nesting by very few killdeers, Forester's terns and spotted sandpipers. The islands were more popular for resting islands and feeding by shore birds and ducks commonly use them for resting. The dikes in Spring Lake proved to be a common place for killdeers to nest on the rip-rap. Many shore birds and ducks used these dikes for feeding and resting.

Upland game shelters and feeders proved to be very popular during the winter months, especially for ring-necked pheasants. In addition to the pheasants, a number of prairie chickens, sharp-tailed grouse, squirrels and rabbits and European partridge and song birds welcomed the food and shelter offered.

During the fall of 1938, three permits were granted for the cutting of alfalfa hay and prairie hay on the refuge. These permittees cut 24 tons of alfalfa hay and 33 tons of prairie hay.

The recreational area proved to be a very popular place for the people in communities neighboring the refuge. There are some people using the refuge every day and on weekends it is possible to see upwards of one hundred cars parked at the area.

Plantings:

Twelve large hackberry trees and six hawthornes were transplanted in the landscaping of the headquarters. 272 buffalo berries were transplanted to landscape the headquarters and near the wooded areas on the refuge. These were very successful with about ninety percent survival.

Our food patch crops during 1938 yielded fair. About 70 acres was planted to millet, rye and barley which was left standing in the fields for food and cover. In addition, 20 acres of corn was raised on the refuge of which 240 bushels was harvested for feeding upland game birds during the winter months and nine bushels was picked for seed corn for the next years planting.

During the spring of 1939, the size of the food patches was reduced and the following crops were planted, 21 acres of wheat, 11 acres of barley, 4 acres of speltz and 28 acres of corn.

During the spring of 1938, wild rice was planted in the canal between the impounded waters of dikes Nos. 1 and 2, and a few spikes grew and matured. In 1939 this rice reseeded itself and there are

more rice growing than there was during the preceeding year.

Round-stem bullrush was also planted in the bays of Spring Lake. One-half mile of double rows of this bullrush rootstalks were planted and was very successful. The prairie bullrush that had been planted the previous year continued to thrive.

Preditor Control:

This nesting season very few nests were broken due to control of crows on the refuge and in the county sponsored by the State Game Warden. On the refuge, 85 crows were killed, 80 crow eggs were destroyed and 25 crow nests broken up.

During the winter season three coyotes were shot and 13 weasel, 54 skunks, one house cat, one badger and one red fox were trapped on the refuge. All of these predators have been found to destroy the eggs in a nest or to kill the nesting hens while setting on the nest.

Refuge Improvement:

The Dargatz easement diversion ditch project was completed and worked very satisfactory this last spring. This ditch necessitated the digging 3500 feet of ditch and a dike 300 feet long which was rip-rapped. A bridge built of native timbers was constructed across this ditch.

Five islands were constructed and rip-rapped in Spring, Hillebrand and Waubay Lakes.

The two dikes on Spring Lake have been graveled to improve the road and to raise the dikes to give them more freeboard.

About 50 nesting boxes for ducks have been built from hollow logs found on this refuge. These boxes have been built and will be placed near Spring and Hillebrand Lakes by NYA boys. Fourteen new shelters and 24 self feeders have been constructed for use during the winter months.

All surplus buildings have been salvaged with the exception of one which will be renovated for storage facilities at this refuge. A chicken house and barn have been constructed at refuge headquarters from salvaged lumber. 1.7 miles of highline have been constructed to connect the refuge headquarters with the power line of the Otter Tail Power Co. The chicken house, barn and machine shed have been wired for electric lights.

The enlarging of the recreational area has been completed. A well has been drilled and a shelter for the pump has been constructed

from native timber. More picnic tables have been constructed and placed for use in the area. Additional picnic tables have been constructed for use at other refuges. The toilets at the recreational area have been moved and improved.

Lumber cut from native timber has been used to carve refuge marker signs for Bear Butte, Crescent Lake and Fort Niobrara Refuges. From this timber, 3000 fence posts have been cut and peeled for use at this and other refuges.

Twenty-six miles of fire guard has been plowed along the highway through the refuge and on the refuge boundary. In addition to this, 12 miles of service trail has been built to be used for administration of the area and a fire guard. One-half mile of snow fence has been constructed and the old snow fence improved.

These improvements have been made possible through WPA and NYA projects on this refuge.

Scientific Progress:

Almost 1000 ducks were banded during the fall of 1938. Other birds were banded in smaller numbers which included the following species, cormorants, ring-billed gulls, red-tailed hawk, Swainson's hawk, marsh hawk, barn swallow, meadow lark, vesper sparrow, brown thrasher, mourning dove, semi-palmated sandpiper, killdeer and lesser yellowlegs.

Law Enforcement:

No violators were apprehended or any violations were reported on the refuge. Excellent cooperation have been received in law enforcement from U. S. Game Management Agent, Leo Childers and State Game Warden, Ury Dahling.

Water Condition:

The water levels in this area on a whole are above last years levels. The impounded water in Spring Lake is the same level as last year and the level of Spring Lake proper is the same. Hillebrand Lake has a level about four inches higher than the previous year while Waubay Lake is about six inches higher. Many of the potholes that were dry last year have water in them and all the other potholes contain more water.

Other Information:

Botulism poisoning broke out on a small pond four miles north of the refuge and at Buffalo Lake located 15 miles north of this

refuge. The former refuge manager in cooperation with United States Game Management Agent, Leo Childers and Mr. Paul Tschetter cleaned up and destroyed the dead ducks by burning.

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