ROUTING SLIP BRANCH OF W	ILDLIFE REFUGES DATE: Jan. 11 1950
MR. SALVER	SPORTON OF HABINAT IMPROVEMENTS
MR. KRUMMES	DR. CRIPTINA PEG 1-17
MR. DUMONT	_DE_ BOURN - WSB 1/12/50
MISS BAUM	MR. KUBICHEK
SECTION OF OPERATIONS:	SECTION OF LAND MANAGEMENT:
MR. BALL	AR. ACKERTATEORY (1)
MR. REGAN	
DR. MORLEY	
SECTION OF STRUCTURES	S. VENICORIA DE ISAS P
MR. TAYLOR	
MR. JOHNSTON	
	PARRATIVE REPORT
REGUGE: N. DAK. EAS	EMENT DIST. NO. 2
PERIOD: Santamber	r - December. 1949

Easement Refuges in District No. 2, North Dakota.

1. Lake Ardoch Refuge.

1. General.

A. Weather Conditions: It was dry here during Semtember and Movember. In October, more moisture was received than we receive as a rule as shown below. Several inches of snow were received during the month of December. Much rain was received in places and not much was received at other places during the past summer. When it froze up in November, all of the pool areas on the Easement Refuges in this District had a fair amount of water in them. Below further weather information is gives as it has been furnished by the Devils Lake Federal Weather Bureau:

			Max.	Minimum	Normal	Plus or Minus
	Snowfall	Precip.	Temp.	Temp.	Precip.	Precip.
September		•55	87	28	1.63	- 1.08
October	1.10	3.94	85	20	1.25	+2.69
November	5.4	•55	68	4	.72	17
December	20.20	1.40	44	20	.54	.86
	26.70	6.44	1		4.14	2.30

B. Water Conditions: The Refuge was inspected on September 21st. The water level was 6.20 then on the Gauge. The gates were open during the first part of July so work could be done on the spillway. The water was drained down so the level of the pool was very low. The water come up to 7.10 by the end of October. The pool was drained during the first part of November.

11. Wildlife.

A. Migratory Birds.

1. Population and Behavior: This area was inspected on Sept. 21st. and a check made on the birds using the area. This Refuge is used mainly as a resting area. The water level was up well and comparatively fresh during the migration since the pool was drained this summer and it was again filled up due to the fall rains. Large numbers of ducks and geese (especially a fair number of Canada geese) used the pool to rest on and they did much feeding in the fields and on other water area.

Large numbers of Franklin gulls, California Gulls and shore birds use the water area to rest and feed on. A few & cormorants and black-crowned night herons also use the water area.

2. Food and Cover. There are some minnows, prairie bulrushes and sago pond weeds growing in the water that the birds feed on. They also feed in the fields and on other areas. There was more cover this period along the water edge than there is as a rule since the water level was low this summer. The high shore lands, trees and brushs on shore edges furnish some protection from the winds.

B. Upland Game Birds.

- 1. Population and Behavior. A few sharp-tail grouse and some Hungarian Prtridge use the land area of the Refuge at times during the milder part of the year. During the winter months, they have to fly to the near by areas where there is shelter and food can be found. There is not much shelter for them on the protected area.
- C. Fur Bearing Animals, Predators, Rodents and Other Mammals. There are affew skunk, weasels and mink that use the area some. The farm dogs take some of them and the trappers thin out the rest. A permit has been issued for trapping to be done on the Refuge.
- D. Fish. Buffalo fish, bullheads and minnows come up from the Red River and pass on into the pool and up into Forest River when the control gates are open. The local people fish along the road dyke at times. A few small fish are caught. There are large buffalo fish that come up to the gates but there are few of them caught.

111. Refuge Maintenance.

The repairing of the damages spillway and road dyke last spring was completed during the first three weeks in July. This structure is now ready for another spring- run-off. We hope that it is not washed out any more. This fall the land area was patrolled and new signs were put up where they were needed and fire protection was done around the buildings this summer.

2. Billings Lake Refuge.

1. General.

B. Water Conditions: This Refuge was inspected on September 19th. The water level was about 15" below the top of the spillway. The spillway and dykes were in good shape. Part of this summer was very dry but the water level stayed up well.

11. Wildlife.

A. Migratory Birds.

- 1. Population and Behavior. A fair number of ducks, some geese and swan use the area as shown on the attached NR- 1 Form. Some of them stay here and nest around the water area. They feed in the fields and on other near by water areas.
- 2. Food and Cover. There is clasping leaf pond weeds, round stem rushes and some other plants growing in the water that they feed on. There is some cover along the water edge where they get in and under. This cover is made up of round stem rushes, cattails and other plants. There is the most of this growth along the water edge on the north end of the pool area. At times a number of swan have been seen on the water. They feed on the plants growing in the water and use the pool as a resting place. Large numbers of Franklin Gulls, California gulls and small flocks of pelicans also use the water area of a spring and fall mainly.

B. Upland Game Birds.

- 1. Population and Behavior. This is just an open prairie area with a water pool on it. There is no cover on it except the weeds. A few sharp-tail grouse use it at times to rest on and look for food. It has been reported that a few bunches of Hungarian Partridges elso use it. We have not seen any of these birds on the Refuge but have seen them near by. The birds have to use other areas during the winter where there is cover and available food.
- C. Fur Bearing Animals, Predators, Rodents and Other Mammals. There are a few muskrats that have their homes over the ice, a mink or two use the land area, some skunks and badgers. A trapping permit was issued to trap on the area this KMXX State Open season. There are not many of the animals on the Refuge.

111. Refuge Maintenance.

This area was gone over and new markers were put up at the places they were needed. The farmer that uses the land area around the pool, hauled many loads of rocks out of the fields last summer and dumped them along the spillway and on the dykes where they were needed. The spillway and dykes were in good shape last fall.

3. Buffalo Lake Refuge.

1 General.

B. Water Conditions. This Refuge was inspected on Sept. 16th. The water seemed to be fresh at that time. The level was 2' below the spillway level. The dykes and spillways were in good shape.

ll. Wildlife.

- A. Migratory Birds.
 - 1. Population and Behavior. When the inspection was made there about 500 ducks, 200 coots, 1000 gulls and 8 pelicens using the pool area. They rest on this area, feed some here and also feed on other areas. The ducks and geese feed in the fields of a fall.
 - 2. Food and Cover. There are some pond weeds growing in the water that they feed on, the seeds from round stem rushes and other plants. The cover is good out over the water on the north west end of the water area. There is some cover at places along the shore on the land.
- B. Upland Game Birds.
 - 1. Population and Behavior: Sharptail grouse, prairie chickens, some Hungarian Partridge and ring-neck pheasants use the land area of this refuge for shelter and protection. Hunters have stated that of a fall the pheasants fly to the refuge at once when flushed near the protected area. This is a good area for the upland birds.

- 2. Food and Cover. There are the insects to feed on during the warmer part of the year. During the winter, theyfeed on weed seeds, buds and the grain they can find in the fields. There is some cover along the lake shore at places of grass, weeds and some brusk. The high π land along the lake furnishes some protection from the wind.
- C. Fur Bearing Animals, Predators, Rodents and Other Mammals. There are a few skunk, mink, weasels and badgers that use the land area at times. Some muskrats make their homes on the north end of the water area where there is a growth of plants out in and above the water level.

111. Refuge Maintenance.

The markers were all inspected and new ones were put at the places where they were needed. Fire protection work was done around the cabin. The dykes were checked and the spillways and they were left in good shape.

4. Brumba Refuge.

1. General.

B. Water Conditions: The Refuge was inspected on Sept. 28th. The water was about 1' below the bottom of the new stop-log. The water seemed to be rather fresh. This summer has been rather dry in this district.

11. Wildlife.

- A. Migratory Birds.
 - 1. Population and Behavior. There were some ducks and coots on the pool when the inspection was made. For a small area, a fair number of waterfowl use the pool area. They use it mainly as a resting area. A few ducks do nest on the land area at places.
 - 2. Food and Cover. There is some pond weeds growing in the water that the birds feed on, they get some food from the seeds of round stem rushes and the prairie bulrushes. They feed in the fields also. The round stem rushes furnish a little cover and the high land at places along the shore line.
- B. Upland Game Birds.
 - 1. Population and Behavior. There are a few ring-neck pheasants and sharp-tail grouse that use the refuge. They use the area during the milder part of the year and during the severe winter weather they move to the south about a mile where there is cover of trees, brush and weeds.
 - 2. Food and Cover. There is plenty of food of insects during the milder part of the year. During the winter they feed on weed seeds, the gain they can find, buds and the food available in the feed yards. They move to the south a mile or so for cover when weather is severe. There is not much cover on the Refuge.
- C. Fur Bearing Animals, Predators, Rodents and other Memmals. There are a few skunk, weasels and a mink or two that use the land part of the Refuge. A few muskrats use the water area to make their homes on.

5. Johnson Lake Refuge.

1 General.

B. Water Conditions: This Refuge was inspected on Sept. 23rd. The water level was high. It seemed to be higher than it has been since it has been a refuge for the fall period. The water seemed to be fresh also.

11. Wildlife.

A. Migratory Birds.

- 1. Population and Behavior. This is a good Refuge and a large number of birds use it as shown on the attached NR- 1 form. They use the area as a resting place and nest some out on the land area. They feed a fair amount on the lake and on other areas.
- 2. Food and Cover. There are sago pond weeds, clasping leaf pond weeds and other plants that grow in the water that they feed on. They also feed in the fields of a fall. The cover is good along the shore out over the water of phragmites, cattails and other plants. Where the land is not pastured much, the cover is good along the shore of grass and weeds.

B. Upland Game Birds.

- 1. Population and Behavior. This is a good upland bird area. Sharp-tail grouse, prairie chickens, ring-neck pheasants and Hungarian Partridge use it. Most of the refuge area is of rather low land which the birds use during the milder part of the year. During the winter, they use the use the higher land around the refuge much. They are more able to see there and get food.
- 2. Food and Cover. There are insects to feed on during the milder part of the year. During the winter periods, they feed on the garain they can find, on berries, seeds and buds. The cover is famir of weeds, some brush and the hills stop the winds.
- C. Big Game Animals. It has been estimated that there were 10 deer on this Refuge this fall. They use this area and the surrounding hills. During the open seasons, they are hunted when off of the Refuge.
- D. Fur Bearing Animals, Predators, Rodents and Other Mammals. There are some muskrats that make their homes out over the water where there are plants for home building. On the land, there are a few mink, weasels, badgers, skunk and a fox or two that use the area.

111. Refuge Mamintenance.

The area was patrolled this fall and new signs were put up at the places they were needed and fire protection was done around the cabin. The cabin was cleaned up inside also.

6. Kellys Slough Refuge.

1 General.

Sept.

B. Water Conditions. This area was inspected on NAX. 20th. The water was at spillway level. The dyke was in good shape. The water stays at about the same level at this spillway all summer. It becomes a little higher during rains and in the spring.

11. Wildlife.

A. Migratory Birds.

- 1. Population and Behavior. There were a few ducks on the area when the inspection was made. They use this water area, as a resting place mainly. A fair number use it of a spring and fall. They also use other surrounding areas.
- 2. Food and Cover. There is some sago pond weed growing in the water that they feed X on, seeds from the round stem rushes, prairie bulrushes and they feed in the fields of a fall and spring.
- B. Upland Game Birds.
 - 1. Population and Behavior. A few Hungarian partridge and ring-neck pheasants use the area at times during the milder part of the year. There are not many of the birds that use the area since there is not much cover on it for them. During the winter they fly a mile or so to the north where there is more shelter and cover.
 - 2. Food and Cover. There are the insects they feed on during the milder part of the year and the rest of the time they have to feed on seeds and the grain they can find in the fields and opened straw stacks.
- C. Fur Bearing Animals, Predators, Rodents, Predators and Other Mammals:
 A few muskrats make their homes in the dyke and the high shores of
 the pool. Some mink, weasels, raccoons and badgers also use the land
 part of the Refuge

111 Refuge Maintenance.

On Sept. 20th., the area was patrolled and new signs were put up at the places where they were needed. The dyke and spillway were inspected and left in good shape.

7 Lac Aux Mortes Refuge.

1. General.

B. Water Conditions: The water level was high all summer and was about 6" above spillway level this fall. It is as a rule about 16" lower than it was this fall during this period. The water was fresh. The level was high all summer, the wind blew much and a fair amount of moisture fell in this locality. Rains were not all received the same over this district during the summer. There was much water that come down the Mauve Coulee from the north this year that helped keep the level of the lake up high.

ll. Wildlife.

A. Migratory Birds.

- 1. Population and Behavior. There are a large number of waterfowl that use this area. It is a very good area except for the fact that there is botulism here during most of the hot summer periods. The birds use this area and the other surrounding water areas to feed on. They rest on the refuge in this locality mainly.
- 2. Food and Cover. There is a large supply of submerged aquatics that furnish food, round stem rushes, prairie bulrushes and other plants. During the fall they feed much in the grain fields. The cover is very good out over the water area of cattails, phragmites and other plants that grow above and over the water.
- 3. Botulism: There was some loss on this water area as shown on the NR-5 form that is attached. All of the dead birds that could be found were picked up and buried. It seems that dead birds are first found always during the summer time around the island on the south west part of the water area. The loss was not very large last summer.

B. Upland Game Birds:

- 1. Population and Behavior: Sharp-tail grouse, Hungarian Partridge and ring-neck pheasants use this refuge a fair amount. They do well here the year around when there is little snow. When the snow becomes deep, they fly to other areas where there is more cover and food they can find to feed on.
- 2. Food and Cover. During the milder part of the year, there are insects that make up most of their food. They also feed on grain and seeds. During the winter, they have to feed on the grain they can find, seeds and buds,
- C. Fur Bearing Animals, Predators, Rodents and Other Mammals: There are a few mink, skunk, weasels and badgers that use the land part of the area mainly. A large number of muskrats have built houses out over the water. A number of permits have been issued recently for trapping on the Refuge according to The N. Dak. State Law.

111. Refuge Maintenance.

The water level has been checked, fire protection was done around the buildings and the road north of the cabin was repaired where it was washed out by the high water last spring. The county hired equipment and repaired the road without cost to the Fish and Wildlife Service. To repair the road, dirt was taken off the north west part of the small plot of government owned land where the buildings are.

8. Lambs Lake.

1 General.

B. Water Conditions: This area was inspected on Sept. 21st. The water was about 15" below the spillway level then. The water was a little higher

this fall that it has been as a rule in September. It may be that some heavy rains were received in this locality in September that helped keep the level up.

11 Wildlife.

A. Migratory Birds.

- 1. Population and Behavior: A few hundred birds were using the water area when the inspection was made. They use this small water area and other water areas in the locality.
- 2. Food and cover. There are the seeds of the round stem rushes that they feed on some, prairie bulrushes seeds and they feed in the fields of a fall on grains. The cover is just fair of rushes growing $\mathbf{x}\mathbf{k}$ at places along the shore on the land and in the shallow water.
- B. Upland Game Birds.
 - 1. Population and Behavior. A few sharptail grouse, ring-neck pheasants and Hungarian Partridge use the area some. They use it during the milder part of the year and then fly to the south where there is rougher land and winter protection. There are the insects and grain for them to feed on and weed seeds.
- C. Fur Bearing Animals, Predators, Rodents and Other Mammals. There are a few badgers, mink, skunk and weasels that use the Refuge a little. They are thinned out by the farm dogs when they come up around the buildings.

111. Refuge Maintenance.

New markers were put up this fall where they were needed. The dyke and spillway were inspected. They were both in good shape.

9. Little Goose Refuge.

1 General.

A. Water Conditions: On Sept. 20th., the water level was about 15" below the spillway. The water seemed to be fresh.

11. Wildlife.

- A. Migratory Birds.
 - 1. Population and Behavior: Mobirds were seen on the area when the inspection was made. They use it mainly of a spring and fall when they are migrating to rest on. There is a little submerged aquatics for them to feed on and they feed in the fields and on other areas. There is not much ocver or shelter on this refuge for waterfowl.
- B. Upland Game Birds.
 - 1. Population and Behavior. A few ring-neck pheasants, Hungarian partridge and sharp-tail grouse use this open area some during the milder weather.

During the severe winter weather they have to move to other areas since there is little cover here and not much food but what is covered up with snow.

111 Refuge Maintenance.

The outside of the protected area was patrolled and new markers were put up at the places that they were needed. The dyke and natural spillway were in fair shape as they have been for a number of years.

10, Minnewastena Refuge.

1 General.

B. Water Conditions. The area was checked on October 4th. The water level was about 2' lower this fall than it was last spring. The level was still up fairly high. The water is fresh.

11 Wildlife.

- A. Migratory Birds.
 - 1. Population and Behavior. No birds were seen on the area when the inspection was made. A few birds use the small water area of a fall and spring. This is a poor waterfowl refuge. There is a little submerged aquatics for them to feed on, round stem rushes and other seeds.
- B. Upland Game Birds.
 - 1. Population and Behavior. A few ring-neck pheasants and sharp-tail grouse use the erea. The pheasants use it some the year around. The grouse only use it of a winter to feed on buds and seeds when the snow is deep on the prairies.

111 Refuge Maintenance.

The land area was patrolled and new markers were put up at the places that they were needed.

11. Pleasant Lake Refuge.

1. General.

B. Water Conditions. This area was inspected on Sept. 15th. The water was 18" below the spillway level then. The water seemed to be fresh. Some rains were received here that helped keep the water fresh and the water wind moved it around some.

11. Wildlife.

- A. Migratory Birds.
 - 1. Population and Behavior. This is just a prairie water area but the waterfowl make much use of it. They use it for the cover mainly. There

is a small supply of food in the water but there are many waterfowl to feed on it. They have to feed on other areas also.

- 2. Food and Cover. There is some submerged aquatics growing in the water that they feed on, the prairie bulrushes and round stem rushes furnish some food. The cover is good out over the water of cattails, phragmites and the rushes.
- B. Upland Game Birds.
 - 1. Population and Behavior: The ring-neck pheasants, sharp-tail grouse and Hungarian partridge use this refuge some. There numbers are comparatively few. They use the refuge mainly for protection and shelter. They use the other local suitable areas.
 - 2. Food and Cover. They feed on insects, weed seeds, buds and the grain they are able to find in the local fields. The cover is good of high grasses, weeds and brush on the Refuge.

111. Refuge Maintenance.

The boundary was patrolled this fall and new markers were put up at the places that they were needed. The small spillmway was checked and left in good shape.

12. Prairie Lake Refuge.

1 General.

B. Water Conditions. This area was inspected on Sept. 21st. The water was about 18" below the spillway level. There was only a very small water area left and it was shallow.

11 Wildlife.

- A. Migratory Birds.
- t. Population and Behavior. A few hundred birds use the area of a spring mainly when they are on their migrations. It is not used so much during the fall since there is not much water there as a rule at that period. It is used very little to nest around.
- 2. Food and Cover. There is very little available food on the water area. There are some round stem rushes, prairie bulrushes grow along the shore edges and some coonteil that they feed on some. There is some conver along the shore edge of rushes and weeds.

111. Refuge Maintenance.

The boundary was patrolled and new markers were put up at the places they were needed. The dyke and spillway were left in good shape. The dyke is well built to hold such a small area of water.

13. Rose Lake Refuge.

1 General.

B. Water Conditions. This area was inspected on October 27th. The water was about 1° below the spillway level on that date. About 300 geese (as shown on the attached form) were on the water area when the inspection was made. No ducks were noticed though. It is supposed that they were feeding on the fields or other water areas.

11. Wildlife.

A. Migratory Birds.

- 1. Population and Behavior. A fairly large number of Canada, snow and blue geese use the water area of a fall. A fair number of ducks also use the water area. Not so many birds will be apt to use the refuge area in the future since the period of the Easement rights has expired on part of the area and the signs were removed from that part this fall.
- 2. Food and Cover. There is some submerged aquatics they feed on, the seeds of the bulkrushes furnish some food and they feed in the fields. The growthof phragmites, and bulkrushes along the water edge furnish some shelter and cover.

B. Upland Game Birds.

- 1. Population and Behavior. Sharp-tail grouse, ring neck pheasants and some partridge at times use the land area of this refuge. There is not much cover or shelter for winter use and they move to the south and east where there is cover and more available food.
- 2. Food and Cover. There are the insects, seeds and other foods for them to feed on dutring the milder parts of the year. During the winter they feed on seeds, in the fields and then move to other areas where there is available food and cover.
- C. Fur Bearing Animals, Predators and Other Mammals. There are a few mink, weasels, skrunk and badgers that use the land area of the refuge some. They are thinned out by the farm dogs when they go up to the buildings, so they are not apt to increase much in numbers.

111 Refuge Maintenance.

This area was gone around this fall and new markers were put up at the places they were needed. Then, later in the fall the signs (or markers) were removed from the part where the Easements had expired and the dyke and spillway were inspected and left in good shape.

14. Rock Lake Refuge.

1. General.

B. Water Conditions: This area was inspected on Sept. 27th. The water was then about 1' below the bottom of the stop-log on the south end of the Refuge. The water seemed to be fresh.

ll Wildlife

A .Migratory Birds.

- 1. Population and Behavior. About a 1000 ducks, 100 coots and 500 gulls were on the water area when the inspection was made. They use the area east of the north-east dyke most since there is more shelter above the water for them to use and the dyke stops the wends from the west.
- 2. Food and Cover. There is much coontail growing in the water, some sago pond weed and other plants that they feed on in the water. They feed some on the prairie bulkrushes growing along the water edge and they feed on the grain that they can find in the fields.

There is a little cover along the water edge of rushes, weeds and brush. East of the north-east dyke there is a fair amount of cover above the water of high grass.

B. Upland Geme Birds.

- 1. Population and Behavior. Ring-neck pheasants and some partridge use the area the year around. In the fall mainly, sharp-tail grouse use it to feed on. We have never seen them there during the winter. It is supposed that a few of them nest on the land area also.
- 2. Food and Cover. There is plenty of food for them during the milder part of the year of insects, weed seeds and berries. During the winter, they fly to the north where there is shelter and there are trees that furnish buds and other foods are available.
- C. Fur Bearing Animals, Predators, Rodents and Other Mammals. A few mink, weasels, badgers and skunk use the land area of the Refuge. Some muskrats make their homes in the high shore line.

111. Refuge Maintenance.

The boundary was patrolled and new markers were put up at the places they were needed. On the south end of the Refuge, the stop-logs were locked in place so they cannot come out unless they are pried out and the locks broken.

15. Snyder Lake Refuge.

1. General.

B. Water Conditions: This area was inspected on Sept. 28th. The water was about 2' below the spillway level. The water evidently seeps away some through the gravel and shale layer down under the clay. The water in the pool was fresh due to some rains and the wind monoring it some.

ll. Wildlife.

A. Migratory Birds.

1. Population and Behavior: There were about 200 ducks on the water

area when the inspection was made. Some swan and a fairly large number of Canada, snow and blue goese use it of a fall. They use other water areas also.

- 2. Food and Cover. There are some submerged aquatics they feed on, the seeds of prairie bul&rushes and the seeds of round stem rushes. There is a little cover on the edges of the water area of rushes and weeds. The high shore line helps stop the winds from hitting them so hard.
- B. Upland Game Birds.
 - 1. Population and Behavior: A few Hungarian Partridges and ring-neck pheasants use this area some. There is not much cover on the land area and when the weather becomes severe, they move to the south about a mile where there is cover and shelter of trees and brush.
 - 2. Food and Cover. There are the insects that they feed on during the milder part of the year. During the winter they have to feed on seeds, the grain they can find in the fields, berries, buds and seeds. There is cover on the area of some low brush and weeds.
- C. Fur Bearing Animals, Predators, Rodents and Other Mammals. There are a few skunks, weasels and badgers that use the land area of the Refuge. A fair number of muskrats make their homes on the north end of the water area out of plants out in the shallow water.

111. Refuge Maintenance.

This area was gomearound and new markers were put up at the places they were needed. The dyke and spillway were inspected and left in good shape.

16. Sibley Lake Refuge.

1. General.

B. Water Conditions: This area was inspected on Sept. 22nd. The water level was then about 1 lower than it was last spring. The water seemed to be fairly fresh. The water level stays up very well in this shallow lake.

ll. Wildlife.

- A. Migratory Birds. .
 - 1. Population and Behavior. About 500 ducks were on the area it is believed when the inspection was made. There were also 100 coots and 200 Franklin Gulls. Phragmites, cettails and other plants grow out in and over the water and it is not possible to see over all of the water area. They use the surrounding water areas but they make much use of the Sibley Lake.
 - 2. Food and Cover. They feed on prairie bulrushes, round stem rushes and the summerged aquatics that are growing in the water. They feed in the near by fields. The cover is good over much of the water area of cattails, round stem rushes and some phragmites.

B. Upland Game Birds.

- 1. Population and Behavior: The ENXNEK ring-neck pheasants, sharp-tail grouse and at times other birds use the area. The refuge area is rather low and they use it during the milder weather. When the snow becomes deep they use the hillsides where they are able to get food better and the uneven land furnishes some shelter also.
- 2. Food and Cover. There are insects to feed on during the summer and other natural foods. During the winter they feed on weed seeds, the grain they are able to find, buds and berries. The cover is good of brush, high weeds, some trees and the hills furnish shelter from the winds and also food.
- C. Fur Bearing Animals, Predators, Rodents and Other Mammals. On the land area, there are skunk, weasels, mink and some other animals. There are a fairly large number of muskrats that make their homes out over the water of plants growing there. Trapping permits have been issued for trapping on this area in the usual way.

111. Refuge Maintenance.

The area was gone around and new markers were put up where ever they were needed. The birds were checked on the area also.

17. Silver Lake Refuge.

1. General.

B. Water Conditions. As of Nov. 2nd., the water was running through the place where the small gates are used. There was about a width of 6' of water flowing over the spillway and 6" deep. We worked on the Silver Lake job from Oct. 2lst. to the end of the first 2 weeks in November.

11. Wildlife.

A. Migratory Birds.

- 1. Population and Behavior. About 700 ducks were on the water area when the inspection was taken. They seem to be making more use of the area each year. Of course the water level was higher than it is as a rule and they are able to get a fair amount of food in the pool.
- 2. Food and Cover. There are coontail, clasping leaf pond weeds and some sago pond weeds growing in the water that they feed on. They also feed in the fields and on other water areas. There is some cover of cattails, phragmites, prairie bulrushes and other plants growing in the water edge.

B. Upland Game Birds.

1. Population and Behavior. Ring-neck pheasants, sharp tail grouse and Hungrian Partridge use this area. The shelter and cover is good on the west side of the pool area. They use this land area during the winters much and use other areas in the summer.

Page 15.

- 2. Food and Cover. There are all of the natural foods available for them here during the milder part of the year of insects, grain and seeds. During the winter, they feed on weed seeds, berries, buds and any other foods they can find. The cover is good over the west side of the lend area of the Refuge.
- C. Fur Bearing Animals, Rodents, Predators and other Mammals, There are a few mink, weasels, skunk and badgers on this Refuge. A few muskrats use the banks of the coulee to make their homes in.

111. Refuge Maintenance.

New markers were put up around the boundary this fall. The dragline and operator from Mud Lake Refuge worked on the area from Oct. 26th. to Nov. 8th. inclusive digging out the dirt and driving the piling so a new spillway can be constructed next spring. The dragline was used to move many yds. of rock and dump them just below the old spillway. The dragline was used to load about 60 yds. of rock on to the trucks and the rock were hauled and put where the new control structure is to be made. This required much work with the equipment and men. Some extra men were hired also. Cement, lumber and other material were hauled from the Upper Souris Refuge to do this job. About 2/3 of the gravel and sand needed for this job is there now. There was not room to pile it all up near where it was needed.

18. Woodlake Marsh Refuge.

1. General.

B. Water Conditions. This area was checked over on Oct. 4th. The water was about 1' below the spillway level. The dyke and spillway were looked over and were left in good shape.

11. Wildlife.

A. Migratory Birds.

- 1. Population and Behavior. No birds were seen on the area on Oct. 4th. This m is not a nesting area. For the size of the water area, a fairly large number of ducks stop on this refuge to rest of a fall when on their way south. They feed in the fields and on other areas. There is not much cover and only along the edge of the water is there some plants growing that give some shelter and cover. There is some sago pond weeds, countail, star duck weed and some other plants that they feed on.
- B. Upland Game Birds.
 - 1. Population and Behavior. A few ring-neck pheasants, Hungarian partridge use this area during the year both winter and summer. Some sharp-tail grouse use it mainly during the winter for shelter from the storms and to find food.
 - 2. Food and Cover. During the milder part of the year, they feed on insects and the other natural foods there for them. During the winter they feed on weed seeds, the grain they can find in the opened straw stacks, berries and buds. It is difficult for them to find grit at times.

The cover is good on this small area of brush, high weeds, some trees and the hills stop the winds especially during the winter. It takes acre size patches or more of cover to be of much use in the winter. The small clumps of WEKAK and brush soon get filled up with snow in the winter.

C. Fur Bearing Animals, Fredators, Rodents and Other Memmals: A few weasels, skunk and badgers use the land area of the refuge. There are a few small muskrats that make their homes in the xxx high shore of the water areas. These rats do not growas large as on other good areas since they just do not have enough of the right kind of foods.

111. Refuge Maintenance.

The boundary line of this Refuge was patrolled and new markers were put up at the places they were needed this fall. The dyke and spillway were carefully checked and left in good shape.

19. Stump Lake Refuge.

1. General.

B. Water Conditions: This Refuge was inspected on Oct. 3rd. There is no water gauge on this area but from checking the present water level with the past levels, the water is fairly high for this fall period. The deep snow last winter helped raise the level much.

11 Wildlife.

A. Migratory Birds.

- 1. Population and Behavior: There were about 50 ducks on the water near the peninsula on the north end of the Refuge. No other birds were seen. They use this water area as a resting place during the fall. They rest out of the wind behind the islands or peninsulas.
- 2. Food and Cover. There is some sago pond weeds that grow in the water and prairiebulrushes grow along the edge of the water that they feed on some. They have to feed in the fields also. There is no cover over the water area. The higher land of the islands and peninsulas stop the winds some.

B. Upland Game Birds.

- 1. Population and Behavior: Some Hungarian Partridges and ring-neck pheasants use the land part of the refuge during the milder part of the year. During the winter when the snow is deep, they have to fly to the west or east about a mile where there is shelter and available food.
- 2. Food and Cover. There are all of the natural foods available for the upland game birds on this land area during the milder part of the year of seeds, berries and buds. During the winter they feed here some on grain they can find in the fields, some seeds and buds. When the snow gets deep and the weather cold they fly to the west to get food and shelter on the hills or they fly to the east for food and shelter in the timbered areas there.

111. Refuge Maintenance.

The area was checked over on October 3rd. The signs were all up and in place on the peninsulas. It was not possible to get over to the islands since there was no boat along.

Report completed, January 4 , 1950. Signed Mesley D. Parker.

Refuge Manager.

P. S. No pictures are included as part of this report since no real new were noticed that could be taken this fall to be included as part of the report.

Much time and care has been taken to make out this report and compile the information on the NR-1 Form. The Easement Refuges are a real help to the waterfowl in this northeastern part of the state as a stopping and resting place of a fall and spring. On some of the Easements, there is much available foodd for the waterfowl. I hope the office approves this report in every way.

when

9 1950 JAN

WATERFOWL

lefugeArdock	_Months of sept	let. to Dec.	31, 1949
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(1)		(2) (3) First Seen Peak Concentration			(4) Last Seen		(5) Young Produced		(6)	
	Species	First	Seen	Peak Conce	entration	Last	Seen			Total
	Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimate for Peri
I.	Swans: Whistling swan	1 00 310 1 00 310 1 00 310	PARSONIA REACTOR PROCESSION			Carlos Son Carlos Son	Sept. 21			150
I.	Geese: Canada goose Cackling goose			Di Cay Ess					i i i i i i i i i i i i i i i i i i i	1000
	Brant		1	in the abo	THE LABOUR.					500 300
I.	Ducks: Mallard Black duck		140 P	65 CL 7508	100 - year 1	100				3500
	Gadwall			Programme and the second		50				500
	Baldpate Pintail					100				500 3500
	Green-winged teal			Line and the last		50				100
	Blue-winged teal Cinnamon teal									200
	Shoveller					Hallony	al prost	S IN SEC.		50
	Wood duck									
	Redhead Ring-necked duck									3300
	Canvas-back Scaup									3000 2000
	Golden-eye Buffle-head									2000
	Ruddy duck			'0	22-04W	1 La 14 3 d	a extra yid			2000
17	Conta				Towns Se	DIE LET S				
V •	Coots				- Sub-	MARY ARE	white water	to synamy		2000

3-1750 (July 1946)

Tota	al	Pro	duc	ti	on	:

Geese		
Ducks	50	
Coots	50	

Total	waterfowl usage during period 22,400
Peak	waterfowl numbers About Nov. 1st 6,000
Areas	used by concentrations The west part of the water are
Princ	pal nesting areas this season they nested very little
here	last summer since the water level was very low.
	Reported by Wesley D. Parker

INSTRUCTIONS

- (1) Species: 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.
- (2) First Seen: 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.
- (3) Peak Concentra- The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge percerd for the species during the season concerned in the reporting period.
- (5) Young Produced: 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.
- (6) Total: Estimated total number of the species using the refuge <u>during the period</u>. 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 <u>Summaries</u> receive careful attention sin these data are necessarily based on an analysis of the rest of the form.

Refuge Rillings Lake

Months of Sept. 1st. 6 to Dec. 31, 1949.

(1) Species		(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) - Total	
	Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Period	
I.	Swans: Whistling swan						Sept. 191		de de la la	60	
II.	Geese: Canada goose Cackling goose				tentre in	14	Lange to the		Properties	500	
	Brant White-fronted goose Snow goose Blue goose	N. Charles	i rena				100 100			150	
II.	Ducks:			10. 10. 19			BOOK TO S		o tetra of sebolation	150	
	Mallard Black duck	rot m		Ne of 1000		50	G CHICAT			2500	
	Gadwall Baldpate Pintail					25 25 50				600 600 2500	
	Green-winged teal Blue-winged teal Cinnamon teal								(100	
	Shoveller Wood duck Redhead									100	
	Ring-necked duck Canvas-back Scaup				in most	T anstitu	S suess of	a suggest	Astronomics	200	
	Golden-eye Buffle-head					war sk on	No.		e se 200 foi		
	Ruddy duck			*	S S S S S S S S S S S S S S S S S S S	espair n	Part Trans		14 Yes	600	
IV.	Coots				The same of	100	ente ance		-250-	800	

3-1750 (July 1946)

Tota	1 P	rodu	ct	ion	:

Geese	
Duc ks	50
Coots	50

	ns Fast part of the water area.
Principal nesting areas thi	is season They nort here but litt

INSTRUCTIONS

- (1) Species: 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.
- (2) First Seen: 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.
- (3) Peak Concentra- The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge percerd for the species during the season concerned in the reporting period.
- (5) Young Produced: 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.
- (6) Total: 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.

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WATERFOWL

Refuge Ruffelo Leke Months of Sept. let. to Dec. 51, 1949.

	(1) Species	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total	
	Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Perio	
I.	Swans: Whistling swan			Same Dup	C CONTROL		Sept. 16t	sh.	en elliste	100	
II.	Geese: Canada goose Cackling goose Brant	Br Jani r	-1/10 100	and sort the	this res a	ays. Oct.	A 17302 COR		e recording	700	
	White-fronted goose Snow goose Blue goose	10 Kulles 11 Col 15		ot open	PTS COPING	ranes and	H PROTES		oyeu*	200 200	
II.	Ducks: Mallard Black duck			AN OF ISSA V 1 NO	The Mary	150	Carped to		NE STOLETE	3000	
100	Gadwall Baldpate Pintail Green-winged teal			IMELES	THE STATE OF	50 50 150				2200 2200 3000	
	Blue-winged teal Cinnamon teal	4.8				25 50			8	50 150	
	Shoveller Wood duck Redhead				- Market	400 00 40	O ENDIS 1831	to and actor	14.	150	
	Ring-necked duck Canvas-back				5A-7297	ner perop	in same Pr	74 - 44-20-2	of may such	1500 3000	
	Scaup Golden-eye							au/gu		2500	
	Buffle-head Ruddy duck				The state of	CHI SA C	ot sign			2000	
IV.	Coots									2200	

3-1750 (July 1946)

Tota	al Production:	SUMMARIES
(Geese	
I	oucks 100	Peak waterfowl numbers About 4000 on Nove late
(Coots 100 -	Areas used by concentrations North and of the water a
	Characteristics and a special section of the sectio	Principal nesting areas this season they nest some on
	THE STATE OF	north end of the water area and around ite
	Sharten	Reported by Wesley D. Parker.
	trosers	INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge percent for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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

Note: Only columns applicable to the reporting period should be used. It is desirable that the Summaries receive careful attention sin these data are necessarily based in an analysis of the rest of the form.

of the migrational movement.

WATERFOUL

Refuge	Months of	Sept. 1st.	to Dec. 31,	1940
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	(1) Species	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total	
	Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Period	
I.	Swans: Whistling swan	A SHETTER				Congo con Longo con	Sept. 28th		and services	80	
II.	Geese: Canada goose Cackling goose Brant White-fronted goose		in the	en va co	SATISTICS OF STREET	\$16. Z/W	a miliona ciconica	usquist i	a kanakana	1000	
	Snow goose Blue goose						The supple		a part	400 400	
III.	Ducks: Mallard Black duck			100 To 10		50				2500	
	Gadwall Baldpate Pintail					25 25 50	in bounds		al angle i	400 400 2700	
	Green-winged teal Blue-winged teal Cinnamon teal						-10-94			100	
	Shoveller Wood duck Redhead			All and the second	100-100	Mary out	EL PER POP CE	Market Will		400	
	Ring-necked duck Canvas-back Scaup Golden-eye				- Section 1		OF STREET	handar.		800 800	
	Buffle-head Ruddy duck				TARK ME	MA AN		in to he is	· million in	1000	
IV.	Coots				***	100	ner grand	Acqua"	13.000	800	

3-1750 (July 1946)

SUMMARIES

Tota	al Production:	
(Geese	Total waterfowl usage during period 11,880
I	oucks	Peak waterfowl numbers About Nov. 1st 2000
(Coots 100-	Areas used by concentrations They use the north end of t
	er principal and a second	water area mainly.
	Christing and Anna	Principal nesting areas this season They nest sees along
		on the land on north end of water area.
	DESCRIPTION OF THE PERSON OF T	Reported by Wesley D. Parker
	Avantage of the April 1990 I	INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge percent for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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.

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WATERFOWL

Refuge Johnson Months of Sept.	1st. to Dec. 31, 194 o.
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(1) Species	(2) (3) First Seen Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total		
Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Perio
I. Swans: Whistling swan	Wanner	Bave	Hambel	раче	Number	Sept. 23rd		me setuses	400
II. Geese: Canada goose Cackling goose Brant	A TOTAL OF	at New York	and for the	sburger or	ne suit pres	a regor core	GLOSING DOS	n reperatng	2000
White-fronted goose Snow goose Blue goose	AMERICAN STATES	t the tex	ot the abs	tys de your	o 70 a 13	print to a	ATT OF ET	CZER*	1000
II. <u>Ducks:</u> Mallard Black duck		rose shed	ed II Toda	AND SHAR	200	E Carolina	,	OUT DISCUSSION OF	8000
Gadwall Baldpate Pintail	ie aggrese		Mark Indea		100 100 200	0 90 005711		Se gatatiff o	7000 7000 10000
Green-winged teal Blue-winged teal Cinnamon teal					50 100	OA SETT	D 10 12 12		200 500
Shoveller Wood duck Redhead			,		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	*			300
Ring-necked duck Canvas-back				Marin	o o manage	E STORE OUT	estraige 10	NA HOUSE STA	4000
Scaup Golden-eye				APPERE	eta ya s	to local paints of	or sugar		10000
Buffle-head Ruddy duck				PLANE I	n 12 00	or oteror you	THE WITH	en ope men	3000
IV. Coots				Body 40	* *	A COLOR OF THE			1000
0000				10000	100				1000

3-1750 (July 1946)

SUMMARIES

Tota	l Production:	
C	eese	Total waterfowl usage during period 63,400
I	oucks	Peak waterfowl numbers About Nov. lat 12,000
C	coots 150	Areas used by concentrations The sides of the water are
		where there is cover over the water.
		Principal nesting areas this season They nest all around
	ACTION OF THE PARTY OF	the rater area, some.
	ADMINISTRATION OF THE PARTY OF	Reported by Wesley D. Parker
	STEWART CARE DOES	
	Literary Control	INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge record for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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 <u>Summaries</u> receive careful attention sin these data are necessarily based in an analysis of the rest of the form.

WATERFOWL

Refuge Kellys Slough Months of Sept. 1st. to Dec. 31, 1949.

(1) Species		(2) (3) First Seen Peak Concentration			(4) Last Seen		(5) Young Produced		(6) Total	
Common Name	Num	aber	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Perio
I. Swans: Whistling sw	an	16720		TORRE TORR	in place	any or care	Sept. 20th		tone statebr	100
II. Geese: Canada goose Cackling goo Brant	se .		urke ten	og tos épa	metrae di		0.000.000.000.000.000	cuer zu p	a reporting	2500
White-fronte Snow goose Blue goose	1 goose	Special Control		ion spen. I	pre od ruce	opes son	objace u	ettons or	02 ea *	2000
II. <u>Ducks:</u> Mallard Black duck Gadwall Baldpate Pintail		20 2 20 2 20 2 20 2 20 2 20 2 20 2 20 2		- N'de Incoe onld bo safe les of look	ON MACH	50 25 25 50	in the occurre	ng on ver	can appeared to	5000 2500 2500 5000
Green-winged Blue-winged Cinnamon tea Shoveller Wood duck	teal							m. 9 · 128		50 250 100
Redhead Ring-necked Canvas-back Scaup Golden-eye	duc k				ALTONO TO	a remain	a seas yes	soopiu 3	da du mot o	2200 4000 5000
Buffle-head Ruddy duck					PARK N	en phica	a creation	e estados.	200 AND 10	2000
IV. Coots					Ideal	Francisco (A SEE GALLS	parant,	THE THINK THE	1000

3-1750 (July 1946)

SUMMARIES

Tota	l Production:	
C	eese	Total waterfowl usage during period 56,200
I	ouc ks	Peak waterfowl numbers 5000 on Nov. 1st.
C	coots	Areas used by concentrations They use the west side of t
		water area mainly.
	Carrier of the Carrier of Carrier	Principal nesting areas this season This is not a nesting
		Area.
	Principle and the	Reported by Wesley D. Parker.
	Services of the services	INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge pecerd for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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.

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Refuge Lac Aux Mortes

Months of Sept. let.

to Dec. 31.

1949.

	(1) Species	(2) (3) First Seen Peak Concentration			(4) Last Seen		(5) Young Produced		(6) - Total	
	Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Perio
I.	Swans: Whistling swan						Oct. 5th.		THE PARTY OF	200
II.	Geese: Canada goose Cackling goose Brant		synta bec			100			a behouse	
	White-fronted goose Snow goose Blue goose	material dr	e pos and	ol, spe abs	The street	does not	the tweet		majuse.	4000
II.	Ducks: Mallard Black duck				E	3000	TOTAL ST			13000
	Gadwall Baldpate Pintail Green-winged teal	e engrere		COM TO THE	in Albin	2000 2000 3000	an object	en derena	go fartig a	8000 8000 13000 300
	Blue-winged teal Cinnamon teal									600
	Shoveller Wood duck Redhead				Wenter:	Lobotes mer dan	The median.	and the same of th	apply making to	200
	Ring-necked duck Canvas-back Scaup Golden-eye				iperior; i				out controls	10000
	Buffle-head Ruddy duck				T SECOND		a sheets it one		Winds was	1000
IV.	Coots				TOTAL W	PERSONAL PROPERTY.	or rain them	Series	43,320,231	3000

Total	Productions	

Geese		
Ducks		
Coots_	b	

Total waterfowl usage during period 78,300
Peak waterfowl numbers About 20,000 on Cotober 10th.
Areas used by concentrations at the water area.
Principal nesting areas this season They nest on plants
growing out over the water and around the water area.
Reported by Mesley D. Parker

INSTRUCTIONS

- (1) Species: 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.
- (2) First Seen: 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.
- (3) Peak Concentra- The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge pecerd for the species during the season concerned in the reporting period.
- (5) Young Produced: 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.
- (6) Total: 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.

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	Refuge Inc Am	ortes	Year	r 1949			
	Botulism		Lead Poisoning or other Disease				
Period of outbreak Above Period of heaviest los Losses: (a) Waterfowl (b) Shorebirds			Kind of disease Species affected Number Affected Species	Actual Count	Estimated		
(c) Other Number Hospitalized	No. Recovered	% Recovered	Number Recovered				
(a) Waterfowl (b) Shorebirds (c) Other			Number lost Source of infection				
Areas affected (location about a total of lo			Water conditions				

Food conditions

Water conditions (average depth of water in sickness areas, reflooding of exposed flats, etc. Water was from a few inches deep to about 42'. This area has been flooded for a number of years.

Condition of vegetation and invertebrate life vegetation is thick over part of the area and healthy.

Remarks The botulism starts was around an island on the south west side of the water area. The cause is not known. The dead birds were picked up and buried.

Remarks	
tomat no	

WATERFOWL

Refuge Lake Months of Sept. 1st. to Dec. 31, 1949.

	(1) Species	(2 First		Peak Conce		Last		Young F	5) Produced	(.6) Total
	Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Perio
I.	Swans: Whistling swan			THE PARTY OF THE P			Sept. 21	1 • • • • • • • • • • • • • • • • • • •	ST OF LAND	50
II.	Geese: Canada goose				- 8					400
	Cackling goose Brant White-fronted goose									
	Snow goose Blue goose	in the sa	al majore	of one above	ar was		The Month	7 10 17		1100
I.	Ducks:			THE MEMORY OF		Control State	ABY DE L		DEPOSITOR OF THE PARTY OF THE P	
	Mallard Black duck			40 42 70 0	Manage Manage	200	· Secretary			2000
	Gadwall Baldpate Pintail Green-winged teal			Total State	OF THE	100 100 200			de antice e	500 500 2000
	Blue-winged teal Cinnamon teal									80 150
	Shoveller Wood duck									100
	Redhead Ring-necked duck									200
	Canvas-back Scaup Golden-eye									300 200
	Buffle-head Ruddy duck				system. J	ng phan	a statement		previous se	500
v.	Coots	10				200				1500

3-1750 (July 1946)

SUMMARIES

Tota	al Production:	
(Geese	Total waterfowl usage during period 10,660
I	oucks	Peak waterfowl numbers About Oct. 25th. 2000
(Coots	Areas used by concentrations All of the water area.
	CONTRACTOR OF THE R.	Principal nesting areas this season No. they do not use t
	BROKENS AND	-area much to nest on-
		Reported by Nesley D. Parker.
		INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge pecerd for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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 <u>Summaries</u> receive careful attention sin these data are necessarily based in an analysis of the rest of the form.

Refuge Little Coose

Months of sept. let. to 31

194 9.

(1) Species	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) - Total	
Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Period	
I. Swans: Whistling swan		parisonal parisonal proper or	BORGE BUSIN		No birds	Sept. 20th		in silve	20	
II. Geese: Canada goose Cackling goose Brant White-fronted goose		ARRA SOS	es tos ene	Charles of	708 000	trees pork	arosed to X	a conseque	600	
Snow goose Blue goose				The column	1000	SHALL SHE		mide.	200 200	
II. Ducks: Mallard Black duck		ESTA CONSCI	en 91 3000	14 mg	out with the	cazat.			2000	
Gadwall Baldpate Pintail Green-winged teal			COLUMN TATA				To all the		1000 1000 2000	
Blue winged teal Cinnamon teal				Title					150	
Shoveller Wood duck					2000000				50	
Redhead Ring-necked duck Canvas-back	4 2 3 3 4			51	T March		TOTESOL S	As he now a	500 600	
Scaup Golden—eye Buffle—head				queen's	105 30 100	CHECK IN	1 -04 *		600	
Ruddy duck							STIGAL HOLD	Man and and	200	
IV. Coots				Total Control	PRIZORT 6		11/24 ·	7.813.0	200	

3-1750 (July 1946)

Tota	1 Production:	
- 0	leese	Total waterfowl usage during period 9.170
I	ouc ks	Peak waterfowl numbers About end of Octo- 2000
C	coots	Areas used by concentrations They use all of the small
		water area to rest on at times.
	CHARLES SEEN SEEN SEEN SEEN SEEN SEEN SEEN S	Principal nesting areas this season this season the sea
		Reported by Wesley D. Parker.
	Mineral Seas	到美国是在中国的企业,但是在1960年的1960年,1960年的1960年的1960年的1960年的1960年的1960年的1960年的1960年的1960年的1960年的1960年的1960年的1960年的1960年的
	ALUE OF THE PARTY	INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge period for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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 <u>Summaries</u> receive careful attention sin these data are necessarily based in an analysis of the rest of the form.

WATERFOWL

	(1)	(2) (3) First Seen Peak Concentration			(4) Last Seen		(5) Young Produced		(6)	
	Species	First	Seen	Peak Conce	ntration	Last Se	en	Broods	Estimated	Total Estimated
	Common Name	Number	Date	Number	Date	Number	Date	Seen	Total	for Perio
I.	Swans: Whistling swan					No birds	Oot. 4th.		en ou less	
I.	Geese:									
	Canada goose Cackling goose		dere mi	100 tot 100	Carrier de	the of Letter	erika som i		i lebourpe	
	Brant									
	Snow goose Blue goose		NAME OF TAXABLE	300 Nove 2000	The Day Proper	P THE THE	A STATE OF THE STA			
	orde Robse	distant en	n and dell	PAR PROPERTY OF	The accommon	does not	Shell Friday		Mary Comment	
	Ducks:				TOPO TOP .					100
	Black duck			THE OF TOOMS	314 NE 27	DEC MANY			THE CASE OF THE PARTY OF	50
	Gadwall Baldpate				PH-Lauri					50
	Pintail Green-winged teal									100
	Blue-winged teal					4 2				50
	Cinnamon teal Shoveller					- Contractor	Mound	in the same		
	Wood duck			A hear						
	Redhead Ring-necked duck									40
	Canvas-back				E BARRES	TE SPECIFICATION	STORE SAME		ALL HO RIES	50
	Scaup Golden-eye									50
	Buffle-head				The same of		de la lace		Every the text	
	Ruddy duck				The Walter			W. Series		50
7	Coote				TOWNER MY					
•	Coots				FAREGY A	PARTICIPATE IN	RABIN IN THE STATE			50

3-1750 (July 1946)

Tota	1 Production:	
C	leese	Total waterfowl usage during period 610
I	oucks	Peak waterfowl numbers About Oct. 20th 100
C	coots	Areas used by concentrations South and of the small la
		Principal nesting areas this season They do not nest h
	Man clark	Reported by Wesley D. Parker.
		INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge percent for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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 <u>Summaries</u> receive careful attention sin these data are necessarily based in an analysis of the rest of the form.

Refuge Pleasant Lake

Months of Sept. lat. to Dec. 31. 1949.

	(1)	(2				(4		(5) Young Produced		(6) -	
	Species	First	Seen	Peak Conce	entration	Last	Seen	Broods	Estimated	Total Estimated	
	Common Name	Number	Date	Number	Date	Number	Date	Seen	Total	for Perio	
I.	Swans: Whistling swan			Petries (p.o.	e de la company	SATIS DO /	Sept. 15th		tede appreça	80	
II.	Geese: Canada goose Cackling goose Brant	in that i	exilise bao	and they also	apentes di	n jags Stript	s each conce	més an a	PD-12-6003-570G	1000	
	White-fronted goose Snow goose Blue goose	ue folicos	op Domyer o pue dos	or ope the	ay bisagi	to the p	a red Impera	er ot ere	clos	400 400	
III.	Ducks: Mallard Black duck	73 13 10 T	netule le	SOLO COL PRINCIPAL COLUMN	SD0 700 S	300	paranal contr	Marie de	he reportin	3000	
	Gadwall Baldpate Pintail Green-winged teal	n address eponemia	reaction sp a co cos	THE THE PERSON	on toes	200 200 300	orea oscarad	er an unt	ge during b	1000 1000 5000 100	
	Blue-winged teal Cinnamon teal							*	r.	200	
	Shoveller Wood duck Redhead				0.000.00	Talong a	n lake shot	Name of	nerg te com	1000	
	Ring-necked duck Canvas-back Scaup				D.IVET	ad nearth	d otogo surje	ansour 3	A SHIP ON	2000	
	Golden-eye Buffle-head									1000	
	Ruddy duck					POLICE U		SALE AND A	1000 to 1000 to	1000	
IV.	Coots				TORFT A	V. S. L. S. W. T.	e eta artiros	Santon	76.00	1500	

3-1750 (July 1946)

Tota	l Production:	
C	Geese	
I	oucks	Peak waterfowl numbers About Oct. 20ther 4000.
c	coots	Areas used by concentrations All of the vater area.
		Principal nesting areas this season they nest over the way
		some and along the lake shore where there is cover.
		Reported by Mealey D. Parker.
	Bins-arvior sair	
		INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge pecerd for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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 <u>Summaries</u> receive careful attention sin these data are necessarily based in an analysis of the rest of the form.

Refuge prairie Lake Months of Sapt. lat. to Dec. Sl.

(1)	(2)		(3)		(4)		(5)	(6)
Species	First	seen	Peak Conce	entration	Last S	seen	Young P		Total
Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimate for Peri
I. Swans: Whistling swan		ALLEGATOR - CONTRACTOR - CONTRA		Carlos (Sept. 21		o officers	THE LU
Canada goose Cackling goose Brant White-fronted goose	The s	igra top	The water	r area was	almost di	r. No bird	de were see	9)(2.	
Snow goose Blue goose		And District	on opposited	Tal Column	40.00 mgc		12.58 512 3 colett et	2157	
I. <u>Ducks:</u> Mallard Black duck Gadwall	TABLE TO A	roce abot.	the of local	STATE OF THE PARTY	ej ajanj	undon'	PE WENGER	on shorter to	50
Baldpate Pintail Green-winged teal Blue-winged teal	V = 192 K	To the		on one	epot aha	A ODDING		to white o	50 50 10
Cinnamon teal Shoveller Wood duck	ered akt	Elmont :			patrone	A TOTAL	n . p. 1.0000	•	10
Redhead Ring-necked duck Canvas-back Scaup					y mentry	exess the	4 0 0 0 0 0 0	1867 on Hay I	10
Golden-eye Buffle-head Ruddy duck				There o	eo pà cor	s structure of the		50°,3° 8°	
V. Coots				1 12000	CANTON! I	alle que	in the root	100	

3-1750 (July 1946)

(over)

1949__

Tota	1 Production:		Object Lines
C	Geese		Total waterfowl usage during period
I	oucks		Peak waterfowl numbers 50 about Ost. 1st.
C	coots		Areas used by concentrations
	ACTION AND AND AND AND AND AND AND AND AND AN		Principal nesting areas this season they do not nest he
		ter area was almost dry when stion was made.	Reported by Do Parker.
		INSTR	CUCTIONS
(1)	Species:		d on form, other species occurring on refuge during the ed in appropriate spaces. Special attention should be l and National significance.
(2)	First Seen:		e species during the season concerned in the reporting This column does not apply to resident species.
(3)	Peak Concentra- tion:	The greatest number of the spe	cies present in a limited interval of time.
(4)	Last Seen:	The last refuge pecard for the period.	species during the season concerned in the reporting
(5)	Young Produced:	sentative breeding areas. Bro	uced based on observations and actual counts on repre- od counts should be made on two or more areas aggregating Estimates having no basis in fact should be omitted.
(6)	Total:		species using the refuge during the period. This figure

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention single these data are necessarily based on an analysis of the rest of the form.

of the migrational movement.

Refuge Rose Labo

Months of Sept. lat.

to Dec. 31,

194 9.

(1)	(2) (3) First Seen Peak Concentration					(4) Last Seen		(5) Young Produced	
Species	rirst	Seeu	Peak Conc	entration	last	Seen	Broods	Estimated	Total Estimated
Common Name	Number	Date	Number	Date	Number	Date	Seen	Total	for Period
I. Swans: Whistling swan						Oct. 27th.			60
II. Geese: Canada goose Cackling goose Brant					100			L selectoriff	1200
White-fronted goose Snow goose Blue goose	* * A				100				800 800
II. <u>Ducks</u> : Mallard Black duck					CO XXXX				3000
Gadwall Baldpate Pintail Green-winged teal				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					2000 2000 3000 50
Blue-winged teal Cinnamon teal Shoveller						- Seer			100
Wood duck Redhead Ring-necked duck					iss sea.				900
Canvas-back Scaup Golden-eye									900
Buffle-head Ruddy duck					- ST 2X 60	te -territori		10 1 10 10 10 10 10 10 10 10 10 10 10 10	1000
IV. Coot:					7:				1000

3-1750 (July 1946)

(over)

Form NR-1

Tota	al Production:	
(Geese	
I	Peak waterfowl number of young Produced: Repart waterfowl number of young produced based on observasentative breeding areas. Repart waterfowl number of the species during the species during the species of local and National significants. Peak waterfowl number seem. Instructions Instructions In addition to the birds listed on form, other species reporting period should be added in appropriate spacies of local and National significant period, and the number seem. This column does not specied to the species during the species of the species during the species. The last refuge pecard for the species during the specied. So Young Produced: Estimated number of young produced based on observasentative breeding areas. Brood counts should be many species and species during the species areas.	Peak waterfowl numbers About Oct. 10th. 4000.
(Coots	Areas used by concentrations morth end of the water
		Principal nesting areas this season they (ducks) nest alo
		the shore some.
		Reported by Wesley D. Perker.
		INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)		The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge pecard for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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 <u>Summaries</u> receive careful attention sinc these data are necessarily based han analysis of the rest of the form.

Refuge Rock Lake Months of Sept. let. to Dec. 31, 1949.

(1) Species		(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced	
Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Period
I. Swans: Whistling swa	in	A CONTROL OF	DANCE DANCE	Constitution of the consti	ATHERE	Sept. 27th		de attione	250
II. Geese: Canada goose Cackling goose Brant White-fronted Snow goose Blue goose		TASE NEW	of the aby		10 A . 78	a part and a		Allen prob	2000 1200 1200
III. <u>Ducks:</u> Mallard Black duck Gadwall Baldpate		STATE OF STA	Alter Mark and or ladit and for an	AN AND LAND LAND LAND LAND LAND LAND LAN	300 200 200			the special of the sp	12000 7000 7000
Pintail Green-winged Blue-winged Cinnamon teal	ceal		15/10		300				12000 200 500
Shoveller Wood duck Redhead				23.702		*	a g · ausa	AND TO THE	200
Ring-necked Canvas-back Scaup Golden-eye Buffle-head	luck			7 purpor	1 veste	1 01.000 -1570 0 00.00 TK 4	SEED S	nt one wa	10000 3000
Ruddy duck				V	A CA CC	n augudet mil			5000
IV. Coots									3000

3-1750 (July 1946)

Tota	l Production:	SUMMARIES
0	eese	Total waterfowl usage during period 68,550
D	uc ks	Peak waterfowl numbers About 10,000 on Oct. 20th.
C	oots	Areas used by concentrations They use the east of the
		water area where there is cover over the water the most.
		Principal nesting areas this season They nest around the
		water area where the land is not pastured on north side the lake mainly. Reported by Wesley D. Parker.
		INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra- tion:	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge percent for the species during the season concerned in the reporting period.
(5)	Young Produced:	Estimated number of young produced based on observations and actual counts on repre-

(6) Total:

Restimated 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.

sentative 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.

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention sinc these data are necessarily based in an analysis of the rest of the form.

Refuge Sunder Lake

Months of Sept. 1st.

to Dec. 31.

1949.

	(1)	(2)		(3)		(4	()	Vauna E	5)	(6)
	Species	First S	een	Peak Conce	ntration	Last	Seen	Young P Broods	Rstimated	Total
	Common Name	Number	Date	Number	Date	Number	Date	Seen	Total	Estimated for Perio
I.	Swans: Whistling swan		pedential inspet of	Lengue Diag		MATERIAL SECTION	Sept. 28th		S CALLED BY AND SECOND BY AND	100
I.	Geese:									
	Canada goose Cackling goose Brant			Pet 102 110		- CT-12 (A15)	g sau coma		a Dance ros	2500
	White-fronted goose									
	Snow goose			AND ARM DESIGN						2000
	Blue goose		Leten yma	75, H. ST.	The sections	9000 900	1600 80 58		Dies	2000
I.	Ducks: Mallard				Al Description	50			AND THOUSAND	
	Black duck			W 62 30057	wing the part	90	Tiouted's			7000
	Gadwall			19 Jan 39 10	12 80014	25		A Minter	SHE SECRET	4000
	Baldpate					25				4000
	Pintail Green-winged teal			FREEDRICK	arors -	50 25				7000
	Blue-winged teal					25				200 400
	Cinnamon teal Shoveller					Kepsies	- 10 TO THE	distant		
	Wood duck								Told rectange	100
	Redhead									800
	Ring-necked duck Canvas-back				KANTON	S Control	THE REAL PROPERTY.		DESCRIPTION OF THE	11/2/92
	Scaup									5000 5000
	Golden-eye									3000
	Buffle-head	3000				A Sing Cold Store			Eine water	
	Ruddy duck									2500
						full ber	Contraction of the last of the	THE TELL	THE RESERVE	
v.	Coots				1000	real real	in also discourse		77230	2500
10					1976 Table					

3-1750 (July 1946)

ota	l Production:	
C	Geese	Total waterfowl usage during period 41100
I	oucks	Peak waterfowl numbers About Oct. 25th 7,000
C	Coots	Areas used by concentrations They use the noteth end of
		water area the most.
		Principal nesting areas this season They nest all around
	(Signess)	the unter area where it has not been pastured closely.
		Reported by Neeley D. Parker.
	STREET, N. 1967	
	STEERING TO SERVICE STATE OF THE SERVICE STATE OF T	INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge pecerd for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.

Note: Only columns applicable to the reporting period should be used. It is desirable that the <u>Summaries</u> receive careful attention sinc these data are necessarily based in an analysis of the rest of the form.

of the migrational movement.

(6) Total:

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

Refuge Sibley Lake

Months of Sept. lat. to Dec. Sl.

1949.

(1)	(2		(3))	(4) Last Seen		((5) Young Produced	
Species	First	Seen	Peak Conc	entration	Last	Seen			Total
Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Perio
I. Swans: Whistling swan		The second			TO SPECIA	Sept. 22nd	a.		150
I. Geese: Canada goose	E 1203								
Cackling goose			and the same		SUS DA	STREET, SALE		E. L. Chickenson	3000
White-fronted goos	se l		OT THE WAY					•	
Snow goose Blue goose									2000
I. <u>Ducks:</u> Mallard Black duck					200				10000
Gadwall Baldpate Pintail Green-winged teal					100 100 100				7000 7000 12000
Blue-winged teal Cinnamon teal									100
Shoveller Wood duck									600
Redhead Ring-necked duck									1500
Canvas-back Scaup Golden-eye Buffle-head									2 500 8000
Ruddy duck				VE MAN	3 54 13. 40	x = 40 - 61 0)			5000
				Jeen a	198 343 30	Posta Trans		- 1010.5	
V. Coots				A STATE OF	Section 1	19 100 200 24	n bedyna i	4.74	3000

3-1750 (July 1946)

Tota	1 Production:	SUMMARIES
C	leese	
I	oucks	Peak waterfowl numbers About Nov. 1st 10,000
C	coots	Areas used by concentrations They use all of the water a
		Principal nesting areas this season They nest all around
		the water area where it is not closely pastured.
		Reported by Wesley D. Parker.
		INSTRUCTIONS
(1)	Species:	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.
(2)	First Seen:	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.
(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge percent for the species during the season concerned in the reporting period.
100		

(5) Young Produced:

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.

(6) Total:

Estimated total number of the species using the refuge <u>during the period</u>. 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 <u>Summaries</u> receive careful attention sinc these data are necessarily based I an analysis of the rest of the form.

Refuge Silver Lake Months of Sept. lat. to Dec. 31, 1940

(1) Species	(2 First		Peak Conce		Last		Vanna D	5) roduced	(6)
2bec Te8	FILSE	Seeu	Peak Conce	ntration	last	Seeu	Broods	Estimated	Total Estimated
Common Name	Number	Date	Number	Date	Number	Date	Seen	Total	for Period
I. Swans: Whistling swan	STATES OF	planting of	Pour productions and the production of the produ	od kused pounts timeses	TO OPERE	Nov. 2nd.	Drej Can	THE STATE OF THE S	100
II. <u>Geese:</u> Canada goose Cackling goose	NAME OF THE PARTY OF		10 101 100	peoles de	50	MICOCO ADDRE	wes 10 o	a debotana	2500
Brant				rest to pass	10 4 10				
Snow goose Blue goose			AL SHELT	de octor	2400 EX	für in u	require so	22007	1000
II. Ducks: Mallard Black duck		lata a minor	HER DE CON	AND MANAGEMENT	200	TO Getter 64			6000
Gadwall Baldpate Pintail	POLITICA AUXILIA		strids Market point be Side	in sorm;	100 150 100		1 - 12 - Cup	nge during ?	2000 2500
Green-winged teal Blue-winged teal Cinnamon teal			IMALE	CARCES .	50 100				5000 100 200
Shoveller Wood duck				*EEQ.A.	Report	en proportion			100
Redhead Ring-necked duck Canvas-back				14 TBOT	ort pesson	d erest der	person a	the season of	1200
Scaup Golden-eye Buffle-head						gen.			5000 6000
Ruddy duck				1,000	er of to			E 30000	2500
IV. Coots				20,705	Anna (See)	distribution	Salgon"	121000	3000

3-1750 (July 1946)

106	11 Production:	
C	leese	Total waterfowl usage during period 38,200
I	oucks	Peak waterfowl numbers About Oct. 25th 4000
C	coots	Areas used by concentrations the whole water area is use
	Self-succes of	by the waterford.
		Principal nesting areas this season They nest along the
		shore and in the fields on north and of water area main
	The source of the same	Reported by Wesley D. Parker.
	Bylia-wziniej plat	
		INSTRUCTIONS
(1)	Species:	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.
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(3)	Peak Concentra-	The greatest number of the species present in a limited interval of time.
(4)	Last Seen:	The last refuge pecerd for the species during the season concerned in the reporting period.
(5)	Young Produced:	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.
(6)	Total:	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 <u>Summaries</u> receive careful attention sinc these data are necessarily based in an analysis of the rest of the form.

WATERFOWL

Refuge Woodlake Mars. Months of Sept. 1st. to Dec. 31, 1949.

	(1) Species	(2 First		Peak Conc		(4) Last Se	en	Young Pr	roduced	(6) Total
C	ommon Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Period
	wans: histling swan	DO TO THE PORT	DESCRIPTION OF	Liegostania Liegos June August Insequ	Topological street	No birds	Oct. 4th.		e indicate programa programa	
Ca	eese: Anada goose Ackling goose rant	THE REAL PROPERTY.	- CEO 3	my 2000 0004	Segrea gr	on the area.		944 W N	e reporting	
Wi	nite-fronted goose now goose lue goose	PA SLANDER	e e Dompse.	of the abs	00 15 00 10 TO	geen son in	gong danwa bon te w		G788*	
Ma B	acks: allard lack duck	S TEME		on of look	and Mario species o	nak statis	peuter	COLA TO A	Pa Luboucia	1200
Ba P:	adwall aldpate intail reen-winged teal			THEORY IN SECTION	OR CHITES	guya ledoca				1000 1000 1200
B: C: S!	lue winged teal innamon teal moveller					Dabuages	(a-100)	4	62.*	50 100 50
Re	ood duck edhead Ing-necked duck									100
So	anvas—back caup olden—eye offle—head				- weeks	Section frage	and mean			100
	iddy duck				y y	of pa son	eurapitus		AN THEORY	100
IV. Co	oots				foldl w	COUNTRY O	der um psi	land on	-10-000	60

3-1750 (July 1946)

Total Production:

I	GeeseOucks	
(Coots	Areas used by concentrations they use the south end of
		small mater area the most.
		Principal nesting areas this season this season area.
		Reported by Wesley D. Parker.
		INSTRUCTIONS
(1)	Species:	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.
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(6)	Total:	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.

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Refuge Stump Lake Months of Sept. 1st. to Dec. 31. 194 9.

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per or hour brace
national of the open
ngaber of the uper
manber of the poer
tos populais destri
THE SHOOT OF SHOOT
4

3-1750 (July 1946)

SUMMARTES

Total Production:

Geese	
Ducks_	
Coots	



Total waterfowl usage during period 17.380
Peak waterfowl numbers About 3,000 on Oct 20th.
Areas used by concentrations The water area around the
islands is used most.
Principal nesting areas this season This is a resting
-place and not much nesting is done here.
Reported by

INSTRUCTIONS

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- (2) First Seen: 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.
- (3) Peak Concentra- The greatest number of the species present in a limited interval of time.
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