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		MR. SALYER		SECTICN OF HAB	ITAT IMPROVE	ent:
		MRS. WOODIN		Mr. Kubic	hek	
		MR. EIMER		Mr. Smith		7
		MRS. CARVIN		Nr. Griff	110 20	36-26
		MR. BUMONT	QAR 5/24	Miss Cook	Dive.	5-15
		SECTION OF OPERAT	IONS:	SECTION OF ERA		
		hr. Krunnes	uk 5/19	Mr. Regan	JAGK	5/12/44
4		Mr. Gustafso	n	Dr. Bourn	WER	Tudyy
		Miss Baum		Mrs. Fish	man	
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	REMARKS	N. D. DISTR	ICT #2 EASEMENTS	NARRATIVE REPORT		<u> </u>
		JANUAR	Y-APRIL 1944	<u> </u>		<u></u>
				Return to	:Habitat Imp	rovement

E. There t

Regional Director, Minneapelis, Minnesota.

May 16, 1944.

Warren S. Bourn, Acting in Charge, Section of Habitat Improvement, Division of Wildlife Refuges. Omission of WR-1 forms, etc.

In the January-April 1944 Marrative Report from the North Dakota Massment Districts No. 2, Mr. Parker submitted only four NE-1 forms omitting these for:

Billings Lake	Little Goose
Brunba	Minnevastera
Johnson Lake	Pleasant Lake
Kellys Slough	Prairie Lake
Lambs Lake	Rose Lake

Snyder Lake Sibley Lake Silver Lake Wood Lake Harsh Stump Lake

Mr. Parker in this report submitted no NR-2 forms for upland game birds and no NR-4 forms for the fur animals and other small mammals for the various easements.

Trapping activities were mentioned in the case of several easements, but no information except general statements was given relative to the removal of fur animals. This information should be incorporated in the NR-4 forms for the areas. In some cases it may be difficult to get the information from the local trappers, but every effort should be made by the refuge manager in so far as possible to collect this type of information. It will be appreciated, therefore, if this office is supplied with the appropriate IR forms in deplicate from such of those areas as it is possible for Mr. Parker to obtain this information.

Marren S. Bourn.

WSB:efn

Easement Refuges In District No. 2 North Dakota.

Period- January, February, March and April 1944.

1. General.

## 1. Lake Ardoch Refuge.

A. Weather Conditions. Some snow has been received during this period and rain but less than the normal amount of moisture has been received in this district during this period and the last five months of last calander year. The water areas in this District No. 2 are lower at the end of April than they have been for a few years. Many of the wells are commencing to go dry and some people are having a difficult job getting enough water for their use and the needs of the stock animals. A few good rains would again furnish enough moisture for the crops and other uses. Up: around Rock Lake Refuge and east in the Ardoch Locality, more snow was received during the winter(than around the other Refuges) and more water is in the soil and water areas. Below there has been given the weather information as has been furnished by the Devils Lake Federal Weather Bureau:

	Snowfall	Precipitation	Max. Temp.	Minimum Temp.	Normal Precip.	Plus or Minus Precioitation.
January	1.5	.12	48	-14	.47	35
Februar	y 1.5	.12	33	-26	.50	38
March	13.4	.98	46	-12	.78	+.20
April	trace	.72	69	-2	1.52	80
		1.94			3.27	-1.33

B. Water Conditions. Patrolman Torkildson was working on control gates and do other work in buildings from Mar. 23 to 31st. I inspected the area on April 13th. in evening and on morning of 14th. of April. In the morning the gage reading was 8.10. This level is about 1' below spillway level with both gates open. The water has not flowed over the spillway this spring. There is much less moisture draining into Ardoch Lake this run-off period than there was last spring. The level was at flood height last spring. The run-off was very light this spring as compared with the past few years.

ll. Wildlife.

#### A. Migratory Birds.

### 1. Population and Behavior.

a. It is estimated that 3000 ducks (about half pintails and the other half mallards), 100 swan, 200 blue geese, 200 snow geese and 50 Canada geese were using the area when the last inspection was made. The waterfowl were feeding mainly though on the flat flooded land just east of the dam. This low land was flooded to a debth of about 1 foot.

b. In this locality, most of the water areas were still frozen over. This is a late spring. There is not much open water for the waterfowl to rest on and feed in. It is believed that the most of the birds are are yet to come from the south to use this area. The ducks and geese were feeding in the local stubble fields.

2. Food and Cover. The food and cover are about the same as they were last fall. Of course they are feeding in the water where the land has  $b \in n$  just flooded it this spring. They get in the shelter of the higher land or dam according to the way the wind is from.

- B. Upland Game Birds. No upland game birds were seen on or around the refuge this spring. It is supposed that these birds (pheasants and Hungarian Partridge) were staying in the brush in the locality . We will keep a close watch for these birds on the next inspection trips. Of course, some of the birds could have been lost since there was some cold and snowy weather received in this locality in February and March.
- C.Fur Animals, Predators, Rodents and other Mammals. It is believed that the muskrat population has increased or that there are about 100 of these animals living on the area now. One medium sized beaver was seen swiming in the water and then up on the dam near the control gates. It was believed that he was eating prairie bulrush bulbs. No other animals were seen on the area.
- D. Fish. It is supposed that number of bullheads, white buffalo and minnows coming up into lake from the Red River is about the same as during past springs. I saw no fish this time though.

111. Refuge Manntenance.

Patrolman Torkildson was to the Preserve from Mar. 23rd. to the 31st. cleaning the gates, painting them again, cleaning out the buildings and do other jobs. It took longer to do the work since there was a snow storm during the period.

2.Billings Lake Refuge.

### 1. General

B. Water Conditions. This area was inspected on April 14th. The dam and spillway were in good condition. The water level was about 14" below the spillway level. It is believed that the water will raise some yet when the snow and ice melts farther to the north and the water runs down into the water area. The snow fall seems to have been light in this locality during the winter.

### 11. Wildlife.

#### A. Migratory Birds.

1. Population and Behavior. The water was open about 10 feet along the east and west sides and on south end near the dam. There were about 6 pintails, 8 mallards and 16 California gulls on the water area when the inspection was made. A few crows were flying and walking along the shore.

2. Food and Cover. There were the old submerged aquatics where the water was open that would furnish some food and the grain that could be picked up in the stubble fields.

The cover is good of a heavy growth of high weeds and grass on the west side and north end. They brake the winds from those directions and furnish nesting shelter and etc.

- B. Upland Game Birds. No upland game birds were seen on this spection trip on the Refuge. It is believed from the reports of people living near by that there are now about 100 partridge and possibly a few grouse that are using the area. We will watch out closely for these birds in the future.
- C. Fur Animals, Predators, Rodents and other Mammals. No animals were seen on the area except a few Richardson ground squirrels. Poisoned oats were put out for these animals on and near the dam where every there were signs of them. Some trapping was done on the Refuge during the winter and a few rats were taken.
- 3. Buffalo Lake Refuge.

### 1. General.

B. Water Conditions. This area was inspected on April 12th. The water level was about 1° foot below the outlet spillway or the same as it was last fall. The run-off was very light on this Refuge. Most of the area was still covered with ice. 11. Wildlife.

1. Population and Behavior. About 100 mallards and 50 pintails were seen on the water area near the dam on the south end and around the spring hole on the north end near the highway. No other waterfowl had yet arrived up until the time this inspection was made.

2. Food and Cover. There are some of last years aquatic growth in the open water that will furnish some food and there is some grain still in the stubble fields. The cover on this water area, that is in the water and along the shores is poor except on the north end where it is good around the spring.

B. Upland Game Birds. About 6 Hungarian Partridge and 10 Chinese Pheasants were seen on the Refuge. It is estimated that there are about 100 pheasants and 200 Partridge on the area at the end of this period.

The food for these birds is fair on the north side of the Refuge where there are grain fields and some land that is not farmed. On north side where the land is not farmed, there is some rough hilly land and brush that furnishes good shelter. The rest of the area is closely pastured or farmed and does not furnish much shelter.

#### 111. Refuge Maintenance.

The cabin was swept out when the inspection was made. The grass was cut short late last summer and a strip made black around the cabin. All is in good shape around the building. This work of keeping the strip black and grass cut will be kn be done again this summer along with the other necessary work.

#### 4. Brumba Lake Refuge.

## 1 General.

B. Water Conditions. This Refuge was inspected on April 22, 1944. The spillway was in good shape. It was sunken down about 4" where stock had used to walk across but it was still in good shape as far as the use it was needed for. The water was running over the spillway to a debth of about  $l_2^{10}$  for a wizdth of about 3'.

## 11. Wildlife.

#### A. Migratory Birds.

1. Population and Behavior. There were about 30 mallards and 40 pintails on the Refuge when it was inspected. Ice still covers most of the water area except along the shore. Some birds will stop to nest along the shore of this area a little later but the birds moving northward now seem to want to keep on moving northward.

2. Food and Cover. There are some of the submerged aquatics in the open water that are furnishing some food. There is also grain in the stubble fields of the mallards and pintails.

The land on the sides of this narrow lake furnish shelter since the land is higher than the water by about 2' or more. There is also high grass along the east and west sides of the lake that furnishes some cover.

- B. Upland Game Birds. No upland game birds were seen on this area when the inspection was made. It is estimated that there are at least 100 Hungarian Partridge that are now using the area more or less. The shelter and food is just fair for these birds.
- C. Fur Bearing Animals, Predators, rodents and other Mammals. There are a few muskrats, about 2 mink and 6 badgers using this area it is estimated by the signs. No animals were seen on this inspection trip.

5. Johnson Lake Refuge.

### 1 General.

B. Water Conditions. This Refuge was inspected on April 17, 1944. The water level was about the same as it was last fall but it is lower than it was a year ago. It is believed that most of the water area is covered with water to a debth of about 5<sup>°</sup>. This water area is holding up well but there must be a good supply of moisture this summer or the level of the water is bound to go down. This is a very good water area.

### 11. Wildlife.

### A. Migratory Birds.

1. Population and Behavior. As near as could be decided by checking over the birds on Apr. 17th., there were 50 mallards, 50 pintails and 40 California Gulls on the water area. Of course, much of the area was still covered with ice. There were more waterfowl along the shore at other places we are sure where the observer could not see. The migration had just gotten well started on April 17th. As a rule, several hundred of geese use this Refuge of a spring and fall.

Of course, the most of the ducks fly on northward to nest but many hundreds of young ducks are raised on this water area each year when it is well filled with water.

2. Food and Cover. The food and cover at the end of this period is the same as it was last fall. There is a good supply of submerged aquatics in the water and grain in the near by stubble fields. The ice has pushed down most of the plants that were growing out in the water but they will soon be up again. There is good shelter along the shore line of most of the water area.

### B. Upland Game Birds.

1. Population and Behavior. 4 pheasants and 23 sharp-tail graouse were seen when the inspection was made. It is believed that there are at least 50 pheasants, 100 sharp-tail grouse, 30 pinnated grouse and 150 Hungarian Partrige that are using the Refuge more or less now. Much of the land around this water area is hilly and rough. The upland geme birds move around a reasonable amount and use the hills as well as the lower land according to the weather, food supply and the water supply.

- C. Big Game Animals. There are a few white-tail deer that are still using this Refuge. None of the animals were seen this trip but it is believed that they are doing well.
- D. Fur Bearing Animals, Predators, rodents and other Mammals. Some trapping was done on this Refuge during the N. Dak. open trapping season last winter. It is not known just how many animals were taken but is is believed that the number of foxes has been lessened enough so less damage will be done to game birds and domestic fowls. It is believed that there are still a fair number of muskrats left on the Refuge at the end of April 1944.

Note: The grass was cut in the yard around the cabin last fall. Also, a strip was made black about 2' wide around the cabin and toilet. But the buildings could have been damaged by fire. There had been a real prairie and stubble fire that burned up to about 1/8 of a mile from the cabin on the south before it had been put out.

6 Kellays Slough Refuge.

### 1 General.

B... Water Conditions. This area was inspected on April 13, 1944. The water was flowing over the spillway (about 2/3 of it) to a debth of about  $1\frac{1}{2}$ ". This water area is kept up during the times when little rain or snow is received by springs. The water level stays about at the same level the year around except when the ice retards the flowing of the springs. The dam and spillway were in good shape.

## 11 Wildlife

### A. Migratory Birds.

1. Population and Behavior. About 40 pintails were seen flying around over the area but no waterfowl were seen on the water or land. Of course a little later more birds (about 3000 ducks, 300 Canada geese, 5,000 snow and balue geese and 400 swan)will use the refuge mainly as a stopping place. Much of the low land to the east and below the dam was covered with water to a debth of about a foot. A number of flocks of pintails and mallards were resting and feeding there below the dam.

B. Upland Game Birds. No upland game birds were seen on the Refuge when the inspection was made. There are few Chinese Pheasants and about 50 Hungarian Partridge on the Refuge now it is estimated.

The birds have to depend on the grain that they can get out of the fields for food during the colder part of the year. Of course when the weather is warm, there are the usual insects that they feed on to a great extent. They find some cover along the fence rows and the rest of it is composed of the high grass on the low land, some brush and a few patches of small trees.

C. Fur Animals. Muskrats seemed to be quite numerous last fall but none were seen when the area was inspected and but few signs of them were noticed. It is believed that many of the rats move to other areas as winter comes on due to the shortage of food. Some trapping was done on the area under permit last winter but it is not known just what furs were taken.

7. Lac Aux Mortes Refuge.

1. General.

B.Water Conditions. This area was inspected on April 22, 1944. Water level was about 16" below the spillway level. The snow fall was light in this locality and not so much moisture was available to fill up the lake. There was about half the amount of water running into the lake that was running into the lake during the main part of the run-off period last spring. Some rain will be needed to fill this lake up to spillway level this spring it is believed.

A. Migratory Birds.

ll. Wildlife.

1. Population and Behavior. When the inspection was made, there were on the Refuge about 2000 pintails, 2000 mallards, 2500 blue geese and 2500 snow geese. Just  $\frac{1}{2}$  mile to the west of the Refuge on Lake Irwin, there were approximately 2500 snow geese and 2500 blue geese

The geese do not stay and nest in this locality but move on northward as it becomes warmer. A large number of the ducks and gulls nest on and around the water area though as has been reported in the past. Besides the birds mentioned there were noticed a few coots, l pair of baldpates, l pair of blue-winged teal and 3 ruddy ducks. As far as we know, only the Franklin Gulls nest on this area. 2, Food and Cover. This spring there is the same or about the same foods available that there were late last fall. As the ice thaws out, there are the submerged aquatics(that were listed in the past) that will furnish food and the grain in the stubble fields.

Also, the cover on this area for waterfowl is about the same as it was last fall. The ice will take some of the plants like phragmites, cattails and other plants down but it is believed that areas of them will stand to furnish cover. There is also fair cover of the old plants along the shore line.

#### B. Upland Game Birds.

1. Population and Behavior. No upland game birds were seen when the inspection was made. It is estimated that there are left on the area at the close of April, 150 pheasants and 200 partridge. We have seen many pheasants on this area in the past and it is a good area for partridge. The past winter was very mild end if there is a good summer for raising young birds, there should be a record hatch of upland game birds in this District No. 2. When warm weather comes many of the birds that have stayed much of the winter on the Refuge, move out on to other land where there is less shelter.

2. Food and Cover. There is plenty of available food on this area for the upland game birds the year around except during the winter when the snow is deep. The cover is also good of the lake banks or higher land surrounding the lake most of places, some brush and high grass.

C. Fur Animals, Predators, Rodents and other Mammals. Permits were issued to three trappers. They did not report to me how many furs were taken as was requested but we are sure that about 300 muskrats were taken and some other animals. The foxes have been scattered out due to the ice melting on the lake and some of them have been trapped. They will not be apt to be quite so numerous this fall since people understand them more and will try to keep their numbers down. Poisoned oats were put out around the government buildings for the Richardson Ground Squirrels.

### 111. Refuge Maintenance.

N o maintenance work has been done on the area during the past period. The spillway was inspected and also the buildings and all found to be in good shape. Some work will be done on and around the buildings this summer as we get time to do it.

8. Lambs Lake Refuge.

#### 1 General.

B. Water Conditions. This area was inspected April 13th. The water level was about 16" below the top of the spillway. The dam and spillway were in good shape. Poisoned oats were carefully put out on and around the dam and spillway where there were signs of squirrels and mice. There are badgers in this locality and they will be apt to dig more holds. They will be watched carefully and filled up on the next inspection trip.

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#### ll Wildlife.

### A. Migratory Birds.

1. Population and Behavior. About 6 mallards, 10 pintails and 20 California Gulls were on the open water along the shore and the ice when the inspection was made. Most of the area was still covered with ice (the water area). It is estimated that about 3000 ducks will use this area as a stopping place and move on northmward and 300 geese. The blue and snow geese geese use this water area as a stopping place mainly. About 50 mallards, 50 pintails, some blue-winged teal and a few green-winged teal will nest around this water area and then bring there young to the water when they have hatched.

2. Food and Cover. There is a small amount of plant food in the water area for the birds to feed on, some stickle back minnows and the stubble fields with grain in them. There will be plenty of insect life on and in the water as it warms up and the young birds are hatched out and ready for the food. The cover is fair on the north end of round stem bulrushes mainly.

B. Upland Game Birds.

1 Population and Behavior. It has been estimated that there are 12 pair of Hungarian Partridge on the Refuge at the end of April that are nesting or getting ready to nest. When fall and cold weather comes, it is believed that many of the birds move to some near by patches of timber or rougher land for shelter and food.

C. Fur Animals, Predators, Rodents and other Animals. There are a few badgers that use the land area, possibly a few skunks and a few Richardson Ground Squirrels. A permit was issued for trapping to be done on the area during the open season. It is not known just what animals were taken.

### 111 Refuge Maintenance.

Some badger holes were filled up on the dam, poisoned oats put out for the squirrels and signs checked. They were all left in good shape.

9. Little Goose.

#### 1 General.

B. Water Conditions. This area was inspected on April 13, 1944. The water was at spillway level when the inspection was made. There was but very little water running out of the lake though. This water area will be apt to hold up well for some time even though we do not get much rain since the water is rather deep.

### 11. Wildlife.

A. Migratory Birds.

1. Population and Behavior. When the inspection was made, there were

10 mallards and 8 pintails on the water and 20 Canada Geese flew up up off of the water. About 400 Canada Geese, 600 blue geese, 600 snow geese, 1500 mallards, 1500 pintails and 1000 scaup use this  $a \succ ea$ of a spring but most of them move on northward to nest. A few mallards, pintails and some blue-winged teal will remain to nest around the water area and then raise there young on the water.

2. Food and Cover. There is but little food in the water for the birds except on the north end where the waterfowl stay mainly when they are on the water area. On the north end of the water area there are a few acres of shelter of high grass where the land is not pastured. Most of the area is over pastured.

111 Refuge Maintenance.

The dam and spillway were inspected and were left in good shape. Poisoned oats were put out on and around the dam where ever there were any signs of squirrels. Much care was taken when the oats were put out so no stock would be harmed.

10. Minnewastena.

## 1. General.

A. Water Conditions. This area was checked over on April 19, 1944 as well as a number of other times during the period. The water lrevel is about a foot lower this spring than it was last spring it is believed. We have had very little rain and a very light snow fall was received last winter.

#### ll Wildlife.

A. Migratory Birds.

1. Population and Behavior. Of a spring about 300 scaup, 100 mallards, 100 pintails, a few blue-winged teal and some golden-eyes use this area. A few golden-eyes nest in the hollow trees around this small lake. The other birds move on to other areas to nest.

2.Food and Cover. This small lake has the same food in it this spring that was there last fall. There are the submerged aquatics and some soft shelled snails. There is no cover around this area that the birds can use.

B. Upland Game Birds.

1. Population and Behavior. It is estimated that about 12 pair of Chinese Pheasants will nest along the outside of this area. There is some open land around the outside where these birds go for food much of the time. No other upland game birds are on the area now it is believed. About 30 sharp-tailed grouse used it some for feeding on buds during last winter.

2. Food and Cover. There is no food on the area except berries and

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insects and that is during the warm weather. The cover is good of brush, high grass and on the north end there is some phragmites.

## 11. Pleasant Lake Refuge.

#### 1 General.

B. Water Conditions. This area was inspected on April 12th. The water level was about 18" below the small spillway. The low place or channel from the lake to the spillway had water in it to the base of ths spillway. This is the highest that we have known this water level to be. The springs must have furnished more water than usual. Most of the water area was still covered with ice.

## 11 Wildlife.

A. Migratory Birds.

1. Population and Behavior. About 40 mallard ducks were seen along the edge of the water. Comparing the use of this water area by the birds with that other years, it is believed that about 3000 mallards, 3000 pintails, 1000 scaup (lesser), 1000 blue geese, 1000 snow geese and 500 Canada Geese will use it on the northward flight this spring. Swan **EX** often stop on this water area. About 20 pair of pintails and the same of mallards stop to nest around this water area.

2. Food and Cover. There is some food out in this water area but it is not believed there is very much since the low place was a closely pastured area for a number of years. The bixinds have to feed in the near by grain fields much and other water areas. There is a heavy growth of high grass, some cattails and other plants that are standing out in the water area that will furnish shelter and possibly a little food.

B. Upland Game Birds.

1. Population and Behavior. When this area was inspected, the main part of it was drove around. 11 Cock Chinese Pheasants were seen. It is believed that at least 20 pheasant hens will be nesting on this Refuge. It is estimated that about 15 pair of Hungarian Partridge will nest on the area this spring and summer.

2. Food and Cover. There are the grain fields that furnish food for the birds and many of them feed right up around the farm buildings. The shelter is good of brush, high grass and some rough land.

12. Prairie Lake Refuge.

## 1 General.

B. Water Conditions. This area was inspected on April 13th. The water level was about 2' below the top of the spillway. This area will go dry this summer unless there is much moisture received in this immediate locality. The dam and spillway were in good shape.

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## 11. Wildlife.

1. Population and Behavior. The water area of about 5 acres was free of ice. No waterfowl were seen on the inter. A few ducks use it as a resting place on their northward flight of a spring but few of them will nest around it and raise their young if the dry weather continues since it will go dry.

2. Food and Cover. There are some of the last years old pondweeds in the water that will furnish some food and the mallards and pintails can feed in the near by stubble fields. This little Refuge helps the Waterfowl when there is plenty of rain and the water is spread out over a much larger area but when it is dry and the level is low, it is of little value to the birds that it is intended to be a help to.

111. Refuge Maintenance.

The dam, spillway and swigns were left in good shape. Poisoned oats were put out on the dam where there were signs of mice and squirrels working in the grass.

13. Rose Lake Refuge.

### 1 General.

B. Water Conditions. This area was inspected on April 13th. The water level was about 18" below the spillway level. The dam and spillway were in good shape. The water above this dam is rather deep and it should not go down much if the dry weather does not continue too long.

### 11. Wildlife.

A. Migratory Birds.

1. Population and Behavior. No waterfowl were in sight on the Refuge when the inspection was made. Several hundred ducks will stop on the lake this spring when they are on their northward flight and also about 300 blue and snow geese. Canada Geese do not stop on this area much. As a rule about 20 pair of mallards and 20 pair of pintails nest in the high grass around the lake.

2. Food and Cover. The food and cover are just the same this spring as they were last fall. The submerged aquatics will furnish a fair amount of food and then there are the stubble fields where some grain can be found. Of course as the water becomes warm, there will be a good supply of insect life in and around the water for especially the young birds.

B. Upland Game Birds.

1. Population and Behavior. No upland game birds were seen on this inspection trip. It is estimated that there are about 20 pheasants and 50 Hungarian Partridge on the Refuge at the end of April.

2. Food and Cover. There is a good supply of weed seeds and grain

on this area for these birds. When the young have been hatched, there will be a good supply of insects for them to feed on in the fields. The cover is good which is made of up of the hills or rough land, some brush and the high grass and weeds that covers much of the area immediately around the lake.

C. Fur Bearing Animals, Predators, Rodents and other Mammals. No animals as are listed above were seen on the Refuge this spring. There are a few muskrats, skunk, weasels, mink and badgers on the area. A trapping permit was issued to a local man to trap on the Refuge last winter but it is not known what animals he was able to trap.

#### 111 Refuge Maintenance.

The dam and spillway were inspected carefully and were left in good shape. Poisoned oats were put out for the Richardson Ground Squirrels that come on to the dam to dig holes. They usually come on to the dam later on in the summer more though.

14. Rock Lake Refuge.

## 1. General.

B. Water Conditions. This Refuge was inspected on April 22nd. The dam was in good shape. The lake level was about 4<sup>m</sup> lower than it was a year ago (according to Mr. Rudalph I. Norheim who lives near the dam and the dam is on his land). No water has flowed out to the south over privately owned land for which there was much complaining the past two wet years. Mr. Norheim informed me that the water in the low places to the south of the lake on the privately owned land was there due to the winter snow melting and the run-off but not from Rock Lake. When the lake was higher the past two years and some water flooded privately owned land to the south, the channel through which the water did frilow to the south has been filled up with matnure during last winter and it should keep water from flowing to the south for some time.

### 11. Wildlife.

#### A. Migratory Birds.

1. Population and Behavior. When the inspection was made, it has been estimated that there were 2000 mallards, 2000 pintails and 1000, ducks on the lake. On the dam and just to the east of the dam it was estimated that there were 2500 blue geese, 2500 snow geese and 300 Canada Geese. Large numbers of mallards, pintails, some redheads, a few Canvasbacks, many ruddys and other ducks will nest on this area and around it. No reports have been received as to Canada Geese nesting on the area.

2. Food and Cover. There is a fair amount of food for the birds of the submerged aquatics, much insect life on the water and some in it and grain in the grain fields. There is not so much cover on the main part of the lake since the water is rather deep. There is good cover in the shallow water east of the dam and at places along the shore where the land is not pastured. B. Upland Game Birds.

1. Population and Behavior. It is estimated that there were 50 Chinese Pheasants and 150 Hungarian Partridge on the Refuge this spring. The weather was mild and more of the birds come through the winter. This is a fair area for upland game birds. It would be a wonderful area for these birds if there was more cover and a good supply of winter food available.

2. Food and Cover. There is a good supply of available food for the birds of grain in the fields and insect life when the weather is warm. When the snows are deep in the winter time, most of the winter food is covered up.

The cover is fair of low banks around the lake, some brush, high grass and weeds in places. Also, some of the farmers are raising corn in this locality which helps out for winter food for the birds.

C. Fur Bearing Animals, Predators, Rodents and other Mammals. There are many muskrats, some badgers and other animals on the area. Some permits were issued for trapping on this area last winter. One man informed me that he trapped 258 muskrats and 2 mink on the Refuge. I did not get to see the other trappers but it is believed that they also trapped a fair number of animals on the area since the prices for furs was very good.

## 111 Refuge Maintenance.

No work was done on the area this period but the dam was carefully inspected and the low place to the south side of the lake on the north end where in the past some water has flowed out of the lake and flooded privately owned land to the south. This is a very good Refuge.

- 15. Snyder Lake Refuge.
- B. Water Conditions. This area was inspected on April 22nd. The dam and spillway were in good shape. No holes of any kind were noticed on the dam or near it. The water level was about 8" below the spillway level. There was much ice on this water area yet.
- A. Migratory Birds.

1. Population and Behavior. When the area was inspected there were 50 lesser scaup, 100 mallards, 100 pintails, 20 coots and 6 ruddys on the north end of the water area where the ice had disappeared. Even though this April 22, 1944 when the inspection of this area was made, the most of the geese and ducks with still to come from the south. This spring is about 20 days later than most of our springs. It is estimated that at least 10,000 ducks of all kind will use this water area for a stopping and resting place on their way north this spring. About 200 mallards, 200 pintails, 20 ruddys, some redheads and canvas-backs will remain to nest on and around this water area this spring. This is a very good water area for the birds to use.

2. Food and Cover. There is a fair amount of aquatics growing in the

#### Page 14.

water (submerged) on the north end of the water area, other plants and the grain fields that furnish food for the waterfowl. The food supply is the same this spring as it was last fall. The cover is fair of some of last years cattails and other plants that grow in the water and the high grass, weeds and brush especially on the east side of the lake. The high shore lines also provide good shelter from the winds.

B. Upland Game Birds.

1. Population and Behavior. At the end of April it has been estimated that there were 50 chinese Pheasants and 100 Hungarian Partridge using the Refuge. If the hatching season is good, there should be a good crop of upland game birds on and around this Refuge this fall.

2. Food and Cover. The food is sufficient for the mature birds of grain and weed seeds this time of the year and there will be plenty of insect life for the young birds when they are hatched out. The cover is fair of high grass, weeds, some brush and the uneven land around the water area furnishes some cover from the winds.

C. Fur Bearing Animals, Predators and other Mammals. There were many muskrats, some mink and other animals on the north end of this Refuge especially last fall. There were a number of large rat houses and one mink was seen in the day time last fall and a large one again when the inspection was made. No trapping permits were issued for the trapping on this area since no one got permission from the land owners and sent them to Sullys Hill for trapping on the area. Last fall the matter of trapping was talked over with some of the local people and they were informed how to go about getting permits to do the trapping. It is supposed that there was too much work that had to be done in that locality during the trapping period. There are still some beaver on the south end of the lake. they do not seem to be doing very much damage to the trees on the south end of the water area as yet.

## 16. Sibley Lake Refuge.

B. Water Conditions. This area was inspected on April 17th. The water level was a little lower this spring than it was last fall. The ice was off of most of the water area. It is believed that it will go dry if much rain is not received this summer.

### 11 Wildlife.

#### A. Migratory Birds.

1. Population and Behavior. When the inspection was made there were about 200 mallards and 200 pintails on the water area. The pintails and mallards arrive first as a rule in this locality. It is believed that about 5000 ducks and a few geese will use it this spring as a feeding and resting place. As the water level goes down, the birds are going to use the area less and less.

2. Food and Cover. As has been previously reported, it is believed that there is not much available food in this water area. The birds

## Page 15.

use this area as a protected resting place and have to get their food out of other water areas or the fields. Old plants that are standing out in the water furnish some cover for the birds while in the water. On the north and west side of the water area there is some land that has grown up to weeds and there is brush that furnishes good cover.

B. Upland Game Birds.

1. Population and Behavior. No upland game birds were seen when the inspection was made. It is estimated that 20 prix of pheasants, and 40 Hungarian Partridge are using the area now. Sharp-tailed grouse use it some during the summer but it is believed they use it more during the winter for shelter and to feed some on the buds.

2. Food and Cover. There is a fair amount of food in the grain fields, the weed seeds on the old weeds on the north and west part of the water area and when the weather becomes warmer there will be a good supply of insect life.

17. Silver Lake Refuge.

## 1. General.

B. Water Conditions. This area was inspected on April 12th. There was no run-off in this area at all this spring. The water is a number of feet (about 5'to lake level) lower than the spillway level. It is believed that the water level of this lake will go down much this summer since it would take an extra amount of rain to raise the lake during the summer. To fill up this water area, it is necessary to have a good spring run-off.

#### ll. Wildlife.

A. Migratory Birds.

1.Population and Behavior. N o waterfowl were seen on the area. The lake was mainly frozen over. A few thousand ducks will stop on this lake to rest while on their northward flight this spring it is believed. It is believed that about 1000 or a few more geese will use it some this spring. The birds do not use this water body much only as a resting place since there is not much available food in the water area for them.

2. Food and Cover. There are some submerged aquatics in the water of this Refuge but the waterfowl have to depend mainly on other water areas and the fields to furnish them with their food. There is a fair amount of cover on the north end of the lake where the shore line is not pastured much or none.

B. Upland Game Birds.

1. Population and Behavior. It is estimated that about 30 Chinese Pheasants and 80 partridge are using this Refuge as a nesting area at the end of April 1944. No birds were seen when the inspection was made. 2. Food and Cover. There is food in the fields for the birds and later on there will be plenty of insects for these birds if we receive a fair amount of moisture. There is only cover suitable for nesting birds on the north end of the lake. Of course as soon as the small grain crops get to be a few inches high they will also furnish cover.

- C. Fur Bearing Animals, Predators, Rodents and other Mammals. There are not very many animals as listed above on this whole area. A permit was issued for a man to trap on part of this area last winter and he just recently informed me that he has caught 9 foxes, 25 skunk, 2 badgers, 10 weasels, 1 mink and 6 muskrats. Some of the furs were trapped on land that was not part of the Refuge the trapper informed me. It will be a help to all of the game birds that the foxes were taken and also the skunk.
- 18. Woodlake Marsh.

1. General.

B. Water Conditions. This Refuge was inspected on April 17, 1944. The dam and spillway were in good shape. About 2" of were running over the spillway. The dam was carefully checked. Most of the water area was still frozen over. This area has been staying up to about the same level the year around.

11. Wildlife.

A. Migratory Waterfowl.

1. Population and Behavior. 18 mallards and 8 pintails were counted on the water area when the inspection was made. About 500 mallards, 500 pintails and 400 other ducks will use the water area to feed on when making their northward flight during April and early May. It is believed that not over about 10 pairs of mallards and the same of pintails with a few other ducks nest on this Refuge. The birds use it mainly as a resting place we have found.

2. Food and Cover. There is a good supply of submerged aquatics in the water and some grain can be found in the grain fields this time of the year. The cover is good all around the water area. This Refuge is rather small but it is a good Refuge, that is many birds use it during the year.

B. Upland Game Birds.

1. Population and Behavior. Three rooster pheasants were seen when the inspection was made. It is estimated that there are about 16 Chinese Pheasants and 10 pair of Hungarian Partridge on the Area now. Birds come on to this area some of a winter for shelter.

2. Food and Cover. There are the grain fields around the area especially to the north that will funish some food and after a time there will be insects for food. There is a good supply of sweet clover and other weed seeds at places on the area also.

### Page 16.

Page 17.

- C. Fur Bearing Animals, Predators, Rodents and other Mammals. There were a fair number of muskrats on this water area and some other animals as were listed in the last narrative Report. A trapping permit was issued in the usual way to a local man to trap on the area but he has not informed me the animals taken. If possible, it is desirable to know and report the animals on each area but time is not available to find all of the trappers of a spring. Not many of them report the animals that they have taken. It is supposed that as a rule they forgetto make the reports.
- 19. Stump Lake Refuge.

#### 1. General.

B. Water Conditions. This water area was inspected on April 17, 1944. The water level seems to have stayed up well over winter, that is the level seems to be the same as it was last fall or a little higher. Of course, it is believed that much snow drifted into banks along the edge of the low area and helped to keep the level up. As has keen reported, plants are growing in the water and it seems to be much fresher than it was a few years ago.

#### 11 Wildlife.

A. Migratory Birds.

1. Population and Behavior.When this area was inspected, there were about 300 ducks and 150 swan on the water area. These birds were feeding out in the water and seemed to be getting plenty of food the way they were working in the shallow water. Many birds use this area as a safe resting area and then they move on to other areas to nest. Not many ducks nest on this Refuge. Some cormorants and California Gulls nest on the north island. Geese use this area and the swan much of a spring and fall. Geese were heard on Refuge (behind the south island it is believed) but they were not in sight.

2. Food and Cover. The food this spring is just the same as it was late last fall of some prairie bulrush along the shore at places and some pond weeds that are out in the water. There seems to be quite a little of the submerged aquatics since the swan and geese feed on this water area much of a spring and fall. The number of swan in this District No. 2, N. Dak. are on the increase, that is the number that we see and use the water areas.

### B. Upland Game Birds.

1. Population and Behavior. No upland game birds were seen on the Refuge when the inspection was made. It is estimated that about 12 Chinese Pheasants and and 24 Hungarian Partridge are using the Refuge for a nesting area at the end of April. There may also be a few sharp-tail Grouse using the area also.

2. Food and Cover. The cover on this area (along the shore line) is good of silver berry brush, other brush, weeds, sweet clover and grasses. The insects are plentiful when it becomes warm. The birds also feed more or less on the near by grain fields.

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In the past, this has been a very good waterfowl area. If plenty of moisture is received for a few years, the lake will keep raising in level and more and more birds will use it as more submerged aquatics grow in the water and the water becomes fresher.

Report completed May 6, 1944.

Signed <u>Wesley D. Jacker</u>. Refuge Manager.

Note: The weather has been dry in this District No. 2 since last July 12, 1943 when the last rain was received. We have had some rains since then but they were very light and soon evaporated or were used up by the plants. The snow was very light during last winter and there was little moisture in it.

In the sense of the word, Run-off as we understand it, there has been none in this District No. 2 this spring. The water level of the water on each area is given on each report for the separate areas. Most of the water areas each has a fair amount of moisture in them but much rain will be needed to keep them up.

Some of the Refuges in this District are small and do not amount to much for the use of the waterfowl but take the District as a whole, The federal Refuges furnish food and resting places for thousands of birds. Also, large numbers of the birds nest on these areas. It has been estimated that 350,000 ducks and 300,000 geese use this District during the spring migration. In the fall it has been estimated that 200,000 geese and 600,000 ducks use the Refuges in this District. For some cause we see fewer geese in the fall than in the spring.

No government employee lives on any of these Refuges. We inspect them and do the work that is required three times a year except where it is necessary to go to Ardoch due to floods like last summer and the botulism on Lac Aux Motes. NR-1 Forms are being furnished for the more important of these areas juged by the use the waterfowl make of them.

Much time has been taken to get the information for this report (19 Refuges) and it is as near correct as it is possible to make it by inspecting the areas about three times a year. We will be very glad to furnish other information if it can be secured and suggestions from the office whill be heeded and kindly received.

Page 1.

Easement Refuges in District No. 2 North Dakota.

A Summary of the Fiscal Year's Activities and So Fourth, Until April 30, 1944.

According to the Devils Lake Federal Weather Bureau, there has been received in the Devils Lake Locality during the last 10 months (July 1, 1943 to April 30, 1944), a total of 5.76". To have received the normal amount of moisture, there should have been received 12.42". For that period, this Devils Lake locality is short 6.66" of moisture. Some of that moisture evaporated and was used up by last years plants. If a number of good rains are received during the next three months, this locality will still be in fair condition as to moisture required.

More geese passed through this District this spring than for a great many years. Also a large number of ducks moved northward but they were not seen so much since they did much of their flying at night. It has been estimated that 350,000 ducks and 300,000 geese use the Refuges in this District No. 2 of a spring. In the fall it has been estimated that 200,000 geese and  $600,000_{4}$  use the same areas. We do not see so many geese of a fall. They must move southward over other areas and many of them remain up north until it becomes very cold and then they never stop in this District No. 2.

During July, August and September there were 2,052 waterfowl, 16 shorebirds, 517 coots and 790 gulls picked up on the Lac Aux Mortes refuge and buried. They had died of botulism. Other water areas around this Refuge for about 10 miles around had more or less losses from the same cause during the same 3 months period. The botulism on and around Lac Aux Mortes Refuge was about the same during the summer of 1943 that it was during the summer before. Birds were not lost on any other Refuge in District No. 2 due to botulism during the same period as far as is known.

The upland game birds increased some on these areas last summer but not as much as during the summed of 1942. During the spring and summer up until after middle of July, the weather was too cold and wet for young birds to do well. For that reason only a comparisatively few grew up. This same wet weather was the cause of fewer ducks being hatched out to grow to mature birds in this area.

Fur bearing animals have increased much on all favorable areas. Permits were issued to trap last winter where there were trappers that wanted to trap and there wars were surplus animals that should be trapped.

The Refuges have all been checked three or more times, depending on the work to be done on each and etc. Ardoch Refuge and vicinity were flooded with much rain middle of July 1943 and water was above normal on this Refuge. Dams, spillways and buildings have all been inspected and are in good shape or are being put in good shape.

It still looks very promising for a big hatch of all game birds in this locality this summer. In order for the ducks to hatch and do well though, a fair amount of rain must be received during the next four months or large numbers of all of the water areas will dry up in District No. 2 and young ducks will be lost due to the lack of fresh water to live and grow on. A fair amount of rain will tide us over.

Signed <u>Mesley D. Carker</u>

Refuge Manager.

## MIGRATORY BIRDS

Refuge	Loke AP	do <b>eb</b>		Mor	ths of	100-1,	to	peil 30	_, 19	94 4.	1612
(1) Species	() First O	2) bse <b>rved</b>	(3) Became Common	(4) Peak Concer	(5) Last Ob	Young	(6) Produ	(7) Total			
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.			Number Using Refuge
Mallard Pintail Hue-wing teal Green-wing teal Lesser Seaup Hedhead Baldpate Gadwall Ruddy Unidentified ducks Hutchine Geeee Snew Blue Canada Swam Shore birds California Gulls Franklin Gulls Fellicam Cornerant Coot Haak -erowned Hight Hore	1500 1500 200 200 50 100	4/13, *4	a deschare in each all ni Abernado 	And and the first of all the second s	contrarpts that so gained and gained and an and the spin-sector of the solution of the solutio	I hepelerg ignory to before fieldsalbet similar instance for meditary and now out	dal prisona ori lo tol prilagorage di toni ni adori qu privati socanitati di toni ni adori qu privati socanitati dellas si	abid the rest and add at the appliest which the rest of a section of the rest	Liberation and the above active the Liberation and a solution of the solution		6000 6000 500 100 8000 200 200 200 200 1000 6000 1000 6000 1000 6000 1000 500 200 200 200 200 200 500 200 500 200 500 5

REMARKS: (Pertinent information.not specifically requested) Estimates of the numbers of birds using the area during the period have been put in the right hand column. It is a very difficult job to estimate the birds that use this area since they step on this refuge to feed a little and then move on northward, As a rule they do not stay long on this area since there is not much feed in the water area but it is a safe resting place.

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#### INSTRUCTIONS

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.

(6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.

(7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

\* Only columns applicable to the period covered should be used.

# UPLAND GAME BIRDS

1613

Refuge Labo Ardoch Befuge

Months of to 194

					100	non ha	COM	Gee correct	(1) SPECTES:
(1) Species	(2) Density	to rea spectes	(3) Young Produced	(4) Sex Ratio	(5) Removals			(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Pheasants	S sections, farm, brush & pasture	25	f studiou admii al na teorg alignat st beisa be	averting animave averting aver president interview interview at binnes as	10	nillen too bess bess too too too too too too too too too t	id be sed b bus s bus s	8	He phoneants have been seen on the area during the
Bungarian Partridge	tons and solvel on	15 ap	prox.	produced, ince institut, 12v to wild to	onite otte	of 3 o bre t sol		100	period. It has been estimated that at the end of April, that there were 100 pertridge using this area.
Sharp-tail grouse.	a report pariot.	45.*			(del	have redmi			There is a fair sumber of groupe that use this area.
-BOOBARS	rt period. This m tuge dering certain	te repo tite re	i. yakub otni 1911			odianie britki		t betenided set stalad	(6) TOTALI
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#### INSTRUCTIONS

Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES: Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

\* Only columns applicable to the period covered should be used.

SMALL MAMMALS

Refuge Lake Ardoch Refuge

April 30, 194

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REMARKS: All of the land is used by the land owners and it is not believed that there are many more animals 1615 using the area than have been listed. One be ver was seen near the control gates eating bulrush bulbs it is supposed. The beaver come from Forest River on the north and possibly at times they come up from the Red River.

## INSTRUCTIONS

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods. short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

# (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

# MIGRATORY BIRDS

Refuge_	Billings	Leke		Months of to, 194									
(1) Species	(4) Peak Concer	<b>tration</b>	(5) Last Of	Berved	Young	(6) Produ	(7) Total						
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.			Number Using Refuge		
Hallards Pintail Blue-wing-teal Green-wing teal Lesser Scaup Redhead Baldpate		6/16,14	orealistic or within ab early all	up ter up ter up ter up ter up ter up ter up	andreas Naturka Stando Stando Stando	an AAAT - 1000 along - 1000 along - 1000	in the second	en-edd San 'o Desurce	to Lib -	gitater a	1000 1500 200 100 300 50 200		
Gadmall Ruddy Other ducks Snow geese Blue geese Canada Swan Shore birds	AC (PREAT (Dout)) AC (PREAT (Dout)) AC (PREAT (Dout)) AC (PREAT (Dout))	The second secon	als with all about the second		the spirit of th	The printing but		April Jan Parks and A	riet no com	No. Contraction of the	100 2000 2000 2000 2000 2000 2000 200 20		
Franklin galle California Galls Pellicans Cornoratte Coots Hutchins goose Elack crouned might horon	16	A sol of a lo	a of resident is area and a	L Che module L'Obe module L'Obe module L'Obe module	soldreghn List or wid hus ego agen andres	Ashahara, puld athar fauta athre stars on	dat gellevel o	ality what way	Streamwiges used	Water of Control	2009 2000 1000 100 2000 200		

REMARKS: (Pertinent information.not specifically requested) This mater area was later opening up-that is the basin filling with water and the ice melting or breaking up and moving immeths river-and accordingly not so many birds used it during the period as have used it at times in the past.

#### INSTRUCTIONS

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

\* Only columns applicable to the period covered should be used.

1613

Refuge\_\_\_\_lings lak

Months of \_\_\_\_\_ to \_\_\_\_, 1944.

(l) Species				(4) Sex Ratio	R	(5) emoval	S	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat		Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Rungarian Fartridge	There is about 3/4 of a section of open farm land mainly.	9	oulbure l sola liste (grees au ve samplé indjeated	everting ber ber type syn possible. Fypresected es should be	da) Stan Mileo ta o Tan	oontroo boo boous doous ren g		50	Then the importion was made, no birds were soon. It has been estimated that at the end of the period there were 50 partridge on
	ab stuioni .ote			, Jabitan ;	edin rine	ia bra 1es p	tidað Laga	in represent In represent Dist column	the Refuge. MUOY (E)
	be report period.	100			'nż	nedau	i Lad	Indicate to	(5) EXHOVELS1 (6) TOTAL1
ne senne. Mag	fage dering certain	the re	tin, into	s those night	s plu to di	bird		include rea Indicate me	(7) REMARKS
									<ul> <li>Only selumna applic</li> </ul>
test									

## INSTRUCTIONS

### Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES:

Use correct common name.

- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

\* Only columns applicable to the period covered should be used.

SMALL MAMMALS

Refuge Millings Lake

April 30, 194

(1) Species	(2) Density	tr sont	bere		3) vals	spec	dach	o noldal Di		(4) tion	of Fur			10	(5)
eto. 1 North	be-tailed jackrabbit, in the "Field Book o	the found	n hip a a a	a 203 7 dna	rel., ourr	nlaps nl se	gray M Dan	Share 7	<b>Tra</b> ppi	ng	lge oed		bed	Destroyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destr	tion
Rieberdsen Ground	About 500 scree of pasture and farm las	arebland 4 151 be	o ne ddim	toeas breat	esori yea a	d od dah h	larly that Le	s paraic	aliqq , zānu	\ 	1 v. 1 v.	T.	130	EXI	(S) 100
White-tail jack rabbit.	Use of the about 199	50	n ac stat yps	bad 1 by A ver t	spres acéd- ch co	ogia Darg No es	by Lo to ba lores	s, Dener Milon is No rede	unber nform he nu						10
occur in	acres of water area	coepi as jould be	e be 8 20 doum	epeat r tyr b so	be n Cave	d not pes. top b	nn deg rer ty 'ormat	sformati sa of co	his i be ar						100
Badgers.	500 Acres of farm land.	100	dwoo de t	t har	iplan ta pr	erg å	ne so roris	nqa ias abocwbri	Lonax d bos						5
Paul Thompson, Long, Rofuge under a permi			serv nd s	18	Rug it	ate o	aly m	re trap;	1tted					2.9	
	amoved since April 30 ing under heading 11s			ose n Forte 1	unde aug	redau roda	n Ladı Alsq	be the ta	ndice revio			1.51	NOM	ESI.	
	rapper's share, and r and the total income and furs taken by Se	umber, t market ped furs th speci	L& n d to trap	peru hipps hare-	t the its s ing s of pe	elle eqlo bulon	d fur mber .es, 1	re⊷trappi te the n by zpec: tel Tre	n sha ndica efuge erson	87 ( - 3 - 3	N. 10	aortii	BPO	I.C.	
	to institutions or o	donated	ALC: NO.	bris God g	tion,	thron	bega be s	sa or dan	tones	-		2 3			

Indicate inventory method (s) used, size of sample area(s), introductions, a edge so any other pertinent information not specifically requested.

## INSTRUCTIONS

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted. this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

# (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

## MIGRATORY BIRDS

Refuge_	liele	Laire		Mon	ths of _		aul, <sup>to</sup> -	April 30	_, 19	4	1612
(1) Species	(2) (3) First Observed Common			(4) Peak Concen	a <b>tra</b> tio <b>n</b>	(5) Last Ob	served	(6) Young Produced			(7) To <b>tal</b>
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg.		Number Using Refuge
Mallerd Pintail Blue-wing teal Green-wing teal Lesser Seaup Redheads Baldpates Gatmall Buddy Other ducks Butchins Geese Snew Blue Cannes Snew Shore birds Californis Galls Franklin Galls Pellicems Gorts.	100 50		.ee. In the second of the large of the second of the second secon	Letter all to when testary all MORAN Larged all to when testary all MORAN Larged Letter to the dat of the fact of all all all all all all all	collidation lief of gerege and gerich an add has goldenants of againstable adding anticode le avientions havenedd	I bequibing group to moduum festamitish with address faultum int supplications action perit tearrie gritherul weithelineserigen order no out on ebiar st hiltrade affauton	start gerbeerst alt in in in gerbest gerbest in theit at alter on gerbest extension in an and the	ald varied of advate spins, which with a little state of advated of advate state of the rate of the ra	Allowersper degalars all start 26 IIA -		CODI         CODI         SODI         SODI <t< td=""></t<>

REMARKS: (Pertinent information.not specifically requested) Nost of the birds listed above used the area during the last few days of April. The stepping period by must of the birds on this area this spring was later than usual since the ice was still covering must of the area on April 12th. Many dusks must on and around this water area. The other birds use it only as a resting place and them nove on morthward.

#### INSTRUCTIONS

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.

(6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.

(7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

\* Only columns applicable to the period covered should be used.

1613

Refuge\_\_\_\_\_

Months of \_\_\_\_\_ to \_\_\_\_, 194

\* Only columns applicable to the

					.em	att stan	-00	Use correct	(1) SPECIES
(1) Species				(4) Sex Ratio	Re	(5) emoval	.9	(6) Total	(7) Remarks
Common Name		lcres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Phensents Bungarien Partridge	1200 acros brush and cultivated farm à pasture land.	12	toulbure 1 bola liste Figures so tre sample trdlocted	veverting ag lage type sys e possible. representet sa should be	dk, Stan Rhen te s r s r	ion ion caed coun rea o	nd hu te, d d be gle in ple i	100	The upland game birds are on the increase on this Rafage. It is believe that if anything they have been
Sharp-tail grouse	a stor include dat	16	gd C.G.S.Mrs	produced, of mabited.	ndin ndin	is bro	rititad Liqua	75 50	algightly under estimates' rather than over estimated . Of course the mild winter that has just passed has
	Contraction of the	min	5 bevener	ach category	a2	Lava : Tedaur	ta ind	Indicate. to	had much to de with the increase in the number of birds.
		1 949 1 949	e da dag e oduž ja cak	isiya esong en Anjas eus an	rd s su a	brite a	1830 Inebi	t petanital include res	(6) TOTALI
	covered in survey.	area ally r	last m and b specific	sternine population ne	10.63 12.31	bsen oeildn	bord er pe	Indicate me include oti	(7) REMARKS

oteros be

DOT

### Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES:

### Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Refuge Buffele Lake Befuge

April 30, 194

(1) Species	(2) Density	tu cont	bertel		3) vals	oaqe -	lione 1	o notten Di		(4) tion	of Fur				(5)
ste. f North	the tailed jackshit, to the "Meld Book o	tow . for	niup a ea	i xoʻi i dris	elsu rely curr	n <i>lupe</i> ni se	gray m nad	Share 1	Irappi	ng	uge bed	1 04	bed	Destroyed	Total Popula-
animala Morth 1 is now	Cover Types & Total	Acres	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	an Mamaa Northea an Recen	Trappers' Share	939	1 Refuge Shipped	ige me	Donated		tion
Common Name	Acreage of Habitat	Per Animal	Hunt	Fur	Pred Cont	For stoc	For Rese	Permit Number	Trap	Refuge Share	Total Furs S	Refuge Income	Furs	Furs	
Striped skuak bidug)	1200 acres brush, farm à pasture lami	stablishe	0 591	tosqa		t ot	l'isli	aldrag a	a Lí qu			10	NSI	80	(2) 84
ted Toxes	antani by coverstore on the refute managed	500	0.8 . 10 0.8 . 10	ben ber	serus spres ened	ba a	ty to	s. Dens	reduua noinu	1					4
Weasel- short-tail	the feluge; once and	100	orge ed e	1.000	oh cş be r	ton b	29.104	lo reda	ine nu bla d			- 40	7		12
Jack-rabbits- white tail.	detailed anongh ba /	60	e a e found	141 a 0.8 d	Cove or Ju	pes, don b	er ty tarrat	as of co	na ori ob odi			2 <b>h</b>			20
Richardson Bround Squirrel.	ani erseivoirae arita	iver , al	danio de la	tail fi britis	uplan ng as	bunio y te gora	ra é or toria	nqa i şe ardwoods	Liquuist ri brua						103
Buckrate	They use about 40 agree of the shallow	be de des	ould rearv	is ? io Le	e Nov sotu	Seria ed on	anent sad eo	fe Manag should	libin detth						
ed hilvor	water area en north end of Refuge.	10 20 0E.	s-bro	, bed	r- bod	y net	Rema	areas, bed unde	endres vigites						200
of the	emoved since April 30 inc under beading 11	segory 1	no ni a Le		abeu ate	tedau roda	n Isdi	d and a si	ndica revio			1.18 (	VOL	R	
ofuge <sup>*</sup> share.		No t		ing ti	ns do		this	Refuge d		the j	ast t	reppin	S SPO	ter i	
the the rvice	and the total income	market ped furs	d to trep	hippo hare-	lta a ing a	of pa bulou	mber es, i	te the n by spec	indtos esutes					20	
of un- ther	es destroyed because to institutions or a	th spect donated	i ea sul	and and	of pe tion,	nbez: cond1	al m aged	nel. To ss or dé	ierson enstme						
REMARKS:	all indications, the	provided	mana	00.0	13 al	(miles)	s od i	Luoda as	toneg					Det	161

can get some person to trap on this area next winter.

PERAMITIES |

(1)

SPECIES:

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

> Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)

Applies particularly to those species considered in removal programs (public (2)DENSITY: hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge: once submitted. this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.

(4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

### (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

### MIGRATORY BIRDS

Refuge	Brunba -Le	ho-Rofug	<b></b>	Mon	ths of _	Jan- 1,	to	pr11_30	_, 19	14 <u>4</u>	1612
(1) Species	( First 0	2) bse <b>rve</b> d	(3) Became Common	(4) Peak Concen	tration	(5) Last Of	se <b>rve</b> d	Young	(6) Produ	iced	(7) To <b>tal</b>
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg.		Number Using Refuge
Mallards Pistaile Pistaile Pistaile Plue-wing teal Green-wing teal Lesser Seaup Rodhesd Paldpate Gadwall Paddy Shoveller Onidentified ducks Rutchims geese Snow Show Show Show Show Show Show Putching geese Snow Show S			And the to end all of the marked the second of the second	astronic all to putting testions with in 10000000 Germany: fedaget to stab and with in 10000000 and set out friends control shaft and	design the spatial of the solution of the second states and the second s	he cabler grave To redence he teached a con- adresso Lastre and Autorendo acqu off , sawoo galfeerd or Lindrateriger con to out no share ad bilinds advance	and problem and he doe no branches a technologies as you's a basis in the technologies of california	addibolteq add getraf agobar add 2 bawe dadi mudd ayae ad dur yar to add reas yrthrees ,anoddarchyserse	it att .acad digitit att to methods		2000 200 200 100 200 100 100 100 100 100

REMARKS: (Pertinent information.not specifically requested) For as we know at this time, the genes do not use this area much. We do not know much about this area since it was just placed in District No. 3 last fell. It / 5 it meant that we do not know just how much the waterfowl make use of it. We will have to an study it more for another spring and fall.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.

(6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.

(7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

# UPLAND GAME BIRDS

1613



Months of \_\_\_\_\_ to \_\_\_\_, 194\_.

					1.00	50 60	0000	the concoch	(1) SPECIES
(1) Species	(2) Density	ner st solooge	(3) Young Produced		R	(5) emova	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Rungarien Pertriége	About 1320 Aeres pacture, grass and form land.	13 Ag		everinte cal and impe avail pomatbla. representat as should be	Stan Stan Weier te o	tonetri Loso belas conce cares	int he ba, s be pla pla	109	No Chinese pheseants were seen on the area when the last inspection was made
	tons and solved con tok shuloni	tevnood officere	ed gron a	noticed, bia hebitet. ily to wild 5	gnuo sthe pathe fiési	y to and a g and grad	redna rtitel Ecrope El ec	bilinated r In represent This column topics space	and for that reason, some have been listed in this report. This is mainly open land except for the land that is a little higher (about 4 to 5 fort) than
	da report period. er period. Etta sa toga disten variato	r gadu 1995 da 1996 da	b bere ers 7 yalrub pộci yali	adh cabagory ng bha rufuga n bhúna algin	i ni i na i na i pi	naciona actorna byteto	bal s tati ident	indicate to Solimited 1 Include rea	the rest of the land and the heavy growth of grass and words, there is no cholter.
	postad.	o seris en ville	bos nelita pritores	ingen enterest der enterenter			boeks	nd stanihul inoluda oti	(2) BERNIEL
*181				er ed Linede		oo ba			

Form NR-2 - UPLAND GAME BIRDS.\*

- (1) SPECIES: Use correct common name.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

# SMALL MAMMALS

Refuge\_\_\_\_\_Refuge

# April 30, 194

(1) Species	(2) Density	nos at i	terret	( Remo	3) vals	aga i	icae 3	Di	sposi	(4) tion	of Fur	466			(5)
	the tailed jackrabbit	rel, wh nucl st	tupe seut	202	Tel.	Lupa.	gray	Share 1	rappi	ng	ed bed		ed	oyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destroyed	tion
Skauk- striped	1520 A. farm land, pasture and grass.	220 660 220		tered be	sandi an an arqui	of t lab bi	frafu Ltate Ltay b	e parele etc.) I e. Dene	itten Norsen Geografi			121	1200	RT .	6 2 6
Heasels- short tall Huskrats Radgers	About 50 serve of the water area. 2320 A. of the ferm		stal ype ted o	87,70 7677 189466 189466	tated ista or be Care Care	i prei a al ion bi reeg.	to bi acinea acinea vez to	ation ia abar of nformati reg of co	infors the m this i the si						150
loture. M. bottom thed in	land, pasture à grass.	2.20	iditin Iombi Io		स्त तम क्रांत्वा व्यु क्रा		forma acto or a shor	ni betie nga rae aboowbia	eb edi lognadi lohinni soat p						
	nd counts on represe	ations lo spl	rased a 2m	a a bad	idos i r bod	ed or bell of mot	be bai Survi	hiuoda sreas. ted ands	seddin signed soithes						
tat tipe	. Ibnga santa bevom 19 galbeet heeding 91	ter con	in or		dani' Tani	tedana toda	i Lado	te the t	sožbri stvezi			e.D	VOM	H	(5)
	ina suris siture, and and the tobal throne and thre taken by S	unbër, narket ped fur	t din at be	pero hispe	t the to still	s 11: of pa noluc	ed fu noder Los, 1	re-trapp be the n by spec	n she indtos sprise	: 93	A JOL	IOIT IN	O'EE	10	(2)
ndi 20 sedij	to institutions of	donate donate provide	frant August	600 e	no la	cond!	began ed i		inita genet			4			

REMARKS: So trapping was done on this area last winter since there was he trapper that wanted to trap there. 1615 The animals should increase more this summer with a fair amount of rain. We will try to locate summons that wants to trap there.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

# (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS! Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

### MIGRATORY BIRDS

Refuge_	Johnses	-Labi-Re		Mon	ths of _	Jan. 1,	to	April 30	_, 194	1612
(1) Species	() First O	2) bse <b>rved</b>	(3) Became Common	(4) Peak Concen	tration	(5) Last Ob	Be <b>rved</b>		(6) Produced	(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date		Avg. Esti- nated Size Total	Number Using Refuge
Mallarde Pintail Blue-wing teal Green-wing teal Lesser Seaup Redhead Baldpate Gadmall Ruddy Showeller Unidentified ducks Rutching Geose Snow Blue Canada Swan Shore birds California Gulls Frenklin	50 50	4/17,.4	Lower To weak add ni "howseedd the second the second and the second and the second and and the second and seco	add to state and the second of the second to state and the state and the state and the second the second the second the second the second second the second second the second sec	Surface to gathe spin the second of the second seco	bore pure lo tednor bedanifed inte o Lantos fos aroldarmento dego amena pitheend evidadnetermen	orteend and to Kui galdagengar O at acced on garwad cedualdan Deduke ed	and a control and applies but balroe, wit withit applies but a didt made eren of dyst wer wo dage gigtheright .emblichthreiten	annes anothe at the second to the the second second second at the second s	5000 5000 200 200 200 200 200 1000 200 1000 400 150 4000 500 6000 2000 500 500 500 500 500 500
Pellican Cormerants Costs			Aerit.	the second	politic ma ad agitro	be de Admine See	and a a tree	the second		100 1500

REMARKS: (Pertinent information.not specifically requested) It is a difficult job to estimate for this report the number of waterfowl that have used the area during April since only part of the waterfowl arrived during this report period. Large numbers of them arrived during May due to the late spring and the ice disappearing. May ducks step and most on this area but nest of the other waterfowl move on morthward for their meeting.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

# UPLAND GAME BIRDS

1613

Refuge\_\_\_\_lohnson Lake Ref

Months of \_\_\_\_\_ to \_\_\_\_, 1944\_\_\_\_

(1) Species	(2) Density	an rea species	(3) Young Produced	(4) Sex Ratio	Re	(5) emoval	-8	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Pheasants Hungarian	Apprex. 800 acres ferm, grass and brush land.	16	ioniture bola liste Figues an ive sample inclated	reverting ago lard type syn possible. I represented tas shorid be	ita, Stan stan der ka o r ar	rituoo to. usad doun rea o	ad ha tette d be bas ed pice a	.50 150	All of the upland game birds listed do not stay on the Refuge all of the time.
Partridge Sharp-tail grouse Pinnated grouse		8 26 Ap;	0-000 bee	produced, b ( hepitet, )	smin nibs	g 20 970 9		100	They use other areas next to the protected area and nest where ever it seems best. This is a good upland game
	is report partod.	t gains	b bevomv.	n noh categor:	ideti at	lava 194au			AFCA. (6)
osti Diso	rt perded. This as fuge during certain peered in survey. peered.	the re	ofal jalis bas mital	igin escrit si	s plu	bird		include rea include an	(6) TOTALE (7) REMARKS
		2	Jos	i ed blirode i	9797	bo ba		the to the	* Only columns applied
-					13 4				

### Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES:

Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Refuge\_\_\_\_engen Lake Refuge

April 30, 194

(1) Species	(2) Density	nos al l	ersi		(3) ovals	seite i	1040-3	D		(4) tion	of Fur	1.1 2.5			(5)
, etc. 10 Horbh	tions special states, a tion states (antraboli tin the "Field Scole	rel, wh rel foun	Lope	idae Ferrit	, far tour	Lupe 2 cos	STROF	Share ?	<b>Fra</b> ppi	ng	nge bed		bed	Destroyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destr	tion
Skunk- striped	Approx 800 cores farm, hilly pasture and grass land.	80		ed bee	ibose s az spre	bà tab bà	Ciali Lists	a partic	ati.qaj stran stran			110			10
Weesel- short tail Mink		80 200	equi	a vo nav	aced bec bec	1 pres 15 m d por	to b sanas og no	nt dolfa ls roda Maaroli	inti qui illie m illie 3			12 22 41 22 72 42		1.1.1	16
Rod Fez Richardson Ground Squirral Badger	• • •	8 200			ardi at da aliqu aliqu	pes, iton i sap, t gn	var b Anno Boe an Iovia a	to io ne ni benia nga nee nboowing	na bili iba edi iopacia iopacia i bita				14 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -		100
Buskrats	These animals use the islands & lake shore lime.	ecu ad unoida lo all	n Lans Frank a bra	7 s o Lo isi	off to state / bod	Seri- ed o y net	paant te bau Survi Femu	fe Manag Aforat Anorat Anorat Anorata	Chill Sadd Li Aligada an Éirea						200
WALLE	a were issued for 8 : g same time only 4 re buy trapped the aming	pertet	ihe :	nen ber	201	n. A	tor a s tak	riting t on. The	o all lour (	of ti rappo	e tra re re	pors :	and	1	0
	7 skusk 2 wassels 123 muskrats.	taber, taber, taritati	i diği 10 di 10 ta	pero Rippo Naro		alf a of po pulou	in fui radaa taabar	tei-trapp te the a by spec	Sile of so this sg/Tee		1 20	roiste	552	0	(4)
	to institution of	oh apeo donato provide	in i rail	itte and e co		nixer condi terres	begod Leged	nel, To se or da se shoul	ionalti ionalti ionag		• • • • • •				

REMARKS: With favorable weather, all of the animals listed above should increase during the this summer period 1615 and especially the muskrate. The unter is comparatively fresh, there is a fair encount of plant feed in the unter and the unter area should be very suitable for the muskrate to increase much en.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted. this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.
- (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

# MIGRATORY BIRDS

Refuge	Kallys 8	lough Be	fuge 🚽	Mon	ths of _	<del>ian. 1,</del>	to	<del>11 30</del>	_, 19	94	161:
(1) Species	( First 0	2) bserved	(3) Became Common	(4) Peak Concen	it <b>ra</b> tion	(5) Last Ob	served	Young	(6) Produ	uced	(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg.		Number Using Refuge
Mallard Pintail Huo-wing toal Groom-wing toal	40	4/13,14	i i	and the second			9 (2) 2 (2) 2 (2) 2 (2) 2 (2) 2 (2)				1000
Losser Seeup Redhend Baldpate Osdmall Ruddy	A A A A A A A A A A A A A A A A A A A	and and a fulling attraction	Larriando Joo abio stab adi		d palacity phractity herroado phractity	Atarthal abh dogu abhratha a stàrca	And and a second		to de Lis arclared		500 100
Unidentified dacks Entching Goose Soon " Dime " Camada	A determined	A TOTAL A	the safe at the same safe and the safe at the same safe at the same safe at the same safe at the safe		a polog a	to maken 1 and and an an and a structure	to the state		ter at any to		400 100 2500 2500 300
Swan Shore birds California Galls Franklin Galls Follican Cormorants	restanting (10) purped familie	and fur the tori, find to	se of realds	A state and a state at	taritata Mat	A subject product of a subject	galieral an	A Design of the second se			400 2000 1000 1000 100 50
Coets	1.28.21		8	13	in a set	1 H W B		19211	20		200

REMARKS: (Pertiment information.not specifically requested) The ice covered much of this water area when it was inspected and not so many waterfewl ware soon on it for that reason. This water area has a fair amount of salt in it and not so much food. The birds use it mainly as a resting place of a spring and fall.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
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(6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.

(7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

UPLAND GAME BIRDS

1613

Refuge\_Lollys-Blongh-Bofuge

Months of \_\_\_\_\_ to \_\_\_\_, 1944.

(1) Species	(2) Density	th sec or of period	(3) Young Produced	(4) Sex Ratio	R	(5) emova	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Fhensents Rungarian Partridge	Approx. 1500 meres farm, pasture à brush land.	75 30	f sum fuol: stalf alod in as ugff signar svi beignar svi beignar	everting ag and type an possible. representat as should be	da, Stan Mer ta o c ar	oombo Loo Loo eo Caroo Caroo Caroo	nd ha ie, e ed b s and ole a	20 50	There are a few upland game birds on this area as have been estimated. They de not seen to increase
		stroom		bilt of uli bilt of uli bilt of uli bilt of uli bilt of uli	anto atta idal atta	or j end e g ead ave noder	indin (10m) Liggs Li ps	in represent in represent blies column blies spect	much though. The cold winters with much snow keeps the numbers down. Also, each of the farm homes have some cate and degs that take a toll of the birds.
	rs period. This mi fage during certain	oges es	e du dag t tank unte	ng the refe		odmin briti	fadd Edent	setimited to notione rea	(6) TOTATA
			lation and t specific	tersine popu formation n	nb od Li di	becu salt		iniicate na Inilude oth	1277 REMARCE
			.bea	should be a	otev	oo ba	pert	the to the	e only columns applie
				i de la	1				

### Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES:

### Use correct common name.

- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
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  - (5) REMOVALS: Indicate total number in each category removed during the report period.
  - (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
  - (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.
  - \* Only columns applicable to the period covered should be used.

### SMALL MAMMALS

Refuge \_\_\_\_\_ Kellys Slough Refuge

# April 30, 194

1615

(1) Species	(2) Density	nos al i	le tab	( Remo	(3) vals	MGN I		Di	isposi	(4) tion	of Fur				(5)
, sola diamani ao	tidenine belog-et	rol, wh re foun	Lupa 081	1000	Jere Liere	Laber	gray on na	Share 7	Irappi	ng	lge bed		bed	Destroyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destr	tion
Skunk- striped	1500 A. Approx of farm, brush & grass	150	100	rega ed		100 M	fusie Liste	attract a	align/			111	12192	0	10
Honsel-short tail Hink Red Fox Richardson Ground	lami. 	100 250 750				tu el tu el tu el tu el tu el	bity to to b acres od the var b	sinci si molis lo seda timerola timerola se so io							15 6 8
Squirrel Raccoons. Badger Maskrats	The muskrate use about the short	575 575					n esc ode ; Josta ad od	ets: epu addressels fis Manag fis Manag ejrodite							100
	line of the lake.	10.000		())	unde			n thin B	1 Cure				100		
And. Article Milaro, to the Article of Un-	9 mink 5 weasels 5 skunk 8 rate.	not fai unitary astrict ped fun th spec					al la nadau Lasdau Lasdau	alian yang ngantawan ta ata at ta ata at ta ata ata ta ata		138	9 9 <u>0</u>	with the	718	50	
	TO BE STOLED STOLED OF	donario distro-ug		00 a		ana an	9636 1 bo	en en sa Grotte ag	alan s					-11	

REMARKS: Some of the animals listed above are going to increase very much more than the estimated numbers that have been listed it is believed since there is not a large supply of falled for them and the farm dogs take some of them each year. Research tracks have been noticed along the shore of the lake.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good reference, is now out of print, although a revision is scheduled for publication in the near future.)
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.
- (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

### MIGRATORY BIRDS

Refu	geAw	liortes		Mon	ths of	<del>an. 1,</del>	to -	<del>r11 50</del>	_, 19	94	1612
(1) Species	(2 First Ob		(3) Became Common	(4) Peak Concen	tration	(5) Last Ol	berved	Young	(6) Produ	uced	(7) To <b>tal</b>
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.			Number Using Refuge
Mallard Pintail Huo-wing teal Green-wing teal Lesser Seemp Redhead Inlépate Gadwall Ruddy Unidentified ducks Hutchins greese Snow " Blas " Ganada " Sma Shore birds California Galls Franklin galls Fallien Cornerants Coots Black-prowned night b	2500 2500	4/22	2/2 "like and the first of the state of the	8000 8000 8000 8000 8000 8000 8000 800		<pre>beschore yroot to rotern betanited: 1000 advarie fasting hes and dartered acqu ord .exers ynthewed weldstrementer cons .exers ynthewed weldstrementer</pre>	ted anti-trans and to find printing and the second se	a off the state of the budd application with the state of	Advergence werten in in in in here and the		16000 16000 16000 16000 1200 1000 1000 20000 20000 20000 20000 20000 100000 2000000

REMARKS: (Pertinent information.not specifically requested) The most goese used this area at the end of April and first part of May that have used it during the the last four years. The ducks were also very plantiful but they were more seattered out than the geese. More such were using this area than usually use it.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

1613

Refuge\_\_\_\_\_

Months of to prell so , 1944.

(1) Species	(2) Density	art al spectos	(3) Young Produced	(4) Sex Ratio	R	(5) emoval	Ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Phonoants Hongarien Partriége	1500 aores fara, late chore à brush land.	10 7월	auloure 1 ola liste igures su vo sample indicated ed spon s	prevising age and type age populates represented as should be herdtab. herdtab.	ia, itan itan ia o ia o nin nin ian ian iani	ocniba .od beuc euros euros sol sol core a core a core a core a core a core a	ni ba sal b ad b inn e sida riand riand laga ti se	150	The upland game birds should increase much in numbers this conver if there is a good hatching period since there is a fair number of grown birds on this area as well as an most of the other Essentrat Refuges in District Ro. 2.
	is report period. et period. This ai fuge during certain	t galia oqer ed et edd	b berener 1 yairub : 1 atal ata	non osbegovo ne vila refue a bine estil	e ett m n Lq e	andana ordanar bri bo		jadicate to kettationen taritate ree	(s) relation (s)
	. Tertino el Obterno Contrat,		bog os ida olikoiga -	iena population in addama)	to di tr	beno		er efselini ifo shriori	(EXPANEL (T)
				e el blacets i	0.034	os ba		able to the	orlega ananida gino *

Form NR-2 - UPLAND GAME BIRDS.\*

- (1) SPECIES: Use correct common name.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

Refuge\_\_\_\_\_

April 30, 194

(1) Species	(2) (3) Density Removals							(4) Disposition of Fur							(5)
	diduction infina-	train white-tailed failers		The set Lennings		Roaky	Share Trapping			bed		ped	oyed	Total Popula-	
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destroyed	tion
the	About 1500 sores farm, pasture à lake shore land.	for tw			sector become to data tradition trad	a sid	s are th to	s and ao		e to			TO		15 15 7 2 100 10 800
	fur bearing animals 596 muskrate. 47 skunk. 6 foxes. 5 badgers. 5 badgers.	F , Widen Jinkinan Sinkinan Sindanab Deblivor	1. 6.1 6. 50 2. 10 2. 10	erreq erreq erret i soli bits tots	end s sai s sai s sai s sai s sai s sai s sai	a line a line i pe ten lond ten di ten di ten di ten di	Alac Alac abas i cos an la assa be a	is year, re-trapp is ble a by speci ist. for is dr ds is about	revio ditos oftige oftige oftige transi genti		N US	20111	DU	10	(1)

REMARKS: The numbers of animals on the Refuge as of April 30, 1946 have been estimated as everying a possible Just a very for years ago, this area was dry and there were no anekrats on it at all. They have increased much durings the last two summer especially. All of the animals will increase and especially the maskrats if the weather is favorable for their growth and we get a fair amount of rain.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

### (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

## MIGRATORY BIRDS

Refuge_	Lambs	Lake Ref	uge 🥑	Mon	ths of _	Jan. 1,	to	<u>pril 30</u>	_, 1	94_4	1612
(1) Species	(i First O	2) bse <b>rve</b> d	(3) Became Common	(4) Peak Concen	<b>tration</b>	(5) Last Ob	Berved	Young	(6) Prod	uced	(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.			Number Using Refuge
Mallard Pintail Blue-wing teal Green-wing teal Lesser Semup Redhead Boldpate Gadmall Ruddy Unidentified ducks Sheveller Hutchins greese Snow Blus Canada Shore birds California Galls Franklin galls Pollican Cornerants	<b>6</b> 10 30	<ul> <li>The first relate react 1.</li> <li>The first relation should be the second statement of the second statement</li></ul>	The second is the second of th	estings all To wedant destary all iffultation parents' technic we also and an up and a dess all wit broost ander staf all all	district an excite a sub- material of the sub- distriction, or purposition, and the sub- districted and builting of obvious cripp of mon-uppreprie.	becaborg gravet to reduce herenthal a dis educed fields for anoldaries on and ord . there yriteered avidad menorget some ar on elses of blocks Sinue	a such at a least of an and a solution of the	aid bog gatered and a for an adda to the terms of the set of an and a set of the set of	advorterges gaugether and the state of side		700 700 100 100 700 30 50 50 100 350 100 350 100 350 100 350 100 200 400 500

REMARKS: (Pertinent information.not specifically requested) This water area is rather small and most of it is not very deep and there is but little food in it for the waterfowl. They use it as a resting place unimly.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.

(6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.

(7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

Refuge Lamba Lake Dufuge

Months of \_\_\_\_\_ to \_\_\_\_, 1944

(l) Species	(2) Density	Density Pr			R	(5) emoval	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
e Bungarian Partridge	600 seres pasture and farm land.	16	i mining india ilata Migurea ev indicated indicated	is guident and an	day Stan ta o ta o ta o	benbri ben ben ben ben ben ben ben ben ben ben	nd ha des e d be s and ple s ndbes	50	This is a rother shall area of open parairie farm land. There is but little
•	, eòc. incinde dat			i hanitat. ily to wild b sach category	n iba an hi Idal	a tre tas p tava unber	PS 11	in represen This column other specj Indicate to	shelter on it except the high grass and woods in places.
	rt period. Ihis an Dige during sertain		odal jaida	is those sign		bi.rd	Inte tosbi	Setimited t Include rec	isator (a)
	prored in survey.			iorastion n	t da	rtine	od ze		(7) MANAMATA
tros									

1613

#### Form NR-2 - UPLAND GAME BIRDS.\*

- (1) SPECIES: Use correct
  - Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Refuge\_\_\_\_\_into Labo Refuge

April 30, 194

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(1)							n see	(4) Dispersition of Dur							(5)
Species	Density	Density Removals Disposition of Fur					Total								
010	tidds when helled at	uta 1101	<i>cistip</i>	atipe · xot		.ferrinpe		Share Trapping			00	1	q	Destroyed	
alested a	terdalation and in lan	a shere and	la si si la vo	1 1 1 2 2 2		a at	ord Pm	accounti -ma	-	Carlor Ver	- Refuge Shipped		ate	tro	Popula-
Atton	Commenter C. Materia		Se la constante de la constant	ţ	10L	1 Ba	ch	Northeal	STS		Re	0.0	no	Sec.	tion
TOD BE	Cover Types & Total	Acres Per	tir	Ves	dat	CK	ear	Permit	pp	ug	s al	Bn	S I	1. 1. 1. 1.	
Common Name	Acreage of Habitat	Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Number	Trappers Share	Refuge Share	Total Furs S	Refuge Income	Furs Donated	Furs	
			11.00	11/20											in the second
Skunks - striped	800 aeres pasture, farm à hey land.	200	0.68	Six I	PELOF	\$ 93 J	CITED.	n partia	pplate			1		-	
and the second	TRUE & MEY JERRO	States and	Be o	t ber	and the second	a od	05 103.	in Centre	Techne	AX C			27		
Indger	on the refige name	100	dada	10 00	beck	pref	50 be	ai noth	urran Stat	1.5		131		147	
Richardson Ground Squirrele		16	adi	1 25	od ris	sis mà	86720	20 made	出力 二方法						50
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	in lanuas all encost	2 23 24	doah		on di	o nol	i ANTRO	al barb	ob.ed						
			00wb				12 94	190 100							
able	A parmit was issued	frem th	-					No. of Contraction	a not	i and					
just	outside the Refuge.		uro	this	; the			he fame	used	the					
Refu	e more or less.	1 10 00	1		0.000	San Y	STATE	ADMPTS.	alone					240	
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	Englished Strange	-	1 4	mar	-	att -	-	buend-e	3.58 8	11.1	11 30	HONT	098	TO	(3)
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	is set the patent in the	riol bed	-	-03.55	5 . 201	buice	2 . 88	toesta yo	a Britis						
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		beblyon	-	Eoo e		risron	a ed	Inonia el	Turvers		15				
												-			

REMARKS: This Refuge is made up of an area of water with open purairie land around it. The few animals will 1615 not increase much since the farm degs will keep them down and there is not so much cover for them.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

# (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

# MIGRATORY BIRDS

Refuge	Little_4	10088		Mor	nths of _	Jan. 1,	to	F. 30	_, 194	
(1) Species	( First 0	2) bse <b>rve</b> d	(3.) Became Common	(4) Peak Concer	ntration	(5) Last Ob	Berved		(6) Produced	(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date		Avg. Esti- size Total	Using
Mallard Pistail Eluo-ving teal	10 8	4/13,14								1500 1500
Green-wing teal Lesser Seaup Redhead Baldpate	T dra to	12 edf	ober o		an truth reyn he rusedo non tro	anktal o. anget da tast	1918		the life	1000
Gedmall Ruddy Unidentified ducks Rutching Googe Snow	Li treat	pater der gabrie	olima may	- - - - - - - - - - - - - - - - - - -	true add. a to that a	schmint bed minister berrandline eridebite bisode	ating luka tes herin bist.	Luch ago to a dor a dor and dor	the second	50 1000 100 500
Blue " Canade " Swan Shere birds	20	•	be due of error	and a second a	ist to go annetter to io and	r of your to breading	of the feat	og arld gr rendd arg		600 400 100 200
California Galls Franklin Galls Pollisan Cormorants	Lands -	for the follow	in the state		derigde L est hos us anoly	auforiq y no.a fauf area.	antisad at at a	the second secon		100 5009 200
Ceets	Int.		1		No II St	ad in the second		19281	35	800

REMARKS: (Pertinent information.not specifically requested) not so many birds use this area except for a resting place on their migrations. The labe is rather small and most of it of water that is from 6 to 15' deep. There is some cover on morth west end of water area.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

1613

Refuge Little Gase

Months of \_\_\_\_\_ to \_\_\_\_, 1944\_\_\_\_

(l) Species	(2) Density			(4) Sex Ratio	R	(5) emoval	Ls	(6) Total	(7) Remarks			
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.			
	Approximately 500 acres of closely pastured land.		I with Level alogical alogical alogical with baland bala based bases				ed ha s tel bas s s ald recipi	Fine of the second seco	No upland game birds are being listed as using this area since more have been seen on it at any time simus recently.			
	, ste. Inside det			1	nibe Ismin Ismi	T tel		in represent Buis column Scher speci	(4) GER RATIO:			
	ed period. This as fuge during corteria	tin repo	l gabud e odni jakte	after odé gai tyte escité és	e pl	ədəbər İrr.td	Leto trisio	Setimated (	(6) poraLe			
	Aprine al brive		allinde q	n colinetoù	it da	anli'i	ar pa		(7) REMARISI			
1.93												

#### Form NR-2 - UPLAND GAME BIRDS.\*

- (1) SPECIES: Use correct common name.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Refuge\_\_\_\_\_

April 30, 194

1615

(1) Species	(2) Density	the cont	2970	( Remo	3) vals	0906	asch	Di	sposi	(4) tion	of Fur	ittes			(5)
ole decoil 3	a identification and a second state of the second s	bring plan	1.00 1.00 5.05	1 200 7 200	, jar	viupu nit an	A LIGHT	Share 1	rappi	ng	nge		ted	Destroyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Desti	tion
Mak	300 scree hilly pasture land.	150	010 C		inderes	d of i deb i be ed	al las	pareto otoul D	adifiqq abiqq abiqq abiqq				TER	<b>10</b>	(D) 2
Budgers		80	1.000	a 19 9 90 9	beni en de	tend de mi	50 be 0165	sh dolds 'lo fiedd	orioln ch. 86		444				10
Richardson Ground Squirrel.	engende theothingin of dagen i safet formers the primeral pi	8	a aq douin	1200 (1 170 100 (1	12. ad 97.50 00. (%	l not rea. ton b	ann an Ar an Annaith	iformation a of on al barl	i ah te ei eb ef						150
He trapping w	s done on this area.	star Star Sean ed	aluc vess		iplan 24 23 26 No.	signa arra s arras bard a	ra es rota duent and bad	nga tan abodahu Wanagi Managi	n bas 296.03 Dead						
ad Abard	Shere to sets signs	a 10 85.	a in			den v , exte	STURE Sans	arean. add under	alqui aslini						
	ali gridani: tetno gri	n synnywi Ling son	820 E	10000	1000	rendmi	a iss Sali	and the second s	eesini olireri						
atrice share. to the rates of one ther	repose a antino and and the batal lances and fore takes op 3 on destroyed because be institutions or	anther, t narket ned Eure th space donated worlded	n di ot in ot in ot in ot in ot in otori nea		enia sea sea sea sea sea sea sea sea sea se	a Ma of pe solud teda teda teda teda	G Far mber es, 1 es, 1 es, ed be s	registici - ni ide ga si di ide ga ga ide con ler ide con ler si con en	anie adlea afage araon araon araon araon						

REMARKS: There are not so many badgers on the area it is believed but they do dig muserous heles and sens of them are on the dam. We fill up the heles on the dam each time that the area is inspected. Of course the badgers as a rule make heles to dig out the squirrels. Felsened onto is put out in and around the squirrel heles when visite are made to the area.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge: once submitted. this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.

- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.
- (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

## MIGRATORY BIRDS

Refuge_	Kinnenst			Mor	ths of _	Jan. 1,	to	pril 30	_, 19	14	1612
(1) Species	(2 First Ob		(3) Became Common	(4) Peak Concer	<b>tration</b>	(5) Last Ob	served	Young	(6) Produ	uced	(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg.	Esti- mated Total	Number Using Refuge
Kallards Pinteil Lesser Seng Goldes-eye (American)	<pre>netable file deal score content it acc stand interact  </pre>	and well brough by the derivation and the second brought and the second se	. traditor to stain and all thereases a the state	Tetuge, on any particular number of the species on any particular or that had hitsered	centraryin Lief to yndree add print min add hen ynteenen to yndraedd agdro wyofrdo is ynteeddan herteedd og no wyofrdo is ynteeddan ar ar	i territore provi lo techni indaniciali : strurot lacites has and duttendo acque tote . asses geliterut svilationarque des to cet no abas ed bizots structo		aint destroy and gerred agener destroy all	Allaphanetter baselier of the base to Like 1	when his personality for the water the same	100 100 300 30

REMARKS: (Pertinent information.not specifically requested) # a birds were seen on the small lake when it was inspected. A few birds use this area of a spring and fall. Only a few of the galden-syss next in hellow trees around this small bedy of water. The most of the water area is from a few fort to 15' deep and there is but little food for birds except these that dive.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.

(6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.

(7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

UPLAND GAME BIRDS

1613

Refuge

Months of \_\_\_\_\_\_ to \_\_\_\_\_, 194.

(1) Species	(2) Density	entradi	(3) Your Produc	ng	(4) Sex Ratio	R	(5) emoval	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat		Number broods obs'v'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Phensants Sharp-tail grouse	Appres. 150 Acres of brush, grass ami timbered land.		r0x.	toui bols Pigu ive ind	everting ag and type ag a possible. a represental as should be	ia oten terior terior terior	1000000 10000 100000 10000 10000 10000 10000	nd ha cei t ha t and phe a	24 30	The phononaute next around the outside of the area and feed much in the cultivated places outside the Refuge. A few of the sharp-tail
80 60	tab abuleni	ednotar ednotar	19 19 19 19 19 1 19		binding telided blin of gift b	n Da n Da Intel Intel	( 10 orid o g seat kova	nednd v Mad Iqqs 11 as	in represent in represent intro egict	during bad winter weather to feed on dried berries and beds. They nest suiside on the prairie during the genuer time.
LEODENSE Sal	he report pariot. ri period. This ne fuge during cartain overed in mover.	oges en	a gala adal a	e de alta	ing the refu	au r au r dq s	eriture baild	faite faite	bedending	Austra (a)
	aborteru p	en ville	oriis	en 3	o soltrerol	1 30	oniin	ing rate	into etulori	

Form NR-2 - UPLAND GAME BIRDS.\*

- (1) SPECIES: Use correct common name.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Refuge

April 30, 194

(1) Species	(2) Density	th cont		( Remo	(3) ovals	06/18	icne 1	Di	.sposi	(4) tion	of Fur				(5)
eta, E North	to the PENEL Sector of the Sec		alap a et	1920) 1920) 1920)	a p a	equit.	Varsa. Rasia di	Share 1	rappi	ng	lge bed		bed	Destroyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destr	tion
Skunk- striped	Approx. 150 acres brush, grass à timbered land.	75			Abol Kan 3 Rentop	3 03 0 85 0 0 90	timity (tetile (tetile	pareto etc.) D to Dens	e E Lyig c Bàilti Te-fail			4		20	2
Wessel-short-tail Nink Raccson Maskrats	They use the lake	87 76 15	9 29 9 29 8 85 6 85			na bi ion h sion f. noj	iner on one on of ormer	to the discretion on the ad git bould	in er 1 ald 16 al 16 al						2 10
	labs for a distance of about 12 miles. as done on this area.	testi betas edi a erosista a 10 es.		aleila 18 X 20 Se 2 kon			nore Jright and e and e and e	noombu opnali ei Aboona anota	i bns 11519 59543 51996						50
	enoved since april 5	r vicen Linî tor			nian Me	nce class Branks	n Lan peli	it elle si crest si	antique travio			:22	1973		(4)
	rapper's share, and and the total incose and firs tated by S as destroyed breakes to institutions or	nazicoli nazicoli od fran in speci lona ( qu incred dag				s lis of ge nolud ther of nd hown	d fru nose de, d de, l de, d de de de de de de de de de de de de de	ingent - er ingent - er ingen go ingen go ingen go ingen go ingen go	n ain naithe naithe strige nostri genda						

REMARKS: This area has some of all of the animals listed above on it. They do not seem to increase much of 1615 none since they all wander more or less and they are trapped and hunted as seem as they get off of the Refuge. Indian degs also take a toll af all of the animals.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.

(4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

### (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

# MIGRATORY BIRDS

Refuge_	<del>Plan</del> ond-Lab		Mon	ths of _	<del>Jone 1,</del>	_ to _	w. 30	, 194	1612
(1) Species	(2) First Obser	wed (3) Became Common	(4) Peak Concen	tration	(5) Last Ob	se <b>rved</b>		(6) Produced	(7) Total
Common Name	Number D	Date Date	Number	Date	Number	Date		Avg. Esti- mated Size Total	Number Using Refuge
Mallard Pintail Blue-wing teal Green-wing teal Lesser Secup Redhends Baldpate Gadmall Ruddy Daidentified Ducks Hutchins Gaese Snow Blue Canada Swan Shore Wirds Canada Swan Shore Wirds Canada Pranklin Galls Pallisan Cornerant Coots		3.44.	actions and its regions concerns and shorts are arreaded but such as action and and another are acted and brocket apprint dank and	Alleration file to guirage and guirable and the solution for the second of the second	beautone prove to reduct betanized	ad pullents and To Act galdage age a galaxies of galaxies of the second on the second se	tert to the get petrod synthesis and hear fact inch ones of fur yes to pic map printing, and the second	Andressager angebre of the second in the line of the second states of the second	3000 200 200 200 1000 100 200 200 200 100 1

REMARKS: (Pertiment information.not specifically requested) This is just a shallow area of water out in the prairie but the birds have been using it much of a spring and fell eince a fair sized area has been covered with water. A few pairs of mallards and pintalis remain to nest around this water area z and then take their young to the water to grow up.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.

(7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

Months of \_\_\_\_\_ to \_\_\_\_, 194\_\_\_

1613

Refuge Pleasant Lake Foluge

(3)(4)(7) (5) (6) (1) (2)Sex Young Remarks Species Density Removals Total Ratio Produced Number broods obs'v'd. Estimated Total For Research For Re-stocking Estimated Hunting Pertinent information not number Acres specifically requested. using Cover types, total per List introductions here. acreage of habitat Percentage Refuge Common Name Bird The phoneants and partridge Chinese Pheasants Approx. 300 sores 10 80 of farm, hilly stay around and on this pasture à brush Refuge since there is good shelter on it for them. It land. Ennearian is believed that they must Pertridge 10 80 de much of their feeding officer of the eres sizes there is not so much food available for them on the Refuge. the the report period. nh s where we not not red to Links blue refuee during and in interruble amonds of Let whether done for and of afda the the 10 20 00 B

### Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES:

Use correct common name.

(2) DENSITY:

Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

# SMALL MAMMALS

Refuge\_\_\_\_Leh

April 30, 194

(l) Species	(2) Density	dnob nk	Serce	( Remc	3) vals	ionde.	6000	Di	.sposi	(4) tion	of Fur	tras			(5)
ete. 1 Horeb	e-tailed jackrabhte, in the "Pield Book o	inter , Ler beneral ar	1224	1 20 0 231	els,	ni en	gange n nam	Share 1	rappi	ng	nge ped		ted	Destroyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Numb <b>e</b> r	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Desti	tion
Richardson Ground Squirrel	About 200 agres of pasture & some farm land.	5	00 00 00 00 00 00	rpeqi be o 1 be		8 68 1 2 6 6 5 5 6 6	riuni datio 20 %2	partici etc.) De	antas antas antas				10		40
ni tilad. Docur in Droioli.	the refuger outre and the refuger one of the second of the second by the	no beneri na beneri na bisroi	100 100 100 100 100 100 100 100 100 100	e u Steeg Steeg	oo iii oo iii oo oo	200 E	62,65 62,65 61,056 62,056 62,056 62,056	Lormatic			a lati a lati l'ilop l'ilop	1786 -1.2 -1 6 -2-5 6 -2-55			
	ritus sériouiture las iand type symbols its where possible. Fit	start volume start Start basuand	oosh de . bLuc	tar i artsta de P	nalo nalo na pr	non o non o lega legal o	na ao node doen	nt serie series ntwoode w Manage	ing and						
be bloom	to sounds on represent	s to sp	- 10 - 10	s ber	yaren U Enr	re. on reet tas: v	er 265 Gurre Rens	should i stear, ed unite	berga elqui socile						
ent to	of the set of the set	LLAT 30	so d als	2289 705091	abeu Yesa	rasidan worde,	n Lad Also	97. 923 a. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	io Lves			:83	100	222	
	rapper's share, did i and the bobal income and fure baien by Se the destroyed became	mber, t market led fure h speci			0113 8 83. 8 88. 90 70	of pe of pe prive	d fur mber en, 1 el m	entering an ente en by apend to the	n sha ndioar nfoge	D H K B	07 50	10171	1012	32	
20110C	to institution of	conabed rovided	ersori Gibb	bea Ego a	enoti dt n	Abnos meta		tab to an slouds a	tone: tone:						

REMARKS: There might be a skunk or two that use this area and possibly same other animals but we have not seen 1615 any of them or signs of them.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

### (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS! Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

### MIGRATORY BIRDS

Refuge_	Projete	-Leim-	<u> </u>	Mor	ths of	Jan. 1,	to	pril 30		1612
(1) Species	(2 First Ob		(3) Became Common	(4) Peak Concer	nt <b>ra</b> tion	(5) Last Ot	served		(6) Produced	(7) Total
. Common Name	Number	Date	Date	Number	Date	Number	Date		Avg. Esti size Tota	d Using
Mallard Pistail Blue-sing teal Green-wing teal Showeller Show goose Blue goose Pranklin Galle Coote.	we recently (ROL real search U.C.A	and but the start with the first first and the start is the start of t	Armshinger in sum but nil Jarrasdo 	And and the second second and the second sec	deltargie List is privat and private the set of the spirateness of a schedule to schedule the schedule to schedule the schedule to the schedul	The bullong graves to median bedranited and elimon landar has sholds reader near ord means guildents eviltations admine	dat goriese's and to but you's second and and and and and and and and and a	attrbeirse att prints agriber eft 2 tess tade pails eren af der Var ve aft nuer gelbreiget "tenssterbigetiete.	the second second of the second	1000 100 50 50 100 500 500 500

REMARKS: (Pertinent information.not specifically requested) this area was inspected an April 18th. He waterfewl were seen on the area. The water area was X rather small and shallow this string and it is believed that not many birds will be using as they did when the water level was higher and the area larger.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

# UPLAND GAME BIRDS

1613

Refuge\_\_\_\_Proi rie-Lob

Months of \_\_\_\_\_ to \_\_\_\_, 194.6.

(l) Species	(2) Density	tn roc spectes	(3) Young Produced	(4) Sex Ratio	R	(5) emova	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Bangarian Partridge.	100 Aeres of Hay and Pasture.	16 16	iculane la constante sola lifete Figures au ive sample	www.ting ng) ind type syn possible. Forestick in should be preduced, be hall tab.		interec beau beau beau beau cour a bard bard	resident	10	We have seen as upland game birds using this area but it is balieved that a few pertridge may use it at times.
	etc. include dat in report period.	ý zatu	6 beverer	e. Moh dabegory	idai nt	ų sal Lova Tedne	lqqs li st s Lei	This column other speci Indicate to	(A) SEX RATION (3) HEROVALSI (4) TOTALI
acanona. Lao	fugs during combain	the re	odnit inida bos er inter	is those sign	i pli	bied	tdent bott	indiade ree Indicate ne	immini (r)
4141		*± •	.bee	i ed bluons i	2751	oo bo	based	and to alde	* Only columns applic

Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES:

Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Refuge\_\_\_\_\_lake

April 30, 194

(l) Species	(2) Density	to cont	6475	( Remc	3) vals	onde	(bite 1	Di	sposi	(4) tion	of Fur				(5)
eto. 1. Joseph	thideploat believed	tatw .iet	niup a. as	1 22/1	a Lori	silvpa al as	gray man nam	Share 1	<b>Ta</b> ppi:	ng	lge bed		bed	oyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Numb <b>er</b>	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destroyed	tion
Richerdson Grand Squirrel.	Apprex 300 Acres of pasture and meader.			boqu boqu boq s vi	eadri year a bersign	t od t tig be ed	ilmii taili ta ta	i thirt i of the start is Dane	ahlin Inda) abhan						(C) 80
Badger and and an and an and an and an	the fine, once to algorithment offers detailed enough to becare the general p	75	e de e a se a se	1-261 12600 12600 1 201 1 0 1 0 1	no de Nores Cores	es al son h sess son h	atres n nee ner ty 'ormut	ider of i literation literation at beili	un an 1 s.h. ciz ed eb.ec		19 19 19 19 19 19 19 19 19 19 19 19 19 1	dis er	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		•
	rbing agriculture la dard type symbols lit there possible. Fit of counts on represen-	a, revo , Star be used stions a	ocmb de g bluco yriae a br	isri 2 siriis is V So Le	naiqi aq-se voli i utos n bai	antes, s gras feria nd can a can	ice an etore icenti icenti Surve	ist spri trdwoods b lianagi should )	Lignadi di bosi 2:14:14 bosi 13 a ( cont						
601 16 1940	<ul> <li>Limpt south bevine</li> <li>Limpt south bevine</li> </ul>		20 () - 9.(3)	1.000 C	4500 1008	e les. Innoer: africa	Rens Adi o Also	iet uzder 10 tile to 10 pairs	adian adian			181	VOI	and the second s	
	repper's sidfa, and and the total interna- and furs taken by 5 at destroyed income to institutions or	Antone	n fi b to trap furs furs	rrad equite equite or use o sol brue coo e	the site of the si	n lin of pe tolod borodi boro	d fur aber ab 1 al 10 aged be g	- Liegge - Liegge by speci iel. To ie or day should	n sha hdisa afuga eraon eraon gansis		1. 10	son:	1095	10	

REMARKS: On this small area the small animals are about the same as they have been for same time. The people 1615 hunt and trap the bedgers as soon as they are off of the Refege and the bedgers dig after the squirrels where ever they find them. The bedgers have made many holes on the area but one bedger makes many holms.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good reference, is now out of print, although a revision is scheduled for publication in the near future.)
- (2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted. this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

# (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

# MIGRATORY BIRDS

Refuge	Rose Lob	<u> </u>	<u></u>	Mon	ths of _	June 1,	to	<del>pr12 30</del>	_, 19	94_	1612
(1) Species	(2 First Ob		(3) Became Common	(4) Peak Concen	tration	(5) Last Ob	Berved	Young	(6) Produ	uced	(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.			Number Using Refuge
Mallard Pintail Blue-wing teal Groun-wing teal Losser Scaup Redhond Faldpote Gadwall Ruddy Unidentified Ducks Hutching Goese Stow Blue Cannon " Swam Shore Birds California Calls Franklin " Pollicens Cormorants Coots	10 - 11 - 11 - 11 - 11 - 11 - 11 - 11 -	age and work brown excites Jarrill with the spectrum of the protocol and the sector and the sector of the sector o	the state of the s	actions and to reduce technols all shorts a section and to reduce technols on the section technols are the section and the reduce a section and tech of a section and technols are the section are the secti	Anythe the spinit of the light of the light of the sum with the spinit of the sum with the spinit of the sum with the spinit of	Levelore prior to vadeur bedwrittel till admost Lautes husk snuldsvensde note of .eters snildstid evidenteropre	and parameter way to do. Another and the second sec	attr .ho ree gdd gereid worten and 2 beun badd nefig etres ad four ybn vol and mode gdthreiget .and darcherterine	11 and acres headlest of assert as ittes		5000 5000 500 500 2000 100 100 100 100 2000 100 500 500 500 500 500 500

REMARKS: (Pertinent information.not specifically requested) This area was inspected on April 13th. He waterfewl were in sight when the inspection was made. Buck of the water area was still covered with ice and the real migretion northward had just started.

.Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

> In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

1613

Refuge\_\_\_\_leke

Months of to hpril so , 1944

(1) Species	(2) Density	in rai	(3) Young Produced	(4) Sex Ratio	R	(5) emoval	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Phoneaute Bungarian Partridge	Apprex 800 Aeres hilly grass land, farm à pasture.	40	f endfodd afold afold aforma erb aforma erb aforma erb	everbing agi land type agi e pomulbing ng shauld h produced, b hebites,		oontes des conse c	ed ba ba ba ba ba s sud pla a batta	20 50	He upland game birds were seen when the last inspection was made. It is believed that about the numbers estimated were using the area at the end of April.
		idasedi 9 yetre 9 yetre 9 yetre	turky, pd remired d a during d adapting d	bliv to vild compose dos gains add yn gains add an	estra Isal al al al al	g se h Leva redau pdaun briki	i in 1 Los 1.540	marico sini toeqa meddo of etsoibal i betenitsi natiots res	(A) SEE RATION (5) SEREVALAY (6) TOTALI
	A LEASE AND A LEAS	area o	bas prital officing 3	termine popularist tormation n	b oi i da	been antiy		an edsoluti the shufeed	(1) REMARKSY

Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES:

Use correct common name.

(2) DENSITY:

Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Toss Lake

Refuge

April 30, 194\_\_\_\_

(1) Species	(2) Density	taoo ad		( Remo	3) vals	piega	diasan 1	D	isposi	(4) tion	of Fur				(5)
ebo. I Vorth	to the "Next Book	the found	2.200 2.000		La's	z hope	AND DAY	Share !	<b>Fra</b> ppi	ng	uge bed		bed	Destroyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destr	tion
Skunk - striped Short-teil tensol Mirk Bod Fox Badger Mito-tail jack rabbits Richardson Ground Squirrels	Apprex. 800 seres grass land, billy pasture and farm.						A addination of the second sec						「「「「「」」」		20 20 20 100

REMARKS: It is not intended to report that the above listed animals use the Refuge all of the time but about 1615 that number use the area off and on. They visit it some due to the water area: symmet where some of their food would be secured from. So far, no muskrate have been seen on this area.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

# (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS! Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

### MIGRATORY BIRDS

Refuge_	Rock L	eka	<u> </u>	Mon	aths of	Jane 1,	<del>ril 80</del>	1612			
(1) Species	(2) First Observed		(3) Became Common	(4) Peak Concer	atration	(5) Last Ob	served	(6) Young Produced			(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.			Number Using Refuge
Mallard Pintail Blue-wing teal Green-wing teal Consor Seamp Redhead Baldpate Gadmall Buddy Unidentified bucks Hutchins Greese Snew Blue Canada Swam Shore birds California Galls Pranklin Galls Pellisen Cormerant Coote	2000 2000 100 2500 2500 2500 300		Armshing To same all all all appression	returns. The president manager of the spontage the provide the state of the spontage. The first manager state of the bar age of the spontage.	author of the so years and purchase and the solution of the so	berndong yruoy to redent beteeling	be called at 10 to	A how Jadraq and Jarah agained and	Anomeneticant succession of the description of the		15000 15000 2000 500 500 500 500 3000 3000 1000 2000 2000 2000 2000 20

REMARKS: (Pertinent information.not specifically requested) This Refuge is on the through (Las Aux Mortes, Suyder, Brunba and other Refuges to the south) migration route from the south. The materfowl make full use of this area. We are sure that about as many a waterfowl use this area as use the Las Aux Hortes Area. It will be necessary for more inspection trips to be made to this area before a fair estimate can be made of birds using it since we have only been looking after this area since last fall.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

1613

Refuge\_\_\_\_

Months of to to 130, 1944.

(1) Species	(2) Density		(3) Young Produced		(4) Sex Ratio	(5) Removals		(6) Total	(7) Remarks			
Common Name	Cover types, total acreage of habitat	Acres per Bird	Numb <b>er</b> broods obs'v'd.	Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.		
Hungarian Partridge	About 2600 seres of pasture, farm and bruch land.	16 Ayş		iuni sloš sloš svis svis bili	terenting ago bird type ago toreithin. representat type should be	ali tati tati tati	ternite Ad becad becad coros	bd ha le, i d he d she ple s	150	No upland game birds were seen when the last inspection was unde of the area. It has		
Chinese Pheneante	trio Centra Inter anol	50 •	• 000	bec	produced, b	state a 15c	5 30 175 0	100m 7/310	50	been estimated that there were about the birds listed on the Refuge on 4/22, 1944.		
	. etc. <u>Indiais</u> int			straint	alls of the				namios sint Cosque resido	The vinter was more severe in this locality on upland game birds since there was much more anow here than		
	rt parled. Mile m free disting versatio	0003 60 23 603	i gali	tek v atša	arter aft pa gite relat	20 2	sdepti b1rd	Leste Tembr	t botenitori inclusie rec	on other parts of District No. 2 and it was also colder.		
	terters. In everyor. Endening	e asten et gilt	512 m 52129	Eðsil (78-2		it d	becu rt.t.nc	badi ar pe	indicate m include oti	A EDUARDE (P)		
				and a second	r ed tstarolle i	e-187	10 20	perd	ndt of elde	stiggs samulos vido s		
						1						
							,					

### Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES:

Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

### SMALL MAMMALS

# Refuge Book Lake Refure

April 30, 194\_\_\_\_

(1) Speci <b>es</b>	(2) Density	(3) Removals					(4) Disposition of Fur							(5)	
	white-tailed jackwaite and the		ukup a ee	1 3105	(Ie)	niipe ni an	KWAR BLAN	Share Trapping			ed ed		ed	oyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destroyed	tion
Skunks- striped	2600 sores fare, pasture ± some brush land.	100	5 88 53 Im 58 0	spect be c	boso. s say	7 03 385 5	larly talls	partic	a Efqq , sdinu radau			17	TEN		(C) 26
Weasel-short tall Mink Red Fox Richardsem Ground		150 170 Ap 450	12°030		toed th co be y be y	pref Ln ea t not	60 he ores cres cres cres cres	tion is ther of formation a of co	araita ba na ba shi ba shi						20 15 6
Squirrel Badger Muskrats	About 700 acres of the water area.	15 170 700			ut no uplan up pr	d nol (gru s gru	ane ao toda	nit besty sign re- eboortru	edo test Legenselo d bene artic b		12 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -				200
Beaver action	" " " Permits wore issued	SSO for fir	• 210	a to	trap	on th	Le are	a. (A m	to we	put	on				500 2
trap;	armits for each trapp ing season. This sprint is make a report of the um reported their eat	ng, lett fur be		iere	sent	to ea	inh tru	pper, re	quest	32 8	the tch aly	193	TON	EE.	(6)
the the second s	301 moskrats. 2 skunks. 2 weasels. 5 mink.	interior surfact deriver deri			edd S edd S gol S	eti iq it torior torior fboot moor	tori b roder l . es l . es bega s ed	the the n by speci lat. to a or day a stould	ade d solbi solore solare lones		94 - 90	40131		10	

REMARKS: This is one of the most suitable areas for the small fur bearing animals to increase on. Hr. Merhain that lives near the dan, reported to no recently that he saw one beaver new near the dam. Not many beaver will use this area since there is but very little of their kind of food around the lake. It is believed that all other animals will keep on increasing and sepacially the muskrate.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

(1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)

(2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

(3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.

(4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

# (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

# MIGRATORY BIRDS

Refuge_	Snyder L	ske	9	Mon	ths of _	dan. 1,	to	et1 30	_, 19	94 4.	1612
(1) Species	(a First O	2) Dse <b>rve</b> d	(3) Became Common	(4) Peak Concen	tration	(5) Last Ob	served	Young	(6) Produ	(7) To <b>tal</b>	
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg.		Number Using Refuge
Mallard Pintail Blue-wing teal Green-wing teal Lesser Sumup Redhead Baldgate	100 100	4/22,*4	and a set			adaradi aquat aquat anatan adaradi				Supra	2000 2000 200 50 2000 50 50 50 50
Gadwall Ruddy Unidentified Ducks Hutchins Goose Snow " Blue Canada "	8 200	and agelled deal	all of the second se		o de la contra de	( to under both the subtational theory of blocks	A State of the sta	the sector and a sector of the	New of the series	and without	50 100 200
Swan Shore birds California Galls Pranklin Galls Follican Cormorant Coot	20	on for the spa- on, fail stars	a of resident investories.	autore at 1	modiwrydw Llwh mr wid bra , pu ggro modwo ;	headers particular atmost fartes to pit	and and an and a	balist and the	and a state of the	same to exam	1090 200 300 200 200

REMARKS: (Pertinent information.not specifically requested) This water area is not so large but the ducks seen to make much use an of it especially on the north and. The water is rather deep for the ducks to use it much on the south part. It is not believed that the goese use it much. We have not seen goese on this area.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

1613

Refuge\_\_\_\_\_

Months of \_\_\_\_\_ to \_\_\_\_, 1944.

(l) Species	(2) Density		(3) Young Produced	(4) Sex Ratio	(5) Removals		ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat		Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Phonents Eungericz Partridge	Apprez 930 acres farm, brush à grass land.	18	formalisti alocation alocation alocation alocation alocation	everting ag are type an e possible. I represented as should be	ita Stan Stan Stan	inite inite	il bi si si si t bus s s sig	50	No upland game birds were soon on the area when the inspection was made but it is believed that there were the numbers listed on the area
	, sto. Initial ist	revenser etneter	iq . estad	processes, or insbitat. ily to wild	o the me to d del	g bol kava	ridad Fiqua Li as	This column This column other speci	at the end of April. There was a fair purber of birds on the Hefugh last winter and the cold wanther period was not so severe as usual.
encennes Est		0 <sup>°</sup> 10'12'8	adni jnida bra mital	ng the raing a three sings	dig a	edaun britd best	tident bod	betastel ser shuloul indicate me	(6) TOTALI (6) TOTALI (7) REMARKSI
			t specific	dormables of		pe be		the state of the	offqua acaulus qlat *
tut									e cle couth

Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES: Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

11

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SMALL MAMMALS

Snyder Lake

Refuge

April 30, 1944 1946.

(1) Speci <b>es</b>	(2) Density	the cont		( Remo	3) vals	orda	encin	Di	Isposi	(4) tion	of Fur				(5)
oto. E Norbit	tidarstos, telfini-ar	and and a	1.120	1 203	100		VATS MAD IN	Share 7	Trappi	ng	uge		ted	Destroyed	Total Popula-
North Martin War naw	Cover Types & Total	Acres Per	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated		tion
Common Name	Acreage of Habitat	Animal	Ηu	Fur Har	PP S	Fo	Fo	Number	The	Re. Sh	Fur	Re.	Fu	Furs	
Skunk-striped	Approx 920 seres of	-	6 89		6600	5 92	finals	ordina i	si trioge		No.	21.43	151	10	(2)
ing the second s	form land, lake shore & a little	92	332m	0 1055 1945	visat a	diata di	NE LEAD	ette.) Die	- Biddig Teachter		1917 - 19	1. t 0		1.1.	10
Weasel- short tail	brush land.	230	tate	a'w	hees	teng	50 ba	at notin	12984			E.	Sinta		Sec. 1
Kink		92		1000	n ad	ton b	Beat an	and an ero hi	it alta		115 21	214-175 (2000)			10
Red for Richardson Ground	de destat 100 destats	of se	R SH		aro5 an de	. 960 d no 1	tar tar Inurto	no io m	ns an be de		Sec. 2		2.0	3	PAR STR. SHOP
squirrel Badgers		450	e centra	and it	anda	- 00010	12 SO	195. 181	Iquan		10.2	Ru e			100
Huskrats	About 5 miles of the	been ed					ditert	appress at	11815		\$ 11.62	0.10	14	11.4	
	the shallow water is	a anolda To av	interes a ber		121 1942 17 - 1200	10 59	e 1946 Surre	hitonid.	bettl almat						1. Mar. 1. Mar.
	used by these animal				1	-9323	Rent	ied moder	aplific						450
Beaver	They use mainly abo		20 H	-	alter	racter	1 Lad	it odd o	ablin	L		181	WOS	22	(2)
	1/2 mile of lake show		als.	run or	TOTA	n cela	Alec	AAREA RI	01494						
	Refuge	The	a di	Tield.	and a	SEE .	tri bi	ddsara-	ans ri	3 15	in ap	Non I	DE	IC	(1) 4
	and furs taken by S	winit her	qart.	Norani	0 10	bu I on	2 ,89	pade Aq	03020						
	es destroyed because	ibeqa di	68 ] 	State 1	17 2. 	aber 1	bene	tor Les	NOS TE		14				
		poplarout	Time		64 41	meon	0 00	froda a	tories			+			

REMARKS: No trapping was done on this area last winter since no one in this locality had time or wanted to trap on this Refage. We will try to get some one to trap here next trapping season.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

## (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

## MIGRATORY BIRDS

Refuge_	Sible	-Lake		Mon	ths of	Jan. 1,	to	p <del>ril 30</del>	_, 19	94	1612
(1) Species	First 0	2) bse <b>rve</b> d	(3) Became Common	(4) Peak Concer	tration	(5) Last Ob	served	Young	(6) Produ	nced	(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg.		Number Using Refuge
Hallard Fintail Divo-wing teal Group-wing teal Group-wing teal Losser Secup Rodhead Daldpate Gadeall Roddy Unidentified Ducks Hutching goose Snow Dino Canada Swam Shore birds Californis Galls Franklin galls Follicen Cornorant Coot	200		Amblem 20 ways and all	and a set to show that and a set in the set of the set	ducing the spring of fall algorithm administric, or examining, and the sig- observed modulates of obvious of pring or non-migrants.	heatdeng growt to wohnen betaanthaft wilk. wijnson Landen Ana wubitarshedt woon off .assta griboett evidenheasympt	dur gribeerd and to dol writesamps -	active and service recommendation and the service and and an	determined suppley of address 124 - 1		1000 1000 50 50 50 50 50 1000 100 500 50

REMARKS: (Pertinent information.not specifically requested) It is not believed that so many waterfeel will use the area during April since there was much ald plant growth still standing out in the water and the water level had gone down much lower than it was a year ago. In the past when the water level was rather high, a large mader of all kinds ar of materfeel used this area of a spring and fall aspecially.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

1613

Refuge sible lake

Months of \_\_\_\_\_ to \_\_\_\_, 1944.

(1) Species	(2) Density	ant al apealae	(3) Young Produced	(4) Sex Ratio	R	(5) emoval	.8	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Phonenath Bungarian Fartridge Sharp-tail groups	Approx. 700 Aeres farm, rough grass and brush land.	35 18 36	and hure 1 of a transformer transformer bad appen of bad appen of	.institut	in, Sharo Sharo Sa o Sa o Marage Salin Salin	interio .od .od .od .od .od .od .od .od .od .o	ul bo ed h ed h bns c c olg techno techno techno techno techno techno	20 40 20	The land is rather rough around this Refuge and the birds use the Refuge & rough land. The birds would increase much on this area if there was nore winter shelter & food available during cold weather and deep snow.
	ha report particle. 15 periode This to	n suine suine suine res suine res	b bevices t gainch t toto	edh cabhgory adh cabhgory ng bhe refaga a theo algia	i pù	lava 1990au 1990au 1990au 1991a		idice gradi (dicate to Relimited red	(8) 100000441 (20) 10000441
	overed in survey.		affilosos		12 0-	orid-	1	an eterioni the shuloni () enit of eide	(7) REMERSE
. erns									

### Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES: Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Sibley Lake Refuse

Refuge

April 30, 194

(1) Species	(2) Density	Theo al			3) vals	a pac	doan	Di	isposi	(4) tion	of Fur				(5)
	in the "Fight Book of	ide , fee	n Lug a ou	a xo' a daa	le	n lupa at se	Kana Baray	Share !	Irappi	ng	nge ped	in a sur	ted	Destroyed	Total Popula-
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Desti	tion
	700 seres farm, rough pasture, timber and grass lamd. Also about 300 A. of shallow lake area 700 A. of land area & about 300 A. of la 300 A. of lake area. Permits were insued trapped a total of n on the Rafuge.	175 7 60 125 125 12					Laciv to be to be to be to be to be to be berne berne to be to be		aplia unter unter unter be un ter ter und h und			121		300 300	10

REMARKS: The animals listed to the right above use the Refuge area part of the time but they also use the other suitable land areas around the Refuge. The water level is rather low in the lake new. If it stays at about the same level during the summer, the rate will be apt to instrance much during the summer. Grass and other water plants are a growing in most of the area of water.

1615

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge: once submitted. this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

## (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS! Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

# MIGRATORY BIRDS

Refuge	Silver-L	ako	e e e e e e e e e e e e e e e e e e e	Mor	aths of	Jans 1,	to	pril 30	_, 19	94	1612
(1) Species	(2 First Ot	2) Se <b>rved</b>	(3) Became Common	(4) Peak Concer	ntration	(5) Last Ob	served	Young	(6) Produ	uced	(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.	Avg.		Number Using Refuge
Mallards Pintail Elue-wing teal Green-wing teal Lenser Soup Medhead Baldpate Gadwall Ruddy Unidentified ducks Futching geose Snow Blue Canada Shore birds California Gulls Pranklin Gulls Pallisen Cormornat Coot	Hone as of the imposition date	12. 4 data the state with a second to a set and a	Anothing to end of the light which the second of the second secon	MALTON: The president hashes of the spectar MALTON: The grantlant hashes or limited interval	deltargula ilai ve gatage and galade au add hus pertenuna is galasatata gages usotedo is evincioni derenado autro usotedo is evincioni derenado	the action of grants in the static between the second and an action acti	and without and he with a subsection of the section	all been in some been outer miller all all all all all all all all all al	iténessique sejutier de eque de filst	and the safe of the protocol state.	2000 200 200 100 3000 100 100 100 50 2000 100 500 500 500 500 200 200 200 200 200 2

REMARKS: (Pertinent information.not specifically requested) There was no run-off into the lake on their Refuge this spring. The water level of the lake is lower new at the end of April than it was a year age and not so may birds will use it as would have used it if the water level had been a little higher.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

UPLAND GAME BIRDS

1613

Refuge\_\_\_\_\_Lake Hofuge

Months of \_\_\_\_\_ to \_\_\_\_, 194\_

(1) Species	(2) Density	er al	(3) Young Produced	(4) Sex Ratio	R	(5) emova	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat	Acres per Bird	Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Phonesate Hungarian Partridge	2400 scree farm, pasture, timber and hilly bruch land.	80 30	i enni inci si ell'attori ra seregit signa evi beracioni inti sed spon o	wwerking agi bid type aga possible. Feptessitat ma should b produced, bu	dey Btan Bta o F arr	ocalo solo bacu touta o bari o bari	ed is tex f d be s and pla s	<b>08</b>	In the locality of this heruge, the wister just passed was very mild and a fair number of birds should be on the area as of April 30, 1966.
	ete, joildle dat bi report portod.			i imbitat. Nily to wild h aob catagory	Idel	e bre 1 ee 1 1 e	11 20	in represen This column other speci Indicate to	(4) SEL PATTON (5) REDVALSI
	et partod. Ihis na free during certain overed in survey. guested.			ing the milit is those mig starmine pape dramation of	s ph	bird beco	bont	<b>ketinstad t</b> include rad indicate ac includa oth	(6) TOTALI (7) REMARKSY
The second se				r ed biroda i		top bo	pert	and to the	* Only column applie

### Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES: U

Use correct common name.

- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Refuge

April 30, 194

(1) Species	(2) Density	the control	00138	( Remo	3) vals	cerit.	eves Eosa	D:	isposi	(4) tion	of Fur				(5)
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For R <del>o-</del> stocking	For Research	Share ' Permit Number	Trappers ' Share	Refuge R	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destroyed	Total Popula- tion
Skunk-striped Hink Red for Biohardson Ground squirrul Badger Baskarats Messel-short- tail	Appren 2400 seres farm, panture & hay land. They use shout a mile of the lake shore & some of the shore &	of fall mber, 1 artist, od fun th speci				to t be o be o be o to no to no be to no be to no to br>no to no to no to no to no to no to no to no to no to t	tiral silash silash sof ut sof ut sof ut toris toris sof sof toris t	pertica to pertica to pertica to pertica to pertica to the pertica to the pertica to the pertica to the pertical to	pplie pplie unter unter be un be un be at be de tand b thill thill t	104	next		Re	in in the second se	6 8 200 6 100 12

REMARKS: From the number of animals trapped on the area and right next to it, it does not appear that enough 1615 animals have been estimated as of the end of April but anaxed two females or more of any kind of animal, produce a number of young each year and some of them will have young twice a year and the numbers soon increase much.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

# (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS: Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

## MIGRATORY BIRDS

Refuge_	Woodl,ako	-March-	<u>.</u>	Mon	ths of _		_ to _	pr11_30,	194	L 1612
(1) Species	(a First Ol	2) Dse <b>rve</b> d	(3) Became Common	(4) Peak Concen	tration	(5) Last Ob	Berved		(6) Produced	(7) Total
Common Name	Number	Date	Date	Number	Date	Number	Date		Avg. Est Size Tot	ed Using
Mallard Pintail Eluo-wing tool Green-wing tool Lesser Somup Redhead Baldpate Gadmall Ruddy Unidentified ducks Entchine geese Smow Shore birde California gulle	18	4/37,*4	- To place and all all advancedo	De la parte de la Traba	a log to the second substant a subsection to the substant and the second second second second a substant second se	I garry to votime betweethed to write here another therein noge on writeand artitude mission of so shear ad historic mission	and an able with solds and the second sold and the sold of the sol	true and patroch succession and the must even ad don year to rightnooped samularity and rightnooped samularity and rightnooped samularity and	er begebert no - seat des Liber 2 1. traf dibert add 20 monterpad - 1. seats add ad yn trap of binner	500 500 50 50 50 50 50 50 50 50 50 50 50
Franklin galls Pollicans Cormorants Coot	the second		dent transferre	estimate formular	autional in ed. la parte at	Academic Binder District Binder District Binder Ster	dan ganta an Canta a	di la	Second C	500

REMARKS: (Pertinent information.not specifically requested) It is not believed that the unterfoul used this area much this spring since the ice was late melting off of the unter and the birds when they cane from the south a little later than usual, the most of them kept neving on northward and did not stop.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
- (4) PEAK CONCENTRATION: The greatest number of the species present on any one date or limited interval of time.
- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

# UPLAND GAME BIRDS

1613

Refuge Boodlake Hareh

Months of to to 1944.

					100	12-03	<b>BOO</b>	JOBILIO BEU	11217/246 (7)
(l) Species	(2) Density	arieh not al notoga	(3) Young Produced	(4) Sex Ratio	R	(5) emova	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat		Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinece Pheseant Hungerien Partriágo	Approx. 160 aeres timber, brush à farm lamd.	8	ical stress	ing of the second secon	ta stan ta o ta o	omba .od basa ayoo a ana a ana a ana	ef be e cal led b baie e e allo e allo	20 20	Phonsents are often seen on and around this ares. The partridge are more a prairie bird and not so much is seen of them on the Bofage.
		ed fille of	nd (Angara	tabitat. the to wild t	atte ante idal	e to i Lava	LÉ m	in represent Nite column other speci	(4) SHE RATION
ana	he report period. "A period. This he tage during certain	Anna Para		ach category ing the refug is these migh		odaute	1914		(5) REMOVALSE (6) TOTALE
			bos e trai oflice ga s	iquiq animatata a entrancia		beca anti-ri	20, 20	in statin in statin in static in static	(7) REMARKSE

### Form NR-2 - UPLAND GAME BIRDS.\*

(1)SPECIES:

Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts. etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- Estimated number of young produced, based upon observations and actual counts YOUNG PRODUCED: (3)in representative breeding habitat.
- This column applies primarily to wild turkey, pheasants, etc. Include data on (4)SEX RATIO: other species if available.
- Indicate total number in each category removed during the report period. **REMOVALS:** (5)
- Estimated total number using the refuge during the report period. This may (6) TOTAL: include resident birds plus those migrating into the refuge during certain seasons.
- Indicate method used to determine population and area covered in survey. Also (7) REMARKS: include other pertinent information not specifically requested.

SMALL MAMMALS

Refuge\_\_\_\_

April 30, 194

(1) Species	(2) Density	inon al	0erso		(3) ovals	obda	dous 1	D:		(4) tion	of Fur				(5)
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	Før Re- stocking	For Research	Share Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Destroyed	Total Popula- tion
Skunk- striped Hensel- short- tail Hink Bisbardson Ground Squirrel Haskrat	About 320 seres of grass land, brusch à hilly land.		Da q tko oqv b b c as dsen oovi t b c c t t t t t t t t t t t t t t t t t t					beering bee	ppilo point point protect prot	1. 11					6 6 100 80

REMARKS: Next of the animals listed above use other surrounding lands as well as the Refuge area. The refuge lists lands are used by the animals mainly due to the available food in the unter area and the shelter furnished by the trace and bruch. The man trapping on the area last winter a year ago, reported that the musktrate he cought on this Refuge were rather small. It is supposed that there is not quite the food for the rate on this area of water that there is an some other water areas a the muskrate just not grow as large.

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2)DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.

## (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKSE

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.

## MIGRATORY BIRDS

Refuge_	Streep-	Lake	9	Mor	ths of -	<del>ian. 2,</del>	to	p <del>r. 30</del>	_, 19	94	,	1612
(1) Species	(i First O	2) bserved	(3) Became Common	(4) Peak Concer	ntration	(5) Last Ob	Berved	Young	(6) Produ	uced	(7) Total	
Common Name	Number	Date	Date	Number	Date	Number	Date	No. Broods Obsvd.			Number Using Refuge	
Mallard Pintail Diuo-wing teal Green-wing teal Lesser Senny Rodhead Daldpate Gadenil Ruddy Inidentified Ducks Buddy Inidentified Ducks Buddy Inidentified Ducks Buddy Inidentified Ducks Buddy Inidentified Ducks Buddy Inidentified Ducks Secon Secon Shore birds California Galls Franklin Galls Franklin Galls Franklin Galls	150		<ul> <li>Alistication of all all becaused</li> <li>Alistication of the second /li></ul>	Larrando de la secono tendence est la	and and have been and the shift submitted and the second of the second of the second of the second of the second s	facularity parent to metanti federatiest state scenario freedra free architermento state artimetra geoficienti estimate attendo rom no ced se state ad bizada attendo	administration and the first spin statements in the second s	the second set we are a supported and the second set with a support of the second set of the second	titicenterper displayered search da Lia		4000 4000 500 200 5000 200 5000 5000 500	

REMARKS: (Pertinent information.not specifically requested) Cormorants next on the north island. Sens ducks next on the ecuth island and the two perineulas. The ducks have been using this Refuge (the mater eres) also the grees and sens, much during the part for years since more rain has been received. This is a much used Refuge by the waterfowl if the waterlovel will just stay up.

Form NR-1 - MIGRATORY BIRDS (Include species in families Gaviidae through Strigidae; also doves and woodcocks)\*

In case a resident form occurs, such as mottled duck on the Gulf Coast, use only the columns that apply.

- (1) SPECIES: Use correct common names as found in the A.O.U. Check List, 1931 Edition, and list in A.O.U. order. General terms are to be avoided, such as "scaup", "teal", etc.; use "green-winged teal" or "lesser scaup".
- (2) FIRST OBSERVED: The first refuge record for the species during spring migration, fall migration, wintering, or summering, and the number observed. In the case of resident species this column may be disregarded.
- (3) BECAME COMMON: The date the species became common on the refuge.
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- (5) LAST OBSERVED: The last refuge record for the species during the spring or fall migration, wintering, or summering, and the numbers observed exclusive of obvious cripples or non-migrants.
- (6) YOUNG PRODUCED: Estimated number of young produced based upon 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 are to be omitted.
- (7) 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 manner in which birds come through; i.e., in waves or all at once. On refuges representing the terminus of the flight lane, the figures would probably be the same in many cases.

1613

Refuge\_\_\_\_\_lake

Months of \_\_\_\_\_ to April 20 , 194\_

					1.03	80, 30	0.016.0	lise correct	
(1) Species	(2) Density	ter nat	(3) Young Produced	(4) Sex Ratio	R	(5) emova	ls	(6) Total	(7) Remarks
Common Name	Cover types, total acreage of habitat		Number broods obs'v'd. Estimated Total	Percentage	Hunting	For Re- stocking	For Research	Estimated number using Refuge	Pertinent information not specifically requested. List introductions here.
Chinese Fheesents Hungarian	Approx. 27 acres grass à short brush land.	2 449		niviting ap and type ap position. 1 representation	in , nh Stan Stan Stan	News 1904 1904 1904 1904	ed be sed be ed be	12	No upland game birds were seen on the area when the inspection was made on April
Partridge	tone and address one	1	r indicator dat span o	las should bi preduced, bi ( hebilat,	saun paun a the	o sero e to ero e	o elq ovém ritei	24	17, 1944. It is believed that about the masher of birds listed ware on the area at April 30, 1944.
	asb elaimi .ets.,		la calinot	nite de stie s	onin Idal	g gad kava	Ligge Là De	This column	(4) SEE RATER (3)
	.isotra paptol.	n yarn	b bevelars	noh ostegon	nž	redett	a Las	indicate to	(5) BERDVALES
. coouse	rb per ted. Ihte wie bes there are all	nger es	e da 1.ag 0 othi jatie	uian add yni y thoas wig				lebiosted ( Indiada rea	(6) TOTALE
			<u>intipo</u> and 4 epictific	ngog saturaði Manation je		beci rtine		in etgelini Lio ebulani	(7) HERLINGS
		-	.bee	ed blands I	eron	oo bo	tree	nið oð stún	+ Unix columns areida
				-					

Form NR-2 - UPLAND GAME BIRDS.\*

(1) SPECIES: Use correct common name.

(2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.). Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottomland hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.

- (3) YOUNG PRODUCED: Estimated number of young produced, based upon observations and actual counts in representative breeding habitat.
- (4) SEX RATIO: This column applies primarily to wild turkey, pheasants, etc. Include data on other species if available.
- (5) REMOVALS: Indicate total number in each category removed during the report period.
- (6) TOTAL: Estimated total number using the refuge during the report period. This may include resident birds plus those migrating into the refuge during certain seasons.
- (7) REMARKS: Indicate method used to determine population and area covered in survey. Also include other pertinent information not specifically requested.

SMALL MAMMALS

Refuge\_\_\_\_\_

April 30, 1944

(1) Species	(2) Density	(3) Removals				(4) Disposition of Fur						(5)			
ere. E Porti	eal, white-balled indicators		alupa zon "tea sea taerauo		grey seed		Share Trapping			ped		ted	Destroyed	Total Popula-	
Common Name	Cover Types & Total Acreage of Habitat	Acres Per Animal	Hunting	Fur Harvest	Predator Control	For Re- stocking	For Research	Permit Number	Trappers' Share	Refuge Share	Total Refuge Furs Shipped	Refuge Income	Furs Donated	Furs Desti	tion
Skunk - striped	18 A. Approx. of Satury grass and brush land.				Janes.	1 03 192 1 1	inera)	edistant - I d (				12	TEN	au.	•
Nessele- short-tail Rabbit- white-tail- jack.		•	32.32 10.23		55 50 55 50 5 55 5 50 5 50	teng breig breig ten bee	10, 50 10, 50 10, 100 10, 100		errollo errollo it errollo it errollo						2
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	and a second s					90 (A) 646-5 107	enter Anter Anter	telene telene telene telene	opäää elemä paikko						
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REMARKS: No trapping has been done on this erea. There may be a few more eminals that wander on this erea at times but we do not know that they use the area.

1615

Form NR-4 - SMALL MAMMALS (Include data on all species of importance in the management program; i.e., muskrats, beaver, coon, mink, coyote. Data on small rodents may be omitted except for estimated total population of each species considered in control operations.)

- (1) SPECIES: Use correct common name. Example: Striped skunk, spotted skunk, shorttailed weasel, gray squirrel, fox squirrel, white-tailed jackrabbit, etc. (Accepted common names in current use are found in the "Field Book of North American Mammals" by H. E. Anthony and the "Manual of the Vertebrate Animals of the Northeastern United States" by David Starr Jordan. "List of North American Recent Mammals" by G. S. Miller, Jr., a very good referencé, is now out of print, although a revision is scheduled for publication in the near future.)
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) Detailed data may be omitted for species occurring in limited numbers. Density to be expressed in acres per animal by cover types. This information is to be prefaced by a statement from the refuge manager as to the number of acres in each cover type found on the refuge; once submitted, this information need not be repeated except as significant changes occur in the area of cover types. Cover types should be detailed enough to furnish the desired information but not so much as to obscure the general picture. Examples: spruce swamp, upland hardwoods, reverting agriculture land, bottom land hardwoods, short grass prairie, etc. Standard type symbols listed in Wildlife Management Series No. 7 should be used where possible. Figures submitted should be based on actual observations and counts on representative sample areas. Survey method used and size of sample area or areas should be indicated under Remarks.
- (3) REMOVALS: Indicate the total number under each category removed since April 30 of the previous year. Also show any removals not falling under heading listed.
- (4) DISPOSITION OF FUR: On share-trapped furs list the permit number, trapper's share, and refuge share. Indicate the number of pelts shipped to market and the total income to the refuge by species, including share-trapped furs and furs taken by Service personnel. Total number of pelts of each species destroyed because of unprimness or damaged condition, and furs donated to institutions or other agencies should be shown in the column provided.
- (5) TOTAL POPULATION: Estimated total population of each species reported on as of April 30.

REMARKS

Indicate inventory method(s) used, size of sample area(s), introductions, and any other pertinent information not specifically requested.



Roll 1 & Exp. 5. 4/13, '44. Kellys Slough, south west side showing water area and the cover here and there out in the water and along the shore.



Roll 1 and Exp. 6. 4/13,'44. Main water area of Kellys Slough Refuge . This picture shows the plant growth along the water edge & etc.



Roll 2 and Exp. 1. 4/14, '44. Showing the Ardoch Control gates, both open and gage reading at 8.10. There is not near as much of a run-off this spring as there has been during the past recent springs. There is plenty of water to fill up the lake to the desired level after some of the surplus water has been allowed to drain away.



Roll 2 and Exp. 2. 4/14, 44. Lake Ardoch free of ice showing the lake towards the buildings from the dam.



Roll 2 and Exp. 3. 4/14, '44. This picture is of Billings Lake taken from the dam and to the north. The high grass on both sides of the water area can be seen. The grasses make good cover for the waterfowl that want to remain on this area and nest.



Roll 2 and Exp. 3. 4/14, '44. This picture is of Ballings taken from the dam and to the north. The high grass on both sider the water area can be seen. The grasses make good cover for the fewl that want to remain on this area and nest.

