

HORICON

NARRATIVE REPORTS

JANUARY-DECEMBER 1947

ROUTING SLIP

DIVISION OF WILDLIFE REFUGES

DATE: _____ 194__

☒ MR. SALYER _____
☒ ~~MR. KRUMHOLTZ~~ *W 4/15*
_____ ~~MR. DUMONT~~ *PAD 2/9*
_____ MISS BAUM _____

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SECTION OF LAND MANAGEMENT:

Mr. Kent *71C 2/24*
~~Mr. Ackerknecht~~ *Coa 2-2X*

SECTION OF STRUCTURES:

~~Mr. Taylor~~ *W 57*
Tabastan _____

STENOGRAPHERS:

REMARKS:

HORICON NARRATIVE REPORT

SEPTEMBER-DECEMBER 1947

Return to: _____

HORICON NATIONAL WILDLIFE REFUGE
WAUPUN, WISCONSIN

NARRATIVE REPORT
SEPTEMBER-DECEMBER
1947

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE



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ADDENDA

Forms NR 1, 1a, 2, 3, 5, 6, 7, 8, 8a, 9, 10, 11, and
Muskrat Trapping Summary.

I. GENERAL

A. Weather Conditions

	<u>Precipitation</u>	<u>Dep. from Normal</u>	<u>Snowfall</u>	<u>Temperature</u>	
				<u>Max.</u>	<u>Min.</u>
August	1.28	- 1.91	0	97	47
September	5.06	/ 1.21	0	89	29
October	1.65	-0.72	0	85	25
November	1.86	- 0.15	9.1	58	-11
December	Data not available				

Data from U. S. Weather Bureau Station, Burnett, Wisconsin

The first two months of the period were abnormally warm, with September being the warmest since 1941, and October the warmest on record. This warm weather had an effect on migrations as will be noted under the discussion of wildlife. November was cold and snowy, being the coldest November since 1926. Having no record to go by for estimating December, it is believed that the month was normal.

B. Water Conditions

Precipitation was above average for September, but for October and November averaged a little below normal. The water levels in the refuge according to the water gauge started off the period at 74.46, rising to 74.68 September 30, and remaining practically static at that figure, reading the same at the end of October. The marsh froze up on November 9 at 74.86, but ended up the month at 75.00. This level remained constant through the month of December reading the same (75.00) at the end of the period .

On December 18, Messers Taylor and Huey in a conference with Wisconsin Conservation Department and Horicon State Game Area officials discussed water spillage for Lake Koshong. Following said conference the dam boards at Horicon were cracked allowing a spill down the Rock River amounting to about .021 per day, and at the end of December approximately .2 foot had been spilled. Exact figures are not at hand in this office, but this action will be followed closely, and more details presented in the succeeding narrative report.

C. Fires

No fires occurred on the marsh with the exception of a peat smoulder which was stopped after it had burned a spot about 4' x 10' and in some places 6" deep.

II. WILDLIFE

A. Migratory Birds

1. Population and Behaviour. Waterfowl started showing up at about

the usual dates, but not in the numbers or such a noticeable migration as last year. The "bumble-bee" weather that stayed with us until the latter part of October was considered to be the cause of the erratic migration. Baldpates were the first migrants to show up in any numbers, although wood ducks began forming in larger flocks about the first week in September. The divers were conspicuously absent, with very few of them being seen. The mild weather kept them on the larger lakes to the north and north-west of the refuge, and when they did begin to move, travelled straight through. On November 4 a migration of some 2000 lesser scaups was noted between 10:30 and noon at the south boundary of the refuge. They were not flying high, but passed on through without stopping. No canvasbacks or ringnecks were seen on the refuge and very few redheads. Ruddy ducks maintained their usual small representation during the period. All in all except for the mallards and blacks who came later than usual, and the widgeon who were here in about the same numbers as in 1946, the migration showed a decrease in the numbers flying through here. Blue and green-winged teal were here in about the same numbers as last year, and remained longer. On the same day that the blue-bill migration took place, a heavy flight of blue-wings occurred. This was a late date for this species, and the numbers seen estimated at 2-3000.

Canada geese were first observed on September 18, when a single goose was seen in the Wheeler Ditch area. From then until September 30 none were seen, on that date 14 were observed feeding in a buckwheat field on F-28. The numbers then climbed to around 500 and stayed there until October 7, when only 200 could be observed on the refuge. This 200 remained the total population until the last week in October when the numbers jumped to 2500. That the population remained small and constant during most of October was checked frequently at the Marsh Road bridge where every morning between 180 and 200 geese could be observed flying into the old lake bed from morning feeding flights to the north of the refuge between 8:00 and 9:30 AM.

Blue and snow geese were not as abundant on the refuge this year as last. The first flocks were seen on October 24, numbering 53. The ratio of about 3 snow to 1 blue was observed again this year. On the night of October 23, between 10 PM and 1 AM large flocks of blue and snow geese were heard flying over the refuge in an almost steady stream. Compared to 1946 the flight was about two weeks later, and the visitors far fewer in number.

Only 6 whistling swan were observed on the refuge this fall. These birds were noted flying west from the refuge on October 9, this being the only record of them this period.

2. Food and Cover. Food and cover conditions were excellent on the refuge during the migration period with natural foods in abundance, particularly sago pondweed seeds and tubers, coontail, river bulrush, as well as a good crop of roundstem bulrush seeds. As for cultivated crops the birds were presented with an abundance of standing corn, buckwheat, winter wheat (grain and herbage), barley, and oats. Not much use of the

fields was noted until the first of November when Canada geese, mallards, and blacks started using an area on F-2 and F-28 containing standing corn, buckwheat, barley, and winter wheat (grain and herbage). For a full week 1000 geese and 500-800 blacks and mallards fed continually, if not exclusively, in this area with the greatest attention being paid to the green winter wheat, buckwheat, and standing wheat in that order. Very few birds were seen in the standing corn.

All corn was left standing so that it would be available for spring feeding of the large Canada goose flight in the coming spring. With an abundance of small grain available, the birds found enough corn to supplement, on the corn fields picked with a mechanical picker on F-8, F-24 and F-28, and on farms off the refuge. In order to make the corn available to the spring flight it will be knocked down with refuge equipment though this may not be too essential, as we have learned that the geese will take standing corn.

The fields of cultivated crops on the north end of the refuge on F-12 and F-13 were not used by waterfowl for the following reason. On October 15, 170 Canadas were observed on a private field between F-12 & 13 from which the corn had been harvested by a mechanical picker. The owner allowed no hunting on his land and chased several parties off who tried to shoot the geese. One party, however, not content to see the geese given added protection by this farmer, fired several shots at the geese from a nearby road on October 17, driving them away. The geese never did come back to this area, and it is believed that if they had been unmolested they would have gone in on the 6 acres of corn to the west on F-12, or the 10 acres of buckwheat and 8 acres of corn to the east on F-13. This same situation was experienced in several instances on F-2, F-3, and F-4, all lying along the west refuge line. The hunters line up along the boundary fences trying to get in some shots at them as the birds circle for a landing. For this reason as much planning as possible is being done to have fields away from the refuge boundary although in the above cases these are favorite feeding areas, and have been in use for the past several years.

The acorn crop was good on the refuge, and one instance was noted on the north end of the refuge where 150 wood ducks were seen feeding in a grove of oaks from 3:30 to 5:30 PM on October 15. The farmer on whose land this occurred was fixing fence near the grove, and this large flock of ducks was seen circling from a distance. On arrival near the spot the farmer started working toward the buildings, and the ducks began dropping in in small bunches until the entire flock was on the ground under the trees. Then there was great activity as groups would "leap-frog" others in getting to the supply on the ground. Several small bunches were seen to come into the area after the main flock had settled in.

Shorebirds were not as numerous this year as last, due probably to the higher water levels covering flats on which these birds prefer to feed. Wilson snipe were slightly more abundant than in 1946, but no records of woodcock being on the refuge this period were noted. Yellow-legs (both species) were much less than previously, although they stayed on

the refuge longer. For that matter, all shorebirds, rails, etc. stayed longer due to the balmy weather. The surprise of the period was the common occurrence of the mourning dove all through the period, the last record being made December 22 by the refuge patrolman. Meadow larks and red-winged blackbirds were also observed here in the third week of December which seems to be rather late for them to be around.

B. Upland Game

1. Population and Behaviour. The pheasant population on the refuge at the end of the period is higher than it has been for some time. This is due to the presence of abundant food supplies of grain and corn available to them in the refuge food plots. That this is a ganged up wintering population is very evident as they are seen mainly in the immediate vicinity of the corn, buckwheat and grain fields. In a four-acre stand of wheat, 43 pheasants were counted on traversing it, and from a 6-acre stand of corn 73 pheasants were observed, not counting those that ran into adjacent marsh unobserved. There are an abundance of them present, and naturally the predators such as foxes, and in a few instances, mink, are taking their toll.

Hungarian partridge definitely appear to be on the increase, and the first record of them on a refuge field of buckwheat was made December 18 when four were observed at F-3. Several other coveys of 13, 15, 9 and 7 were seen in and immediately adjacent to the refuge.

2. Food and Cover. On the whole, food and cover is sufficient for the needs of the upland game birds, although not as abundant as last year. The Rosaceae group in general did not bear as heavily as in 1946, though an adequate production of weed seeds appears to have occurred. In two separate areas, some distance from refuge crops, pheasants have been fed by refuge personnel, but these are the only cases so far. It may be necessary to do additional feeding before the winter is over, but with no more snow than we now have, the birds should be able to get along quite well. The pheasants prefer the cornfields to grain, and are taking a heavy toll of it in the fields they are using. Buckwheat and small grains are not ignored, however, as in addition to food good cover is often afforded.

C. Big Game Animals.

The deer population remains at about 25 animals confined mainly to the west side of the refuge. One cornfield on F-10 is being cleaned up completely by deer, ably assisted by pheasants. Following a fresh fall of snow, a track count was made, and at least 6 deer were estimated to have been feeding in the field following the snowfall. They will have cleaned up every ear of corn in this six acre field of corn, before the geese ever think of leaving the southern climes. This is an occurrence to be expected, however, from here on out, for with such good conditions as to food and cover existing, the population will undoubtedly continue to climb, and cause us headaches in more ways than one. One trapper saw seven deer in one group on Lehner Ditch, 3 of them bucks, 4 does. From all reports there are some good sized deer on the refuge, and one buck has been reported as an eight pointer.

D. Fur Animals, Predators, Rodents and Other Mammals.

Muskrats taken during the November 1 - 25 season totalled 3966, slightly over half as many as were taken in the same season of 1946. At the beginning of the season it was estimated that there were 18000 muskrats on the refuge. This figure was high, it was later determined, and the cause for the low population is not too clear. Following the dry season in 1946 it may have been that more rats left the marsh than was estimated, or the percentage take was greater.

Muskrat activity prior to the opening of the season tended to indicate that the population was substantial. Many feeders were in evidence, though house building lagged somewhat. It appears now that the feeders were built and used but once or twice, when new ones would be built again. The record breaking mild weather during October did not exert any great influence on the rats to build houses, so it was not until after November 9, the first freeze-up that house building was completed.

The catch for the first nine days of the season was good, and it was believed that the take would be near that of 1946. Following the first freeze-up, however, the ice was too thick to push a boat, and too thin to support a man's weight, so that for several days none of the trappers could get to their traps.

That portion of the refuge west of the Main Ditch holds a much lower population than that portion east of it. The most serious dry conditions existed on the west side in 1946, and the rats did not come back as well as they did on the east side. The north end of the refuge was low in numbers as is to be expected, as there are no sloughs, just ditches.

Very few muskrats were seen in the ditches this period, due to ample water in the marsh proper, whereas last year with the potholes and sloughs dry, the ditches became quite congested.

One female rat was taken on November 3, bearing 7 unborn young. Several trappers caught female rats that had been suckling young at a very recent date before being trapped. This lateness of the last brood or litter has not been observed in the past few years, and it may have some bearing on the small population of the refuge this year. A good breeding stock remains on the refuge, however, as investigations following the trapping season showed many active houses in each unit.

The mink population is also somewhat smaller than first estimated, seemingly about the same as here in 1946. The mink started drilling rat houses in early December, and only through heavy trapping were they held in check on the drilling. A larger number of mink trappers is on the refuge this year, and the whole area is being well covered. The mink appear in very good condition, although the first ones taken in the rat season were not too prime, many of them being quite black. At the end of the period 166 mink had been taken, 105 during the rat season, and 61 during the first month of the mink season.

No controlled burning was accomplished by either State or refuge personnel on their respective areas as was done last year. This did not

have any effect on the mink as it did last year when the southern portion of the refuge received an influx of mink from the burned over State areas adjacent to the refuge boundary. It is believed that the mink in the burned areas migrated north and south out of the burned areas where all protective cover had been removed,

Raccoon, skunk, opossum and weasel populations remain about the same as last year with the possible exception of skunk, who seem to be increasing somewhat.

Red fox are increasing, and considerable comment on opening of the refuge to controlled fox hunts is being heard. The several conservation clubs in the vicinity of the refuge are naturally perturbed at the reports of foxes seen. The permittee on F-28 at the west end of Sommers Ditch reported five foxes in the field behind his house on December 11. The next day he saw two more in the same vicinity. This is an unusual occurrence to see five in the open at one time, but it is believed that they are drawn in there by the concentration of pheasants in the food patches left there. 7 foxes have been taken by the trappers during the period ending December 31. In order to cut more heavily into the population the refuge patrolman is also running a trap line for foxes in areas of known heavy concentration.

Cottontail rabbits appear to be on the increase as they are seen commonly in most parts of the refuge. Fox squirrels are the most common of the two species present, and in one area F-22, they are eating up a goodly share of corn from a 5 acre cornfield. The bases of several trees in a woodlot adjacent thereto are covered with the stripped cobs.

1. Trapping Activities. Sufficient trappers were on hand to adequately fill the quota as established, and several new applicants were accepted to replace those rejected as not desirable trappers on the basis of their work in 1946. The conditions after November 9 made it bad for trapping, and the take was held down on this account. Most of the units on the west side of the refuge were closed down around the 12 of November, due to the small catch. Better care of furs was obtained this year when the trappers were warned ~~that~~ prior to the season that all furs showing improper care would be rejected by the trapping inspector in making the divisions. At a meeting prior to the season all points of the program was presented to the trappers, so that there would be no doubts as to the way the trapping was to be undertaken. A check of each trapper in the field was made at least once, and in some cases twice. This tends to keep the trappers on their toes, and in three cases we settled questions as to unit boundaries to the satisfaction of all concerned.

E. Predaceous Birds, including Crows.

Two species of hawks are fairly common on the refuge with the rough-leg being most abundant, and the other represented by a few redshouldered hawks. The golden eagle reported last year has not been seen this period.

Crow concentrations were less this period than at any time of the year,

and at the end of the period only one concentration of about 500 birds existed here. The fall migration was smaller, and they did not stay as long as in former years.

F. Fish

There has been no change of note in the fish population on the refuge with the same species, ie. carp, bullheads, and northern pike being present in that order of abundance.

III. PHYSICAL DEVELOPMENT AND MAINTENANCE

A. Physical Development

All posted boundaries were inspected prior to the hunting season, with damaged signs replaced, as well as wooden posts where necessary. Several small parcels were added to the lands already under control, and these were properly posted.

In October the refuge patrolman occupied the residence on the former A. Feucht farm, (F-24), and farm buildings were taken over for refuge use. It is planned to have this site as permanent patrolman's headquarters for the refuge. The granary was fixed up for grain storage on the first floor and the overhead story used as a fur storage shed. The machine shed is used for equipment storage, with one end of it remodelled into a refuge workshop. It is not completely suitable, as the building itself is in poor condition, but will do until something of a more permanent nature can be provided.

The water craft consisting of an outboard boat, duck boat and canoe, were all brought into the shop after the marsh froze up, scraped, repaired, painted and stored away for the remainder of the winter.

During the quarter on November 15, two Caterpillar tractors, D-7 models, were received from war surplus, unloaded from the car, and stored at headquarters. This is the first of the construction equipment scheduled for delivery here to be used on the construction of the proposed dike.

B. Plantings.

2. Cultivated Crops. On the whole cultivated crops did very well. Corn especially was favored by the late fall allowing it to harden properly before it was necessary to harvest it. Buckwheat in some instances, however, did not do so well. On one unit where a portion of the Government share was harvested a yield of only 7 bushel to the acre was obtained. This particular case may be due to the low fertility of the land, but other areas of this crop yielded lower than was considered average yield.

Following are total acres of various crops left standing in the fields for wildlife usage:

Field Corn - 48.7 Acres

Barley - 20.9 Acres
Oats - 9.6 Acres
Wheat - 4.0 Acres
Buckwheat - 74.8 Acres
Wh. Oats-Barley - 10.8 Acres

Whenever possible the fields were left where human interference would be the least, in open situations, and near natural concentration points where geese and ducks normally rest. While the use this period was not large, it is expected that following spring migrations there will be little left of it.

All farming this year with the exception of three permits was done under cooperative agreement. On the whole it worked out very well for the first year, and it has become necessary to straighten some of the kinks out of the program that somehow crept in. One big change will be that any farmer wishing to put in a cash crop of peas, will be required to put in the refuge share of that acreage in grain or corn. Then following the peas if the permittee wishes to put in buckwheat then the refuge will also get its proper share of that crop. As worked this past year, the refuge share was taken out in buckwheat, and it was the short end of the stick in a few instances, as late planting of the buckwheat could mean a crop failure. The three permits for cash rental were on Units F-1, 14 & 15, said units being peat lands, and the third, F-8 a farm obtained after the start of the crop season.

IV. ECONOMIC USE OF THE REFUGE

A. Grazing and Farming. All grazing and farming unit permits terminated during the month of October, and no renewals will be made until in the spring. The only permits in this category outstanding at present are those for rental of farm buildings on Units F-2, 5, 8 and 28.

B. Wood Cutting. Only one permit for wood cutting had been issued this period. This permit is for the cutting and removing of willow and poplar firewood for domestic use.

V. FIELD INVESTIGATION

No activity under this heading this period.

VI. PUBLIC RELATIONS

A. Recreational Uses.

During the migration many persons drove out the Marsh Road to try to get a look at some of the geese, and other waterfowl. The numbers were not as plentiful as last year, especially as to the blue and snow geese who attracted many people in 1946. Some dip-netting for carp was attempted by a few fishermen, but was soon given up with no success. There are very few carp that remain on the refuge during the winter time, as the water is greatly reduced in oxygen content at that time, and the fish move down

into the State area, and up the E. Branch of the Rock River where there is more oxygen available.

After the freeze-up, practically every Sunday small parties of skaters used the Main Ditch in the vicinity of the Marsh Road bridge for skating.

B. Refuge Visitors.

October 10	R. O. Gustafson	Safety and equip. inspection
November 13	Charles Horner	Law Enforcement
November 13	J. C. Salyer	Discussion of Refuge Activities
December 18	W. V. Taylor	Conference on Road Relocation
	A. G. Huey	

C. Refuge Participation.

The film " Fighting Large Grass and Brush Fires" was shown to the following organizations during October: Waupun, Conservation Club, Natural Science Class, Waupun High School, Atwater Conservation Club, Atwater, Wis. In addition two talks were made on the Horicon Refuge before the Mayville Rotary Club, and the Beaver Dam Rotary Club.

F. Violations.

On the whole sportsmen cooperation in observing refuge boundaries was good, but despite this six cases were made during the period of hunting on the refuge. All six cases were prosecuted in Justice Court , two in Horicon and four in Beaver Dam, Wisconsin. Two cases in Horicon the defendants plead guilty and were fined \$10.00 and costs of \$5.50 each. The four cases held in Beaver Dam, the defendants plead guilty, and were fined \$10.00, and assessed costs of \$6.70 each. These cases were prosecuted with the approval of the Game Management Agent, and with the cooperation of the Dodge County game warden.

The Game Management Agent, Mr. Horner, has been very cooperative on all law enforcement problems referred to him, either for action or advice, and it is a pleasure to have such cooperation. The local county game warden has also been helpful in prosecuting and assisting in the cases made.

VII. OTHER ITEMS

a. Personnel.

On September 12, Mr. Lester H. Dundas left this refuge for assignment to the position as Refuge Manager at the Slade Refuge in North Dakota. On the same date the Clerk-Typist (Laborer-Patrolman) resigned his position here to accept employment with the Social Security Agency of the Federal Government.

B. Roads.

During the last two weeks in November the Marsh Road, formerly County Trunk "AW", was redesignated and is now State Highway 49. This in accordance with the action taken by the Governor in connection with the entire state highway system.

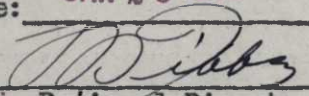
On December 18, Mr. W. V. Taylor, and Mr. A. G. Huey visited Waupun for a conference with County Highway Commissioners, and officials relative to the proposed relocation of Highway 49 which will be made necessary when the proposed flooding of the marsh takes place. It is proposed that the relocation lie along the Dodge-Fond du Lac County line, and at this conference certain technical details were discussed, as well as the part the Fish and Wildlife Service would play in it.

Respectfully submitted,

Donald V. Gray
Refuge Manager

Approved:

Date: JAN 23 1948


Acting Regional Director

3-1750
Form NR-1
(Nov. 1945)

WATERFOWL

Refuge Horicon Months of September to December 194 7

(1) Species Common Name	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total
	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Period
I. <u>Swans:</u> Whistling swan	6	10-9	6	10-9	6	10-9			6
II. <u>Geese:</u> Canada goose	1	9-18	2500	11-1	250	11-27			4000
Cackling goose									
Brant									
White-fronted goose									
Snow goose	35	10-24	600	10-28	13	10-31			1000
Blue goose	17	10-24	200	10-28	6	10-31			300
III. <u>Ducks:</u> Mallard			4000	11-13	6	11-26			6000
Black duck			2500	11-13	3	12-3			4000
Gadwall	1	10-12	60	11-12	3	11-24			100
Baldpate	7	9-8	1200	10-10	20	11-9			2000
Pintail			500	11-13	9	11-24			900
Green-winged teal			1000	10-28	10	11-3			1200
Blue-winged teal			2000	10-28	16	11-7			3000
Cinnamon teal									
Wood duck			1200	10-15	2	11-4			2400
Red head			70	11-2	3	11-9			100
Ring-necked duck									
Canvas-back									
Scaup									
Golden-eye									
Buffle-head									
Ruddy duck			20	10-3	5	10-26			30
Shoveller			36	10-17	2	11-4			100
IV. <u>Coot:</u>			1000	10-29	60	11-8			2100

(over)

SUMMARIES

Total Production:

Geese.....

Total waterfowl usage during period.....27236

Ducks.....

Peak waterfowl numbers.....16892

Coots.....

Areas used by concentrations.....Wheeler-Townline Area (ducks)

Ranka Island & Old Lake Bed (geese)

Principal nesting areas this season.....

Reported by.....Donald V. Gray

INSTRUCTIONS

- (1) Species: In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance.
- (2) First Seen: The first refuge record for the species during the season concerned in the reporting period, and the number seen. This column does not apply to resident species.
- (3) Peak Concentration: The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge record for the species during the season concerned in the reporting period.
- (5) Young Produced: Estimated number of young produced based on observations and actual counts on representative breeding areas. Brood counts should be made on two or more areas aggregating 10% of the breeding habitat. Estimates having no basis in fact should be omitted.
- (6) Total: Estimated total number of the species using the refuge during the period. This figure may or may not be more than that used for peak concentrations, depending upon the nature of the migrational movement.

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

3-1751

Form NR-1A
(Nov. 1945)MIGRATORY BIRDS
(other than waterfowl)

Refuge _____ Months of _____ to _____ 194 _____

(1) Species	(2) First Seen		(3) Peak Numbers		(4) Last Seen		(5) Production			(6) Total
Common Name	Number	Date	Number	Date	Number	Date	Number Colonies	Total # Nests	Total Young	Estimated Number
I. Water and Marsh Birds:										
Pied-billed Grebe					3	11-16				450
Western Grebe	1	10-6			1	10-7				1
Great Blue Heron					4	10-29				350
American Egret					4	9-24				25
Eastern Green Heron					1	9-18				100
Black Cr. Night Heron					7	11-2				800
King Rail					1	11-4				80
Virginia Rail					1	11-4				100
Sora Rail					1	11-3				250

II. Shorebirds, Gulls and

Terns:

Killdeer	30	10-23								600
Wilson Snipe	6	10-29								350
Greater Yellowlegs	3	10-26								100
Lesser Yellowlegs	6	10-24								100

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. Doves and Pigeons:					
Mourning dove			1	12-22	300
White-winged dove					
IV. Predaceous Birds:					
Golden eagle					
Duck hawk					
Horned owl					
Magpie					
Raven					
Crow					10,000
Am. rough-legged hawk	1	10-6			12
Short-eared owl					30
Reported by <u>Donald V. Gray</u>					

INSTRUCTIONS

- (1) Species: Use the correct names as found in the A.O.U. Checklist, 1931 Edition, and list group in A.O.U. order. Avoid general terms as "seagull", "tern", etc. In addition to the birds listed on form, other species occurring on refuge during the reporting period should be added in appropriate spaces. Special attention should be given to those species of local and National significance. Groups: I. Water and Marsh Birds (Gaviiformes to Ciconiiformes and Gruiformes)
 II. Shorebirds, Gulls and Terns (Charadriiformes)
 III. Doves and Pigeons (Columbiformes)
 IV. Predaceous Birds (Falconiformes, Strigiformes and predaceous Passeriformes)
- (2) First Seen: The first refuge record for the species for the season concerned.
- (3) Peak Numbers: The greatest number of the species present in a limited interval of time.
- (4) Last Seen: The last refuge record for the species during the season concerned.
- (5) Production: Estimated number of young produced based on observations and actual counts.
- (6) Total: Estimated total number of the species using the refuge during the period concerned.

3-1752
Form NR-2
(April 1946)

UPLAND GAME BIRDS

1613

Refuge Hickman Months of September to December, 1947

(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	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.
Pheasant	5000 acres	4		30% male 70% female	850	Winter concentration around cultivated crops left in fields.
Hungarian Partridge	1000 Acres			50-50	100	

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

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.

Refuge

Harcourt

Year 1947

(1) Species	(2) Density	(3) Young Produced	(4) Removals				(5) Losses			(6) Introductions		(7) Estimated Total Refuge Population as of Dec. 31	(8) Sex Ratio
Common Name	Cover types, total Acreage of Habitat	Number	Hunting	For Re- stocking	Sold	For Research	Predation	Disease	Winter Losses	Number	Source		Percentage
White-tailed Deer		10										28	25% male 75% female

INSTRUCTIONS

Form NR-3 - BIG GAME

- (1) SPECIES: Use correct common name; i.e., Mule deer, black-tailed deer, white-tailed deer. It is unnecessary to indicate sub-species such as northern or Louisiana white-tailed deer.
- (2) DENSITY: Applies particularly to those species considered in removal programs (public hunts, etc.) exclusive of fenced herds. 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 total number of young produced on refuge.
- (4) REMOVALS: Indicate total number in each category removed during the year.
- (5) LOSSES: On the basis of known records or reliable estimates indicate total losses in each category during the year.
- (6) INTRODUCTIONS: Indicate the number and refuge or agency from which stock was secured.
- (7) TOTAL REFUGE POPULATION: Give the estimated population of each species on the refuge as of December 31.
- (8) SEX RATION: Indicate the percentage of males and females of each species as determined from field observations or through removals.

ANALYSIS OF SHANE TRAPPING NOV. 1 TO 25, 1947

NAME	UNIT	TOTAL FURS TAKEN				GOVERNMENT SHARE				TRAPPER'S SHARE				SOLD TO	GROSS RETURNS
		NO.	RATS	MINK	COON	OTH.	RATS	MINK	COON	OTHER	RATS	MINK	COON	OTHER	
J. Van Saane-3816 Waupun, Wis.	18	145	8				73	4			72	4			Joe Cohen 72 rats 152.50 Oshkosh, Wis. 4 mink 110.00 Total 252.50
H. TerHorst -3828 Waupun, Wis.	23	68	4				34	2			34	2			34 Rats St. Corvitz 93.50 2 Mink Oshkosh, Wis. 66.00 Total 118.50
D. Weenink -3790 Waupun, Wis.	20	95	22			4 Poss	48	11			47	11		4 poss	
H.W. Neitzel -3826 Waupun, Wis.	21	126	8	2		1 Skin.	63	4	1		63	4		1 Skin.	
G. Pieper -3827 Burnett, Wis.	22	216	2	2			108	1	1		108	1	1		Joe Cohen 108 rats 280.80 Oshkosh, Wis. 1 Mink 30.00 1 Coon 1.00 Total 311.80
A. Thompson -3817 Waupun, Wis.	18A	20	2				10	1			10	1			H. Goldberg 10 Rats 25.00 Waupun, Wis. 1 Mink 25.00 Total 50.00
Vane TerHorst Esther " -3818 Waupun, Wis.	17	101	6				51	3			50	3			St. Corvitz 51 Rats 127.50 Oshkosh, Wis. 3 Mink 85.00 Total 212.50
Wm. Zimmerman-3815 Beaver Dam, Wis.	6	4		2			2				2	2			Alvin Tenkin 2 Rats 5.00 Beaver Dam, Wis. 2 Coon 2.00 Total 7.00
H. Lopez -3845 Menasha, Wis.	4	176	2				88	1			88	1			Max Corvitz 88 Rats 220.70 Oshkosh, Wis. 1 Mink 25.00 Total 245.70

NAME	UNIT NO.	TOTAL FURS TAKEN				GOVERNMENT SHARE				TRAPPER'S SHARE				SOLD TO	GROSS REVENUE
		RATS	MINK	COON	OTHER	RATS	MINK	COON	OTHER	RATS	MINK	COON	OTHER		
R&D Klemme -3794 Gump Kiel, Wis.	19	114	2	2	1 Sku 1 Badg	58	1	1		56	1	1	1 Sku. 1 Badg	?	56 Rate 153.00 1 Mink 30.00 Total 183.00
E. Lehner - 3820 Rte. 3, Mayville, Wis	10	289	4			145	2			144	2			B. Burkhardt Kekoskee, Wis.	144 Rate 210.50 2 Mink 55.00 Total 265.50
Al. Franke -3829 Mayville, Wis.	24	140	6			70	3			70	3			Burkhardt Sears Roebuck	58 Rate 123.50 1 Mink 30.00 12 Rate 32.00 Total 185.50
Klasinger-Hilbert Mayville, Wis.-3797	13	295	2			147	1			148	1			Burkhardt Kekoskee, Wis.	148 Rate 347.40 1 Mink 25.00 Total 372.40
Alex Feucht -3799 Mayville, Wis.	14	260	10			130	5			130	5			R. Rich, Milw. Burkhardt	130 Rate 320.00 3 Mink 90.00 Total 410.00
Alois Feucht 3800 Rte 3, Mayville	9	307				153				154				Joe Cohen Oshkosh, Wis.	154 Rate 351.00
Hints & Scala -3795 Mayville, Wis.	12	218	6			109	3			109	3			Joe Cohen Oshkosh, Wis.	109 Rate 257.05 1 Mink 25.00 Total 282.05
Vallmer, Collein & Collein -3822	15	464	7	1		222 227	4	1		237	3			Joe Cohen Oshkosh, Wis.	237 Rate 670.00 3 Mink 75.00 Total 745.00

NAME	UNIT	TOTAL FURS TAKEN				GOVERNMENT SHARE				TRAPPER'S SHARE				SOLD TO	GROSS REVENUE
		NO.	RATS	MINK	'COONOTHER	RATS	MINK	'COONOTHER	RATS	MINK	'COONOTHER				
S. Schaumburg-3792 Rte. 3, Mayville	8	112		1		56				56		1	Burkhardt Kekoskee, Wis.	56 Rats 134.00 1 Coon 1.40 Total 135.40	
A. Schaumburg-3791 Mayville, Wis.	11	37		1		43		1		44			Burkhardt Kekoskee, Wis.	44 Rats 110.00	
R. Howard -3789 Waupun, Wisconsin	3	134	2			67	1			67	1		Joe Cohen	67 Rats 107.50 1 Mink 30.00 Total 137.50	
Peterson-Moriarity Oshkosh, Wis. -3821	2	142	1			65	1			77			Max Corvits Oshkosh, Wis.	77 Rats 175.00	
Miller-McCall-3819 Waupun, Wis.	7	97	2	2		48	1	1		49	1	1	Joe Cohen Oshkosh, Wis.	49 Rats 98.50 1 Mink 25.00 1 Coon 1.50 Total 125.00	
E. Pieper - 3713 Burnett, Wis.	8	92	5	1		41	3	1		51	2		No report.		
E. Fischer - 3726 Mayville, Wis.	1	264	4			132	2			132	2		Joe Cohen Oshkosh, Wis.	132 Rats 363.00 2 Mink 55.00 418.00	
TOTALS	ALL	3966	105	14	2Sk. 4Poss 1 Bad	1968	54	7		1998	51	7	2Sk. 4Poss 1Bddg.		
		SPECIES			NUMBER SOLD					AVERAGE PRICE			TOTAL RETURN		
		Muskrat			1826					\$2.38			\$4,357.05		
		Mink			28					27.50			770.00		
		Raccoon			5					1.18			5.90		

Refuge _____ Year 194 _____

No diseases or parasitic conditions noted or reported

Botulism

Lead Poisoning or other Disease

Period of outbreak _____

Period of heaviest losses _____

Losses:

	Actual Count	Estimated
(a) Waterfowl	_____	_____
(b) Shorebirds	_____	_____
(c) Other	_____	_____

Number Hospitalized	No. Recovered	% Recovered
(a) Waterfowl	_____	_____
(b) Shorebirds	_____	_____
(c) Other	_____	_____

Areas affected (location and approximate acreage) _____

Water conditions (average depth of water in sickness areas, reflooding of exposed flats, etc.)

Condition of vegetation and invertebrate life _____

Remarks _____

Kind of disease _____

Species affected _____

Number Affected Species	Actual Count	Estimated
_____	_____	_____
_____	_____	_____
_____	_____	_____

Number Recovered _____

Number lost _____

Source of infection _____

Water conditions _____

Food conditions _____

Remarks _____

Year 1947

Species	Relative Abundance	Sport Fishing		Commercial Fishing		Restocking		Number removed for Restocking
		Man days Fishing	Number Taken	No. of Permits	Pounds Taken	Number Stocked	Area Stocked	
Northern Pike	Common							
Wall-eye Pike	Scarce							
Common Bullhead	Abundant							
Carp	Abundant							

REMARKS:

PLANTINGS
(Marsh - Aquatic - Upland)

Refuge Harlem National Wildlife Refuge Year 1947

Species	Location of Area Planted	Rate of Seeding or Planting	Amount Planted (Acres or Yards of Shoreline)	Amount & Nature of Propagules	Date of Planting	Survival	Cause of Loss	Remarks
Wild Rice (<i>Zizania aquatica</i>)	SE/NE 13-13-15 NW/SW 30-13-16	7200 clumps per acre	1/20 A.	360 whole plants	July 17 & 18	0	Eaten by muskrats	3 exp. plots
Mountain Ash (<i>Sorbus americana</i>)	SE/SE 7-13-16		1/10 A.	25-4 yr. plants	5-23-47	100%		2 cover patches
Red Cedar (<i>Juniperus virginiana</i>)	SE/SE 7-13-16 NW/SW 18-13-16 NE/NW 9-12-16	1200 per A.	1/2 A.	542 - 3-0 stock	5-23-47	70%	Some wash, some choked by weeds	Planted in 3 eroded cattle lanes.

TOTAL ACREAGE PLANTED:

Marsh and aquatic 1/20 A.
Hedgerows, cover patches .6 A.
Food strips, food patches _____
Forest plantings _____

CULTIVATED CROPS

Refuge.

Horicon

Year 1947

[illegible]

DIRECTIONS FOR PREPARING FORM NR-8
CULTIVATED CROPS

Cultivated Crops Report Form NR-8 should be prepared on a calendar-year basis for all crops harvested or utilized during the calendar year and submitted with the December 31 refuge report.

Permittee - List each permittee separately. If lands of the refuge are farmed by refuge personnel or hired labor, this should be indicated in the Permittee column.

Permit No. - List the number of the Special Use Permit issued to the individual.

Use or Location - The Unit No. or name specified in the Economic Use Plan should be listed in this column.

Crops Grown - A separate line of the form should be used for each crop grown by each permittee or by refuge personnel. This is important, since if each crop grown by each operator is not specifically enumerated, the report will be of no value for statistical purposes.

Average Yield per Acre - It is important that the average yield per acre of each crop grown by each operator should be shown.

Permittee's Share - Only the number of acres harvested or utilized by the permittee for his own benefit should be shown under the Acres column, and only the number of bushels of farm crops harvested by the permittee for himself should be shown under the Bushels Harvested column. It is requested that all crops harvested be reduced to bushels wherever possible, or, as in the case with the harvesting of seed such as that of sweet clover, alfalfa, brome grass, etc., the total harvested crop in pounds may be shown. Timothy, alfalfa, or other hay harvested by the permittee should be shown on Form NR-10 and should not be shown in the Permittee's Share column.

Government's Share or Return - Harvested - Show the number of bushels harvested for the Government and the acreage from which this share is harvested, both for grain raised by refuge personnel and by permittees. Unharvested - show the exact number of acres of crops allowed to remain unharvested as food and cover for wildlife. An estimate of the number of bushels of grain that is available for the wildlife in such unharvested crops should be shown in the Bushels column.

Compensatory Services, or Cash Revenue - Show other services received by the Government in cooperative farming activities, the number of acres of food strips planted for wildlife, the amount of wildlife crops not otherwise reported that are planted by cooperators for the Service, or the cultivation of wildlife plantations. If the permit is on a fee basis, the total cash revenue received by the Service.

CULTIVATED CROPS

Refuge.....Year 194.....

Permittee (If farmed by refugee personnel, so indicate)	Permit No.	Unit or Loca- tion	Crops Grown	Avg. Yield per Acre	Permittee's Share		Government's Share or Return				
					Share		Harvested		Unharvested		Compensatory Services, or Cash Revenue
					Acres	Bu. Har- vested	Acres	Bu.	Acres	Bu.	
Albert Gruhn	17552	F-6	Barley	50	4.0	200					
	17426	F-29	Peas	1791#	8.7	15571#					
			Buckwheat	10Bu					188.7	87	
			S. Corn	2.51	16.5	40T					
			F. Corn	18					4.0	76	
Wm. Vanderkin	18257	F-8	S. Beets	10T	9.0	90T					
			F. Corn	30Bu	12	396					
			Barley	30 "	15	450					
			Oats	35 "	18	630					
											\$270.00
John Yarooh	17554	F-9-10	Corn, F.	28 "					5.2	145	
			S. Corn	2T	7	14T					
			Buckwheat	8Ba							
			Barley	20	9.7	194	1.7	35	3.0	24	
			Oats	26	18.4	478	3.5	84	8.5	170	
			Rye	29	5.4	136			6.0	156	
			Peas	1000#	3.0	3000#					
Ed. Zuelke	17549	F-12	Peas	900#	5	4500#					
			Oats	40Bu	12	480					
			Corn	35 "					6.0	210	
			Barley	16.5			3.0	50			

[illegible]

DIRECTIONS FOR PREPARING FORM NR-8
CULTIVATED CROPS

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Average Yield per Acre - It is important that the average yield per acre of each crop grown by each operator should be shown.

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Government's Share or Return - Harvested - Show the number of bushels harvested for the Government and the acreage from which this share is harvested, both for grain raised by refuge personnel and by permittees. Unharvested - show the exact number of acres of crops allowed to remain unharvested as food and cover for wildlife. An estimate of the number of bushels of grain that is available for the wildlife in such unharvested crops should be shown in the Bushels column.

Compensatory Services, or Cash Revenue - Show other services received by the Government in cooperative farming activities, the number of acres of food strips planted for wildlife, the amount of wildlife crops not otherwise reported that are planted by cooperators for the Service, or the cultivation of wildlife plantations. If the permit is on a fee basis, the total cash revenue received by the Service.

Refuge.....Year 194.....

450[illegible]

DIRECTIONS FOR PREPARING FORM NR-8
CULTIVATED CROPS

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3-1758
Form NR-8
(April 1946)

CULTIVATED CROPS

Refuge.....Year 194.....

Permittee (If farmed by refugee personnel, so indicate)	Permit No.	Unit or Loca- tion	Crops Grown	Avg. Yield per Acre	Permittee's Share		Government's Share or Return				
					Acres	Bu. Har- vested	Harvested		Unharvested		Compensatory Services, or Cash Revenue
							Acres	Bu.	Acres	Bu.	
Harry Milben	17578	F-22	Oats	41 Bu	11	451	3	123			
			Corn	40 "	6	240			4	160	
			Peas	2200#	7	14000#					
			Barley	23 Bu	2	46	3	69			
			Buckwheat	13					8.3	108	
Alois Weiss	18092	F-23	F. Corn	30	4.8	144	1.5	45	1.5	45	
			Oats-Wht-Bar	28					4.0	112	
			Buckwheat	13					8.1	105	
			Rye	30	3.0	90					
			Barley	19	10	190					
A Fought	17560 & 17563	F-19&24	Barley	20	4.0	80	2.0	40	7.4	148	
			Oats	50	18.0	900					
			F. Corn	50	17.0	850			4.0	200	
			W. Wheat	20	.5	10	8.5	70			
			Peas	2000#	15.0	34,500#					
			Buckwheat	14	2.0	28	12.0	169	4.0	56	
Schaumburg & Ellofuss	17559	F-25	Peas	2480#	24.0	59520#					
			Oats	23 Bu	10.5	242	11.0	253	Govt. share sold for \$258.18		

[illegible]

DIRECTIONS FOR PREPARING FORM NR-8
CULTIVATED CROPS

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Government's Share or Return - Harvested - Show the number of bushels harvested for the Government and the acreage from which this share is harvested, both for grain raised by refuge personnel and by permittees. Unharvested - show the exact number of acres of crops allowed to remain unharvested as food and cover for wildlife. An estimate of the number of bushels of grain that is available for the wildlife in such unharvested crops should be shown in the Bushels column.

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CULTIVATED CROPS

Refuge.....Year 194.....

Permittee (If farmed by refugee personnel, so indicate)	Permit No.	Unit or Loca- tion	Crops Grown	Avg. Yield per Acre	Permittee's Share		Government's Share or Return				
					Acres	Bu. Har- vested	Harvested		Unharvested		Compensatory Services, or Cash Revenue
							Acres	Bu.	Acres	Bu.	
George Focht	18071	F-26	Oats-Wheat Barley Corn	30 21 50	13 2 9	390 42 490	2 .5	60 25	4 2 4	120 42 200	
Alfred Wagoner	17358	F-27	F. Corn	38	10	380			7	266	
Henry Holbach	17557	F-28	F. Corn Peas Oats-Barley Buckwheat	50 2300# 45 18	29 20 2 1	1450 14600# 90 18			2	100	
							7.0 12.0	315 216		90	

CONTINUED SHEET
DIRECTIONS FOR PREPARING FORM MB-8

[illegible]

DIRECTIONS FOR PREPARING FORM NR-8
CULTIVATED CROPS

Cultivated Crops Report Form NR-8 should be prepared on a calendar-year basis for all crops harvested or utilized during the calendar year and submitted with the December 31 refuge report.

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Crops Grown - A separate line of the form should be used for each crop grown by each permittee or by refuge personnel. This is important, since if each crop grown by each operator is not specifically enumerated, the report will be of no value for statistical purposes.

Average Yield per Acre - It is important that the average yield per acre of each crop grown by each operator should be shown.

Permittee's Share - Only the number of acres harvested or utilized by the permittee for his own benefit should be shown under the Acres column, and only the number of bushels of farm crops harvested by the permittee for himself should be shown under the Bushels Harvested column. It is requested that all crops harvested be reduced to bushels wherever possible, or, as in the case with the harvesting of seed such as that of sweet clover, alfalfa, brome grass, etc., the total harvested crop in pounds may be shown. Timothy, alfalfa, or other hay harvested by the permittee should be shown on Form NR-10 and should not be shown in the Permittee's Share column.

Government's Share or Return - Harvested - Show the number of bushels harvested for the Government and the acreage from which this share is harvested, both for grain raised by refuge personnel and by permittees. Unharvested - show the exact number of acres of crops allowed to remain unharvested as food and cover for wildlife. An estimate of the number of bushels of grain that is available for the wildlife in such unharvested crops should be shown in the Bushels column.

Compensatory Services, or Cash Revenue - Show other services received by the Government in cooperative farming activities, the number of acres of food strips planted for wildlife, the amount of wildlife crops not otherwise reported that are planted by cooperators for the Service, or the cultivation of wildlife plantations. If the permit is on a fee basis, the total cash revenue received by the Service.

SUMMARY OF CROPS GROWN - 1947

CROP	ACREAGE	PERMITTEE'S SHARE		HARVESTED		GOVERNMENT'S SHARE		TOTAL REVENUE
		ACRES	BUSHELS	ACRES	BU.	ACRES	BU.	
Oats	187.8	110.7	3905	17.5	460	9.6	264	
Barley	93.2	62.6	1549	9.7	194	20.9	438	
Buckwheat	149.2	4.0	56	55.4	679	89.8	1047	
Winter Wheat	11.0	.8	16	7.0	140	4.0	80	
Sugar Beets	24.4	24.4	207.87					
Oats-Wh.-Bar.Mix.	49.1	20.5	660	18.8	620	9.8	268	
Peas	205.3	205.3	414.5M					
Field Corn	169.7	117.0	4832	2.0	70	50.7	1792	\$1118.18
Sweet Corn	108.9	108.9	191.17					
Potatoes	10	10	3000	110.4	463	184.8	3889	
Cucumbers	40	40	50T					
Onions	75	75	25000					
Rye	8.4	8.4	226					
		787.6	39244					

3-1570
NR-8a

REFUGE GRAIN REPORT

Refuge Horicon

Months of September thru December 194 7

(1) VARIETY	(2) ON HAND BEGINNING OF PERIOD	(3) RECEIVED DURING PERIOD	(4) TOTAL	(5) GRAIN DISPOSED OF				(6) ON HAND END OF PERIOD	(7) PROPOSED USE		
				TRANS- FERRED	SEEDED	FED	TOTAL		SEED	FEED	SURP.
Winter Wheat	140		140					140		140	
Barley	185	9	194					194		194	
Oats	205	38	243					243			243
Oats-wheat	777*										
Oats-barley						67		620		333	287
Oats-wheat-barley											
Buckwheat		679	679					679		400	279
* This figure should have read 687 bu. as a mistake was made in division with permittee on F-28, where he was to get 90 bushels of this mixture, and he was to leave the refuge 2 acres of standing corn. The original division overlooked this agreement, and during the period it was adjusted.											

(8) Indicate shipping or collection points Horicon Refuge, Waupun or Mayville, Wisconsin

(9) Grain is stored at Refuge granaries

(10) Remarks

3-1570
NR-8a

NR-8a REFUGE GRAIN REPORT

This report should cover all grain on hand, received, or disposed of, during the period covered by this narrative report.

Report all grain in bushels. For the purpose of this report the following approximate weights of grain shall be considered equivalent to a bushel: Corn (shelled)--55 lbs., Corn (ear)--70 lbs., Wheat--60 lbs., Barley--50 lbs., Rye--55 lbs., Oats--30 lbs., Soy Beans--60 lbs., Millet--50 lbs., Cowpeas--60 lbs., and Mixed--50 lbs. In computing volume of granaries, multiply the cubic contents (cu. ft.) by 0.8 bushels.

- (1) List each type of grain separately: Corn, wheat, proso millet, etc. Include only domestic grains; aquatic and other seeds will be listed on NR-9.
- (3) Report all grain received during period from all sources, such as transfer, share-cropping, or harvest from food patches.
- (4) A total of Columns 2 and 3.
- (6) Column 4 less Column 5.
- (7) This is a proposed breakdown by varieties of grain listed in Column 6.
- (8) Nearest railroad station for shipping and receiving.
- (9) Where stored on refuge: "Headquarters grainary", etc.
- (10) Indicate here the source of grain shipped in, destination of grain transferred, data on condition of grain, unusual uses proposed.

3-1759
Form NR-9

COLLECTIONS AND RECEIPTS OF PLANTING STOCK
(Seeds, rootstocks, trees, shrubs)

Refuge.....Horicon National Wildlife Refuge..... Year 1947

Species	Collections				Receipts		Total Amounts on Hand	Amount Surplus
	Amount	Date or Period or Collection	Method	Unit Cost	Amount	Source		
Wild Rice (Zizania aquatica)	360 clumps	July 17 & 18	Dug by hand	\$0.03			0	0
Mountain Ash (Sorbus americana)					25	Wis. Cons. Dept. Horicon, Wis.	0	0
Red Cedar (Juniperus virginiana)					542	"	0	0

HAYING AND GRAZING

Refuge Horicon National Wildlife RefugeYear 1947

Permittee	Permit No.	Unit or Location	Actual Acreage Utilized	Animal Use Months	Tons of Hay Harvested	Period of Use From - To		Rate	Total Income	Remarks
James Drury	17565	G-4	33	60		5-15	10-15	0.80	\$ 28.00	
Harry Hilbes	17431	F-22	5		5	8-1	9-15	1.00	5.00	
Harry Hilbes	17421	FG-22	90	140		5-15	10-15	0.80	112.00	
Alois Feucht	13340	FG-24, (1-10)	90	175		5-15	10-15	0.80	140.00	
George Feucht	18047	G-14	24	40		5-15	10-15	0.80	32.00	
Harry Holbach	18066	FG-28	35	100		5-15	10-15	0.80	80.00	
Harry Holbach	17427	F-28	14		14	8-1	9-15	1.00	14.00	
Harry Holbach	17439	F-28	14		12	9-1	9-30	1.00	12.00	
Herbert Hals	18090	FG-13	60	90		5-15	10-15	0.80	72.00	
Lester Jace	13900	G-9	20	80		5-15	10-15	0.80	40.00	
Alvin Kehmeyer	18077	G-8	18	55		5-15	10-15	0.80	44.00	
James Krenner	17423	G-1	22	44		5-15	10-15	0.80	35.20	
Arnold Lushko	13339	G-15	10	44		6-15	10-15	0.80	35.20	
Harold Meitsel	18044	G-3	70	110		5-15	10-15	0.80	88.00	
Herbert Meitsel	17424	FG-2	75	95		5-15	10-15	0.80	86.00	
Herbert Meitsel	19401	F-2	10		20	9-1	10-15	1.00	10.00	
Oliver Penschay	17428	F-7	17		16.5	8-1	9-15	1.00	16.50	
Oliver Penschay	17352	FG-7	54	80		5-15	10-15	0.80	64.00	
Arnold Schaumburg	17566	G-13	35	70		5-15	10-15	0.80	56.00	
Ruben Sparger	18258	G-5	97	200		5-15	10-15	0.80	160.00	
Ruben Sparger	17432	G-2	60	72		8-1	10-15	0.80	57.60	
William Vandertin	18257	FG-8	72	125		5-15	10-15	0.80	100.00	
Alois Wase	18091	FG-23	68	75		5-15	10-15	0.80	60.00	
Alvin Wiese	17422	G-7	40	56		6-15	10-15	0.80	44.80	
John Yarosh	17436	F-2410	17		17	8-1	9-15	1.00	17.00	
John Yarosh	18076	FG-9	140	100		5-15	10-15	0.80	80.00	
Ed Zuelke	13338	FG-12	113	90		5-15	10-15	0.80	72.00	

HAYING AND GRAZING

Refuge Horicon National Wildlife Refuge Year 1947Page 2Alfalfa, clover, timothy mixtures and combinations.

Permittee	Permit No.	Unit or Location	Actual Acreage Utilized	Animal Use Months	Tons of Hay Harvested	Period of Use From - To		Rate	Total Income	Remarks
Henry Bilbes	17431	F-22	10		22	8-1	9-15	5.00	50.00	
Alois Faurht	17438	F-24	12		30	8-1	9-15	5.00	60.00	
Alvin Kehringer	17437	F-20	5		8	8-1	9-15	5.00	25.00	
Harold Neitsel	17429	F-4	1.5		3	8-1	9-15	5.00	7.50	
Herbert Neitsel	17401	F-2	1		1	9-1	10-15	3.50	3.50	
Ernst Bleifuss	17434	F-25	10		16	8-1	9-15	5.00	50.00	
Lokise Schmidt	17425	F-16	2		3	7-1	7-15	3.50	7.00	
William Vanderkin	17430	F-8	10.5		21	8-1	9-15	5.00	52.50	
Alois Wass	17435	F-23	10		19	8-1	9-15	5.00	50.00	
John Yaroeh	17436	F-9&10	18		32	8-1	9-15	3.50	63.00	

Totals:

Acreage grazed 1150Animal use months 1571Total income Grazing \$1506.28Marsh - 75Marsh - 74.5Marsh - 74.50Acreage cut for hay 255-80Tons of hay cut 255Total income Haymaking \$268.50

TIMBER REMOVAL

Refuge Horicon National Wildlife RefugeYear 1947

Permittee	Permit No.	Unit or Location	Acreage	No. of Units Expressed in B.F., ties, etc.	Rate of Charge	Total Income	Reservations and/or Diameter Limits	Species Cut
Peter Fought	13337	W-1000 Sec. 32-13-16	20	50 cords	.10/A.	2.00	none	Willow & Aspen
Peter Fought	19405	S-1000 Sec. 29-13-16	20	50 cords	.10/A	2.00	none	Willow & Aspen
Alois Neas	13333	E-1000 Sec. 20-13-16	20	50 cords	.10/A	2.00	none	Willow & Aspen
Harry Kilbee	17576	P-22	3	15 cords	2.00/E.	30.00	none	Cottonwood (dead)

Total acreage cut over 63Total income \$36.00

No. of units removed B. F. _____

Method of slash disposal ScatteredCords 165

Ties _____

Department of the Interior
Bureau of Land Management

Section of Land Management

Office of the Regional Director



Section	Subsection	Tract	Acres	Original Owner	Acquired By	Acquired Date	Remarks
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
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10	10	10	10	10	10	10	10
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97	97	97	97	97	97	97	97
98	98	98	98	98	98	98	98
99	99	99	99	99	99	99	99
100	100	100	100	100	100	100	100

Section of Land Management

Office of the Regional Director

Service