ROUTING SLIP BRANCH OF WILDLIFE REFUGES DATE: _____ 195__

MR. SALYER _____

MR. KRUMMES _____

~~MR. DUMONT~~ _____

~~MISS HAUM~~ _____

SECTION OF HABITAT IMPROVEMENT:

~~MR. GRIFFITH~~ REG

~~DR. BOURN~~ _____

SECTION OF OPERATIONS:

~~MR. BALL~~ _____

~~MR. REGAN~~ _____

~~DR. MORLEY~~ _____

SECTION OF LAND MANAGEMENT:

~~MR. ACKERKNECHT~~ _____

_____

STENOGRAPHERS:

MEJ 4-6-51 _____

_____ _____

_____ _____

NARATIVE REPORT

REFUGE: NECEDAH

PERIOD: SEPT - DEC., 1950

Necedah National Wildlife Refuge
Necedah, Wisconsin

PERSONNEL

Frank R. Martin ---------- Refuge Manager
Vern E. Rudolph ---------- Clerk-Typist
Fred T. Bennett ---------- Maint. Man (Equip.)

TEMPORARY

Ellsworth R. Hodge ----------Dragline Operator
William B. Edgerton ----------Oiler
Robert G. Birkholz ----------Operator General
Arthur B. Jamieson ----------Constr. & Maint. Foreman
Joe Malec, Jr. ----------Laborer
William R. Zak ----------Laborer
Alfred W. Ersepke ----------Laborer
Matthew Jordan ----------Laborer
Stephen Keyes ----------Laborer
Louis Nowicki ----------Laborer
Harold Hanson ----------Laborer
Erwin Felbinger ----------Laborer
Lawrence Becker ----------Laborer

Table of Contents

Necedah National Wildlife Refuge

Narrative Report

September, October, November, December

- 1950 -

I GENERAL

A. Weather Conditions

1950		Precipitation		Max. Temp.	Min. Temp.
September		.91		83	23
October		.87		84	28
November		.34		78	-11
December		3.90		38	-23
	Total	6.02	Extremes	84	-23
1949					
September		.97		81	18
October		.90		80	20
November		.65		71	4
December		.35		55	-21
	Total	2.87	Extremes	81	-21
1948	Total	8.02	Extremes	93	-16
1947	Total	11.69	Extremes	88	-17
1946	Total	13.20	Extremes	90	-19

The above weather data were furnished by the U. S. Government Weather Station at Mather, Wisconsin, which is located about four miles west of the Necedah Refuge.

More than twice as much precipitation occurred as in the same period in 1949. An early frost in the previous period (August 20) browned up the vegetation on the refuge and even though a fair amount of rain fell during the period, warm winds kept the area thoroughly dried out and the fire danger was very high until the first snow fell on November 22.

B. Water Conditions

Sufficient water was available throughout the period to maintain the pool levels as desired. Although no water was spilled from the newly constructed Sprague-Mather pool, the incoming water about equalled the loss by evaporation and the pool was maintained at a level that saturated the ground.

C. Fires

In view of the hazardous fuel conditions during the period, it was miraculous that no forest fires occurred on the refuge. On November 21 a fire broke out on the state land just south of the refuge. With some help from the refuge, the local ranger and his crew had the fire under control in about two hours.

II WILDLIFE

A. Migratory Birds

1. Populations and Behavior

In contrast to many other waterfowl areas in the midwest, the Necedah Refuge played host to more waterfowl than in 1949. The peak in Canada geese numbers reached 5,000 during the period as compared to a top of 3,500 in 1949. Blue and snow geese reached a high of 400 in 1949, whereas the peak during the 1950 migration reached 1400 for these birds.

The geese did not fly out to feed in nearby rye and corn fields as they did in 1949. The estimated kill was about 25 along the south boundary of the refuge, as compared to the estimated kill of 100 during the previous fall. Although the corn and rye crops outside the refuge were normal, the aquatic foods plus the flooded millet on the refuge apparently kept the birds on the refuge.

The pintail flight was comparatively heavy during the period with the peak of 800 reached on October 19. Blue-winged teal also showed an increase over 1949 and reached their peak in numbers (1000) on September 30. The teal came into the refuge with several hundred coots and the number of coots built up until 1500 were present on October 2. By October 18 the coots reached a peak of 2000. This was the last date that any coots were observed. The majority of the teal moved out with the coots on or shortly after October 18. The mallards and black ducks showed a reduction in numbers over 1949. Total mallard numbers for the period reached 5,000 as compared with 7,000 in 1949. Black duck numbers dropped from about 600 to about 400 in 1950.

2. Food and Cover

The pintails, teal, mallards and black ducks used the shallows

of Rynearson One and the portions of Rynearson Two where the flooded millet supplied ideal feeding conditions. Both geese and ducks used this millet seeding until the freeze-up on November 10. A flock of 5,000 Canada geese stayed on the ice of pool No. 1 for ten days. They departed for the south during the third day of the deer season and on that day they did a considerable amount of flying in and out of the refuge. This occurred during the waterfowl season but there were no hunters present to take advantage of the best shooting day of the year.

3. & 4. Botulism and Disease

None observed

B. Upland Game Birds

1. Populations and Behavior

Ruffed grouse and sharp-tailed grouse were again numerous during this period. They did not show any great increase and apparently their numbers are leveling off at the top of the "cycle", which has been the prediction of game ornithologists during the past few years. Neither of these game birds are hunted on the refuge, although hunting does take place along the refuge boundaries at almost all points. The State of Wisconsin opened the season on Sharp-tailed grouse for fourteen days (September 23 to October 6). This was the first season in recent years and success was fair in the vicinity of the refuge. The refuge is located in an area that, at one time, was one of the leading sharp-tail areas in the United States. Much of our food patch work, farming, clearing and proposed buring is being handled to favor these birds.

The ruffed grouse season of 51 days (September 23 to November 12) was the longest "pat" season Wisconsin has enjoyed for many years. Success was good along the refuge boundaries but did not prove better than in 1949.

No pheasants were observed during the period although several were seen near the boundaries on occasion.

Bobwhite quail apparently increased somewhat over last year as several coveys were seen at different points on the refuge. It is expected that they will suffer considerably during the present winter as the snow depth is well over two feet at the time of this writing.

The woodcock flight was good along the east boundary of the refuge where alder and aspen thickets provide good habitat. The Yellow River bottoms just to the east of this area provide some of the best woodcock shooting in the midwest. There have been relatively few woodcock hunters in this area during the past few seasons.

C. Big Game Animals

1. Populations and Behavior

The kill of 580 deer on the refuge in 1949 reduced our herd considerably and browse conditions are expected to improve in the next few years. Deer are still numerous in the southern one-third of the refuge where the rather large closed area attracted large numbers of deer during the open seasons of 1949 and 1950. Some over browsing and perhaps some starvation can be expected if snow conditions change for the worse during the present winter. At the time of this writing there is more than two feet of snow and the crucial period for the deer herd is still more than a month away.

2. Food and Cover

An excellent acorn crop, as in 1949, may help considerably to bring the deer thru the period of deep snow. A good mast crop takes a great deal of pressure off the browse species, as the deer will paw through more than two feet of light snow to get at the acorns. Usually, however, the formation of a crust on the snow along in January sometime makes it necessary for the deer to revert to browse until the spring breakup. There has been some pawing for marsh grasses along the boundaries of Rynearson one since the end of the year and it is likely that this is a sign that pawing for acorns is becoming difficult. It appears that we will enter the critical period much earlier than usual. The State has offered to place feeding stations on the refuge to take care of the deer during the next two months. We refused this food in view of the fact that we do not wish to adopt nor endorse any policy that is not consistent with good wildlife management. Men connected with deer management for the State of Wisconsin do not believe in the winter feeding of deer but an insistent public has forced them to spend certain funds each year for the purchase of high quality hay for winter feeding.

D. Fur Animals, Predators and other Mammals

Due to the low numbers of muskrats and mink, we did not have a trapping season this fall. Muskrats appeared to be about as numerous as last year and it was felt that one closed season would allow them to recuperate somewhat. Weasels, skunk, raccoon and badgers were as numerous as ever but there was little demand to trap them.

A Fur Management Plan was drawn up during the period and approved. Through this plan we will be able to manage our fur resources on the refuge much more efficiently.

Although the beaver census work was not started during this period, we believe that they have increased in number. They are at least as numerous as during the early part of 1950 and plans are being made for a 1951 season in March and April.

Coyotes are still present on the refuge. On November 12 a coyote was sighted on the ice of Rynearson One. The animal was feeding and the scene was investigated to find out if a crippled goose had been caught. A flock of 5,000 Canada geese were resting on the ice about 300 yards from the feeding animal. It was found that coyotes had killed a deer that had fallen down on the smooth snow-covered ice. From the tracks present it appeared that three animals had been in on the kill. The deer was a large one although its sex could not be determined. Several coyotes plus five bald eagles had been feeding on the carcass. The coyote seen, ran off with the head as the scene of the crime was approached. Nothing remained but the hide, feet, backbone and a few ribs.

Red and gray foxes are numerous on the refuge as indicated by their tracks along the township roads of the refuge. There were no requests for permits to trap foxes. Although there is a $5.00 bounty on adult foxes, the value of the fur is very low.

E. Predaceous Birds

Bald eagles were present during the entire period with the exception of the last week in December. They fed mainly on deer offal left by hunters. They spent much time about the flowages and among the ducks and geese. Their presence often flushed the geese and ducks but they were never observed to pursue waterfowl. On one occasion a bald eagle was observed making attempts to catch something (probably a fish) in the shallow water of No. 2 pool.

Snowy owls were not seen or reported during the period. They were seen occasionally during the same period last year.

Great horned owls were not seen or reported during the period.

Rough-legged hawks, usually wintering here in large numbers have not been seen frequently this year. Heavy snows may have forced these mousers farther south.

III. REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development

1. Sprague-Mather Flowage Construction

Work on the new 3,000 acre Sprague-Mather flowage continued throughout the period. The deep fluffy snow kept the ground thawed out even after weeks of sub-zero temperatures and the dragline worked continually except for a period of about two weeks when the operator was sick.

A total of 3,750 lineal feet of dike was constructed. This involved the placing of 33,480 cubic yards of fill. Other work completed on this project was the filling of all low places in the dike west of the Goose pool structure. This was accomplished with the D-7 tractor and scraper. This western portion of the dike can now be finished in the spring months when the tractor will not be able to work on low areas.

A cement bridge with four stoplog bays was constructed on the Wood County line road at the northern end of the refuge. Through this bridge will flow a large amount of water needed to maintain levels in the new flowage.

Stop logs were made for the Remington bridge, Goose pool structure and Dam No. 11.

2. Other work accomplished

A trip was made to the Rice Lake Refuge in Minnesota for a truck load of structural lumber.

The Clerk's residence and garage was painted.

A Kohler A.C. light plant was installed in the Northwest dragline to allow night work.

One-half of the cement floor was poured in the Equipment building at the Secondary headquarters.

A trip was made to the Horicon Refuge for a reel of 5/8" cable and to deliver a steel cutter.

A 12 x 16' oil house was constructed at headquarters for the storage of oils and greases.

Seven miles of fence line was brushed out and the fence posts placed along the east boundary, of the refuge. This section of the refuge had never been fenced.

Timber was cruised on a new unit and the proposed cutting plan submitted for approval. Pulpwood was measured and cutting methods checked periodically on four pulpwood permits during the period.

A trip was made to the Nagle-Hart plant at Madison, Wisconsin to pick up tractor parts and get magneto repaired.

The closed area for the bow season on deer was posted in September and a larger area in November for the gun season.

The snow plow was installed on a dump truck and roads were plowed periodically as needed.

Plowed two old fields and sowed rye and blue grass on a total of 15 acres.

Plowed and disced fire break about Secondary headquarters.

B. Plantings

1. Trees and shrubs - None

2. Other plantings

One-hundred pounds of wild rice was obtained from the Rice Lake Refuge during the period but it was not planted during the fall months as is the usual procedure with this aquatic. It was submerged in six feet of water to be held for spring planting. The spring planting made last year was very successful.

IV. ECONOMIC USE OF THE REFUGE

A. Grazing

Three grazing permits were in force during the period covering an area of 540 acres and involving 236 AUM's.

B. Haying

Three haying permits were in effect during the period resulting in the sale of 24 tons of wild hay at .50¢ per ton.

C. Fur Harvest

No trapping took place during the period.

D. Timber Removal

Five timber permits were active during this quarter.

V. FIELD INVESTIGATION OR APPLIED RESEARCH

None

VI. PUBLIC RELATIONS

A. Recreational Uses

Bow hunters and gun hunters used the refuge to about the same extent as in 1949.

During the waterfowl season hunters and sight-seers flocked to the refuge to see the concentrations of waterfowl near the headquarters buildings.

Rudy, the tame fawn held here during most of the last period was released to the State, who turned him over to a Mauston, Wisconsin man who has a game farm permit. Visitors continued to come to the refuge to see this tame deer up until early October, when he was taken away.

B. Refuge Visitors

NAME	TITLE	DATE	PURPOSE
Wm. Hopkins	Former Manager	9-6-50	Visit
Ben Little	Wis. Game Warden	9-8-50	Cooperation
Lester Dundas	Mgr. Rice Lake	9-13-50	Visit
Forest Carpenter	Ass't Ref. Sup.	9-22-50	Inspection
Mr. Smith	Seney Refuge	10-3-50	For equipment
Ben Little	Wis. Game Warden	10-4-50	Cooperation
Alex Hines	Wis. Game Warden	10-4-50	Cooperation
J. R. Wright	Engineering Sec.	10-4-50	Dike Construction
R. Johnson	Engineering Sec.	10-4-50	Dike Construction
Bill Luehring	Horicon Refuge	10-5-50	For barb wire
Harry Stiles	Horicon Refuge	10-5-50	For barb wire
Mr. Dougall	Engineering Sec.	10-5-50	Dike Inspection
Ben Little	Wis. Game Warden	10-9-50	Cooperation
Alex Hines	Wis. Game Warden	10-9-50	Cooperation
Wayne Truax	Wis. Horicon Marsh	10-10-50	Mutual problems
Jim Churchill	Local Ranger	10-10-50	Mutual problems
Stanley Pliss	Wis Game Mgmt.	10-18-50	Waterfowl problems
Stanley DeBoer	Wis Game Mgmt.	10-18-50	Mgmt. problems
Kendall H.S. Students, about 35		10-18-50	Tour of refuge
Clarence Searles	Sportsman, Wis Rap.	10-20-50	Waterfowl count
Ben Little	Wis. Game Warden	10-25-50	Cooperation
Stanley Pliss	Game Mgmt - Wis.	10-26-50	Deer problems
Kendall School Students, about 35		10-26-50	Tour of refuge
Stanley Pliss	Game Mgmt - Wis.	11-3-50	Law Enforcement
F. C. Gillett	Reg. Ref. Sup.	11-14-50	Inspection
Otis Bersing	Game Mgmt. Wis.	11-15-50	Deer season
Stanley Pliss	Game Mgmt. Wis.	12-4-50	Deer track count
J. R.Wright	Engineering Sec.	12-5-50	Dike Construction
Mr. Richey	Engineering Sec.	12-5-50	Dike Construction
Jim Churchill	Wis. Game Warden	12-20-50	Cooperation
Ben Little	Wis. Game Warden	12-20-50	Cooperation

C. Hunting

The bow season on white-tailed deer took place during the period September 23 to November 6, inclusive and brought to the refuge about the same hunting pressure that we experienced in 1949. This pressure was light. The refuge deer herd is now low enough so that the bow hunters do not get as much shooting as in the past. The average bow hunter has to get a lot of shooting to get an arrow into a deer, and this fact has led many of the Robin Hoods to the northern counties where the deer are more numerous. Figures on the bow kill are always late in arriving here as many reports from the checking stations (maintained by the state) do not arrive on schedule. It is thought that the kill was lower than in 1949 when 18 deer were killed. A check with the Necedah Ranger station revealed that hunters reported only three deer killed on the refuge. Those reported at the Babcock and Meadow Valley stations will undoubtedly raise these figures considerably.

The gun season on deer occurred during the period November 18 to November 24, inclusive. Data from the three checking stations manned by State and refuge personnel revealed that 248 deer were taken. Of these, 128 were bucks and 120 does. One deer of either sex and any age could be taken during the season. Wisconsin as a whole had a heavy deer kill, but the central Wisconsin counties, having received heavy pressure during the 1949 season, did not have a heavy kill this season. As shown in the table on the next page, the hunting success ratio on the refuge dropped from 20.2 per cent in 1949 to 7.8 per cent in 1950.

Deer were very numerous in the closed area shortly after the season opened and they remained there long after the season and apparently are still concentrated in the area that was closed to hunting. In 1951 the boundaries of the open and closed area will be shifted to harvest a good portion of the deer in the area that has been closed for many years.

As in 1949, three checking stations were set up to get data during the hunting season. The state manned two of these stations and refuge personnel manned one. Data acquired were used by the state to determine an estimate on the deer kill. The same method has been used each year and constitutes the basis for the table on the next page.

Reactions to the "any deer" season were many and varied. There will be strong pleas for a closed season next fall. There is some talk of a pronghorn season for 1951. About the only thing that everyone can agree upon is, that there were fewer dead deer left in the woods after the restrictions were relaxed.

The refuge can stand about any kind of season that the sportsmen and the Conservation Commission can dream up. By merely shifting the boundaries of our open and closed areas, we can regulate our kill and the pressure on our deer range.

Necedah Refuge Deer Kill Estimates - Compiled by Wisconsin Conservation Department

Year	Date of Season	Bag Limit	No. Open Sections	No. Closed Sections	Kill	Bucks	Does	Number of Hunters	Success Ratio
1946	Nov. 23-Dec. 1	One Antlerless Deer	49.64	12.41	1,637			2,226	75.0%
1947	Nov. 22-Nov. 30	One Forked Horn Buck			500	500			
1947	Dec.6-Dec.14	One Antlerless Deer	53.80	8.25	924			4,116	37.0%
1948	Nov. 20-Nov. 28	One Forked Horn Buck	53.80	8.25	100			3,340	2.6%
1949	Nov. 19-Nov.23	One Antlerless Deer except bucks with forks not exceeding 2 inches	35.80	26.25	580	183	397	2,837	20.2%
1950	Nov. 18-Nov. 24	One deer, either sex and any age	36.00	26.05	248	128	120	3,068	7.8%
					3,989				

D. Fishing None this period

E. Violations

On October 25, 1950 an employee of the Wisconsin Conservation Department's enforcement division was apprehended while hunting ducks on the refuge. He was accompanied by two friends. The case was turned over to the State Warden, who in turn placed the case in the hands of his superior. At the time of the apprehension it was apparent that the hunters did not violate wilfully. The last word we had from the state indicated that there will be no court action taken on the case.

A Mr. A. G. Beagle of Madison, Wisconsin was apprehended by the Refuge Manager for carrying a loaded and un-cased gun in his car during deer season. The case was turned over to the State Warden and he was fined $10.00 and assessed $3.70 court costs.

Mr. Rudolph, the refuge clerk, apprehended Bernard Crawford of Necedah as he dragged a deer from an area marked closed to hunting. The case was turned over to the State Warden and the man paid a $50.00 fine and $3.70 in court costs.

Mr. Jin Churchill the Necedah Ranger apprehended Mr. David Finn of Occonomowoc, Wisconsin. He was transporting a loaded rifle in his car. Mr. Finn paid $10.00 fine and $3.70 costs in state court.

VII OTHER ITEMS

A section on photographs precedes the NR Forms

Date: January 10, 1951

Submitted by Frank R. Martin
Frank R. Martin
Refuge Manager

Approved by [signature] JAN 17 1951
ACTING Regional Director

- Biggest job of the period was the construction of this bridge-control structure at a point where additional water will be diverted into the new Sprague-Wather pool.

- Stoplogs of 4 x 4 inch material, instead of the regular 4 x 8's, are being used to reduce the work of removal during periods of heavy flow.

This 12 x 16' Oil House, complete with cement floor and siding to match the other headquarters buildings, was constructed during the period.

WATERFOWL

Refuge Necedah Months of September to December 31 19~~4~~ 50

(1) Species	(2) First Seen		(3) Peak Concentration		(4) Last Seen		(5) Young Produced		(6) Total
Common Name	Number	Date	Number	Date	Number	Date	Broods Seen	Estimated Total	Estimated for Period
I. Swans:									
Whistling swan	None observed								
II. Geese:									
Canada goose	Breeding Res.		5,000	11/12	1,000	11/19			5,500
Cackling goose	None observed								
Brant	None observed								
White-fronted goose	None observed								
Snow goose	17	10/4	1,400	10/27	50	11/10			1,500
Blue goose	3	10/4	300	10/27	4	11/10			350
III. Ducks:									
Mallard	Breeding Res.		3,500	10/19	1	11/12			5,000
Black duck	Breeding Res.		300	10/19	2	11/10			400
Gadwall	None observed								
Baldpate	2	10/4	50	10/19	2	10/27			75
Pintail	8	10/4	800	10/19	1	10/29			1,200
Green-winged teal	4	10/4	4	10/4	4	10/4			**
Blue-winged teal	Breeding Res.		1,000	9/30	12	10/27			1,500
Cinnamon teal	None observed								
Shoveller	1	10/19	1	10/19	1	10/19			**
Wood duck	None observed								
Redhead	9	10/29	9	10/29	9				**
Ring-necked duck	None observed on refuge								
Canvas-back	None observed								
Scaup	None observed								
Golden-eye	None observed								
Buffle-head	None observed								
Ruddy duck	9	10/27	9	10/27	9	10/27			**
IV. Coot:	1,500	10/2	2,000	10/18	2,000	10/18			2,000

** Data insufficient for estimate

3-1750
(July 1946)

(over)

Form NR-1

SUMMARIES

Total Production:

Geese -

Ducks -

Coots -

Total waterfowl usage during period 17,525

Peak waterfowl numbers 14,373

Areas used by concentrations Rynearson Pools No. 1 & 2, the new Sprague-Mather pool and various ditches

Principal nesting areas this season

No nesting this period

Reported by Frank R. Martin

Frank R. Martin, Refuge Manager

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.

2338

3-1751
Form NR-1A
(Nov. 1945)

MIGRATORY BIRDS
(other than waterfowl)

Refuge Necedah Months of September to December 31 194 50

(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:										
Sandhill crane	17	10/7	17	10/7	17	10/7				**
II. Shorebirds, Gulls and Terns:										
Wilson's snipe (1/4 mile west of refuge	27	10/7	27	10/7	2	10/28				**

** Data insufficient for estimate

(over)

(1)	(2)	(3)	(4)	(5)	(6)
III. Doves and Pigeons:					
Mourning dove					
White-winged dove					
IV. Predaceous Birds:					
Golden eagle					
Duck hawk					
Horned owl	Breeding Res.		Still present		**
Magpie					
Raven					
Crow	Breeding Res.	300	12/1	Still present	500
Bald eagle	Breeding Res.	8	12/12	Still present	8

** Data insufficient for estimate

Reported by Frank R. Martin

Frank R. Martin, Refuge Manager

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 Gruiiformes)
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 Necedah Months of September to December 31, 1950

(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.
Ruffed grouse	37,000	18							2,000	Same
Sharp-Tail grouse	35,000	19							1,800	Slight decrease
Prairie Chicken	3,000	60							50	Same
Bob-white quail	5,000	67							75	Increase
Ring necked pheasant	5,000	333							15	Decrease

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.

3-1753
Form NR-3
(June 1945)

BIG GAME

Refuge Necedah Calendar Year 1950

(1) Species	(2) Density	(3) Young Produced	(4) Removals				(5) Losses			(6) Introductions		(7) Estimated Total Refuge Population		(8) Sex Ratio
Common Name	Cover types, total Acreage of Habitat	Number	Hunting	For Re-stocking	Sold	For Research	Predation	Disease	Winter Loss	Number	Source	At period of Greatest use	As of Dec. 31	
White-tailed deer	34,000	300	293									2500	2200	50%

Remarks:

Reported by Frank R Martin
Frank R. Martin, Refuge Manager

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: 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 <u>each</u> <u>species</u> on the refuge at period of its greatest abundance and also as of Dec. 31.

(8) SEX RATIO: Indicate the percentage of males and females of each species as determined from field observations or through removals.

116008

3-1755
Form NR-5
60701

DISEASE

Refuge Necedah Year 19 50

Botulism

Period of outbreak None observed

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

Lead Poisoning or other Disease

Kind of disease None observed

Species affected

Number Affected Species	Actual Count	Estimated

Number Recovered

Number lost

Source of infection

Water conditions

Food conditions

Remarks

3-1756
Form NR-6
(April 1946)

FISH

Refuge Necedah Year 19~~5~~50

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	
Great northern pike	Common	300	75					
Bullhead	Common	400	1500	NONE		NONE		NONE
Crappie	Uncommon	20	0					

REMARKS:

3-1757
Form NR-7
(April 1946)

PLANTINGS
(Marsh - Aquatic - Upland)

Refuge Necedah Year 1950

Species	Location of Area Planted From Top	Rate of Seeding or Planting	Amount Planted (Acres or Yards of Shoreline)	Amount & Nature of Propagules	Date of Planting	Survival	Cause of Loss	Remarks
Corn	Bridge	Drilled	6 acres	1/2 bushel	6/1/50	Good	Frost	Plowed under
Rye	"	3 pk per A	15 acres	15 bushel	9/7/50	Good		
Wild Rice	Pool No. 1	Scattered	100 yards	25 lbs	5/12/50	Good		
Millet (Jap)	Pool No. 2	via airplane	Entire flats & shoreline	800 lbs	7/21/50	Good		
Millet, Wild	Pool No. 2	"	"	1000 lbs	7/21-22	Good		
Smartweed	Pool No. 2	"	"	250 lbs	7/21	Good		
Mixture of: Alta Fescue Common Rye Grass Creeping Red Fescue Rye Buckwheat Hairy vetch	Sparge-Mather Dike	Ratio basis	2 miles	15 bushels	Spring and Summer	Fair		Wind erosion

TOTAL ACREAGE PLANTED:

Marsh and aquatic 500 acres
Hedgerows, cover patches -
Food strips, food patches 15 acres
Forest plantings -

Seeded two miles of dike

3-1758
Form NR-8
(April 1946)

CULTIVATED CROPS

Refuge Necedah Year 1950

Permittee (If farmed by refuge personnel, so indicate)	Permit No.	Unit or Location	Crops Grown	Avg. Yield per Acre	Permittee's Share		Government's Share or Return				Compensatory Services, or Cash Revenue
							Harvested		Unharvested		
					Acres	Bu. Harvested	Acres	Bu.	Acres	Bu.	
Refuge Personnel		Iron Top Bridge	Corn								Corn froze on August 20th. Was plowed under for green manure.

Summary of Crops Grown:

Crop	Acreage	Permittee's Share		Government's Share				Total Revenue
		Acres	Bushels	Harvested Acres	Harvested Bu.	Unharvested Acres	Unharvested Bu.	$

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, bromegrass, 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 indicate the total cash revenue received by the Service.

3-1570
NR-8a

REFUGE GRAIN REPORT

Refuge Necedah Months of September through December 31, 1950

(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 or Suitable Use*		
				Transferred	Seeded	Fed	Total		Seed	Feed	Surplus
Rye	0	30	30		25		25	5	5		0
Wheat	14	0	14			14	14	0	0	0	0
Barley	18	0	18			9	9	9		9	0
Buckwheat	7	0	7			7	7	0			0
Sweet Clover	1½	0	1½				0	1½			0
Crested Wheat Grass	4	0	4				0	4			

(8) Indicate shipping or collection points

(9) Grain is stored at Secondary Headquarters

(10) Remarks

*See instructions on back.

16—61482-1

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 lb., corn (ear)—70 lb., wheat—60 lb., barley—50 lb., rye—55 lb., oats—30 lb., soy beans—60 lb., millet—50 lb., cowpeas—60 lb., and mixed—50 lb. In computing volume of granaries, multiply the cubic contents (cu. ft.) by 0.8 bushels.

(1) List each type of grain separately and specifically, as flint corn, yellow dent corn, square deal hybrid corn, garnet wheat, red May wheat, durum wheat, spring wheat, proso millet, combine milo, new era cowpeas, mikado soy beans, etc. Mere listing as corn, wheat, and soybeans will not suffice, as specific details are necessary in considering transfer of seed supplies to other refuges. 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 break-down by varieties of grain listed in column 6. Indicate if grain is suitable for seeding new crops.

(8) Nearest railroad station for shipping and receiving.

(9) Where stored on refuge: "Headquarters granary," etc.

(10) Indicate here the source of grain shipped in, destination of grain transferred, data on condition of grain, unusual uses proposed.

16—61482-1 U. S. GOVERNMENT PRINTING OFFICE

3-1759
Form NR-9
(April 1946)

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

Refuge Necedah Year 1950

Species	Collections				Receipts		Total Amounts on Hand	Amount Surplus
	Amount	Date or Period or Collection	Method	Unit Cost	Amount	Source		
Wild Rice					100 lbs	Rice Lake, Minn	0	0
Bulrush, (Scirpus Amercanus)					300 lbs	Belhaven. N.C.	300	0

3-1760
Form NR-10
(April 1946)

HAYING AND GRAZING

Refuge Necedah Year 19 50

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
Becker, John	Necedah-14	Unit 3 & 9	240	144		5/16 to 11/15/50	.20	28.80	
Czech, John	Necedah-15	Unit 7	80	28		5/16 to 11/15/50	.20	5.60	
Hove, Edward	Necedah-13	Unit 6	320	64		5/16/to 11/15/50	.20	12.80	
Baumgart, Emil	Necedah-19	Unit 1	18		6	7/20 to 9/19/50	.50	3.00	
Findys, Walter	Necedah-22	Grazing Unit No. 1	16		5	9/1 to 9/30/50	.50	2.50	
O'Dell, Emery	Necedah-21	Unit 2	13		13	8/4 to 9/30/50	.50	6.50	

Totals:

Acreage grazed 540 Animal use months 236 Total income Grazing 47.20

Acreage cut for hay 47 Tons of hay cut 24 Total income Haying 12.00

3-1761
Form NR-11

TIMBER REMOVAL

Refuge Necedah Year 194X 50

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
PERMITS ISSUED IN 1948, COMPLETED IN 1950								
Gregar, J.	18723	S-M Pool	160	28.54	2.00	7.08	None	Jackpine
PERMITS ISSUED IN 1949, COMPLETED IN 1950								
Jasinski, V.	Necedah-10	S-M Pool	320	100.00	.50	50.00	None	Jackpine
O'Dell, E.	Mpls-74	S-M Pool	320	524.63	1.00	549.63	None	Jackpine
Leszczysnki, A.	18731	Unit 6	160	89.84	2.50	103.12	8" DBH	Jackpine
Swientoski, S.	18732	Unit 10	80	79.25	2.50	69.60	8" DBH	Jackpine
PERMITS ISSUED IN 1950, COMPLETED IN 1950								
Becker, John	Necedah-11	Unit 12	80	11.20	2.50	28.00	8" DBH	Jackpine
PERMITS ISSUED IN 1950, TO BE COMPLETED IN 1951								
De Martino, J.	Necedah-22	Unit 11	60	.00	2.50	100.00 DP*	8" DBH	Jackpine
Leszczysnki, A.	Necedah-12	Unit 6	80	227.00	2.50	567.50	8" DBH	Jackpine
				1,180 Bd ft	.09	10.62		Jackpine
O'Dell, E.	Necedah-18	Unit 13	80	108.31	2.50	270.78	8" DBH	Jackpine
Sweintoski, S.	Necedah-17	Unit 11	40	30.00	2.50	75.00	8" DBH	Jackpine
						35.00 DP		
O'Dell, E	Necedah-18	Unit 13				50.00 DP		

* Down Payment

Total acreage cut over 960 Total income 1,991.33

No. of units removed B. F. 1180 Method of slash disposal Lop and scatter
Cords 1198.77
Ties