

MEDICINE LAKE

NARRATIVE REPORTS

JANUARY 1938 - JANUARY 1939

NARRATIVE REPORTS FOR THE

MEDICINE LAKE WILDLIFE REFUGE

1938

#1

NARRATIVE REPORT  
MEDICINE LAKE MIGRATORY WATERFOWL REFUGE

NOVEMBER, DECEMBER, JANUARY

1938-39

February 28, 1939

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GENERAL:

November, December and January were almost unexcelled in so far as working conditions on the refuge were concerned. Temperatures were fairly high for the period with the exception of only a few days. Snow was not deep and thus everything went to make up one of the best early winters this country has experienced for a number of years, according to Weather Bureau Records.

More waterfowl were observed on the refuge during the past fall migration flight than ever before since the establishment of the project. Flight after flight came through this section of the country, many of them stopping over to rest a few days on their way South. Food was plentiful and the birds became unbelievably fat from feeding in the many agricultural fields in the vicinity and on the refuge, which during the past summer were partially destroyed by a grasshopper infestation which resulted in many unharvested fields. This almost unlimited food supply lured the birds through this section of the country rather than some other route, as observed from reports from other sections of the vicinity by waterfowl hunters.

The lowest temperature recorded for November was seven degrees below zero, for December thirty five below and for January twenty four degrees below zero. These cold periods did not last long, however, and in general the climate was very mild during the entire period. Total precipitation for the period was only .96 inches of melted snow, which if no more snow falls will mean a very light spring run-off. (1)

(1) Official Weather Bureau Station located at Refuge Headquarters.

Water impoundment areas remained at a standstill during the period due to the final freeze-up coming shortly after November first. Most of the areas were pretty well frozen over by the middle of the month. A few holes remained open, however, from constant use by waterfowl or by springs until about November 23.

The first of November saw the fall fire season over for the year. We were extremely fortunate in not having any prairie fires during the entire summer. Due to more rainfall the past summer than usual vegetation was very dense in localized areas and presented continuous fire hazards.

The refuge restoration program has gone forward with the aid of the C.C.C. Camp but with no supplementing W.P.A. Project.

## II WILDLIFE:

### A. Waterfowl:

In addition to the great number of waterfowl reported as present on the fall migration flight in the last narrative report flights of mostly mallards with a few pintails continued to come through until the middle of November. (The peak of the migration flight occurred about the middle of October and which peak saw at least 100,000 waterfowl using the refuge and adjoining territory as resting and feeding grounds )

( Towards the latter part of the season practically all waterfowl concentrated in the Homestead Unit, at least 80,000 to 90,000 being estimated on the area at one time. )

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burn*

*Birds seen  
and*



Food was plentiful during the entire migration flight. Waterfowl fed mostly in the wheat fields adjoining the refuge and very sparingly on corn. This was no doubt due to the great amount of wheat to be found unharvested in the vicinity due to grasshopper damage. Where the fields were harvested there was an abundance of grain to be found on the ground, the heads being cut off by grasshoppers. In fact the waterfowl appeared to prefer the fields which had been harvested as feeding grounds.

There should be an abundance of feed left in most of these fields for the spring flight. We picked only about half of our corn last fall and if the spring flight does not clean the rest of it up we will probably have to go in and finish picking it before we put in our spring crops.

(According to many local hunters and others interested in waterfowl, the past fall was the best they had seen for number of birds present since about 1923.) Many sportsmen have taken the stand that had it not been for the refuge and the unmolested water units present the birds would have been "burned" out after a short time and thus the shooting would have been ended. As it was there were numerous birds present in the vicinity of the refuge during the entire open season and good shooting was thus made available during the morning and evening when the birds went to the grain fields to feed. Many hunters in this vicinity want the hunting hours changed to 5:00 p.m. instead of the present 4:00 p.m. law. *Birds gone*

A predator trapping campaign was started the first of November by a small crew of C.C.C. boys. Trapping was stopped with the latter

part of December, the total catch being 58 skunks and 9 weasels.  
 No coyotes were caught or killed during the winter to date and since they are extremely scarce no damage is being done by this animal to amount to anything. They are probably doing more good than harm through reducing the winter population of jackrabbits. In general the predator population is not believed to be as great as it was a year ago.

#### B. Upland Game Birds:

Upland game birds present on the refuge during the period have remained about the same with prairie-sharp-tailed grouse leading by far in number present. A few ring-necked pheasants and Hungarian partridge are present but little suitable cover has as yet been established for these latter birds. The grouse are limited to the range afforded by the sandhill unit of the refuge and very seldom is this bird seen over five to six miles away from this section of the refuge. During the first of December a few of the grouse migrated from the sandhills to Big Island and along the south shore of Medicine Lake, apparently for winter feeding since they are to be found in these latter localities during the summer months in any great number. This migrating characteristic was noted during the winter of 1937-38 also. A conservative estimate of the grouse present on the refuge is placed at 500, ring-necked pheasants at 25 and Hungarian partridge at 100.

( Food has been very plentiful during the winter in the form of wild rose, snowberry, wild buckwheat and other species of vegetation bearing seeds and fruits. As observed from sharp-tailed grouse

*added  
12/20/37*

*Food  
habits  
etc*



droppings much of their food is consisting of wild rose fruit. ✓  
 Chokecherry, juneberry, aspen and cottonwood buds also make up  
 part of the diet of the grouse, from observations made in the field. )

Surplus barley, wheat and corn have been stored at the refuge  
 headquarters for use as upland game bird food, should it be necessary  
 to put out food before the end of the winter. ( Feeding stations were  
 not placed in operation, however, during the period covered by the  
 report due to a plentiful natural food supply and light snowfall. ) ✓  
*Shallcross*

Very little cover outside of the sandhills, south shore of  
 Medicine Lake and old homestead groves are present for cover,  
 however, and it is planned this spring to plant several rows of  
 caragana, Russian olive and ash or cottonwood in each of the  
 refuge fields where same can be cultivated without any great  
 extra amount of work. In this manner a food and cover patch  
 of trees and shrubs will be developed along the edge of each agric-  
 ultural field with the end in few of establishing cover in this  
 manner, besides planting up the coulees and other suitable sites.

#### C. Predator and Rodent Control:

Predatory animal and rodent control for the months of November,  
 December and January in so far as trapping was concerned was covered  
 above.

Some damage to waterfowl was noted by golden eagles during  
 the late fall months. They were apparently picking up crippled ducks  
 to a great extent since the fields adjacent to the refuge saw much  
 shooting and thus many cripples came back into the refuge to die  
 or recuperate.

Rough-legged hawks and prairie falcons were also noted on the refuge during the winter months but their numbers are not great.

A considerable number of magpies have been noted in the sandhills and along the south side of Medicine Lake. It is planned to destroy all nests of this species during the coming spring and early summer months.

It is also planned to put on a gopher eradication program if sufficient poisoned grain can be procured for the work. In some areas such as the Homestead Unit these animals are becoming so numerous that they cut nearly all the early grasses off (mostly needle grass, Stipa), apparently for the seed and for nesting materials. These rodents will have to be controlled on all dikes, dams and fields and also near the refuge boundary where private fields adjoin the refuge. If the densest populations could be broken up through the use of poisoned grain it would go a long way toward the control of the animal. It is surmised that a number of waterfowl nests are torn up each year through the actions of the gopher.

Jackrabbits were fairly numerous during the winter, doing some damage to the young trees in the shelterbelts and elsewhere. Plans are now underway for the treating of all young trees in the two shelterbelts with some good rabbit repellent.

#### D. Fur take by Refuge Personnel:

A small C.C.C. crew was assembled with the first of November for the purpose of thinning out the predator population

Not enough to  
warrant additional  
control

carried  
Burm



on the project. As a result 58 skunks and 9 weasels were taken. They are being held waiting for information relative to the sale of same.

E. Fur Take by Other Trappers:

We have had no outside trapping on the project during the months covered by this report.

F. Other Animals:

Animals other than predatory and rodents present on the refuge this winter consist mainly of muskrats. A few badgers are present also. These animals are doing no damage at the present time with considerable good being done by the muskrats in keeping the bulrush thinned out in some of the deeper areas where they utilize the vegetation in building nests, and for food.

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Muskrats are present in every water unit on the refuge; there being only one unit where they should at this time be taken out and transplanted elsewhere. This is in the sandhill pond and to be able to obtain a stand of wild rice--the only unit where we are now sure of a stand of rice---the muskrats will have to be eliminated since they have been found to cut off and pull out the young stalks of rice before they have a chance to put on any growth.

During the winter of 1937-38 quite a number of wild house cats were caught during the trapping season; this year, however, none were taken, indicating the fact that most of them have been cleaned out. Mice and a few rats are present, of course, around some of the old building sites.

### G. Bird Banding Operations:

Bird banding operations on the refuge were not carried on during the period due to the pressure of other urgent work. Most of the banding during the present year has consisted in the banding of waterfowl which recovered from botulism.

Results from bird banding are coming in slowly and to date we have had thirty five returns on birds banded at this station. Approximately 2,000 birds have been banded here since the establishment of the project. The returns show a migration towards the southeast although not sufficient returns have been had as yet to establish any definite conclusions as to flights. One return was had from Yellowknife, on Great Slave Lake, Northwest Territories, Canada and one from Mexico, indicating to some degree the range of migration and the nesting and wintering grounds of some of the birds coming through Medicine Lake.

Birds banded elsewhere and retaken at Medicine Lake during the past summer were as follows:

<u>Species:</u>	<u>Where Retaken and Date:</u>	<u>Where and when banded:</u>
Pintail	Medicine Lake, 7/16/38	Malheur Refuge, Oregon, 8/16/32
Pintail	" " 7/26/38	Avery Island, La., 7/27/37
Mallard	" " 7/26/38	Thief Lake, Minn., 9/17/35
Pintail	" " 7/28/38	Torquay, Sask., Canada, 7/23/37

### III. REFUGE DEVELOPMENT:

#### A. Physical Development:

The following improvements have been either partially or wholly completed during the period ending January 31, 1939, by



the C.C.C. camp at this point.

#### Water Control Structures:

No work has been accomplished on any of the water control structures during the period outside of placing an earth plug between Katy's Lake and Unit No. 12 proper. A little channel excavation was also accomplished before the freeze-up on the No. 10 area. The reason for the plug between Katy's Lake and Unit No. 12 proper is so that with a water control gate through the plug we can control the water level of Katy's Lake and thus attempt the reduction of the botulistic outbreaks in the latter unit through maintaining a constant water level. A control gate and culvert will be placed in this plug next summer.

The ice breaker in the No. 1 Diversion Ditch needs repairs and it is planned to initiate such before the spring run-off starts.

The Homestead Spillway was complete except for the water cushion plug which will go in the channel of Muddy Creek below the spillway.

#### Sewage and Waste Disposal System:

The sewage and waste disposal system at the subheadquarter's site is complete except for man hole cover on the septic tank and a small amount of miscellaneous work in the basement of the house.

Plans at the present time call for the revision of the sewer system for the service building at the headquarters due to the plugging of the present system during the colder winter weather. The present line is believed to be too near the top of the ground and thus freezes up during the cold weather.

Fencing:

With the completion of the boundary fence along the west side of the Homestead Unit no trouble has been experienced with stock crossing the creek into the refuge.

The sandhill lane fence has been completed and trouble from stock entering the refuge from this section of the refuge has been eliminated.

A few corner brace posts have been set in the northeastern part of the refuge on a start of the interior fencing program. When this program is completed all marsh and water areas as well as the refuge fields will be fenced out of the grazing units and at the same time the refuge will be split up into a number of grazing units so that any forage surplus to refuge needs can be handled through grazing without interference with the other features of the project.

Approximately 515 rods of willow brush snow fence were constructed along the north side of the No. 1 Diversion Ditch during the fall and early winter as well as 219 rods of the same type of fence along the truck trail where the snow has had a tendency to drift and block the roads. One hundred and thirty rods of portable wood panel fencing was set up around the headquarters and sub-headquarters to bank up snow for shelterbelt and landscape plantings. Amounts of snow fence as constructed has been furnished from information supplied by the C.C.C. camp.



Channels and Ditches:

Several channels were excavated in the No. 10 Unit during the fall but little work was accomplished during the period covered by this report due to the freeze-up and the need of repairing the heavy equipment, according to the C.C.C. Camp superintendent. The channels were not completed for the reasons given. The purpose of these channels in this unit is to provide additional ditch capacity so that water coming down Lake Creek can be handled by the ditches and thus taken into the different potholes within the unit without loss of water before the holes are all filled. During the past the ditch capacity was not sufficiently great to allow the passage of all water thus it backed up and spilled around the end of the No. 10 Dam before the unit was filled. The water was not completely lost, however, since it went down the creek and into Medicine Lake. We hope that with the completed channels this deficiency will have been eliminated.

Some few short channel changes were also started in Sand Creek just below the No. 11 Dam in order to prevent the creek from running under the boundary fence in several places. By changing the channel of the creek much maintenance work on fences will be eliminated.

A new channel and structure into Medicine Lake from the No. 10 Unit is proposed in order to facilitate the control of the water level in the No. 10 Unit. The location of this project is at the extreme southeast corner of Medicine Lake. There is already

an outlet and structure into Medicine Lake from this unit but to lower the ditch so that the unit could be drained would require rebuilding the structure and a bridge already on the ditch. It is also belived ( this can be checke easily) that the structure between Medicine Lake and the No. 10 Unit rests on a bed of gravel and if this is the case it will not be safe. Another structure in connection with the bridge just mentioned will hold the water back if the other structure on the gravel bed does go out sometime.

Several proposed surveys incident to the storage of water above the No. 12 Unit, Sand Creek and Cottonwood Creek have not been undertaken at present. This storage would serve to catch the midsummer rains and thus by proper manipulation of the gates the water could be used to maintain a constant water level in the No. 12 and 11 Units in an effort to avoid or avert any botulism outbreaks. This theory may be all wrong but it is belived that if the midsummer rains could be let down into the units gradually and not cause a sudden high fluctioation in the unit level much of the disease could be done away with; in other words a constant water level as nearly as possible.

#### Lookout towers:

The thirty-foot wood frame tower at the overnight cabin site on the Homestead Unit is nearing completion. No fences, as yet, have been constructed around any of the towers. This latter project is planned for completion during the spring or early summer.



Truck Trails:

Little work on truck trails was accomplished during the winter period covered by this report due to the early freeze-up. A small amount of gravel was placed on the Homestead dike road in order that it will be passable during the spring thaw. More work is required before any of the Homestead roads will be complete. Some little elevating work was accomplished on these roads but the early November freeze-up stopped the work.

If possible, it is planned to complete most of the remaining trails during the coming summer along with their gravelling.

Russian thistles were dragged from all the trail during the early fall and burned to prevent the drifting of snow in the trails during the winter. To date only a very few spots on the trail are drifting and these areas will be taken care through the erection of snow fence.

Fire Lanes:

Double fire lanes have been constructed around all of the refuge boundary with the exception of a few tracts title to which we do not as yet have and where trails border the project boundary.

Late instructions on fire lanes are to the effect that one lane approximately 16 feet in width is sufficient and which lane can be maintained with an 8-foot oneway disc. Before the next fire season comes we expect to have an interior grid of fire lanes which will prevent the spread of fire to any great extent.

General Cleanup:

General cleanup work for November, December and January consisted mainly in the form of camp work and little work was done on the refuge proper outside of what the refuge personnel did themselves around the different buildings on the project and headquarters.

Seed Collection:

A small crew of C.C.C. boys worked at the collection of Russian olive and Juniper seed during the early fall. A total of 17 pounds of Juniper (*Juniperus scopulorum*) seed was depulped along with seven pounds of Russian olive seed. Two and one-half bushels of Juniper seed (with pulp attached) is still held in camp. The Juniper was secured along the Missouri River valley near the town of Culbertson, while the Russian olive was secured from shelterbelts on the refuge and vicinity.

Food and Cover Planting:

Food and cover planting during the period covered consisted of the planting of hardstem bulrushes in the Number 11 Unit in an attempt to combat botulism in this particular area. The work is more of an experimental project in order to determine the vegetation's usefulness in creating a barrier through which waterfowl will not penetrate, and thus cut off the shallow water areas from waterfowl; the areas where from information received are more subject to botulism than other deeper areas.



Equipment Repair and Construction:

Some of the refuge equipment such as the tractors need a small amount of repair work done on them before spring cropping begins. This repair work is planned to take place sometime in February or March. New parts for some of the other farming equipment are also needed and are being requisitioned at this time. The C.C.C. Camp has been using this equipment in connection with their project relative to farming activities and they will do the repair work necessary.

Rodent and Predatory Animal Control:

Rodent and predatory animal control by the C.C.C. Camp consisted of a small crew of boys who trapped skunks and weasels during the fall months with the result that 58 skunks and 9 weasels were taken.

Preparations are underway for the treating of all trees planted in the headquarters as well as subheadquarters shelterbelts in order to prevent further damage by jackrabbits. The original idea along this line was to have a few rabbit drives by the camp boys but they never materialized thus the need for treatment in some other fashion to prevent damage.

Telephone Line:

No actual construction work was accomplished during the period on the telephone line from the refuge headquarters to the subheadquarters. Materials are being requisitioned, however, and

the line should be up before spring.

The total telephone line mileage for the refuge will in the end be approximately 12 miles. This is all ground system line.

#### Stock Guards:

Some work was accomplished during the period in repairing and building stock guards in order to eliminate stock from the refuge. As long as some of the roads through the project are not closed to outside traffic gates will be left open and to overcome this problem stock guards have been placed at these points until such time as the roads can be closed then some of them may be taken out where desired.

#### Overnight Cabin:

The Homestead overnight cabin was practically completed with C.C.C. labor during the period but some work remains to be done such as the laying of the floor, painting, hanging of the door and storm windows, etc. A few feet of flagstone walk, initiation of a crested wheat grass lawn and general cleanup will be necessary after the completion of the cabin.

#### Barn:

A small barn-garage type of building approximately 12 x 26 feet was started during the period at the Homestead overnight cabin site but not completed. It is so arranged in the interior that either a horse or car may be accommodated but not both at the same time.



A combination overnight cabin and barn-garage is scheduled for construction in the No. 12 Unit during the next summer.

Duck Hospital:

Plans for the construction of the duck hospital about 550 feet east of the refuge headquarter's dwelling house have been approved. A separate well will be put down at this point and a windmill used for water supply. The hospital will be the same approved type as that in use at the Bear River Refuge.

Signs, Markers and Monuments:

No large recognition signs have, as yet, been set up for this refuge. Plans are underway, it is understood, for the construction of these signs elsewhere than at Medicine Lake. It is tentatively understood that the Kenmare CCC Camp will take up the project and complete them.

A number of signs have been partially completed by the C.C.C. Camp at Medicine Lake but due to inability to prevent the logs secured from checking extremely bad the signs were never put up.

Refuge Headquarters:

Some little work was accomplished at the refuge headquarters during the winter. Two stalls in the service building garage were sealed in so that they could be heated separately from the remainder of the building. One of the furnaces secured from the Fort Peck salvage operations was set up for the heating of these stalls. Grates

were secured for this furnace since the original installation at Fort Peck was for a gas furnace. Total cost of the grates was \$17.30, and the furnace is in excellent condition.

Final plans for the revision of the service building sewer system are at hand and same will be accomplished by the C.C.C. Camp during the spring or summer.

No water pipes have frozen up in the dwelling this winter although one pipe did freeze in the laboratory several times but was always thawed out easily. This condition was remedied by leaving the faucet open sufficiently to let a trickle of water run through the pipe. The point of freezing was where the pipe goes through the concrete floor and where little heat from the room would reach it.

#### B. Plantings:

##### 1. Aquatics:

No planting of aquatics took place on the refuge during the period outside of the planting of a quantity of hardstem bulrush in the Number 11 Unit before the final freeze-up. These plantings are being made at three-foot intervals in the hope that with two or three favorable years the shallow area will have become a more or less solid mat of bulrush and thus keep waterfowl out of the area; this is desirable from a botulism standpoint in order to try and reduce the losses in waterfowl from this disease.

An intensive planting program is scheduled for next spring in the planting of aquatics such as smartweed, wild millet, wild rice,



sago pondweed and widgeon grass, if the latter can be obtained for planting purposes. The refuge at the present time is lacking in some of the aquatic food plants it should have and after the bulk of the heavy work is over this planting work should be stressed more and more.

## 2. Cultivated Crops:

Sufficient Gehu corn was picked last fall for winter feed and seed. That picked for seed was strung on strings and hung in the loft of the barn for proper drying and to be free from any mice which should be present. About half of the corn fields were picked last fall with the result that if the spring waterfowl flight does not complete the picking job we will have to do it before spring work starts.

Plenty of barley and wheat were harvested during the summer for winter food for game birds as well as spring feeding of waterfowl and planting.

A few of the sunflower heads were picked and stored in the sandhills for winter food for grouse and some were stored for seeding purposes. However, a germination test was run on these seeds and at least 50 percent did not germinate. Tests on corn are underway at the present time. Tests were run on barley and wheat with the result that over 95 percent germinated.

## 3. Trees and Shrubs:

No fall planting of trees and shrubs took place during the past fall due to past experience with fall planting of such

showing very low survival percentage.

A load of 17,000 trees and shrubs was received from Kenmare, North Dakota last fall and which was reported on in the last narrative report. More trees are scheduled for arrival this spring but at the present time it is not known just what species or number will be received.

#### 4. Grasses-Range Improvement-Erosion Control:

No winter work has been done toward range improvement on the refuge although it is planned to plant a small plot or two of abandoned agricultural land to crested wheat grass early in the spring if such seed can be procured with the present refuge allotment.

#### C. Collection:

##### 1. Collection, Aquatics, Trees and Shrubs:

The C.C.C. camp collected Juniper (*Juniperus scopulorum*) seed and Russian olive seed during the fall and have at the present time depulped 17 pounds of the cedar or juniper seed and seven pounds of the Russian olive seed. They still have at the camp two and one-half bushels of Juniper seed which they have not depulped.

The harvesting of prairie bulrush and "#-square" was precluded due to an early wet snowfall which knocked down all of these rushes to such an extent that harvesting with a combine was out of the question. Wild millet planted on the refuge during the spring of 1938 did not come up sufficiently good to make a seed harvest possible.



Cereal crop seeds of barley and wheat were reported on in the last narrative.

2. Treatment, Storage, Stratification, etc., of  
Seed and Transplanting:

The C.C.C. camp depulped seventeen pounds of juniper and seven pounds of Russian olive seed as mentioned above . This seed is stored where it will not deteriorate. Seed of barley and wheat is stored at the refuge headquarters. Corn seed is strung on strings in the loft of the barn where good drying conditions are to be had and where it will not be molested by any stray mice. Traps are kept continually set and baited for mice, however, and there should be none present.

No stratification of seeds has taken place at this point.

D. Distribution of Seed and Nursery Stock:

No seed or nursery stock were shipped out during the winter months. Seventeen thousand trees and shrubs as stated elsewhere in this report were shipped in from Kenmare, North Dakota during the early fall months and heeled in at the refuge headquarters.

IV. PUBLIC RELATIONS:

A. Recreational Uses:

1. Camp Facilities:

Recreational areas have not as yet been set for this refuge outside of one unit on the Homestead area. No work outside of the planting of few trees has taken place as yet toward the development

of this area although present plans are to start work next summer in the building of shelter, toilets, bath house (although such is not believed necessary here). Planting of more trees is believed necessary for this Homestead Unit. A well with hand pump should be supplied this area.

An extremely good area is possible on the south side of Medicine Lake after title has passed to the Government on the Overland Estate.

## 2. Fishing:

As yet there are no fish other than minnows present in any of the water impoundment areas. It is planned to put a few bullheads and a few cat fish in them after we are fairly certain that the areas will withstand reasonable drought periods and that freezing will not occur to the bottom under such conditions.

## 3. Hunting:

There are as yet no public shooting grounds on this refuge and it is our hope that there never will be any. From observations made during the past fall it is not believed that any such area will ever be asked for by the sportsmen since field shooting is always good when waterfowl are present and the refuge only tends to keep the birds in the vicinity longer than they would otherwise stay due to unmolested resting water areas.

## 4. Visitors:

Very few visitors were present during the three months covered by the report due to cold and otherwise inclement weather.



Officials calling at the refuge during the period were Messrs. Salyer, Ball, Bennett, and MacDonald, who made an inspection of the refuge on the 23rd of November.

Mr. F.E. Garlough, Director of the Control Methods Research Laboratory located at Denver, Colorado paid the refuge a visit during the period, being particularly interested in jackrabbit damage to young trees and shrubs.

Mr. Brice McBride also spent two days at this point in connection with water rights, the Soil Conservation project near Froid, and W.P.A. dams in Sheridan County.

#### B. Refuge Violations:

No refuge violations occurred during the period. Local inhabitants respect the refuge regulations quite well, and thus cause very little trouble.

### V. ECONOMIC USES OF THE REFUGE:

#### A. Grazing:

It is planned, if climatic conditions are favorable for prairie vegetation during the next two years, to open up the grazing units of the refuge to grazing during the fall of 1940. By this time the range should be in good condition unless more droughts prevail as they have during the past ten years in this vicinity, outside of the past summer.

#### B. Haying:

No haying permits were active during the period.

In accordance with plans set for for haying on the refuge the meadows will lie idle for one year out of every four. During the pst summer, due to good feed crops, only two permits were issued, thus the idle year has been had for the next four year rotation. All hay land on the refuge is available for the cutting of hay with the exception of that close to the shores of the water areas and other areas where waterfowl prefer the uncut haylands for early spring nesting.

C. Timber Removal:

There is no timber available for removal on this refuge.

D. Share-Cropping:

During the winter we have spent considerable time in an attempt to secure share-cropper s for refuge lands. Practically all farmers are complying with the allotment laws and therefore they cannot take land for farming on the refuge due to the fact that we have been unable to secure allotments on any of the refuge lands.

The county committee on allotments, Mr. Ehrmantrout being secretary, was contacted several times during the winter but with no results other than the statement that the land being federally owned as a permanent project cannot receive allotments.

Our share-cropping program will, therefore, suffer until such time as the allotment laws are dropped or until we can secure allotments on our refuge lands.

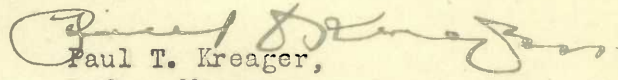


VI. MISCELLANEOUS:

Efforts are being put forth to secure a W.P.A. Project to start with the first of March if possible. Sheridan county commissioners have given their written consent to a statewide WPA project for the Medicine Lake Refuge.

Little research work was carried on during the winter. Plant collections made during the past summer have been arranged and are ready for sending away for identification. Feeding of upland game birds and data from this work will be started sometime in February if the climatic conditions and snowfall are such that the birds will have to be fed.

Respectfully submitted,

  
Paul T. Kreager,  
Refuge Manager.



Telephone Line Construction To Subheadquarters



Upland Game Bird Shelter And Feeding Station





Lumber Shed Constructed to Handle Lumber From Ft. Peck - CCC



Fort Peck Slavage Lumber.



Posts (CCC) For Interior Fencing



Overnight Cabin Barn





Willow Snow Fence In Use On Refuge



Same As Above

*Good*



Building Fire Lanes - CCC Equipment.



The Bowman Bridge Looking North.





Island Construction - Unit No. 11



Waterfowl, Homestead - Last Fall



Willow Snow Fence On No. 1 Ditch



Portable Snow Fence Canals - Subheadquarters





Waterfowl - Homestead - Fall 1938



Waterfowl - Homestead - Fall 1938



Upland Game Bird Shelter And Feeding Station

Big Island

(Used By About 30 Prairie Sharp-tailed Grouse.

✓  
shelters

per







(used by report to Wildlife Surveyed Clones)

WILDLIFE

WILDLIFE SURVEYED CLONES AND FEEDING STATION