KULM WETLAND MANAGEMENT DISTRICT

KULM, NORTH DAKOTA

ANNUAL NARRATIVE REPORT

1976

KULM WETLAND MANAGEMENT DISTRICT Kulm, North Dakota

ANNUAL NARRATIVE REPORT Calendar Year 1976

NATIONAL WILDLIFE REFUGE SYSTEM Fish and Wildlife Service U.S. DEPARTMENT OF THE INTERIOR



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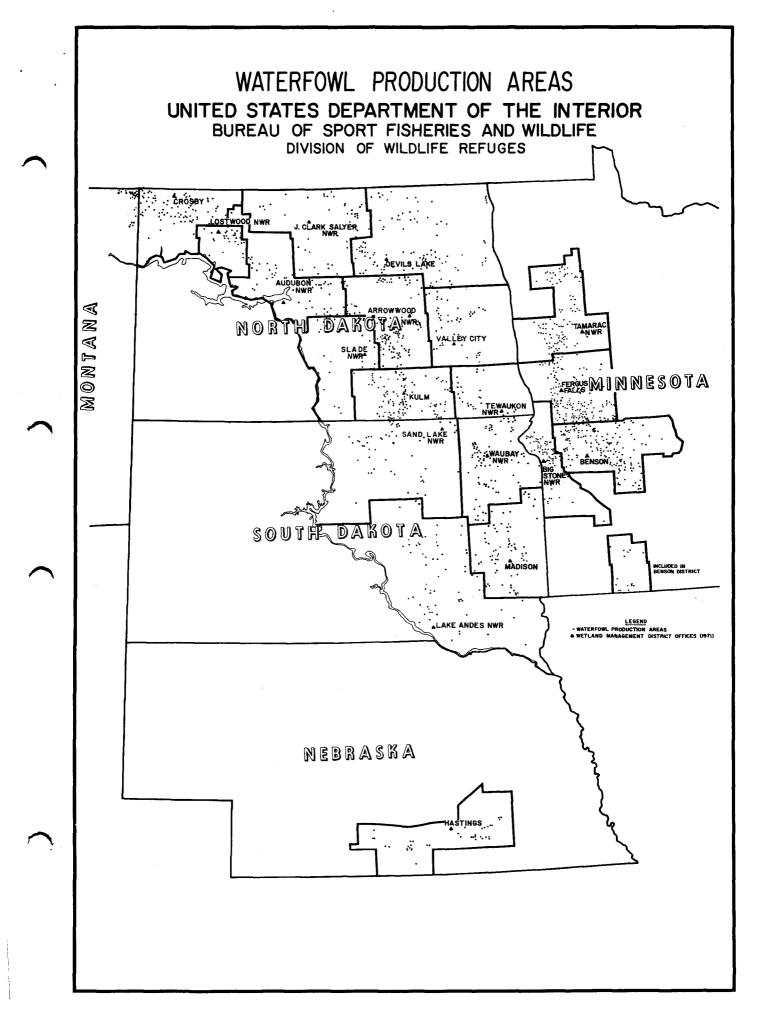


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I. GENERAL

A. Introduction

The Kulm Wetland Management District was officially established in July, 1971. The district is composed of four counties, Dickey, La-Moure, Logan and McIntosh, and is situated in south central North Dakota.

Headquarters is in the town of Kulm. Logistically it is hard to imagine a better situation because Kulm is located within two miles of the geographic center of the district. In addition, nearly 80 per cent of our management units are within a 30 mile radius of our office.

B. Climatic and Habitat Conditions

Weather conditions for the year in the four county area were hot and dry. About the only precipitation received came the first three months of the year. Weather records reveal that precipitation this year was on par with the drought years of 1935 and 1936.

There was very little precipitation during the spring season and temperatures were above normal with lots of wind. Because of these conditions farmers were already stopping in regarding grazing and haying.

Continuous high temperatures ranging from the 90's to 100's in early summer along with strong gusty winds became a common occurrence. Heat and strong winds literally parched pastures and crops. Marshes that had not dried since the land was settled were now patches of cracked soil. What little rain was received during this period was quite spotted and really didn't help much. A high of 104 degrees was recorded on July 25.

Hot temperatures and wind continued right on into late September and October. A 98 and 91 degree temperature was recorded during these two months. Things looked really bleak for fall.

November and December didn't record much in precipitation either, but some light snow was received during the period. Temperatures during this time were 6-8 degrees above normal for this time of year. Cold snap started the last week in December and a -25 was recorded on December 30. Weather picture for 1976 could be summed up in terms of a sewere drought.

	į	LaMoure				<u>Wishek</u>		
			Ter	IP .		-	T	omb
Month Jan.	Rain	8now 10.0	Max.	Min. -20	Rain	Spow 4	Max.	Min-
Feb.		2.0	54	-15		4	54	-19
Mar.		4.	65	-16		9	59	-13
Apr.	2.08	•	83	16	2.50	•	82	18
May	1.03		86	20	.53		84	18
June	3.23		96	32	2.45		84 97	36
July	.20		104	39	.85		103	34
Aug.	.82		103	41	1.71		103	39
Sept.	.48		98	21	.19		100	15
Oet.	.05		91	04	.19		89	05
Nov.		1.00	75	-10		2.00	68	-18
Dec.	And the second second	4.50	45	-26		6.50	45	-28
Total	7.89	21.50			8.42	25.50		
AVE.	20.55	_			17.17			

The run-off from the spring snow melt filled most marshes to near normal levels except in the southern half of McIntosh county. Many of the WPA's in southern McIntosh started the spring season with one to two inches of water which disappeared before mid-May.

By mid-July the severity of the drought could be measured by the number of young coots found squashed on the highway.

During the interval between spring thaw and fall freeze-up we received no general rains to recharge the marshes. By freeze-up over 90 per cent of the WPA's in the Kulm district were completely dry with the marshes laced with wide and deep cracks.

The growth of upland vegetation was surprisingly good on all of the WPA's. Apparently the thick vegetation on our areas stockpiled snow and then conserved the moisture during the summer months. This contracted dramatically with the grasses on private land which went dormant about the first of July.

C. Land Acquisition

1. Fee Title

Apparently, the continuing drought spurred many farmers into making the decision to sell to "wildlife" in 1976. While the number of fee cases only increased from 17 last reporting period to 20 this year the total acreage more than doubled to 2,964. The average size unit purchased this year was 148 acres as compared to 75 acres in FY 75.



Moldenhauer (384) Logan County - a 600 acre unit purchased in 1975. There was a lot of water on this area in the spring but by September the marsh was completely dry. (3-76)

We have assumed the management responsibility for the Kirshenmann (18) WPA in Kidder County because we have two adjacent units and several others close by.

2. Resement

The easement program continued its downward momentum. During the year only 13 new easement contracts were signed for a net gain of 174 wetland acres.

We have so many easements in Logan and McIntosh Counties that the saturation point has just about been reached. Many acres of good wetlands still need to be protected by easement in Dickey and especially LaMoure County.

FEE TITLE AND EASEMENT ACQUISITION STATUS

	Fee Title			ment
County	# Met. Units		#Eassments	Wetland Acres
Dickey	37	7,538	31 0	23,060
LaMoure	33	4,488	217	13,314
Logan	37	9,137	376	32,833
McIntosh	66	16,876	384	27,293
Kidder	1	105	0	0
	174	38,144	1,287	96,299

3. Other

No new public domain tracts were brought under Service management in CY'76.

County	No.	Acres
Dickey	3	307
LaMoure	0	0
Logan	2	353
McIntosh	4	98
	•	758

D. System Status

1. Objectives

Kulm's objectives were set in 1971 shortly after this district was established. Because of a lack of information the entire objective setting process was a figure juggling operation.

During our recent program scheduling effort we were forced to revise the output level in three categories after updated census information indicated our original objectives were unrealistically

Other Migratory Bird Maintenance increased from 3,000,000 to 10,000,000.

At the present time all of our activities are in phase with approved objectives. Most of our objectives, however, are badly in need of revision.

2. Funding

Finding Pattern

				<u>Staff</u>	
<u>Year</u> 173	<u>1210</u>	<u>1500</u>	PFI	PFT	PT
	54,000	1,500	2	1	2
174	54,600	1,500	2	1	2
175	56,500	1,500	2	1	1
176	68,500	1,500	2	1	1
177	70,000	1,000	2	1	

The Kulm District has been operating on the edge of bankruptcy since inception and each year our activities have become more restricted because of financial restraints. Between 1973 and 1977, funding for Kulm was increased by \$15,500, a 28 per cent increase. During this same period, however, our fixed costs have been spiraling upward at 10 per cent per year. This leaves us with a net gain of \$200 with which to manage the additional 10,000 fee acres and 10,000 wetland easement acres purchased during this five year span.

II. CONSTRUCTION AND MAINTENANCE

A. Construction

Approximately 45 per cent of the upland in the Kulm District is native prairie. Managing this land for waterfowl production requires the use of such tools as haying, burning and/or grazing. Grazing is judged to be the best tool for use in this part of North Dakota so considerable effort is made to construct as much fence each year as funding will permit.

In 1976 we were fortunate in getting fences constructed on the following 12 units:

- 1) Larson (28) D. 486 rods, constructed by neighbor
- 2) Honl (76) D. 520 rods, constructed by neighbor
- 3) Weiler (321) D. 670 rods, constructed by neighbor 4) Sukut (157) D. 570 rods, constructed by neighbor
- 5) Kusler (148a) L. 80 rods, constructed by neighbor
- 6) Kauk (333) L. 544 rods, professional fencing crew



When clean-up time comes on newly purchased WPA's you occasionally find relics that blend into the environment so well you hate to move them.

- / ABTIUS (X43) L. 284 rods, constructed by neighbor
- 8) Hussel (11) L. 320 rods, constructed by neighbor
- 9) Zimmerman (129) L. 204 rods, constructed by neighbor
- 10) Kusler (148a) L. 80 rods, constructed by neighbor
- 11) Pfeifle (177) McI. 660 rods, constructed by neighbor
- 12) Geissler (182) McI. 80 rods, constructed by refuge crew

Two mobile and one base radio-transmitters were purchased from General Aviation Electronics at a total cost of \$1300. These units have an output of 35 watts which which is capable of giving us coverage over 75 per cent of our area. To achieve 90 per cent coverage would require 100 watt transmitters and an expenditure of \$6,000.

B. Mintenense

Our perpetual maintenance problem is a 1971 Dodge 4x4 half-ton pickup. This year we had to replace the rear differential and eight u-joints. Since we received this vehicle we have had to replace every u-joint at least once each year.

C. Wildfire

Two wildfires occurred on WPA's this fall - one was started by hunters and the other one by a local farmer.

Hunters got their car stuck in a badger hole adjacent to the Erlenbusch (12) WPA, Dickey County, in early October. Apparently, the muffler came in contact with some tall dry grass which burst into flame. Before going out the fire burned about 60 acres of wildlife land and two acres of privately owned grassland. The fire was pushed by a 20 mph wind and would have burned several thousand acres if the farmer downwind hadn't overgrased his pasture so much it wouldn't carry a flame.

This fire received wide spread publicity because it was started by hunters. Three days later a farmer in Logan County decided to burn his marsh. This fire escaped and burned about 120 acres on the larson (12) WPA and 200 acres of private land. This fire received no publicity and wasn't even reported in the local newspapers.

For the Erlenbusch fire an insurance company paid us \$180 for loss of grass and paid a neighbor \$75 to repair WPA fences.

On the Larson fire we are negotiating with the farmer for replacement of one wooden post.

III. HABITAT MANAGEMENT

A. Croplands



Erlenbusch (12) Dickey County - In this fire the hunter lost one station wagon, five shotguns, one case of beer and about 15 boxes of shotgun shells. Once the oil on the motor caught on fire the hunters scattered because of fear of a gasoline explosion. Three quarters of a tank of gasoline placidly burned with no explosion. Maybe gasoline in cars only explodes in the movies? (5-76)

farmed as a means of preparing a seed bed for grass seedings.

The drought reduced crop production to the point that none of our cooperators even broke even on cost. A good example would be Leo Johnson on the Borth (14) WPA. Leo planted this 130 acres to wheat in early spring. By mid-June the wheat had withered and turned brown. We then had a one inch rain so Leo decided to plow up the wheat and plant flax. The flax crop seemed to be a winner with excellent germination and fast growth. After growing about six inches, however, the flax began to wither from the lack of moisture and finally died without blooming. After he seeded the unit into DNC in October we figure Leo lost about \$3,500.

Food plots were grown on three units:

	Unit	Acres	Crop
	River NWR	22	corn
	t (151) D.	5	corn
3. Knut	on (123) LaM.	9	corn

It is estimated that corn production this year averaged about 1-2 bushels per acre.

Farming agreements were issued on seven WPA's to break up stunted tame grass fields. To catch up on our backlog we should be breaking up a minimum of 1,000 acres each year.

Agreements were signed on the following areas:

- 1. White (184) D. 8 acres
- 2. Redlin (11) D. 46 "
- 3. Todd (16) LaM. 120 "
- 4. Strahm (153) LaM. 16 "
- 5. Kramlich (216) McI. 35 acres
- 6. Salzer (237) McI. 69 acres
- 7. Esslinger (246) McI. 20 * 314 acres

In an effort to reduce the time these fields are out of production we have negotiating agreements to have the fields broken up in the fall, farmed for two summers and reseeded to DNC during the third fall. Time from breakup to reseeding would be two years.

We managed to seed 700 acres on 15 units into DNC this year. On all units seeded by cooperators, except for the Jenner (289) McI., the DNC was seeded in late October or early November directly into the grain stubbles.

7

This was our second attempt at seeding the Jenner (289) and the co-operator suggested we try seeding in the spring with a nurse crop. After seeing the stanted condition of the surse crop I would sursise that we have witnessed another failure.

We are not sure how the DMM which was seeded in the fall of 175 sw wived the sameer drought. We know that there was good germination but after mid-July even the weeds quit growing.

DNO Sended in 1976

WIC (214a) McI. WIC (214a) McI. Deming (434a) McI. Schlecht (37) D. Kwiges (260) D.	Fig. (144) Hol. Fischer (234) Hol. Elldebrand (259) Hol.	Arthur (230) L. Lagger (257) No.1. Lagger (250) No.1. Myletken (107) No.1.	
1 to 5 to 4	೭ಚರ⊼	8 22 2	130
四 3	2 M	Spring Vall	TLATE

*These units were seeded by refuge ores in mid-December.

DNC mixture consisted of 4 pounds of pubescent and/or intermediate wheatgrass, 2 pounds tall wheatgrass and 2 pounds alfalfa.

B. Granting

i. Greates

Our grazing program is the main tool we are using to improve the wildlift habitat on native grasslands. We are making the assumption, of course, that improving the rangeland conditions results in improved wildlift habitat.

We have no doubt that our controlled grasing has improved range conditions. This improvement is very dramatic on areas that have not been disturbed for several years and a met of Kentucky bluegrass has been accumulated. Eluegrass mats build up quite rapidly so repeated grasing every three to four years will be necessary to maintain and/or improve range conditions.

rotation system has been utilized. a fairly large area. Best results from grazing can be observed on units where a rest-That is why we have This system, however, requires have this type of graning on

only two units, the Erlenbusch (12) D. and Larson (12) L.

Units Grazed in 1976

	Unit	Acres	# Cows	Dates
1.	Larson (28) D.	60	No Limit	5/1-6/15
2.	Erlenbusch (12) D.	28 0	25	5/1-10/30
3.	Hartman (65) D.	2 0	No Limit	6/1-6/16
4.	Hille (14b) D.	40	ff	7/1-8/13
5.	Gackle (52)LaM.	40	n	6/16-7/16
6.	Karius (243) L.	57	n	5/1-6/15
7.	Larson (12) L.	482	5 0	5/1-8/15
8.	Ammon (14) L.	12 0	No Limit	5/11-6/16
9.	Klipfel (274) McI.	48	11	5/1-6/15
10.	Pfeifle (177) McI.	127	11	5/1-6/15
11.	Nitschke (249) McI.	33	Ħ	5/1-6/15
12.	Goebel (315) McI.	99	40	6/10-7/10
		100	40	7/11-8/10
13.	Geiszler (182) McI.	49	No Limit	5/1-6/15
14.	Koepplin (142a) McI.	154	Ħ	6/15-9/15
	Total	1,689		

The wildfire which burned across the Erlenbusch (12) WPA was restricted to just one of the grazing pastures. By coincidence the unit which burned was also the unit which we had scheduled for rest in 1977.

We were fortunate to get the Hartman (65) WPA grazed this year. This small unfenced unit was purchased in 1965 and the grassland has probably been ungrazed for the last 20 years. With grass in short supply we were able to locate a cattleman who was willing to herd his cows on the unit for 16 days. As a sign of the times the man used a Honda instead of a horse to keep the cows from straying.

2. Having

As would be expected in the midst of a drought we were swamped with having requests. Our first reaction was to do no having on WPA's because we anticipated a real shortage of cover on private land.

After reviewing all of our areas, however, we realized that this was an opportunity to hay some of the units we had been unable to interest anyone in the past.

This type of a program is very costly in time. It allows us, however, to meet a great number of the men who are farming in the four county area. It also gives us an opportunity to explain our program and eliminate a few misconceptions.



"My grass management is shore good. I've rested this pasture 12 years and already grass is acomin' back!"

We received over 200 applications for hay and several offers of steak dinners or other rewards if we were to select the right individual for haying privileges. We held a lottery and selected 64 farmers who would have the privilege of haying 1,500 acres of grassland. We had quite a few farmers return their permits after they got a close look at their haying units. There was always someome around, though, who was willing to cut anything as long as it was green.

On the Larson (10) WPA in Dickey County we haved half of an 80 acre DNC planting. This unit, which had been seeded to DNC in the spring of 1971, had become matted to the point that little new growth could be observed in mid-June. This unit was haved primarily so that we could observe DNC growth reaction to a clipping and removal of litter.

In order to maintain a record of all units which were haved we are providing the following list:

	Unit	Acres	Unit Acres
1.	Brummond (116) D.	× 8	28. Brunner (101) L. 35
2.	Brandenburger (177)	D. 17	29. Baltzer(70) L. 13
	Hartman (65a) D.	8	30. Mund(134) McI. 34
4.	German (115a) D.	30	31. Dittus(176) McI. 87
5.	Schneider (64) D.	25	32. Sackman(112) McI. 36
6.	Redlin(11) D.	52	33. Kramlich(216) McI. 38
7.	Vasvick(178) D.	10	34. Eszlinger(246) McI. 22
8.	Enger (32a) D.	31	35. Ulmer(220) McI. 43
9.	Graham(31) D.	8	36. Sackman (100a) McI. 30
10.	Retslaff(150) D.	11	37. Rothfusz (257a) McI. 12
11.	BLM(1b)	3	38. Dalke(65) McI. 2
12.	Hamann (203a) D.	16	39. Elumhardt(18) McI. 10
13.	White(184) D.	18	40. Eszlinger(246a) McI. 25
14.	Larson(10) D.	41	41. Marzolf(87) McI. 45
15.	Kannowski (10) LaM.	5	42. Eszlinger (246a) McI. 20
16.	Strahm(153) LaM.	16	43. Knopp(306) McI. 4
17.	Dittus(180) LaM.	19	44. Sackman(100) McI. 18
	Todd(16) LaM.	160	45. Bender (215) McI. 25
19.	Liechty (184) LaM.	24	46. Sackman(112) McI. 34
20.	Abell(145) L.	12	47. Hoffman(121) McI. 40
	Wentz(122) L.	55	48. Goettle(106) McI. 25
22.	Kusler (148) L.	35	49. Baumann (308,a) McI. 39
23.	Muonio (109) L.	67	50. Fey(144) McI. 14
24.	Dallman (338) L.	14	51. Salzer(237) McI. 31
25.	Boschee (368) L.	3	52. Geiszler(20) McI. 30
26.	Fandrich (52) L.	12	53. Klein(33) McI. 28
27.	Miller (171) L.	10	54. Ziegenhagel (281) McI.50

C. Wetlands

The opportunities for management of wetland is very limited in this

area. Now that we have a D-4 cat we are planning on some mechanical control of vegetation in cattail clogged marshes.

D. Forestlands

No shelterbelt plantings were made in 1976. The last planting was made in 1973 on the Mund(134) McI. This seeding was made by a neighbor, Lawrence Vogel, who has cultivated it twice a year since planting. Some of the trees are now 10-12 feet tall.

E. Other Habitat

Nothing to report.

F. Wilderness and Special Areas

Nothing to report.

Easements for Waterfowl Management

We made a 100 per cent easement check between November 8-16. Easement violations still have not become a big problem in this district. In 1974 we had 8 violations, 6 in 1975 and 9 in 1976.

The following is a listing of easements where violations were found in 1976:

- Vietzke (248x,1) Dickey Co.
- 2.
- Richter (264x,1,2) Dickey Co.
 Kirschenman (130x) LaMoure Co.
- 4. Isaak (72X,1) LaMoure Co.
- 5. Gall (20x,1) LaMoure Co.
- 6. Bauske (100x) LaMoure Co.
- 7. Miller (150x) Logan Co.
- Buchholz (65x,1-3) Logan Co.
- Entrie (198x) McIntosh Co.

The violations in the above listing have been ground checked and verified. Only four land owners, however, have been contacted, all of whom agreed to make corrections. We experienced trouble with only one individual, Leo Entzie, who ordered us off of his property after we explained the purpose of our visit. It took a lot of talking to convince him that we were going to get compliance with terms of easement one way or another.

During our easement checks we recorded the location and photographed ditches on private land which drained marshes that had a minimum 40 acre watershed. This information will apparently be used by the State Water Commission to determine the magnitude of illegal drainage within the state.

We were a little surprised that we didn't find more drainage. We reported a total of 27 possible state drainage violations; 16 in Dickey county, 4 in Logan, 7 in LaMoure and 0 in McIntosh.

IV. WILDLIFE

A. Endangered and/or Threatened Species

Nothing to report

B. Migratory Birds

1. Waterfowl

We have once again used the random quarter section pair count to calculate the number of breeding duck pairs in the district. The count was taken between May 20-30. Time consideration limited our sampling to 30 quarters.

Species	Total Pairs	Avg. Prod. Rate .45	Strd. Brood	Ducks Produced
1. Bluewinged tea	1 2,479	1,116	7	7,812
2. Gadwall	1,702	766	6	4,596
3. Ruddy	724	326	4	1,304
4. Mallard	697	314	6	1,884
5. Redhead	683	307	6	1,842
6. Shoveler	563	253	6	1,518
7. Pintail	509	229	6	1,374
8. Scaup	147	66	6	396
9. Greenwinged te		66	7	462
10. Canvasback	134	60	5	300
11. Widgeon	121	55	6	330
12. Wood duck	2	1		
13. Ringnecked	_ 1	1		
	1,909			21,818
	1,909			

Expanded pair count data indicates that there has been little overall change, an increase of less than 1 per cent, in the breeding duck population in the district.

There is distressing evidence, however, that the decline in mallard and redhead populations is continuing. Between 1974 and 1976 the number of mallard pairs has declined 36 per cent and redheads are down 38 per cent. It is felt that the decline in both species is related to hunting pressure.

An estimated 21,818 paper ducks were produced on WPA's this year. While there was a good breeding population and we think there was a higher than average productivity rate the number of birds reaching flight stage was probably down. The drought, which intensified in July, must have forced a manifold increase in the normal marsh to marsh movement of ducklings. Any increase in overland movement should have resulted in an increase in mortality. We



These geese made their appearance in a farmer's yard one morning last spring, stayed for about two weeks and disappeared. Note that these birds have not been banded. They are thought to be lesser Canada geese.

out it probably approached 30 per cent.

The various goose releases have begun to pay dividends. We had several reports of Canada geese broods this spring. While we did not personally see any of the broods, we spoke to enough people who did that we feel we have verification of four broods, all in Logan county. Average size brood was four.

The geese released in McIntosh and Dickey counties will be returning for nesting in 1977. Indications are that hunting mortality in these two releases has been very low which increases the possibilities of establishing a breeding flock.

When waterfowl season opened less than 10 per cent of our units had any water and the duck population was near 10,000. As hunting season progressed the population increased to 32,000 which is about 70 per cent below normal.

The main goose migration was late in arriving. We had no more than 15,000 geese in the district until the last week in October when an estimated 70,000 appeared. These birds stayed for only three or four days before moving on.

2. Marsh and Water Birds

An unusually large concentration of American avocets (250) and willets (100) was observed on the Brinkman (195) WPA in McIntosh county in mid-June. This was the largest group of such birds we have ever seen and they were congregated together as one flock.

In July we visited the island on the Graham(31) WPA, Dickey county. This island is less than one-tenth of an acre in size but contained approximately 200 cormorant nests, six Forester term nests, three American avocets nests and seven duck nests. Four of the duck nests were redheads.

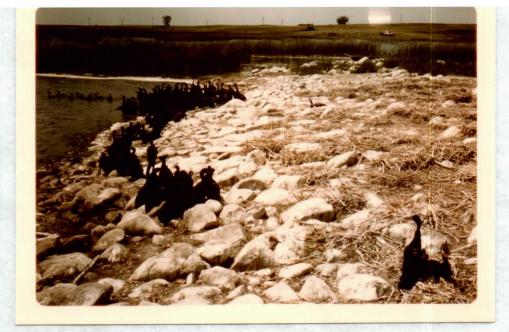
We estimate that 600 cormorant were raised to flight stage.

3. Shorebirds, Gulls, Terms and Allied Species

By early August most birds in this category had departed - conditions were just too dry.

4. Raptors

The spring migration was upon us sudden like on March 19. On that day nearly all of the hawks normally occurring in this area were observed.



Graham (31) Dickey County - cormorant production on this island went from zero in 1973 to approximately 600 in 1977. (4-76)



I have often wondered what the cormorants in this area were eating. A visit to the cormorant rookery revealed the primary food source for the young birds was waterdogs. (4-76)

The big surprise was the spotting of six hald eagles in one day, March 19, the first we have observed in this district.

Snowy owls were first seen in early November, several weeks befor our first snow. They were fairly common for awhile but had just about disappeared by late December.

The short-eared owl population has been down for the past two years. This fall less than a dosen birds were seen.

5. Other Migratory Birds

The dove population was at a near normal level. An average of 45 doves per mile were counted on the road survey south of Kulm. An average of 39 doves have been counted along this route between 1971-1975.

On April 22 a chestmut-collared longspur nest with four young was discovered. At this early date the young birds already had a good covering of feathers.

C. Mammals and Non-Migratory Birds and Others

1. Game Manmals

For some reason white-tailed deer reproduction was down. Normally the average doe will have twins, a significant number will have triplets and only rarely will a single fawn be seen. This year a single fawn was average, a significant number were twins and only rarely were triplets observed. So, the overall decline of the deer population in this district continues.

This year the deer hunters seem to do more riding and less walking so the total kill should have been reduced.

We received several complaints on the deer herd on Maple River NWR last winter. Deer home in on this area on the first day of deer hunting and tend to stay there until spring thaw.

In an effort to alleviate this concentration we asked a neighbor to drive his tractor through the marsh on that part of the refuge which we own. On the second day of the season the tractor was driven through the marsh but the deer refused to leave the refuge. It seems that the tractor owner told his friends of the plans, they told their friends, etc. so when the appointed hour arrived the refuge boundary was shoulder to shoulder hunters.

In mid-December we got a party of eight men together in another attempt to disperse this deer concentration. This attempt was



Snow storms can be tough on wildlife. We kept this owl for about a week before letting him go. Found out that owls can't eat hamburger meat — sticks to the roof of their beak.

was also a failure as the deer wouldn't move unless stepped on.

2. Other Manuals

Until this year I didn't think it was possible to control a fox population through hunting and trapping. This fall, however, fox fur prices hit a high of \$60 and the hunters-trappers came out of the woodwork. By late December the fox population had dropped so low it was considered rare to even spot a fox track in the snow. The fox population is probably now at its 30 year low.

This extensive trapping also had a decimating effect upon the skunk and raccoon populations. The spring of 1977 should be a good year for all ground nesting birds.

The coyote population is definitely on the upswing. Three ranchers in south west Dickey county reported losing a combined total of 100 + lambs. Animal damage control personnel responded to a call for help and killed three coyotes. We are hoping that this increase in the coyote population will result in a decrease in the fox population.

3. Resident Birds

Two counts were made on the sharptailed grouse dancing ground located just off the Larson(12) WPA in Logan county. The two counts showed an average of 35 dancing males. The dancing ground on the Asmon(14) L. has not been used for the past two years.

This is the second year in a row in which we have had excellent fall populations of sharptailed grouse and Hungarian partridge.

The pheasant population in southeast Dickey county is at its highest level since 1966. It is estimated that the population on the Maple River NWR is between 350-400, birds, Enger (32) between 150-200, Kvigne (260) between 100-125 and Larson (10) between 300-250.

4. Other Animal Life

Although we entered winter with low water levels we are expecting a fish kill only on the Thurn (258) in McIntosh county. At freeze-up water depth was down to 7 feet so chance of any fish surviving the winter is remote. We will oppose any attempt to restock this unit once a die-off does occur.

. LATERPRETATION AND REGREATION

A. Information and Interpretation

1. On-Refrice

Nothing to report

2. Off-Refuse

Each year the Soil Conservation Service in Dickey and LaMoure Counties sponsors a 7th grade environmental education conservation tour. The Kulm WMD was requested to participate by providing a wildlife program as a tour stop. John Jones did such a tramendous job of developing rapport with the touring students last year that he was requested to also handle the wildlife program in Ransom and Sargent Counties in 1976. From the response received we surmise that John's program was once again the high-light of the tour.

Last winter we contacted the 10 wildlife clubs in the district offering to present a slide talk on our wetland program. We presented programs to the five clubs which responded to our letter. Buring the question-answer sessions the subjects most often raised were taxes, our policy on having and grazing and weed control.

B. Regrestion

1. Wildlife Oriented

Because of the high fire danger many restrictions were placed upon the hunting season this year. Seasons were postponed, restricted to one-half days, reinstated, postponed again, etc. — it was all very confusing. A person did not know from one day to the next when or if he could hunt.

Even with these restrictions plus a lack of water in the marshes, small game and waterfowl hunters turned out in surprising mumbers.

All hunting restrictions were lifted on October 19.

2. Non-Wildlife Oriented

Nothing to report

C. Enforcement

Since the season on redheads and canvashacks was closed in this district we posted two concentration areas, Earnest (13) and Graham(32), to stop all waterfowl hunting. The state also posted an area around the Earnest(13) as a waterfowl rest area.

so were turned over to the local warden.

With a shortage of grass in '76 many of our neighbors were casting covetous eyes upon our WPA's. We were able to apprehend five of the more adventurous farmers although we had reports on several others.

The more imaginative individuals turned their cows out after dark and took them home before sunrise. One man was even more subtle and tried to make it appear as though his cows were getting out by accident instead of being deliberately turned out (this was on twice a day basis).

FOC's were issued to the following individuals for trespass cattle:

Name	Unit	Date	
Schweigert, Wilbert	Schweigert (299)L.	4/2/76	25.00
Dallman, Eldon	Dallman (338)L.	9/13/76	100.00
Holser, Larry	Sukut (362)L.	10/18/76	100.00
Hoffman, Gary	W.I.C. (214)McI.	10/24/76	100.00
George, Walter	George (263a) McI.	10/24/76	100.00

A few months after we issued the FOC to Mr. Schweigert the bond rate was increased to \$100.

VI. OTHER ITEMS

A. Field Investigations

Nothing to report

B. Cooperative Programs

Nothing to report

C. Items of Interest.

Miss Kim Morres of Farmington, Maine, was selected to fill our summer position as Bio. Aid. Kim proved herself to be a hard worker who wasn't hesitant at tackling any assignment. Without any doubt I would judge Kim to be the best summer employee we have hired at this station. We tried to convince Kim that she should apply for a permanent position with the Service but she was more interested in returning to the state of Maine.

The section of this report on weather was written by Mrs. Okerlund - the remainder of the report was scribbled by John Akin.

MEASUR

One reportable accident occurred during the summer. John Jones was jabbed in the eye by a bullrush tip while walking through a marsh. This was a very painful injury which laid John up for one day.

We did not always hold formal monthly safety meetings. Safety meetings were held weekly and sometimes daily but the format was an informal bumper type.

Formal meetings are generally restricted to the summer field work months.