TEWAUKON WETLAND MANAGEMENT DISTRICT Cayuga, North Dakota



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ANNUAL NARRATIVE REPORT Calendar Year 1980

NATIONAL WILDLIFE REFUGE SYSTEM FISH AND WILDLIFE SERVICE U.S. DEPARTMENT OF THE INTERIOR



SWB

HOFFMAN HOFLEN BUSCHING

POTTER

Personne1

-		
1.	David G. Potter, Refuge Manager GS-11, PF EOD 9-9-79 from Mark Twain NWR, Illinois	Γ
2.	Forrest W. Cameron, Refuge Manager GS-11, PF Transferred 6-2-79 to Ruby Lake NWR, Nevada	Γ
3.	Christ R. Schuler, Biological Technician GS-07, PF	
4.	Scott W. Busching, Biological Technician GS-05, PP	
5.	Barbara F. Hoflen. Refuge Clerk GS-U5, PP	
6.	Ahrlin G. Hoffman, Maintenance Helper WG-05, PP	
7.	Robert W. Hoflen, Maintenance Helper WG-05, Ter	np
	Seasonal Appointments	
1.	Arvid W. Anderson, Biological Aid GS-04 (5-28-79 through 8-25-79)	
2.	Timothy L. Sirek, Biological Aid GS-04 (5-28-79 through 8-25-79)	

Review and Approvals

Area Office

Date

Regional Office

Date



SWB

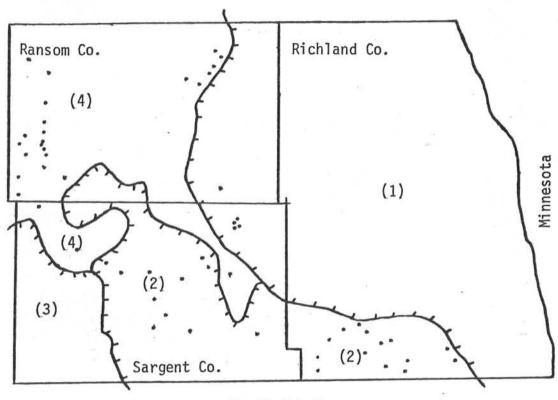
"Mister Hoffman"

Ahrlin G. Hoffman, affectionately known as "Mister Hoffman", retired on November 3rd after coming on board in 1965. Mr. Hoffman has witnessed the coming and going of many personnel here and has participated greatly in the growth of this refuge and district. His knowledge of refuge operations has been instrumental in the effective and smooth conduct of activities on this station and being a one-time area farmer, has been a more than effective public relations asset. His charm and wit will be missed around the headquarters and in a humble attempt to show our appreciation, we dedicate this narrative report to him.

Ahrlin plans to remain in Rutland and catch up on lots of fishing with buddies on the Sheyenne River. However, he promises to continue to visit the refuge from time to time and bring out his homemade bread. We expect that when he sees the smoke from the first spring burn, he'll show up to join in the action.

TOPOGRAPHY (Geological Zones)

TEWAUKON WETLAND MANAGEMENT DISTRICT



South Dakota

- (1) Glacial Lake Agassiz
- (2) Collapse Coteau Moraine
- (3) Glacial Dakota Lake
- (4) Drift Prairie

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Location of Waterfowl Production Areas

WATERFOWL PRODUCTION AREAS UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF SPORT FISHERIES AND WILDLIFE DIVISION OF WILDLIFE REFUGES . CROSBY J. CLARK SALYER 1 ARROWWOOD DAKOTA Z NORTH VALLEY CITY 1 Z MINNESOTA WISHER 0 × : 4 . * TEWAUKON ... SAND LAKE BENSON : DAKOTA. SOUTH MADISON LEGEND - WATERFOWL PRODUCTION AREAS - WETLAND MANAGEMENT OFFICES (FALL 1969) LAKE ANDES NEBRASKA HASTINGS ... -! ...

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	Introduction Climatic and Habitat Conditions Land Acquisition System Status. II. Construction and Maintenance Construction Maintenance. Wildfire III. Habitat Management Croplands. Grasslands Wetlands. Forestlands. Other Habitat. Wilderness and Special Areas Easement for Waterfowl Management. IV. Wildlife Endangered and/or Threatened Species Migratory Birds. Mammals and Non-Migratory Birds and Others V. Interpretation and Recreation Information and Interpretation Recreation Enforcement. VI. Other Items Field Investigation. Cooperative Programs Items of Interest.

I. General

A. Introduction

The Tewaukon Wetland Management District includes the three counties in the extreme southeastern corner of North Dakota. Three easement refuges, 98 WPA management units totalling 11,892 acres and over 500 wetland easements including 31,036 wetland acres are administered from the Tewaukon Refuge office.

The topography of the district varies considerably as shown in the topography map. In the eastern portion is Glacial Lake Agassiz (1), now known as the Red River Valley. This rich, flat intensively farmed land has few wetlands. Much of the southern portion of the district is Collapse Coteau Moraine (2) and contains numerous shallow marshes, many of which are being lost to drainage. Glacial Dakota Lake (3) consists primarily of sandy soils and provides little wetland habitat. The northwestern corner of the district is Drift Prairie (4). Potholes in this area are also being threatened by drainage. The soil types and groundwater sources lend themselves well to establishment of pivot irrigation systems which may also deplete groundwater supplies and cause increased pressure against wetlands by farmers whose very expensive equipment is stymied by water areas which hinder the pivoting wheels.

B. Climatic and Habitat Conditions

The official weather station near Forman, 20 miles west of head-quarters, recorded 18.24 inches of rain in 1979 compared to the average of 20 inches. The winter months were severe with 16 inches of snow on the ground the end of January, 22 inches in late February and 12 inches of snow remaining the last of March. Snow turned to rain in April and continued in generally above average amounts into early August (1.65 inches on August 4) before shutting down. September through December was generally drier and much warmer than average with only two cold snow storm periods occurring, November 10 - 12 and December 15 - 17.

Due to good carry-over water conditions and the above average amount of snow and rain, all wetlands generally were in excellent condition. Waterfowl nesting consequently shifted noticeably from refuge water to the more dispersed WPA, easement or private wetlands.

Deer, pheasants, huns (gray partridge) and other resident wildlife species experienced a third tough winter and their numbers dipped accordingly. Refuge and larger WPA's again served as the major deer wintering ground in the area. The very mild fall period kept these species well dispersed and will be very favorable to population increases if it continues.

C. Land Acquisition

1. Fee Title

Due to Govenor Link's policy that all Service land purchases must count as mitigation acreage for wildlife lands lost to the Garrison Diversion Unit project, no land has been bought in North Dakota since April 1978. The wetlands program is funded with "Duck Stamp" funds and these funds cannot be diverted for use as mitigation money. The Garrison project contains it's own funds for purchase of wildlife mitigation lands.

At year's end the Garrison project was shrouded in controversy and uncertainty as to funding and legal status. Meanwhile, the Service has initiated a State-wide campaign from every office to inform the public about the wetland program, their value and that the Govenor is holding the program hostage for Garrison.

Several private individuals are sueing the State for prohibiting the free sale of their land to whomever they wish. But since both sides probably will appeal, a solution to this problem via the courts may be a long time coming.

2. <u>Easements</u>

As reported in the 1977 narrative, the 1977 state legislature passed a bill affecting taking of easements for Waterfowl Management Rights after July 1, 1977. Under it's provisions, the perpetual easement prohibiting burning, filling and draining of wetlands would be null and void if title to the land was transferred by inheritance or sale. Thus no easements have been purchased in North Dakota since that date.

3. Other

Nothing to report.

D. System Status

Tewaukon Refuge personnel are charged with management of Tewaukon National Wildlife Refuge; Tewaukon Wetland Management District including Ransom, Richland and Sargent Counties; and Wild Rice, Storm Lake and Lake Elsie Easement Refuges.

Objectives

Primary management objectives are waterfowl production by providing optimum nesting habitat and waterfowl maintenance by providing protection and food for fall and spring concentrations of ducks and geese. Some secondary objectives need

revision. Most of the objective levels shown for outputs in the program scheduling documents need revision. Most public use objective levels are too high, while wildlife objective levels are too low. Under BLHP high priority continues to be placed on marsh and cover development and replacement or restoration of facilities and equipment.

2. Funding

The Tewaukon Wetland Management District and Tewaukon National Wildlife Refuge budgets are handled as one. A summary is:

	FY-	78	FY-	79	FY-	80
	0&M	Cyclic Maint.	0&M	Cyclic Maint.	0&M	Cyclic Maint.
1210	\$66,000	\$13,000	\$112,800	\$16,900	\$104,000	\$25,000
1220	3,000		1,000	1,200		
1240	4.,000	1,000	4,000	1,000	10,000	
Sub- Total	\$73,000	\$14,000	\$117,800	\$19,100	\$114,000	\$25,000
TOTAL BDGT.	\$87,	000	\$136,	900	\$139,	000
BLHP	\$27,	000	\$154,	000	\$123,	000
STAFF	2PFT, 2 3 s	PPT, easonal	2 PFT, 2	PPT, seasonal	2 PFT, 2 4 s	PPT, easonal

A summary for all BLHP projects is:

PROJECT	FY	PDW	AVAILABLE	USED BY REFUGE
Dump Truck	77	# 7	\$ 15,000	\$14,980
Residence Replacement Boundary Fence Const. Oil Storage Building Horseshoe Slough Marsh	78 78 78 78	#13 # 8 # 6 # 5	\$ 45,000 40,000 4,000 35,000	\$55,540 29,355 3,916 22,651
Carryover PDW #5 Water Mgmt - WPA Dense Nesting Cover HQ Dv1pmt-Shop	79 79 79 79	# 5 #12 # 9 # 1	\$ 5,200 33,000 51,000 70,000	\$ 5,200 33,000 45,447 80,100
Carryover from FY-79 (used for garage and Horse Grassland Mgmt & Rehab HQ Landscaping & Sewer Sys	80 shoe 80 80	Slou	gh Dike)	\$ 7,775

II. Construction and Maintenance

A. Construction

No construction was done in the district this year since BLHP projects kept the work crew and contractors busy on the refuge.

B. Maintenance

The vocational-technical college in Wahpeton, North Dakota State School of Science, completely reworked and painted the old D-6 at the cost of only parts. They did excellent work. Major items done were major engine overhaul and repair of transmission and final drives. We also took possession of a new dump truck this year.



An overhauled, rejuvinated D-6 back from the Diesel Department, North Dakota State School of Science. SWB



Beautiful, new dump truck ordered in FY-77 and received in FY-79.

Boundary posting was checked and re-worked as necessary. "No Vehicle" stickers have been effective in reducing snowmobile and other off-road vehicle trespass on WPA's so they were added to all WPA signs we happened to drive by when on other business. Other work completed is as listed below.

Warner WPA

Burned old barn, garage, corral, shed; dropped a silo; removed one mile old hog-wire fence

Smith WPA

Asche WPA

Burned old house

Burned old shed and miscellaneous trash

Weaver WPA

Palensky WPA

Removed five miles old fence; built 1 3/4 mile fence

Removed rocks from fields

Wyum WPA

Removed rocks from fields



Barn cleaned off the Warner WPA.

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The district extends 70 miles from headquarters out to the Chose WPA in Ransom County and many WPA's are 35 - 50 miles away. Efficient and safe transport of tractors, drills and supplies is a necessity but has not always been available. A 5th-wheel type trailer and one-ton truck were acquired to provide this capability.





New 5th wheel trailer and 1-ton truck will allow safer and more effecient tractor or implement transport.

Also a 350 gallon fire pumper rig was ordered to fit into the Chevrolet to provide something else we lacked: efficient and heavy-duty spray capability for prescribed burns and herbicide spraying.

C. Wildfire

An apparent lightening fire occurred on the Krause WPA on August 27. About $1\frac{1}{2}$ acres of brome grass were burned with no significant damage done. The local fire department controlled the blaze and we learned about it later.

III. Habitat Management

A. Croplands

Farming done in the district during 1979 is listed on the following pages for each county. None was done force account.

The 27 permittees farmed a total of 1455 acres compared to 28 permittees and 1271 acres in 1978. New breakout acres totalled 323 acres which was scattered throughout the district. In the second or third year of cropping, these fields are scheduled for reseeding to nesting cover, hopefully a mixture of native grasses in most cases.

Our share of crops was 123 acres, all standing food plots. There was 101 acres DNC seeded back on 11 WPA's. The DNC mixture was comprised of tall wheatgrass, intermediate wheatgrass, alfalfa and yellow blossom sweetclover. Nurse crop was either wheat or barley. All seedings were done in the spring by the permittee.

B. Grasslands

Grazing

One grazing permit was issued to Mr. Harris Strege, Lidgerwood, ND, for the Ford WPA in Richland County. The grazing was done early to remove litter and to reduce growth of cool season tame grasses, smooth brome and Kentucky bluegrass. Actual use was 38 cows/calves from May 1-28 and 10 cows/calves from June 13-22 at \$1.25/AUM or \$186.76.

This treatment had some benefit in controlling the tame grasses but we feel a controlled burn would do more for the native vegetation present. We do not plan to graze this unit in 1980 and do plan to burn it, time and conditions permitting.

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		R	YE	CC	ORN	WH	IEAT	BAF	RLEY	FL	AX :	w/W	NC HEAT CROP	MII	LLET		N+ WERS	BREAKOUT
WPA - TRACT	PERMITTEE	Р	R	Р	! R	Р	l R	Р	R	Р	R	P	R	Р	¦ R	Р	R	
Compson 303	Krueger		,		! ! !		! ! !		; ; ;			37	9		1			
Grinstead 43 Schiffner165	Сторр				 		! ! ! !		1 1 1 1		1 1 1 1 1				1			45
Holt 66	Cropp		 		1 1 1		 	58	12		i i t				1			44
Kaspari 33,a	Schroeder		 		1	15	3		1 1 1		1 1 1				1		1	
Kenyon 68	Cropp		! ! !		1	22	4		1 !		! ! !	48	12				 	
Peterson 28	Strander		1				1			27	5							
Reinke 58	Ballinger		1 1 1		!		1		1		1 1 1		! ! !		!		! ! !	1
Tanner 298	Maley		1 ! !			55	27				1		 				1 1 1 1	
Warner 306	Schroeder		1		1 1 1		1		1		1	72	24		!		1 1 1 1	
Wiltse 11	Schroeder				1						1	21	4		1) ()	30
531 total acres	Sub-totals		1		1 1 1 1 1	92	34	58	12	27	5	178	49				! ! ! ! !	
farmed	TOTALS		0		0	1	26		70	3	32	2	27		0		0	76

P - Permittee Share R - Refuge Share

				1979	RTCHI	AND C	OLINTY	COOPE	RATIV	F FAR	MING	SUMMARY						errate incompany
		R	YE		RN		EAT	BAR		FL		D	NC HEAT CROP	MIL	LET	SU FLO	N- WERS	BREAKOUT
WPA - TRACT	PERMITTEE	Р	R	Р	R	Р	R	P	R	P	R	Р	R	Р	R	P		
Biggs 12,a	Schiltz					10	5						4					
Bladow 13	Berg						I I I					57	8					40
Boehning 30	Gaukler					30	5											
Elsen 50 Larson 29	Pheasant Fund						 											40
Ford 36	Strege	17	3		 		r 1 1											
Gaukler 27	Duerr									28	5							
Kuehn 43	Haase				1		1					28	7					50
Larson 29	Gray				 		1					16	4					
Leack 44,a	Trittin .			30	10		 											12
Novetzke 39	Spellerberg		1		1		1									10	2	
Smith 28	Helmer		1		1				1						! ! !			50
Vogeler 15 Haaland 38	Stenson		1 1 1 1		1		1 1 1	23	4						! ! ! !			
Wollitz 35	Wollitz		1		1 1	34	. 0		1 1 1		 	0	9		! !			
537 total	Sub-totals	17	3	30	10	74	10	23	4	28	5	101	28	0	0	10	2	
farmed	TOTALS	1	20		40		84	2	7	3	3	1	29		0	1	2	192

P - Permittee Share

			1979	SARG	ENT C	OUNTY	COOPER.	ATIV	E FAR	MING	SUMMARY						
		RYE	CC)RN	WH	EAT	BARL	ΕY		AX.		NC HEAT CROP	MIL	LET	SU FL0	N- WERS	BREAKOUT
WPA - TRACT	PERMITTEE	P¦R	P	¦ R	P	R	P !	R	P	R	P	R	Р	R	P	R	
Evanson 163	Bjerke	i 1 1		! ! ! !							36	9	-				
Kaske 175 Palensky 154	Marquette	1 1 1 1 1		 			1						54	11			
Klefstad 149	Nelson		25	5							10	5					
Krause 158	Glarum			1 1 1	32	6								1			
Mahrer 94,a	Marquette			 							1		6	3			25
Olson, H. 150	Fiala, J.			! ! ! !			1				35	10		! ! ! ! !			30
Olson, L. 151,a	Hoistad	1	0	8	-					 	-			 	42	0	
Saunders 157	Fiala, F.	1					1 1			 			30	5			
387 total acres	Sub-totals		25	13	32	6				! ! ! !	81	24	90	19	42	0	
farmed	TOTALS	0		38	3	8	0			0	10)5	1	09	42	2	55

P - Permittee Share

R - Refuge Share

2. Haying

There were no requests for haying this year. It was a good grass growing year; also, it seems that there are fewer cattle being raised in the area than in the past.

3. Prescribed Burning

Evanson - 160

Prescribed burns were conducted this spring to benefit the native grasses on the below listed areas. More areas were scheduled for burning but the stormy, rainy weather severely hindered our efforts. However, once the burns were accomplished, the wet weather contributed to beautiful stands of natives responding on all four WPA's.

	WPA	's Burned	1979
Wollitz - 3	35 70	acres	North and northwest end
Paetzke - 3	33 20	acres	Entire area
Paetzke - 3	32 6	acres	Entire area

100 acres

All but southeast 20 acres



Prescribed burns of grasslands and pothole marshes were very successful. SWB

4. Pesticides

All WPA's were checked and sprayed as necessary. Results were good on thistle but were marginal on leafy spurge. Spurge spraying is pretty much a holding action just to keep it from spreading. Spot spraying for spurge was done by refuge personnel using a truck mounted sprayer as listed below:

WPA	SPRAYED	WPA	SPRAYED
Bladow	7 acres	Bauer	Spots
Ford	spots	Lundstad	Spots
Smith	spots	L. Olson	Spots
Bueling	4 acres	Evens	Spots
Blikre	spots	Evenson	Spots
Reinke	spots	Leack	Spots
Wiltse	spots	Palensky	Spots
Boehning	spots	Boeder	Spots
Gainor	spots	Metzen	Spots
Brekke	spots	Wollitz	Spots

Due to distances involved and rough rocky terrain, six WPA's were aerially sprayed by Ness Air Spray, Lisbon as shown below. Results were very good and the saving of refuge labor especially travel time, equipment damage and better coverage all added up to make the cost pretty reasonable.

WPA's AERIAL SPRAYED 1979

WPA	Acres	Chemical_	Target	Date
Asche	10	2-4,D	Canada thistle	6/29
Peterson	40	2-4,D	Leafy spurge Canada thistle Leafy spurge	6/29
Carlson	15	2-4,D	Canada thistle Leafy spruge	6/29
Bueling	21	2-4,D	Sow thistle	7/6
Warner	3	2-4,D	Sow thistle	7/6
Kaspari	6	2-4,D	Sow thistle	7/6

5. Seed Harvest

To meet our primary objective of waterfowl production, each year we seed acreage back into a dense nesting cover (DNC) grass-legume mixture or to a tall grass native mixture. DNC has a limited life span while natives fit the ecological balance of the area better; they last longer and provide better over-all wildlife habitat. A prescribed burn once in a while should be all native grasses seem to require to stay vigorous.

To avoid the prohibitively high cost of natives: (\$10 per pound and rising!) and to avoid "natives" that mostly come from out of state (Nebraska), the idea of harvesting our own native seed was put into action this fall. A fine mixed stand of Indian grass, switch grass and big blue stem was burned on the Evanson WPA west of Forman this spring, good growing moisture fell and a fine seed crop was available. Picking the correct day to combine the grass was/is an educated guess. The seed needs to be as mature as possible but we must combine before the Dakota wind dispersed too much of it.

On September 28 and 29 a local farmer combined approximately 100 acres and hauled the roughly 6,000 pounds of seed in at a cost of \$10/acre. He did an excellent job. The seed was as clean as commercially purchased seed; it seeded through our Nesbitt drill when we made a trial seeding in November of 40 acres on the Tanner WPA. By cutting high to get mostly only grass heads, excellent cover was left for wintering wildlife.

To dry the seed we cleared out the two equipment buildings, spread it on the concrete floor and turned it one to two times per week. This seemed to work fine. One big mistake we made was not dumping and spreading the first truck load immediately because it came in Friday evening after hours with waterfowl opening day that Saturday. When we spread it on Monday, the smell and the feel of the seed indicated substantial heating had occurred. It is unknown exactly how much damage was done to the seed viability - but we won't make this mistake again.



Air drying locally harvested native grass seed on concrete floor of vehicle shed.

DGP

Information from a very knowledgeable seed man, Mr. Ehrling Jacobson, of SCS in Bismarck showed that germination of native grass seed increases significantly in the first 2-3 years after harvest. Also, the period immediately after harvest is a poor time to have a germination test.

The North Dakota State University seed lab conducted an initial germination test from October 15 - November 15, 1979. Sample results were varied with germination rates ranging from 3% to 15%. Their average germination results were:

Indian grass 5% germ. plus 1% dormant Switch grass 6% germ. plus 4% dormant Big Bluestem 6% germ. plus 1% dormant

We plan another germination test in April which should give us a much more accurate picture of the seed's value. Possibly "aging" the seed will boost the germination rate sufficiently. Or, possibly a double seeding rate would produce a good stand if the germ rate improves moderately over this winter. In spending \$1,000 plus refuge labor to buy \$60,000 worth of seed, we can afford to work to develop this operation for the benefit of grassland habitat on many refuges and parks in the tall grass prairie.

C. Wetlands

No active water manipulation occurred this year. The Gainor WPA has the only water control structure in the district - a culvert with flap gate.

D. Forestlands

Although not native on the prairies, shelter belts provide many resource management benefits in slowing soil erosion, catching snow to replenish adjacent wetlands and as habitat for many upland bird and mammal species. Narrow belts can be traps for pheasants and other ground birds in years of heavy snow accumulations by drifting full and suffocating individuals. However, wide and well designed shelter belts are very beneficial to wildlife.

No shelter belts were planted this year. In past years, WPA neighbors have requested a shelter belt planting and will agree to disc the weeds each year if we would pay for the original planting. Often, this type of arrangement has had good results and serves as a positive community relations project.

E. Other Habitat

Large, circular 700 pound size bales were made from the wildlife share of refuge and Palensky-Wyum-Kaske WPA's millet crops. The bales contained the seed heads as well as the straw and were placed in the lea of brush or trees on the refuge, Wollitz WPA (3 bales) and Palensky-Wyum-Kaske WPA's (4 bales) to provide winter feed for deer, pheasants, huns, rabbits and small birds. Since they are nearly six feet tall they will extend above the snow and should last three to five years. Despite the mild winter, at year's end pheasant, deer and small birds were making good use of many of these bales.



Millet bales were placed in protected sites and were readily utilized by deer, pheasants and small birds. SWB

F. Wilderness and Special Areas

Nothing to report.

G. Easement for Waterfowl Management

Aerial surveillance and ground checks for easement violations were made after the snow melted in April. After two successive years of flying in the spring, we believe there is something to be said for it. Among it's good points are the increased predictability of the weather, assurance of finding effective ditches filled with water and decreased time between landowner contacts and compliance dates. A period of five days was given for compliance with only one violator asking for an extension. Late

fall easement checks were flown in November this year; although final checks were not completed by year's end, it seems that the number and severity of violations have been reduced, possibly due to late harvest and price of fuel.

EASEMENT VIOLATIONS - 1979

Easement	<u>Violation</u>	Compliance	Fine
75X, Sargent	Drain	Yes	\$100
95X, Sargent	Drain & fill	Yes	\$100
136X, Sargent	Drain	Yes	\$100
147X, Sargent	Drain	Yes	No
195X, Sargent	Drain & fill	Yes	\$100
286X, Ransom	Drain	Yes	No

The above cases include violation by two tenants and two heirs not a party to the original easement contract. One violation notice was issued to a landowner warned a few years back.

IV. Wildlife

A. Endangered and/or Threatened Species

Bald eagles drift through each fall. Usually they spend a few days working the waterfowl flocks before moving on south. Four single birds were observed this year.

B. Migratory Birds

1. Waterfowl

The cold and snow held all waterfowl south late so that by March 30 the District population was still zero compared to 30,000 snows; 25,000 Canadas and 12,000 mallards on March 31, 1978. Then in April the migration busted loose and apparently passed right on over. The District peaked at only 10,000 snows; 18,000 Canadas and 13,000 mallards compared to 100,000 snows; 30,000 Canadas and 16,000 mallards peak in April 1978.

Water conditions were favorable and production for most duck species was up substantially. The below table compares this year's production with 1978. Of note was the decrease in wigeon and redheads and the increase in canvasback. For the second year, an established WPA quarter section breeding pair count based on a 20% sample was run. Results are as in the table.

Estimated Duck Production on Tewaukon WPA's

CDECTEC	Pair			ding	Estima	
SPECIES	Sam 1978			ation ¦1979	Production 1978	1979
Coot	133	222	1290	2153	1838	2859
Mallard	56	88	543	854	721	1133
Gadwall	31	29	301	281	399	373
Wigeon	12	2	116	19	154	26
Green-wing Teal	6	19	58	184	77	245
Blue-wing Teal	277	316	2687	3065	3567	4069
Shoveler	43	57	417	553	554	734
Pintail	35	57	340	553	451	734
Redhead	123	87	1193	844	1583	1120
Canvasback	1	14	10	136	13	180
Lesser Scaup	4	1	39	10	52	13
Ruddy	40	71	388	689	515	914
Ringneck	4		39		52	
Wood Duck	2	2	19	19	26	26
TOTALS	634	743	6150	7207	8164	.9567

Estimated Duck	Production on Tewauk	on District
	1978	1979
WPA's	8,164	9,567
Easement's	8,100	14,640
TOTAL	16,264	24,207

The easement figures were derived by multiplying the number of easement acres estimated to actually contain water by .5 ducks produced per acre. Species production was calculated from the species composition observed during the WPA quarter section census.

Geese do not nest or summer in the District. Summer duck populations were very similar to last year's with average numbers of 6500 mallards; 1800 gadwall; 400 pintail; 6000 blue-wing teal; 1600 shovelers; 1600 redheads and 125 canvasback present in August.

Fall began with goodly numbers of ducks distributed throughout the WPA's. Opening day of the waterfowl hunting season, 9-29-79, brought the normal thorough hunting pressure and the ducks moved to safer quarters. The Englevale Slough complex (composed of seven WPA's, a small chunk of State land and neighboring private land voluntarily joined in) remained closed to waterfowl hunting as it has for many years to provide a sanctuary -- as requested by local citizens. Englevale provides excellent marsh habitat anyway and, with the hunting closure, usually holds the bulk of the District's birds.

The fall migration was similar to last year's with peaks of 20,000 snow geese and 50,000 mallards at Englevale. However, the weather continued unseasonably warm into December and mallards remained unusually late with 4500 mallards at Englevale on December 12.

2. Marsh and Water Birds

Nothing unusual to report.

3. Shorebirds, Gulls, Terns and Allied Species

Nothing unusual to report.

4. Raptors

Routine observations were similar to previous years. Each fall eagles migrate through. Six golden eagles and 4 balds were observed this year which is an average number.

A possible sighting of a gyrfalcon was made on December 26 on the Gunness WPA by Schuler and Potter. This species occurs in North Dakota according to Stewart's Check List of Birds in North Dakota.

5. Other Migratory Birds

Our regular spring dove coo' count was again taken in Ransom County near Englevale. Doves appear to be increasing, at least in the area of this count, with the numbers heard going from 56 in 1977 to 102 in 1978 and 120 this year.

North Dakota opened for dove hunting this year for the first time since 1964. Talk now is that an attempt to stop this hunt will be made in this year's State Legislature. Hunter organizations are gearing up to try to hold on to this popular sport.

C. Mammals and Non-Migratory Birds and Others

Game Mammals

As with most species, there is no deer data for the district beyond random observations. However, the third straight severe winter and continued loss of private woods and shelter-belts has deer populations quite depressed. Deer hunting success was relatively low.

Other Mammals

High fur prices have caused a great interest in trapping and all WPA's are being trapped to one degree or another -- mostly heavily. Relative to this trend and three severe winters, populations of these species seem to be reasonably good. With good water conditions, muskrat, beaver and mink seem to be increasing. Fox and skunk populations appear to be holding steady. Raccoon numbers are down markedly with distemper showing up in some animals. Rabbits also seem to be down.

3. Resident Birds

Status of these species is the same as with deer - very low.

A group of sportsmen from Hankinson have started a group, Pheasant Fund, Inc., to increase pheasant numbers in southern Richland County. After several meetings with refuge personnel, a three season farming agreement was signed July 12 with Mr. Dick Anderson in which they would breakout, summer fallow for a year, plant and cultivate two shelter belts with scattered food plots on the Elsen (12a) and Larson (29) WPA's. Acreage involved is 40. They are to do all work and the Service will own the trees and crops. To date this small but interested group is making good progress.

4. Other Animal Life

Nothing to report.

V. Interpretation and Recreation

A. Information and Interpretation

1. On-Refuge

Nothing to report.

2. Off-Refuge

Press releases were mailed out routinely dealing with District programs or wildlife information. The local papers in Milnor, Lidgerwood and Hankinson all printed them without editing and at least three other papers used them occasionally. This effort is being expanded into a once or twice monthly column under our established heading as shown on the next page.

Refuge personnel routinely visit local sportsman's clubs to discuss refuge and district "current events".

Busching was assigned duty on the newly formed Area public involvement task force and served ably. This new effort is aimed at setting and coordinating the Area wide major effort to get the Service view point across. Initiated by the new Area Manager, this effort may get our small wetlands acquisition effort back on track.

B. Recreation

Wildlife Oriented

Due to the low human population in this rural area, the vast majority of District public use is hunting. Use by hikers, birders or photographers occurs but is very low.

Waterfowl hunters had a good year due to plentiful water acres to hunt and a good scattering of ducks. Goose hunting on the District occurs mainly adjacent to the Englevale Slough sanctuary and snow goose hunters had some excellent days along the boundaries. Elsewhere, the goose hunting was slow due to "blue-bird" weather. Hunter use totalled an estimated 4,250 visits and 16,500 activity hours, very similar to last year.

Pheasant hunting was generally very poor due to the low populations although beautiful, mild fall weather provided ideal conditions. Estimated use was 1,050 visits for 3,150 activity hours which was less than half of 1978's use.

Large numbers of nimrods turned out to scour the WPA's during the firearm deer hunt but, according to informal reports, the deer were few and far between due to three severe winters. Estimated use was 1,500 visits/3,000 activity hours, the same as 1978.

Booming fur prices have nearly everyone "and their grandma" out setting traps. The mild fall weather was excellent for trapping so an increase in use was experienced to 1,870 visits/2,500 activity hours from 1,850 visits/1,850 activity hours.

Sargent County Teller " 10 - 80 m matter 8

U.S. FISH & WILDLIFE SERVICE

Tewaukon



Refuge Notes

By Dave Potter, manager

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in hidzerwood Monitor
É Hankinson News

By Dave Potter WHAT IS A WPA?

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THE BEST TOURS

With each A

Back in the days before World War II many out of work people joined in a national government program known as the WPA - Works Progress Administration. The WPA did much good work on Tewaukon National Wildlife Refuge planting trees and building bridges and other structures. In fact, seniors may remember that the large woods located a half mile west of the refuge office was planted by the WPA.

Now the Fish and Wildlife Service is involved in another national program involving a new WPAT - Waterfowl Production Areas. The WPA effort aims to preserve wetlands for wildlife habitat by purchasing land containing ponds, sloughs, marshes and some uplands for management by the federal Fish and Wildlife Service. As in the name, Waterfowl Production Areas are purchased primarily as duck nesting habitat. All the major duck nesting areas in North Dakota, South Dakota, Minnesota, Iowa, Nebraska and Montana are or have been involved. However, by far, North Dakota is the most important duck nesting state, excluding that northern giant, Alaska.

WPAs are purchased with money from the sale of Duck Stamps required of all waterfowl hunters over age 15.

Funds from all across the nation have been used to preserve North Dakota land for waterfowl, other wildlife and for public use like hunting, trapping, hiking or fishing. These scattered, relatively small tracts of wetlands also serve other extremely important roles in controlling floods by slowing the spring runoff, in allowing water to sink into the soil to replenish underground supplies and in providing catch basins for sediments and chemicals in the water to settle out

Ever Illuary.

No WPAs have been purchased in North Dakota since April 1978 because the Governor refuses to approve any sales unless they count toward mitigation of the damage done to wildlife habitat by the Garrison Diversion Unit project. This is not possible because it is illegal under prior, existing federal law. So North Dakota's share of the Duck Stamp funds has been going to preserve habitat in South Dakota, Iowa, Montana, and Minnesota,

Tewaukon Refuge personnel are responsible for 11,892 acres of WPAs in the three county area. A summary in Richland County - 35 WPAs totalling 4,204 acres; Sargent County - 24 WPAs of 3,537 acres and Ransom County - 39 WPAs of 4,151 acres.

2. Non-Wildlife Oriented

Nothing to report.

C. Enforcement

As was the year before, our enforcement efforts were concentrated on WPA's. No instances of snowmobile trespass were noted due to the lack of snow. The redhead problem experienced in other seasons was virtually eliminated as the State allowed the taking and possession of one redhead duck. No large concentrations of hunters were observed this year and enforcement activities were reduced somewhat. State Deputy Game Warden credentials were issued to Busching this year enabling him to cite for State violations encountered while performing enforcement of Federal laws.

A radio operating on State Law Enforcement frequency was purchased to allow us to maintain constant contact with the State Warden. Busching, Schuler and Potter all qualified with the Service revolver prior to the hunting season. Our thanks go to District Field Assistant Larry Tangen and District Game Warden John Violett for their assistance during the enforcement season.

The second day of the rifle deer season (Saturday, November 10), Schuler checked the Weaver WPA in Ransom County and found a freshly killed adult bald eagle. Fresh tracks in the snow indicated several apparent deer hunters had been on the area. A thorough investigation by refuge personnel and Agent Bill Reynolds was conducted. Interviews with several hunters present in the area that day were conducted and the bird was X-rayed and examined by a veterinarian for possible bullet fragments or other clues. However, all our afforts were to no avail and the case was closed pending receipt of any additional information.

Below is a listing of cases written in the District for 1979.

VIOLATION	FOC/COURT	FINE
Camping on WPA	FOC	\$25.00
Cattle Trespass & Destroying Plants on NWR WPA Trespass (2 cases)	FOC FOC	\$200.00 \$25.00 (each)
Taking Migratory Birds with Unplugged Gun	Court	\$25.00*

*Bond on the unplugged gun case was \$50.00. Violator plead guilty and fine was reduced to \$25.00.

Violations concerning State Law on juveniles prosecuted under county jurisdiction:

Loaded	Gun	in	Vehicle									\$50.00
Loaded	Gun	in	Vehicle									\$50.00
Loaded	Gun	in	Vehicle									Left the state
Loaded	Gun	in	Vehicle							٠		\$50.00
Taking	Mig	rate	ory Birds	5 1	wit	th						
Unp	luaae	ed (Gun (Juv)) .			2					Probation

VI. Other Items

A. Field Investigation

Nothing to report.

B. <u>Cooperative Programs</u>

Bee keeping special use permits were issued to Mr. Dick Ruby, Milnor for the Blikre WPA and Mr. Dale Lehfeldt, Lidgerwood for the Leack WPA. The rate was \$.50/hive; Mr. Lehfeldt paid \$8.00 and Mr. Ruby paid \$22.50.

Nearly every year it seems, unauthorized bee hives are discovered on the District. This year hives showed up on the Ford WPA. The owner, Mr. Gene Sager of Wheaton, MN, was identified by his brand, contacted by letter and agreed to cooperate with the Service on future bee hive use.

C. Items of Interest

1. Training

There was no formal training this year.

2. Administration

Hoflen attended the Area Administrative Workshop. Cameron or Potter attended Area Project Leader's Meetings. Busching attended a Public Affairs Task Force Meeting and a Project Leader's Meeting.

Manager Cameron succumbed to the lure of sage brush and mountains moving west as refuge manager of Ruby Lake NWR, Elko Nevada on June 1. Valley City Wetlands Manager, Lloyd Jones, served as acting project leader until David Potter transferred in September 17 from the assistant manager slot, Mark Twain NWR Complex, Quincy, Illinois.

Clerk Hoflen delivered a healthy, strapping baby boy, William Roger, on April 19. She was promoted to GS-5 on July 15.

Biological Technician Busching was converted to this position on August 12 from a Maintenance Helper, WG-5 job.

Maintenance Helper Ahrlin G. Hoffman closed out his 18 year. Service career with retirement on November 3. His wealth of knowledge and steady hand about the Refuge and District will be missed. However, he comes out to visit regularly.

3. Shared Revenue Payments

The short-fall in these payments continues to be a problem that critics of the wetlands program such as hostile county commissioners use regularly to blast the Service. Payments this year were less than 50% of "normal". And, it is hard to rebut. Hopefully, a solution to this problem is on track for 1980.

Payments under PL 88-523, Revenue Sharing Act, were:

County	1977	1978	1979		
Ransom	\$ 4,662.30	\$ 3,553.30	\$3,370.00		
Richland	\$ 5,765.09	\$ 4,043.69	\$3,847.00		
Sargent*	\$14,971.81	\$10,501.34	\$9,990.00		

^{*}includes refuge and WPA payments

4. Credits

Potter wrote this report drawing liberally from previous narratives, records and the Crew's memory. Except, Busching wrote the law enforcement and easement sections. Hoflen's quality typing job speaks for itself.

D. Safety

No accidents occurred this year. Formal or informal safety discussions were held regularly.