J. CLARK SALYER
WETLAND MANAGEMENT DISTRICT

Upham, North Dakota

ANNUAL NARRATIVE REPORT

Calendar Year 1983

U.S. Department of the Interior
Fish and Wildlife Service
NATIONAL WILDLIFE REFUGE SYSTEM

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Employees at Salyer NWR includes: Kneeling (L to R), Walls and Vohs; Front Row (L to R), Berg, Zeretzke, Latendresse, and Eslinger; Back Row (L to R), Gutzke, Giese, Badke, and Benson.

1. Darold T. Walls, Refuge Manager, GS-12, PFT
2. *Fred G. Giese, Assistant Refuge Manager, GS-11, PFT
3. William J. Berg, Wetlands Manager, GS-9, PFT
4. *Theodore W. Gutzke, Assistant Refuge Manager, GS-9, PFT, EOD 5/29/83
5. *Thomas W. Stewart, Assistant Refuge Manager, GS-9, PFT, Transferred 5/14/83 (Not Pictured)
6. Gary A. Eslinger, Biological Technician, GS-7, PFT
7. Wanda L. Vohs, Refuge Assistant, GS-6, PFT
8. Raymond F. Badke, Automotive Mechanic, WG-10, PFT
9. *Hamilton S. Benson, Maintenance Worker, WG-7, CS, 5/1/83-12/25/83
10. *Edwin C. Zeretzke, Motor Vehicle Operator, WG-7, CS, 1/1/83-2/20/83 and 5/1/83-12/31/83
11. *Leo J. Latendresse, Engineer Equipment Opeerator, WG-8, CS, 1/1/83-2/6/83 and 4/17/83-12/25/83

* Less than 5 percent of time spent on WMD

Review and Approvals

William J. Berg 7-9-84
Submitted by Date

Ted I. Peabody 7/17/84
Regional Office Review Date

Temporary summer employees included: Front Row (L to R), Freund and Peterson; Back Row (L to R), Grabow, O'Donnell and Erickson.

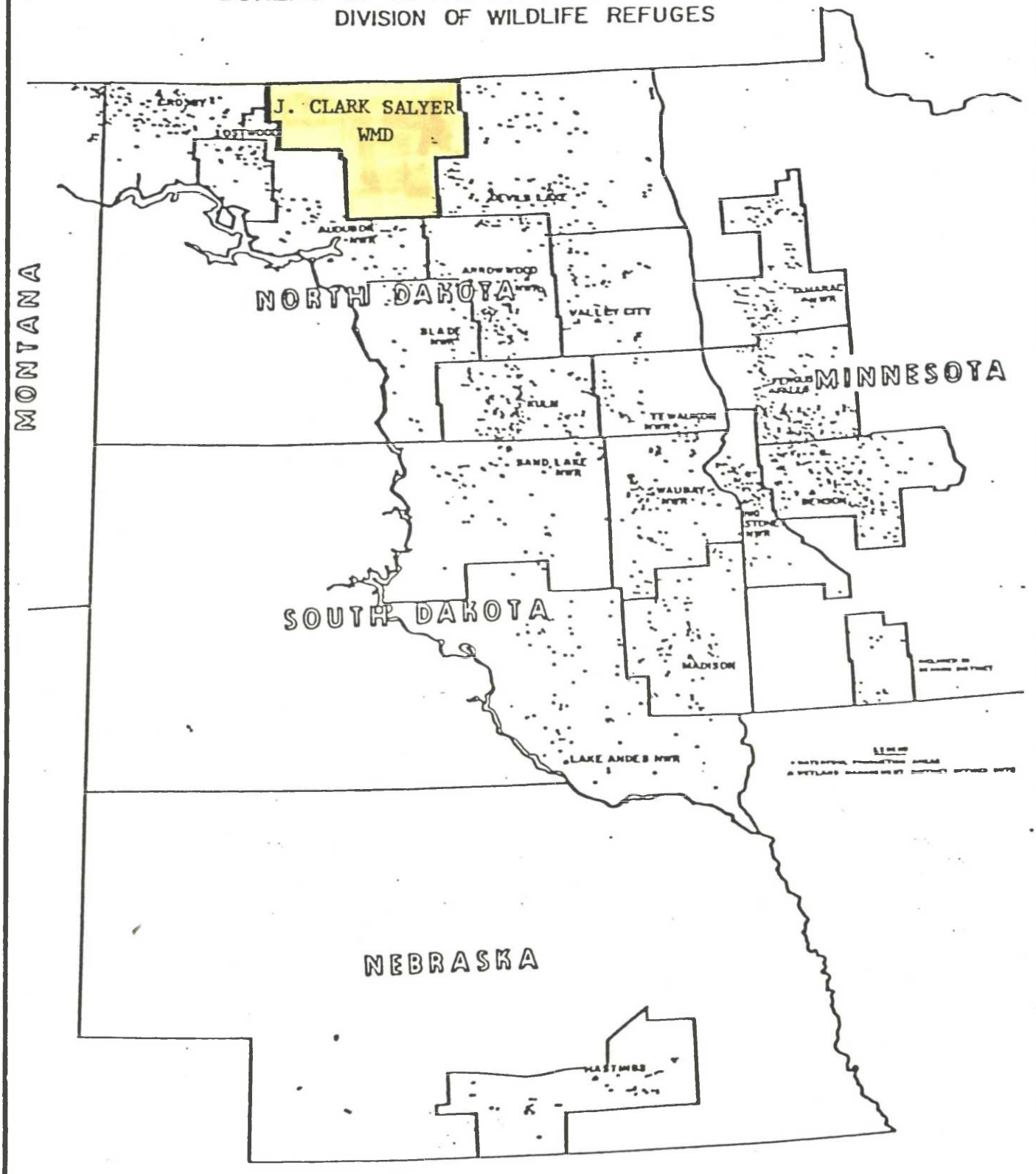
1. Jay F. Peterson, Biological Technician (Wildlife), GS-5, 5/2/83-9/9/83 (Refuge)
2. Michael A. Erickson, Biological Aid, GS-4, 5/15/83-9/2/83 (WMD)
3. Mike L. Grabow, Biological Aid, GS-2, 5/31/83-9/2/83 (WMD)
4. Timothy J. Freund, Biological Aid, GS-2, 5/31/83-9/2/83 (WMD)
5. Jheri L. O'Donnell, Biological Aid, GS-2, 5/31/83-9/2/83 and Clerk-Typist, GW-2, 11/21/83-12/31/83 (Refuge)

WATERFOWL PRODUCTION AREAS

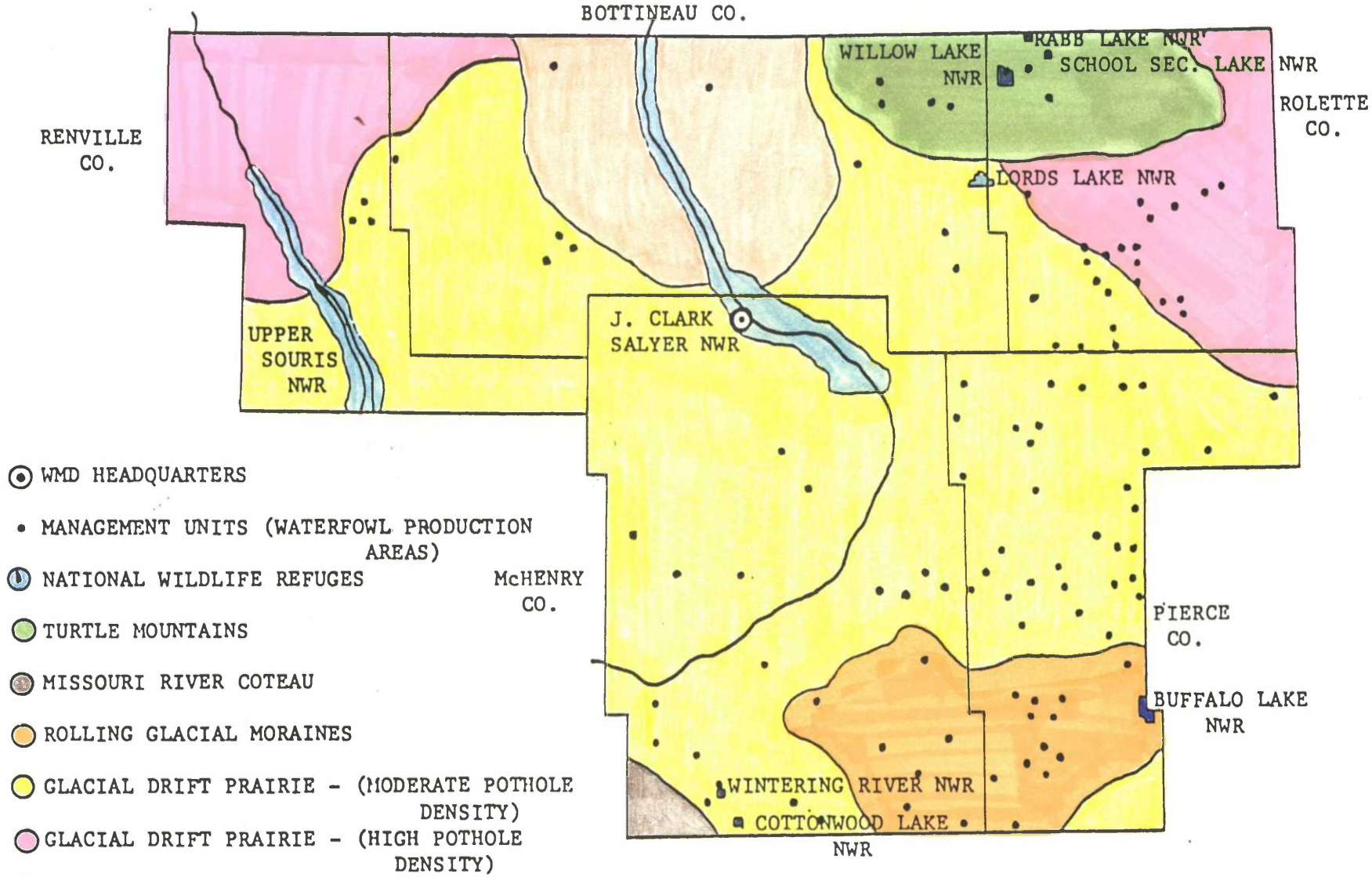
UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF SPORT FISHERIES AND WILDLIFE

DIVISION OF WILDLIFE REFUGES



J. CLARK SALYER WETLAND MANAGEMENT DISTRICT



SCALE: 1 INCH EQUALS APPROX. 20 MILES

* for a map showing locations of individual WPA's see public use guide in back cover of this report.

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Introduction

J. Clark Salyer Wetland Management District is located in northcentral North Dakota. The district is made up of Renville, Bottineau, Rolette, McHenry and Pierce Counties. Within the 5-county district there are 114 Waterfowl Production Area Management Units totaling 22,156 acres, 7 easement refuges totaling 8,826 acres and over 2,000 easement contracts totaling 117,298 wetland acres. District staff includes one GS-9 Wetland Manager (1 FTE), one part-time GS-7 Biological Technician (.5 FTE) and about .3 of a man-year for clerical and other assistance. This station is grossly understaffed in comparison to other WMD's in North Dakota and Minnesota (Figure 1).

The majority of the district is made up of glacial drift prairie with glacial Lake Souris occupying central Bottineau County and northcentral McHenry County. A portion of eastern Pierce County, in and around Hurricane Lake, lies within glacial Lake Cando. Only a small portion of southwestern McHenry County lies within the Missouri River Coteau. A twelve township sized area in southwestern Rolette and northcentral Pierce Counties is made up of numerous small prairie lakes and potholes comparable to the Missouri River Coteau. A majority of the district WPA's are located in this geological formation. The Turtle Mountains lie in the northeastern part of the district. They are not mountains as such but a wooded moraine rising about 500 feet above the surrounding prairie. Many shallow lakes and small potholes make up this geological formation. Uncleared uplands in the Turtle Mountains are made up of green ash, burr oak, aspen and various shrubs.

A. Highlights

Tentative plans were formulated to restore water levels in Holsten WPA by permanently raising an inlet sill .8 of a foot. (Section F-11).

A public hearing on White Spur Drain and Stone Creek Channelization Project was held in April (Section).

All but three pre-83 easement violations were closed by year's end. (Section F-11)

Seven hundred and eight acres of native grassland and marsh were prescribed burned in 1983. (Section F-9)

Russell Diversion lawsuit is going to trial. (Section F-11).

B. Climatic Conditions

The winter of 1982-83 was one of the mildest on record with temperatures averaging 7 to 12 degrees above normal. The coldest temperature at Upham in January was 34 degrees below zero but only two days in January and February had daytime readings below zero. Total snowfall for the winter at Upham was only 17 inches with 7 inches the greatest snow depth on the ground in both January and February.

By March 5 all snow had melted due to continued mild weather and little runoff had occurred. On March 6 a major storm brought over an inch of rain to most areas of the district. The rain fell on partially frozen ground that was still saturated from heavy fall rains. This produced abundant runoff volumes and filled most wetlands to or in excess of their capacity. Prospects for waterfowl production were excellent going to the spring as the result of this single storm.

The spring of 1983 was a little cool and wetland conditions remained good with near normal precipitation. Ice went out of the major lakes on April 25.

Soil moisture conditions were good for native grass seedings through June. In July and August excessive heat hurt some of the seedings. The hottest temperature of the year at Upham was 102 degrees on August 5th.

Wetland conditions remained good through July due to above normal precipitation that month. However in August below normal precipitation and continued high temperatures left wetlands in only fair to poor shape. As has been the case for several years, water conditions in the northwestern part of the district were not as good as the central or eastern part.

Total precipitation or the summer was near normal in most areas.

Above normal precipitation in September restored soil moisture to adequate and helped maintain wetland conditions. The rains were not enough to fill the Grassy Lake area near Wolford. Grassy Lake has been a very high use area for snow geese in the fall for several years due to good water conditions. However, this fall very few snow geese used the area because most of the lake was dry.

Total precipitation for the fall was above normal due to the rains in September. Temperatures for the period were near normal. Freezeup occurred on November 22.

Only light snow fell across the district in November and December. Again precipitation was heavier in the central and eastern parts and lighter in the northwest. There were six inches of snow on the ground at Upham on December 31.

The year ended with a month-long cold wave. Temperatures during the month of December averaged 15 degrees below normal. The coldest day of the month and year at Upham was 42 degrees below on December 23.

Total precipitation for the year at Upham was 17.06 inches, which is 0.45 inches above normal.

C. Land Acquisition

1. Fee Title

1983

County	Total Acres	Increase Acres	Goal Acres
Bottineau	2,155	0	3,550
McHenry	4,112	0	7,950
Renville	250	0	750
Pierce	10,492*	0	10,200
Rolette	5,183	0	6,600

*Includes 3,276 acres of Bureau of Land Management land that were turned over to the FWS for management purposes.

No fee acquisition has taken place in North Dakota since April of 1978. In 1980 the North Dakota State Legislature passed a law which requires the FWS to devise a state waterfowl plan before the governor can approve any fee acquisition. The plan will have to be approved by the North Dakota State Legislature. The FWS proposes to submit a plan to the governor and legislature by December 31, 1984. Inquiries from landowners wishing to sell to "wildlife" continue to come into this office on a average of one a month. Some involve lands adjacent to WPA's which would make ideal round outs. All inquiries are referred to the Devils Lake or Minot Realty Offices. The realty offices in turn refer them to the Bureau of Reclamation for potential Garrison Diversion mitigation acres.

2. Easements

On August 2, 1983 the FWS officially accepted 259 wetlands acres that were donated by the Turtle Mountain Band of Chippewa Indians. The donation was made to offset impacts

that will occur to easements and fee lands in an area where ground water withdrawals will take place. This is only the second easement that has been accepted in North Dakota since July of 1977.

In October it was learned that Region 6 would have available 3 million dollars for the Small Wetlands Acquisition Program. One million of this would be used for administration, one and one-half million would be spent in South Dakota and 500,000 would be expended in North Dakota. At year's end FY-84 Easement Acquisition Guidelines were being prepared for North Dakota.

Easement acreages for the 5-county district are shown below:

County	Acquired in 1983	Easement Wetland Acres	Goal Acres
Bottineau	0	26,294	33,550
McHenry	0	23,391	28,900
Renville	0	12,366	16,700
Pierce	0	36,163	38,150
Rolette	259	19,152	23,350
Total	259	118,366	140,650

Easement acquisition is 84 percent complete for J. Clark Salyer WMD.

D. Planning

2. Management Plans

A controlled burning plan was prepared and combined with the refuge plan in March. A proposed operating plan for Holsten Slough was written and submitted to the Boundary Creek Water Management Board for approval in December.

3. Public Participation

County commissioner meetings were attended in all counties except Rolette. County commissioners and weed control officers were sent updates on our weed control efforts and prescribed burning programs. News releases were prepared for all official county newspapers explaining the benefits and purpose of our prescribed burning program.

Wetlands Manager Berg worked with two writers and photographers from the National Geographic Society on two special publications entitled Our Threatened Inheritance: Natural Treasures of the United States and Lakes, Peaks, and Prairie: Discovering the U.S.-Canadian Border.

Tom Ramsey (film maker for America's Wetlands) worked in the district to collect footage for a production on the 50th anniversary of the duck stamp. Several scenic wetland shots, along with migratory bird pictures were obtained.

Tom Ramsey worked in the district for one week collecting footage for the 50th anniversary of the Duck Stamp. WJB

A program entitled The FWS in Pierce County was presented to 25 members of the Rugby Lions Club in April. Several questions concerning acreage and habitat programs were answered after the presentation.

Bill Berg and Al Ludden (ES, Bismarck) attended the McHenry County Water Resource District meeting to discuss FWS interests in relation to the proposed channelization of Cut Bank Creek north of North Lake and Buffalo Lodge Lake. Several easement acres could be drained if the project is carried out. The Water District's solution to the perceived high water problem was to establish a legal drain with an assessment district. To date the landowners have not petitioned the Water District to create a legal drain.

Throughout the year many inquiries were answered concerning legal drains, illegal drains, proposed drains, weed control, burning and public use.

5. Research and Investigations

Changes in Diet and Body Composition of Lesser Snow Geese on their Wintering and Spring Grounds

Ray Alisauskas, graduate research assistant - University of Western Outaria, along with ND Game and Fish Department and FWS personnel collected about 60 snow geese for a body fat composition study being carried out throughout the flyway. Preliminary indications are that lesser snow geese do not start acquiring body fat, in preparation for egg laying and incubation, until they reach South and North Dakota. Birds will be collected again in the spring of 1984.

E. Administration

J. Clark Salyer WMD and NWR are administered out of the same office but are considered separate stations. Since 1980 an effort has been made to centrally locate the WMD office in Rugby.

1. Personnel

The WMD has one full-time Wetlands Manager along with a full-time Biological Technician position which is shared with the refuge. Maintenance personnel assist with vehicle upkeep and the Refuge Assistant handles the clerical work.

FTE's trends for the WMD are shown below:

	Permanent Full-Time	Summer Temporary
FY-78	1.69	0
FY-79	1.25	0
FY-80	1.58	3
FY-81	1.66	2
FY-82	1.51	0
FY-83	1.80	3

A comparison of staffing patterns for WMD's in Minnesota and North Dakota is shown in Figure 1.

5. Funding

The WMD continues to suffer from lack of manpower for a 22,156 fee-acre and 117,298 easement wetland acre district. Boundaries on several units lack posting along with much needed habitat monitoring and restoration. Lack of equipment and manpower prevent many of the activities that are routinely done on other districts. Future plans are to acquire a 100-h.p. tractor and equipment truck to aid with habitat restoration efforts.

Figure 1

Comparison of J. Clark Salyer WMD with Minnesota's WMD's

	J.C.S.	Morris	Detroit Lakes	Fergus Falls	Litch-field
Easement					
Acres	117,298	13,559	8,147	15,354	5,284
Contracts	2,061	904*	543*	1,023*	364
No. of Violations	1975-1982 143				
Oil well conflicts	60				
WPA					
Acres	22,156	39,596	31,038	33,350	22,639
Units	114(1983)	224(1983)	143(1979)	198(1979)	117(1981)
Staffing	FTE 1983	FTE 1983	FTE 1983	FTE 1983	FTE 1981
Wetland Mgr.	1 - GS-9	1 - GS-12	1 - GS-12	1 - GS-12	1 - GS-12
Asst. Mgr.		1 - GS-11 1 - GS 7/9	1 - GS-11	1 - GS-9	1 - GS-11 1 - GS-9
Range Cons.		1 - GS-11	1 - GS-9	1 - GS-11	1 - GS-11
Bio. Tech.	.5 - GS-7	1 - GS-7	1 - GS-5	1 - GS-6 1 - GS-5	
Biologist (Ease)		1 - GS-9/11	1 - GS-11		
Clerk		1 - GS-5	1 - GS-6	1 - GS-4	1 - GS-5
Maintenance		1 - WG-7		1 - WG-7	1 - WG-7
Other	.30**		1 - GS-7***		
Temporaries (No. that year)	3	2	unknown	2	11
Total FTE's (Temps. not included)	1.8	8.0	7.0	7.0	6.0
Easement Acres/FTE	65,166	1,695	1,164	2,193	881
WPA Acres/FTE	12,309	4,949	4,434	4,764	3,773

* Projected using 15 acres as average easement contract
** Includes clerk, mech., and other assistance
*** Trainee

Figure 1 (cont)

Comparison of J. Clark Salyer WMD with North Dakota WMD's

	J.C.S.	Devils Lake	Kulm	Valley City	Crosby
Easement					
Acres	117,298	148,338	97,012	39,160	65,234
Contracts	2,061	2,602*	1,702*	687*	1,144*
No. of Violations	1975-1982 143				
Oil well conflicts	60				
WPA					
Acres	22,156	39,996	42,035	16,300	17,151
Units	114(1983)	178(1979)	180(1979)	72(1979)	93(1979)
Staffing	FTE 1983	FTE 1983	FTE 1983	FTE 1983	FTE 1983
Wetland Mgr.	1 - GS-9	1 - GS-13	1 - GS-11	1 - GS-11	1 - GS-9
Asst. Mgr.		1 - GS-11 2 - GS-9 1 - GS-7	1 - GS-9		
Bio. Tech.	.5 - GS-7	1 - GS-5	1 - GS-7	2 - GS-7	1 - GS-5/7
Clerk		1.5 - GS-5	1 - GS-5	.75 - GS-5	
Other	.30**				
Temporaries (No. that year)	3	unknown	unknown	unknown	unknown
Total FTE's (Temps. not included)	1.8	7.0	4.0	3.75	2.0
Easement Acres/FTE	65,166	21,191	24,253	10,443	32,617
WPA Acres/FTE	12,309	5,713	10,713	4,346	8,575

* Projected using 57 acres as average easement contract
** Includes clerk, mech., and other assistance

6. Safety

Regularly scheduled safety meetings are held monthly for both WMD and NWR staff.

F. Habitat Management

1. General

Habitat conditions on private land were poor going into the 83/84 winter. The Department of Agriculture's PIK program left thousands of acres idle throughout the state. Toothless county guidelines allowed many landowners to leave little to no residual cover on set-aside acres. North Dakota ranked second only to Texas with 900,000 acres exposed to severe erosion. Idle time, created by fewer acres being planted, also allowed many landowners to catch up on their annual fall ditching.

Drainage of private wetlands in the WMD was again documented during aerial easement flights. The number of cases in violation of North Dakota drainage laws are as follows.

Year	Quarter Sections with Drainage
1976	542
1977	-
1978	144
1979	86
1980	17
1981	15
1982	2
1983	15

A typical example of private wetland drainage which continues to erode ND's wetland base is the proposed drainage of Hurricane Lake. Hurricane Lake, landowners claim, is unnaturally high so a push is on to drain the lake and add about 7,000 acre-feet of water to Devils Lake. Devils Lake is already causing flooding problems, to the extent that the Corp of Engineers and the City of Devils Lake are proposing an outlet for the lake into Strump Lake and eventually the Sheyenne River. The Sheyenne River almost annually floods the Citys of Valley City and West Fargo. This type of irresponsible water management continues to create water problems throughout North Dakota. State water laws are available to prevent much of the wetland drainage in the upper reaches of watersheds. Local water boards have failed to consider downstream impacts while ignoring the thousands of acres that are drained annually. Until an economic return is offered to landowners to maintain wetlands, they will continue to be drained at the current rate of 20,000 plus

acres a year. With surplus grain production and annual set-aside programs, conversion of wetlands to productive cropland is also compounding the problem of low grain prices.

The first oil well on a WPA was drilled in August of 1982. Restoration of the pad and entrance road was finally completed in October of 1983.

Grassland restoration was completed on Hutton WPA in October. WJB

2. Wetlands

Data compiled during spring pair counts indicated that wetlands were better than 90 percent full going into the breeding season.

There are no water control structures on Service lands within the WMD. Staff gauges are monitored on seven easement refuges, four WPA's, and two easements. Water levels on WPA's and easements are being documented to evaluate the impacts that are occurring or will occur due to drainage projects or ground water withdrawals. The North Dakota State Water Commission continues to ignore the uncontested water rights we have on WPA's and easements. To our knowledge a ground water withdrawal application has never been denied or contested because of the impacts it may have on related surface waters. In 1983 two ground water withdrawal permit applications were approved by the SWC on lands that also had a wetland easement.

3. Forests

Eight WPA's in the Turtle Mountains have native stands of burr oak, green ash and aspen. An agreement with Lake Metigoshe State Park allows them to cut aspen in a 1-acre checkerboard fashion on Lundy WPA. To date about 20 1-acre clearings have been cut. The management is intended to improve ruffed grouse and white-tailed deer habitat.

Shelterbelts and farmstead plantings are present on many WPA's within the district. A total of 807 acres of woodlands exist on the 114 management units.

4. Croplands

Cooperative farming agreements are carried out on WPA's to establish native seedings, maintain winter food plots and revitalize dense nesting cover.

During 1983 the following units had active cooperative farming agreements.

Unit	Acreage	Purpose
Mikes Peak	29	Cropped - Preparation for 84 native DNC seeding
	10	Winter food plot
Robert Gilge	8	Cropped - Preparation for 84 native grass seeding
Volk (Rolette)	72	Seeded to DNC with nurse crop in 1984
Round Lake	24	Cropped - Preparation for 84 native grass seeding
Boyer	31	Cropped - Preparation for 84 native grass seeding

Approximately 25 acres that had previously been trespass farmed were seeded to either natives or DNC, depending on the adjacent cover.

5. Grasslands

Native grasses were seeded on a total of 110 acres on two management units (Mikes Peak and Herd Lake). A mixture of warm season native grasses was seeded on Mikes Peak and a mixture of warm and cool season natives was seeded on Herd Lake WPA. Both areas were seeded into summer fallow which had been treated with round-up that spring.

6. Grazing

No grazing permits were issued in 1983. Trespass grazing was noted on Berube and Herd Lake WPA's during 1983. Both owners were contacted and given warnings.

7. Haying

No haying permits were issued in 1983. Trespass haying occurred on Juanita WPA in Pierce County. Following survey of the WPA our boundary was posted and marked with steel fence posts at 50-foot intervals. A followup letter was written to the owner and operator explaining the situation and asking him to respect the boundary.

Trespass haying and farming on Juanita WPA, Pierce County. WJB

9. Fire Management

Prescribed burns were conducted on the following units in 1983.

Burn No.	Unit	Date	Acres	Purpose and Result
83-1	Little Gurr (Rolette)	5/10/83	20	Stimulate 1970 sand bluestem seeding for possible harvest. Dry conditions prevented seed development.
83-2	Reider (McHenry)	5/25/83	75	Stimulate 1969 big bluestem seeding. Vegetative growth much more robust during summer of 1983.
83-3	Herd Lake	5/31/83	85	Rejuvenate native prairie by reducing Kentucky bluegrass competition. Excellent response by big bluestem in coulees and low areas.
83-4	Elbow Lake (Rolette)	5/31/83	50	Stimulate native prairie. Vigor of grassland improved.
83-5	Holsten Slough (Bottineau)	10/83	480	Remove vegetation for survey. Clean burn.

Warm season natives responded well to a May 31 burn on Herd Lake. WJB

One wildfire occurred on Kuntz WPA in September of 1983. A heavy equipment operator who had been hired to bury a barn foundation either threw out a cigarette or a spark from his equipment caused a fire which burned 40 acres of native prairie. Two FWS employees and six members of the Drake volunteer fire department along with two pumper units extinguished the fire in about two hours. A bill for $250.00 was received from the fire department for their services.

10. Pest Control

Twenty-four WPA's with known leafy spurge and Canada thistle problems were sprayed with Ester 2,4-D and Tordon 22K. Most areas were treated with a boom sprayer with a few less accessible areas being treated with a hand sprayer. Following is a list of weed control efforts in the 5-county district.

Unit #	Target Species	Gallons Applied Ester LV-6	Tordon 22K	Water	Acres
McHenry County					
17	Spurge	1.00		75	2.0
23	Spurge	.05		5	.1
4	Spurge	4.00		300	8.0
Bottineau County					
2	Spurge & Thistle	19.00	1	1500	40.0
10	Spurge	.10		10	.2
14	Spurge	.10		10	.2
1	Spurge	1.00		75	2.0
13	Spurge	5.00		375	10.0
Pierce County					
32	Spurge	1.00		75	2.0
19	Spurge	30.00		2250	60.0
39	Spurge & Thistle	2.00	2	300	8.0
26	Spurge	1.00		75	2.0
25	Spurge	.20		20	.5
23	Spurge	.05		5	.1
6	Spurge	1.00		75	2.0
16	Canada & sow thistle	2.00		150	4.0

Unit #	Target Species	Gallons Applied Ester LV-6	Tordon 22K	Water	Acres
Rolette County					
8	Spurge & Can. thistle	18.00	2	1500	40.0
15	Spurge	2.00		150	4.0
2	Spurge & Can. thistle	1.00		75	2.0
17	Spurge	.50		40	1.0
24	Spurge & Thistle	10.00		750	70.0
25	Spurge	1.00		75	2.0
6	Spurge	.10		10	.2
14	Spurge	.10		10	.2
24	TOTAL	100.20	5	7910	210.5

In addition to the above information we also recorded the locations of weed problems on aerial photos. This will reduce the chance of patches being missed due to change in personnel applying the chemicals.

Copies of our weed control efforts were sent to county weed control officers, county commissioners and one township board.

Two weed complaints were received from adjacent landowners during the 1983 spraying season. Both areas were treated within a week of when the complaints were received.

11. Water Rights

Hurricane Lake

In 1981 the Pierce, Rolette, Towner and Benson County Water Resource Districts (WRD's) filed suit against the FWS in an attempt to drain Hurricane Lake's associated easements and a WPA on the north end. The suit claimed that the WRD's did not need a permit from the FWS to dredge through wetlands covered by an easement. In April of 1982 the United States moved to dismiss the action claiming that the court lacked personal and subject matter jurisdiction because the WRD's failed to exhaust their administrative remedies. In March of 1983 the WRD's filed an amended complaint adding the State of North Dakota as a plaintiff. Specifically the plaintiffs claimed that the easements cannot limit the activities of third parties; that the WRD's have authority to acquire or take by condemnation interest in land to carry out the drainage project in spite of the wildlife production area easements; that the State and its political subdivisions are not required to comply with statutes and regulations governing National Wildlife Refuge lands; that the Secretary of Interior has acquired easements covering wetlands in

excess of the amount authorized by the governor; and that the wildlife production area easements are void for vagueness. In November of 1983 the plaintiffs filed a motion for a preliminary injunction requesting the court to order the defendents not to interfere with the plaintiffs' attempts to dredge the wetlands. On November 30, 1983 the court ruled that harm to the defendants if plaintiffs are permitted to dredge the channel far outweights any harm to the plaintiffs if the channel is not dredged. The court also recognized that the Hurricane Lake area is an important breeding area for migratory waterfowl in the spring and a staging area during fall migration. In addition, the loss of wetland acres that will result from channel dredging would cause a loss in habitat and breeding grounds. Since the plaintiffs chose not to appeal the court's ruling they are now required to go through the administrative process to legally go through wetland easements. The process involves mitigation and an environmental assessment or environmental impact statement before the issuance of a permit.

The first leg in the drainage of Hurricane Lake. WJB

Even though the court dismissed the case, the issues argued by the plaintiffs continue to come up throughout the state. In this district alone there are three drain projects that involve FWS interests similar to the Hurricane Lake Project. In Towner County (Devils Lake WMD), while the Hurricane Lake Project was in court, the Water Resource District ditched out several wetlands covered by easement. It is only a matter of

time before the FWS is back in court with the State and its political subdivisions to determine whether the state has to abide by statutes and regulation governing National Wildlife Refuge Lands.

Russell Drain

In September of 1981 the North Dakota Chapter of the Wildlife Society (NDTWS) filed a lawsuit against the North Dakota State Water Commission (SWC), Bottineau County Water Management District (BCWMD) and landowners involved in the Russell Diversion wetland drainage project. The NDTWS initiated litigation shortly after the FWS chose not to defend downstream rights that were being violated by the Russell Drain project. In the suit the NDTWS claims that, at the time the permits were granted for the drain, the SWC and BCWMD failed to investigate whether or not the drainage would flood or adversely affect lower landowners. The NDTWS also claims that flowage easements were not obtained from the FWS by the drain sponsors. Both the downstream investigations and the flowage easements are required by the North Dakota Century Code.

Following the initiation of the lawsuit the attorney for the drain proponents filed a motion for summary judgement which requested dismissal of the lawsuit. The motion claimed basically two things: First, that the Department of the Interior never properly acquired the land upon which the J. Clark Salyer NWR is located. The attorney claimed that the federal government acquired only shoreline rights and that lands underlying the water on the refuge remain the property of the State of North Dakota. From this he claimed that no flowage easements were required to drain additional water onto the refuge. The second part of the motion involved laches. This line of defense argued that the NDTWS waited too long before initiating litigation against the drain sponsors.

On February 28, 1984 the District Court Judge in Devils Lake denied the defendants motion for dismissal of the case. The Judge concluded that the SWC and BCWMD have not shown that lower proprietors will not be adversely affected by Russell Diversion runoff, nor is there proof that the SWC or BDWMD have complied with the Century Code which requires investigations to determine downstream impacts. The Judge went on to say that the SWC, or other qualified experts, did not state an opinion that the Russell Drain would not adversely affect downstream landowners. He said, however, there was evidence that indicated otherwise. The case will go to trial sometime in 1984.

Holsten Slough

Efforts to restore historic water levels in Holsten Slough WPA continued in 1984. Several meetings were held with the Soil Conservation Service, Boundary Creek Water Management District, FWS and adjacent landowners. The FWS is basically asking for an .8 of a foot rise in a diversion sill which will divert additional flows into the WPA. The FWS will also have to build about .3 of a mile of dike to prevent water from backing into previously drained wetlands. In addition, we have proposed to install a return flow structure which will remove standing water above the sill once the marsh has been filled.

In August a John Deere 8630 with a 16-foot Crisa-fulli pump was used to drain the marsh to allow for a complete 100- foot interval topographic survey of the WPA. In October a controlled burn was also conducted to improve survey conditions.

Holsten WPA was pumped in August to facilitate a complete topographic survey. WJB

The drainage of Holsten WPA began in 1976 when the SCS sponsored Boundary Creek Drain was constructed to divert most of the flows past Holsten Slough WPA. Original plans called for all the flows up to 50 cfs to flow into the WPA. Because of the 2-foot lowering of the diversion ditch, sufficient head is not available to force water into the marsh. The SCS's original solution to the problem was to dredge the coulee that meandered through the WPA. They felt that high

spots in the channel were preventing water from entering the WPA, when actually it was the high spots that were forcing water out of the channel and creating the marsh in the first place. The project requires Boundary Creek Water Management District Board approval because the sill and control gates will have to be constructed on District property. An agreement will also have to be worked out with the board so the FWS can maintain control of the diversion gates. An easement is also needed to construct a portion of the dike on private property.

White Spur Drain

In April the Bottineau County Water Resource District held a public hearing in regards to the proposed White Spur Drain and Stone Creek Channelization Project. The hearing was attended by about 250 persons from the U.S. and Canada. In addition to written and oral testimony, petitions totalling 400 signatures opposing the project were presented to the water board. This wetland drainage project involves 6,500 acres of high quality wetlands some of which are under easement to the FWS. Project flows will empty into Pool 332 of the J. Clark Salyer NWR, the same pool that receives flows from Russell Drain. Irregardless of intense opposition, the project was still approved by a 70 percent margin. Even though 70 percent approval appears to show overwhelming support, this is not the case when one reviews the voting system. The assessment vote is based on one vote per dollar assessment. The assessment area is established by the water board which also determines the amount being assessed. Water boards are appointed by County Commissioners and are usually landowners within the specific project that is being promoted at that time. When the assessment area is established the water board has already pre-determined who will vote in favor of the project. Therefore landowners who are assessed more and are also given more voting power. In the case of White Spur, 30 of the 266 landowners involved could have carried the 50 percent majority needed for approval. Even though the majority of the landowners are opposed to the project, they do not carry enough assessment votes to defeat the project.

Brander Drain

The Brander Drain Project is also located in Bottineau County and is one of seven active or proposed projects that will empty into J. Clark Salyer NWR. Brander has been approved at the water board level and is presently before the State Water Commission. The project is actually a cleanout and extension of an old legal drain that was constructed in the mid-1930's. During the 1970's several wetland easements were purchased along the old channel. If the project is completed as planned several acres of wetlands covered by easement could

be drained. The State Water Commission is apparently waiting for an outcome on Hurricane Lake and the Russell Drain before issuing a permit for this drain.

13. WPA Easement Monitoring

Easement surveillance for 1983 was conducted the spring of 1984. A total of 24 violations were confirmed following ground checks. Wet spring conditions made it much easier to spot violations than in the fall when many wetlands were dry. All landowners were contacted in May and given June 1st compliance dates. In some cases restoration was completed the same week contacts were made. Even though work loads increase when doing spring checks, detection of violations is easier and the landowner cooperation to complete restoration seems to be more prompt. A list of easement violations will be included in the 1984 NR.

Midsummer rains filled a recently restored wetland on Bottineau 42x easement violation. WJB

An increase in oil activity was again noted in 1983. After low exploration activity in 1982 the number of wells being drilled is again approaching record levels. During 1983 18 oil wells sites were inspected to assess potential impacts to easement wetlands. Four involved moving the drill site 50 - 100 feet to avoid wetlands. Five involved locating spoil piles where a fill violation would not occur. Three violations occurred when the oil company failed to contact

the FWS before drilling. These are pending and will be restored once the site is cleaned up. Six sites did not involve wetlands. In the past the only notification the oil companies received was a letter from our Bismarck office informing them of the easement. Our Bismarck office finds out about the drill site by checking the permit records of the ND Geogolgical Survey. Many times the oil companies are informed by phone that a permit has been granted, so unless we have had previous contact with the oil company they are unaware of the contract until after the violation. Many companies have been sent maps showing legal descriptions of lands that have wetlands under easement. These companies often contact us when the site is staked so we can inspect the site before the dirt work begins. After the site is inspected we meet with the dirt contractor to point out any potential problem areas. In cases where we have met with the dirt contractor or a company representative, no violations have occurred. Cooperation with oil companies is getting better with only occasional problems arising with new companies.

All but three pre-1983 easement violations were resolved by year's end just in time for a new batch.

G. Wildlife

3. Waterfowl

The first major spring migration of waterfowl in the district was on April 4 when 10,00 snow geese were observed in Bottineau County.

A total of 577 duck pairs were counted on the quarter-section sample areas during our annual pair count census. This computed to about 9,400 young produced on fee acres in the WMD. To arrive at these figures, a 25 percent productivity rate was used along with an average brood size of 6.5 young. Productivity rates are arrived at by using several nesting studies that are ongoing around the state. Average brood size is estimated using general observation on the refuge and throughout the 5-county district. The estimate of 9,400 young is up almost 10 percent from last year.

In addition to the regular counts we also made duck pair counts using the Cowardin model. Three 4-square mile areas were selected in Rolette, Bottineau and Renville Counties. The Bottineau County area indicated the highest numbers of duck pairs, although it had no major differences in number of potholes. The reason may have been better water levels and closer proximity to the refuge. Waterfowl production using the Cowardin Model was estimated at:

Model Predications of Recruits Produced
J. Clark Salyer WMD

	Private	Easement	Federal(a)	Total
Mallard	37,026	4,842	404	42,272
Gadwall	21,593	2,516	476	24,585
B.W. Teal	75,437	10,630	1,666	87,733
Pintail	34,189	5,646	476	40,311
Shoveler	12,458	1,760	238	14,456
Total	180,703	25,394	3,260	209,357

Canada goose production during 1983 in the WMD was estimated at 50 birds. Most of the nesting occurred on sites other than structures. Of the 32 nesting structures checked only one showed signs of goose nesting. This was on the Johnson WPA in the Turtle Mountains. Random observations in July indicated three young at Mikes Peak WPA, signs of a goose loafing area on the south shore of Beatty WPA and several family flocks totalling 30 birds on Horseshoe Lake WPA.

In cooperation with the North Dakota Game and Fish Department 35 Canada geese (5 adults, 30 goslings) were released on Sandhill Crane WPA in southern Pierce County. All birds were captured in the Audubon NWR area on July 7 and released the same day.

Aerial waterfowl counts were made during the fall and revealed the following peak concentrations:

WPA	Snow Geese	Canadas	Ducks	Swans
Horseshoe	1,200	200	500	300
Round Lake	4,200		3,000	
Hurricane	15,000			
Foster	5,000			
Cruden	2,000			
Hong	5,800			

The greatest number of snow geese counted in the entire WMD was 72,920 on September 27. Snow goose numbers declined after that and averaged about 60,000 birds in the WMD during most of October.

4. Marsh and Water Birds

A lone sandhill crane was reported by a farmer near Denbigh on January 24. An investigation by Wetland Manager Berg found the bird feeding in an irrigated cornfield in an area known as the Karlsrube Bog. This and several other areas along the Souris have open water near flowing springs during the winter.

Three observations of great egrets were made in the WMD this year. Two birds were seen at Cruden WPA on August 15, one bird near Gardena on August 20, and one bird near Island Lake on October 2.

Red-necked grebes were sighted several times on Thompson Lake WPA and a red-necked grebe was sighted on Reider WPA on May 23. On July 21 a group of 30 western grebes were observed at Horseshoe Lake WPA.

Common loons were observed in the spring and fall in the Turtle Mountains. One bird was seen on Twin Lakes on April 25 and two birds were sighted several times in October on Boundary Lake.

5. Shorebirds, Gulls, and Terns

The first spring observation of shorebirds in the WMD was on April 19. An avocet, marbled godwit and willet were sighted near Zurcher WPA and three Hudsonian godwits were seen near Wolford.

Golden plovers seemed to be more common this year. Five birds were sighted on May 13 near Kramer and a flock of 100 birds was found near Willow City while running the Cowardin pair counts on May 16.

The first fall migrants observed were five lesser yellowlegs at Boreson WPA on July 6. On July 12 a group of 20 long-billed dowithcers were sighted on Seil WPA.

6. Raptors

On January 20 two bald eagles were sighted in Renville County and on January 25 a rough-legged hawk was observed on Grenier WPA.

A Swainson's hawk was observed on Herd Lake WPA on June 1.

On October 1 a prairie falcon was observed near Long Lake in Rolette County.

8. Game Mammals

Good numbers of white-tailed deer exist on most WPA's. One velvet buck was sighted at Boreson WPA on July 7 and a doe and fawn were observed at Seil WPA on July 13. A local farmer reported 30 deer taken on Beatty WPA during the state gun season.

Sightings of moose in the WMD are more common every year. Although none have been recorded on WPA's it is likely some use occurs.

10. Other Resident Wildlife

a. Resident Birds

Upland game birds showed variable rates of production during 1983 according to surveys made by the North Dakota Game and Fish Department.

Sharp-tailed grouse in the WMD showed an increase of 10 percent from 1982. Hunter success was down slightly.

Ruffed grouse are present on WPA's in the Turtle Mountains. The spring drumming counts showed a 42.5 percent decrease from 1982. Hunter success was down even more with a drop of 55 percent from 1982. This was mainly due to the fact that the birds are at the low end of their cycle.

Hungarian partridge in the WMD also showed a 42.5 percent decrease in production from 1982. Hunter success however was up 25 percent from 1982.

Pheasants are present in localized areas in the WMD and showed a fair increase from 1982 due to the mild winter.

b. Furbearers

Light snow cover throughout most of the WMD restricted snowmobilers from harrassing fox and coyotes again this year. Hunter activity appeared to be higher this year particularly on those WPA's closer to population centers such as Rugby. Coyotes continue to expand their range, thus increasing the prospects for better waterfowl production in the district. More units are found each year with a mixture of fox and coyote, such as Mike Peaks WPA in McHenry County.

12. Wildlife Propagation and Stocking

On April 8 Biological Technician Eslinger released 25 pheasants on Mikes Peak WPA in McHenry County. The birds were obtained cooperatively through the ND Game and Fish Department's hatchery at Spiritwood Lake near Jamestown.

H. Public Use

7. Other Interpretative Programs

Assistant Refuge Manager Giese, Biological Technician Eslinger and Wetlands Manager Berg presented a hunter safety course in May. In September Giese, Berg, and Dave Lineham (Upper Souris NWR) held a waterfowl identification course at

North Dakota State University - Bottineau Branch. The course was held one evening and was attended by about 25 interested persons.

8. Hunting

a. Waterfowl

Hunting accounts for the majority of total visits on WPA's. Round Lake WPA, Hurricane Lake WPA and Ghost Valley WPA all had good numbers of waterfowl which in turn attracted hunters to the area. On opening weekend 25 hunters were observed using Hurricane Lake WPA. Most hunters using decoys experienced good success.

b. Upland Game

Most upland game hunting on WPA's is done incidental to either waterfowl hunting or big game hunting. Even though good numbers of ruffed grouse, sharp-tailed grouse and Hungarian partridge exist on many WPA's little effort is expended strictly for these game birds.

c. Deer

During 1983 about one-half of the WMD (parts of Pierce, Rolette, and McHenry Counties) had a 16 1/2 day deer gun season. The remainder of the district had the normal 9 1/2 day season. Hunting pressure in areas with the 16 1/2 day season appeared to be down from previous years when only the 9 1/2 day season was offered. Opening weekend success was about 25 percent. Fewer hunters in the field was the excuse used by many of the non-successful hunters. Hunting pressure and success were about the same in the 9 1/2 day zone. Hunting success statewide for deer in 1983 was over 70 percent.

9. Fishing

Sport fishing occurs on Beatty WPA, School Section NWR, Rabb Lake NWR, Cottonwood Lake NWR and Buffalo Lake NWR. Nice 3 - 4 pound northern pike were reported taken on Buffalo Lake NWR during June and September. Smaller "hammer handles" were caught throughout the year on Beatty WPA.

10. Trapping

Trapping is second to hunting for public use on WPA and refuge easement lands in the district. Trapping permits were issued to six landowners on Willow Lake and Buffalo Lake Easement Refuge.

17. Law Enforcement

The following FOC's were written in the WMD during 1983.

Date	No.	Violation		Fine
10-1-83	2	16USC703	Taking Migratory non-game bird closed season (Pectoral Sandpiper)	$200
10-1-83	1	20.72	Unlawful take of MGB w/o State License	$25
10-1-83	2	20.21(b)	Unlawful taking MGB with shotgun capable of holding more than 3 shells	$100
10-1-83	2	20.24	Unlawful taking MGB in excess of daily bag.	$150
10-2-83	1	20.38	Unlawful possession of live wounded game bird	$50
10-2-83	2	20.43	Unlawful transportation of MGB w/o fully feathered wing	$100
10-3-83	1	20.23	Unlawful taking MGB after legal hours	$47
10-16-83	1	16USC718	No duck stamp	$50
11-13-83	1	20.21(a)	Taking MGB with rifle	$50

I. Equipment and Facilities

2. Rehabilitation

Ten miles of boundary were marked with steel fence posts to eliminate trespass farming. Letters were sent to adjacent landowners to inform them of the boundary so future problems would not develop. Fencing that was initiated in 1981 on Seil and Ghost Valley WPA's was completed in 1983.

3. Major Maintenance

Junk piles, building foundations and old fence were collected and buried on Round Lake, Horseshoe Lake, Long Lake, Seil, Gross, Mikes Peak, Kuntz, Foster, Grove and Volk WPA's. All but three disturbed sites were seeded in the fall with either a tame grass mix or a native mix depending on the adjacent cover type.

Old farm buildings were burned and buried on Horseshoe Lake WPA and elsewhere throughout the WMD. WJB

1983 1-ton Chevy Pickup with 300-gallon pumper. WJB

4. Equipment Utilization and Replacement

With the aid of fire money, a 1-ton Chevrolet with a permanent 300-gallon pumper unit was purchased for use in the district and on the refuge. Also, a 1-ton unit with John Deere sprayer was purchased for noxious weed control in the district. For more information on equipment that is shared with the refuge see the 1983 J. Clark Salyer NR.

J. Other Items

1. Cooperative Programs

Field checks for ES in Bismarck were conducted on one road project and one sewage lagoon.

3. Credits

Wanda Vohs assembled and typed this report. Gary Eslinger wrote Section B, G and the easement refuge reports. Bill Berg wrote the remainder. Darold Walls edited this report.

K. Feedback

Funds are beginning to trickle down, allowing for the purchase of equipment specifically for the WMD. In past years weed spraying, grass seeding and use of the pumper unit was done once refuge projects were completed. Future funding looks bright for WMD equipment needs. Even though funding is improving, manpower continues to be a major problem. Additional work loads due to oil and gas development, drain projects, and an increase in easement violations detract from other habitat programs. Future programs such as pre-1976 easement delineation will further increase our workload.

One bright spot is the reinstatement of the easement acquisition program. With government funded wetland drainage running rampant in Canada, every wetland acre protected in the U.S. becomes even more important.

Lords Lake NWR

This easement refuge is located on the Bottineau - Rolette County line and has a total of 1,915 acres, all closed to hunting. The large brackish lake, which is separated by a township road, provides a resting area for large numbers of snow geese and other waterfowl that stop mainly in the fall. This year an average of 15,000 snow geese were present during the month of October. These numbers are down 25 percent from 1982.

Hunting pressure on snow geese also appeared to be down somewhat in 1983 probably due to the lower numbers of geese and the more restricted hunting by landowners around the lake.

Boundary signs remained in good condition for the second year in a row.

On May 29 there were still four snow geese on the lake. On September 20 the first buildup in migrants was observed with 500 snow geese, 1,000 redheads and 100 canvasbacks counted on the lake.

Water levels in the spring of 1983 were up a foot from 1982 levels. By late summer the levels had returned to normal.

Willow Lake NWR

This easement refuge of 2,619 acres is located in the Turtle Mountains of Rolette County. The FWS owns 228 acres of the refuge purchased under the small wetlands acquisition program. The Service prohibits hunting within the boundaries and also maintains the water rights on the large lake found thereon.

A cabin, garage and outhouse is located on a 2-acre tract owned by the Service. Under a cooperative agreement with North Dakota State University (Bottineau Branch) this site plus the 228 acres of WPA is used for environmental education projects.

Both goose structures on the WPA portion of the lake were filled with new nesting material in February. Neither structure showed any sign of goose nesting attempts.

The white pelican and cormorant rookery on the island in the southwest portion of the lake was active again this year. On June 30 there were 1,039 flightless cormorants and 137 flightless white pelicans counted on the island. Since 1961, cormorants have been counted nine years. Production for

those years averaged 348 young per year. While pelican production has been intensively surveyed only twice in the past three years. Production for those two years averaged 125.5.

Water levels in 1983 dropped 1.5 feet below those of 1982.

All boundary signs were in good condition during an inspection in October.

Rabb Lake NWR

This 260-acre easement refuge is located adjacent to the Canadian border in the northwestern corner of Rolette County.

The FWS controls hunting and water rights on the area. The refuge is covered with an aspen and green ash forest, the dominant habitat type of the Turtle Mountains. The adjacent state game management area, along with Rabb Lake, provides excellent migratory habitat for diving ducks, especially canvasbacks.

Rabb Lake is the most remote of all our easement refuges and is accessible only during good weather conditions. The remoteness of the area accounts for otherwise uncommon bird species such as the red-necked grebe. Two pairs of these birds were observed on May 16.

The water level of the lake has been rising since the spring of 1982. Levels during 1983 averaged 1.5 feet above normal.

Boundary signs were found in good condition during an inspection in October.

School Section Lake National Wildlife Refuge

This 680-acre unit is Rolette County is over 60 percent woodland with the remaining portion water. The lake was a popular fishing area at one time but has become marginal in recent years due to increased euthrophication.

The FWS controls the hunting rights and the right to maintain the water elevation of the lake at 89.6.

The North Dakota Game and Fish Department owns 640 acres of this unit while the other 40 is in private ownership.

This unit provides excellent diving duck habitat, as do Willow and Rabb Lake NWR's located 5 to 7 miles away. The upland cover is good habitat for ruffed grouse and white-tailed deer.

Water levels in 1983 were up slightly from normal levels.

Buffalo Lake National Wildlife Refuge

This 2,070-acre easement refuge is located in southern Pierce County along the southern overflow valley to ancient glacial Lake Souris.

The service owns 24 acres in fee title. Of the fee title 2.5 acres along the southeast shore are under a special use permit with United Penticostal Church Camp.

When the refuge was established, a spillway and rubble masonary culvert were placed in the county road to create a lake. A relief spillway, diversion dike and a diversion ditch were installed to provide additional waters to the lake from an adjacent watershed.

During the 1960's the local sportsmen's club repaired the spillway with concrete and raised the lake level two feet.

The North Dakota Game and Fish Department stocks the lake with fish in cooperation with the local sportsmen's club. The area receives year-round fishing pressure.

Water levels were down about one foot this year.

Cottonwood Lake National Wildlife Refuge

This 1,031-acre easement refuge is located in southern McHenry County. When the refuge was established a diversion ditch, relief spillway, and outlet spillway were constructed. Since that time the relief spillway was blown out and the outlet spillway has been repaired by the Butte Sportsmen's Club. A new outlet spillway was put in by the Sportsman's club this year.

The large, open lake is a popular fishing area for local people.

Water levels are measured at the outlet spillway. Levels were up one foot from 1982.

A common loon was observed on the lake October 19.

Wintering River National Wildlife Refuge

This 239-acre easement refuge is also located in southern McHenry County. The Service owns 160 acres of the refuge purchased under the small wetlands acquisitions program. This is our only easement refuge with Type IV wetland habitat rather than open water or Type V. The unit has a diversion ditch and dike creating the 157-acre marsh.

The new spillway constructed in 1981 continued to erode during the year. Water levels have now returned to less than adequate with only a small portion of the basin holding water. Priority will be given to constructing a new spillway in 1984.

The new dike remained in good condition.