MORRIS WETLAND MANAGEMENT DISTRICT

Morris, Minnesota

ANNUAL NARRATIVE REPORT

Calendar Year 1987

U.S. Department of the Interior

Fish and Wildlife Service

NATIONAL WILDLIFE REFUGE SYSTEM

REVIEW AND APPROVALS

MORRIS WETLAND MANAGEMENT DISTRICT

Morris, Minnesota

ANNUAL NARRATIVE REPORT

Calendar Year 1987

Wetland Manager — Date: 3/30/88

Refuge Supervisor Review — Date: 3/31/88

Regional Office Approval — Date: 4/7/88

INTRODUCTION

The Morris Wetland Management District (WMD), originally established in 1963 as the Benson WMD, includes 229 Waterfowl Production Areas (WPA's) totalling 44,631 acres in fee title ownership. The Morris office also administers approximately 14,300 wetland acres of Waterfowl Management Easement lands. The fee and easement areas are scattered throughout Big Stone, Lac Qui Parle, Pope, Stevens, Swift, Traverse and Yellow Medicine Counties. The headquarters is located four miles east of Morris, Minnesota, on the 861 acre Long Lake-Edwards WPA.

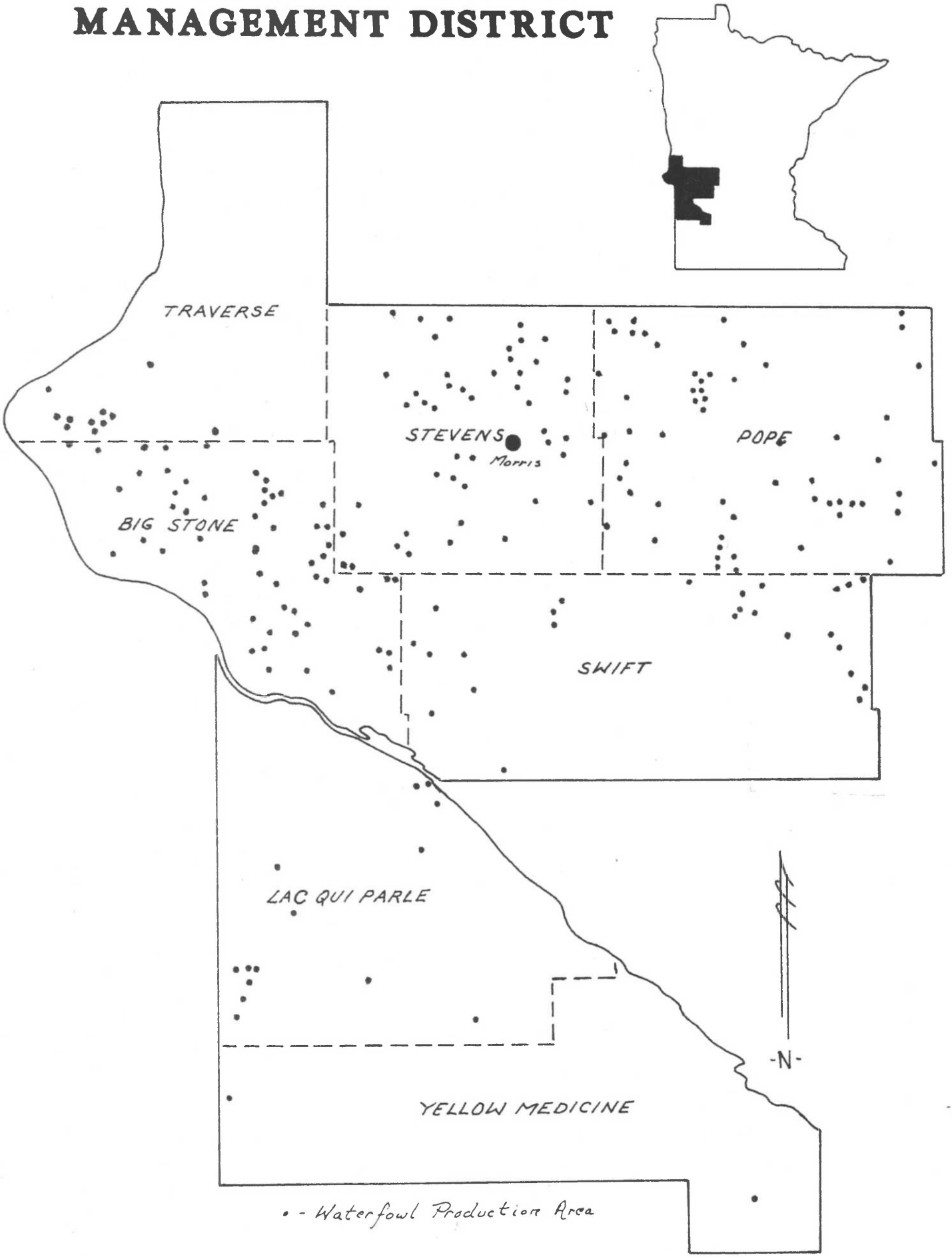
The topography of west-central Minnesota is extremely diversified, ranging from the granite outcrops of the Minnesota River bottoms to the rolling hills of Pope County. The flat agricultural land of the Red River Valley of the north blends into the transition zone between the tall grass prairie and the eastern deciduous forest. Soils of the region are generally productive which contributed to the historically high concentrations of breeding waterfowl. With the advent of modern agriculture, over 60 percent of the original wetlands were drained and nearly 100 percent of the native grasslands were converted to cropland.

As a part of the Minnesota Wetlands Complex the primary objective of this District is to acquire, develop and manage habitat for waterfowl production and maintenance. Waterfowl species that commonly breed in this area include blue-winged teal, mallard, pintail, wood duck, redhead and canvasback. The district also contains good populations of ring-necked pheasant, gray partridge and white-tailed deer. Another high priority objective is to provide habitat for native plants and animals and to provide for wildlife diversity. Waterfowl Production Areas are open to public hunting and a variety of other wildlife oriented uses.

High public use occurs on WPA's only during hunting seasons. The areas received their greatest use on opening days of pheasant, waterfowl and deer hunting seasons.

Of the 44,631 acres of fee title, 15,812 acres consist of marshes. Grasslands comprise 26,726 acres of the district. This category includes 7,158 acres of reseeded native grasses and 5,637 acres of unbroken native prairie. The balance of the existing grassland contains various cover types including brome, quack and alfalfa. Also included in the grassland category are 852 acres presently under short term farming agreements. The purpose is to prepare seed beds for future grassland seedings. Croplands account for an additional 682 acres and consist primarily of rest-rotation food plots for resident game.

MORRIS WETLAND MANAGEMENT DISTRICT



INTRODUCTION

TABLE OF CONTENTS

Page

A. HIGHLIGHTS 1

B. CLIMATIC CONDITIONS 2

C. LAND ACQUISITION

1. Fee Title 5
2. Easements 9
3. Other 10

D. PLANNING

1. Master Plan 18
2. Management Plan . . . . . Nothing to Report
3. Public Participation. . . . . Nothing to Report
4. Compliance with Environmental Mandates. . . Nothing to Report
5. Research and Investigations 18
6. Other . . . . . Nothing to Report

E. ADMINISTRATION

1. Personnel 24
2. Youth Programs. 26
3. Other Manpower Programs 28
4. Volunteer Program 29
5. Funding 29
6. Safety. 30
7. Technical Assistance. 31
8. Other . . . . . Nothing to Report

F. HABITAT MANAGEMENT

Page

1. General 32
2. Wetlands. 33
3. Forests 33
4. Croplands 33
5. Grasslands. 34
6. Other Habitats. . . . . Nothing to Report
7. Grazing 39
8. Haying. 40
9. Fire Management 40
10. Pest Control. 41
11. Water Rights. . . . . Nothing to Report
12. Wilderness and Special Areas. . . . . Nothing to Report
13. WPA/Easement Monitoring 44

G. WILDLIFE

1. Wildlife Diversity. 47
2. Endangered and/or Threatened Species. 47
3. Waterfowl 48
4. Marsh and Water Birds 50
5. Shorebirds, Gulls, Terns and Allied Species 51
6. Raptors 53
7. Other Migratory Birds . . . . . Nothing to Report
8. Game Mammals. 53
9. Marine Mammals. . . . . Nothing to Report
10. Other Resident Wildlife 54
11. Fisheries 55
12. Wildlife Propagation and Stocking . . . . . Nothing to Report
13. Surplus Animal Disposal . . . . . Nothing to Report
14. Scientific Collections. . . . . Nothing to Report
15. Animal Control. 55
16. Marking and Banding . . . . . Nothing to Report
17. Disease Prevention and Control. 56

H. PUBLIC USE

Page

1. General 57
2. Outdoor Classrooms - Students . . . . . Nothing to Report
3. Outdoor Classrooms - Teachers . . . . . Nothing to Report
4. Interpretive Foot Trails. 57
5. Interpretive Tour Routes. . . . . Nothing to Report
6. Interpretive Exhibits/Demonstrations. 57
7. Other Interpretive Programs 58
8. Hunting 59
9. Fishing 61
10. Trapping. 61
11. Wildlife Observation. 61
12. Other Wildlife Oriented Recreation. 62
13. Camping . . . . . Nothing to Report
14. Picnicking. . . . . Nothing to Report
15. Off-Road Vehicling. . . . . Nothing to Report
16. Other Non-Wildlife Oriented Recreation. . . Nothing to Report
17. Law Enforcement 62
18. Cooperating Associations. . . . . Nothing to Report
19. Concessions . . . . . Nothing to Report

I. EQUIPMENT AND FACILITIES

1. New Construction. 63
2. Rehabilitation. 66
3. Major Maintenance 66
4. Equipment Utilization and Replacement 67
5. Communications Systems. 68
6. Computer Systems. 68
7. Energy Conservation 69
8. Other . . . . . Nothing to Report

J. OTHER ITEMS

1. Cooperative Programs. . . . . Nothing to Report
2. Other Economic Uses . . . . . Nothing to Report
3. Items of Interest 70
4. Credits 72

K. FEEDBACK

A. HIGHLIGHTS

Record high winter temperatures turn Minnesota into a "banana belt". (Section B)

Did the long, dry spring and summer end Minnesota's wet cycle? (Section B)

Over 165,000 acres of private land are enrolled in the Conservation Reserve Program in the Morris Wetland Management District. (Section C.3)

Kannegiesser easement violation is restored after many years of frustration. (Section F.13)

Two hundred people attend open house. (Section H.7)

Thirty-one of 299 nest baskets were utilized by mallards. (Section G.3).

Ducks Unlimited finishes the Sherstad Slough WPA project. (Section I.1).

Minnesota Twins are World Champions!!!

Edwards-Long Lake WPA's - Home of the Morris Wetland Management District. 11/13/87 BLA 87-1

B. CLIMATIC CONDITIONS

The Minnesota winter of 1986-87 was one of the mildest in recorded history. As reported in the 1986 narrative report, no precipitation fell in December and the ground was bare at the end of the year. Lakes and marshes froze, but ice remained thin and very dangerous. Wetland water levels remained high because of carry-over water received during the summer of 1986, even though the fall period was very dry.

Even frost was hard to find during the "banana belt" winter of 1986-87. 4/87 BLA 87-2

Temperatures in January of the new year continued to be exceptionally warm. Long term high temperature records were set on the 13th and 25th with temperatures in the 60° range. No blizzards occurred and only light snow falls were recorded.

February continued warm with no temperatures below zero. The only snowfall occurred during the last two weeks of the month. March was still warm with the temperatures reaching 69° on the 7th, another record. Snow was recorded only on the 1st and 16th. By the end of the first week of March the snow had disappeared. Some farmers started field work in late March but no crops were planted. Lakes and marshes were ice free in early March and all seasons were occurring earlier than normal.

April was more of the same. Temperatures were above average and rainfall was below average. A record-breaking 90° was reached on April 20. This was a record for the day and was also the earliest 90° temperature on record.

May continued the warm trend with temperatures 5° above normal. Early May was very dry and temporary wetlands were dry. Field crops were off to an early start and most of the District received enough rain to stimulate growth in late May.

The summer continued with the weather being hot and dry. June was the 7th consecutive month with above normal temperatures. Rainfall was less than half of normal. July continued the trend set early in the season with hot, dry weather. Rains were frequent but the total moisture received was well below normal. Marsh levels were dropping rapidly and it appeared that the wet cycle of the past few years was over.

August brought the first below normal temperatures since November, 1986. Precipitation was over 1.5 inches below normal. The total precipitation for the April 1 to August 31 period was only 8.45 inches. This made 1987 the third driest growing season recorded. Drier growing seasons were only recorded in 1936 and 1976.

September was the most normal month of 1987. Nearly three inches of precipitation fell. September temperatures averaged 59° which was exactly normal, and there were no frosts.

October temperatures continued cool averaging 42°, 5° below normal. The first killing frost occurred on October 3. The month was very dry with rain 1.3 inches below normal. Insignificant traces of snow were received. Precipitation for November was also below average and only a trace of snow was recorded. The dry fall season along with the hot summer reduced marsh water levels dramatically. We suddenly went from record-breaking wet conditions in 1986 to a very dry situation by late 1987.

A late November ice storm reminds us that Minnesota is the "Land of Four Seasons". 11/87 BLA 87-3

The good fall weather continued in December with above average temperatures. The high temperature was 38° on December 12. The snowfall for the month totalled 8 inches, slightly above the average of 7 inches. On the evening of the 30th, strong winds with blowing snow started and continued through the 31st. Old Man Winter just wanted to remind us that we do indeed live in Minnesota!

C. LAND ACQUISITION

1. Fee Title

Fee acquisition activities proceeded at a slower pace than in 1986. A total of 540 acres were added to the Morris Wetland Management District by the purchase of 10 tracts that averaged 54 acres. All tracts were roundouts of existing waterfowl production areas. The current fee acreage of 44,630.81 represents 56 percent of the Morris District's goal acres.

WATERFOWL PRODUCTION AREA ACREAGE - MORRIS WMD - 1987

County	Acquisition Total 12/31/86		Acquisition Total 12/31/87		Goal Acres
	Units	Acres	Units	Acres	Acres
Big Stone	59	9,588.49	59	9,639.18	15,600
Lac Qui Parle	15	2,748.19	15	2,748.19	9,650
Pope	63	13,135.96	64	13,316.04	22,250
Stevens	52	8,570.29	53	8,728.04	12,850
Swift	26	6,580.38	26	6,580.38	10,800
Traverse	10	3,397.48	10	3,528.98	6,720
Yellow Medicine	2	70.00	2	90.00	1,260
Total	**227**	**44,090.79**	**229***	**44,630.81**	**79,130**

*Increase due to correction of records.

The number of willing seller contacts continued at an extremely high rate as the farm economy experienced problems. Banks and other lending agencies often contacted our office or encouraged farmers to do so. An average of two willing sellers per week contacted our office. Obviously, many of the tracts available did not fit the Fish and Wildlife Service's fee acquisition criteria. However, a list of approximately 25 sellers has been established for future negotiations. The future of fee acquisition remained unknown because of the uncertainty of funding. Enough wetland habitat still is available for the Morris District to reach its fee acquisition goal of 79,130 acres should the program retain its recent activity.

A common sight in Minnesota - vacant farm sites.
10/7/87 BLA 87-4

Our fee acquisition continued to focus on significant wetland complexes for rounding out existing waterfowl production areas. An occasional new start may be purchased if an outstanding complex has been overlooked in our original inventory.

We operate under the procedural agreement between the Service and the Minnesota Department of Natural Resources (DNR). The agreement requires that each fee and easement tract be presented to the respective county board of commissioners for certification. Thus, county boards can offer their input into the acquisition process. But, final approval still rests with the Minnesota Land Exchange Board (MLEB) which is comprised of the Governor, Auditor, and Attorney General.

The resource status and politics of our acquisition program for fee and easements varies by county as follows:

Big Stone County

One new fee tract totalling 50.69 acres was purchased in 1987 in Big Stone County.

Our relationship with this county remained excellent. We were able to communicate openly and had no serious problems with the commissioners during the past several years. Our appointments usually developed into informal visits.

All tracts are presented to the Big Stone County Zoning Board for certification before meeting with the county commissioners. This board creates no difficulties for fee or easement acquisition.

A major acquisition effort in 1987 was exerted in our attempts to purchase the 500 acre Moonshine Lake basin. This marsh was totally drained of surface water by a legal ditch constructed in the early 1900's. Some of the six current land owners of the basin were interested in selling their holdings to the Service. A meeting of all landowners, Minnesota DNR personnel and Wetland Manager Radtke initiated offers to all the landowners. Ducks Unlimited had offered to provide structures, island construction, and the rip rapping of the county road that crosses the original basin. Unfortunately, after all these efforts, two of the landowners refused our offers and it appears the project may be dead. A final effort will be made in early 1988 to convince these landowners to sign.

Lac Qui Parle County

No fee tracts were purchased in 1987. However, there are willing sellers and negotiations will continue in 1988. No problems with the county commissioners are anticipated as long as an acceptable level of effort is made by the Service on weed control.

Pope County

Service personnel continue to have a good relationship with the Pope County Board. Two fee tracts totalling 180.08 acres were certified by the commissioners in 1987.

Stevens County

Four roundout fee tracts totalling over 157 acres were certified with few objections by the commissioners. Tracts have been certified with few problems in the past. Our relationship with the commissioners remained excellent. Prompt response to county problems and weed control complaints probably will assure a positive relationship with the commissioners in this county.

Swift County

No fee work was completed in Swift County in 1987.

Traverse County

Two fee tracts totalling 131.50 acres were purchased in 1987. The county commissioners have been easy to work with since a long time opponent was voted out in 1986. Problems from the commissioners should not be severe if weed control and other management practices are completed.

Yellow Medicine County

The first fee acquisition in at least ten years was completed when the 20 acre Muetzel tract was purchased. The Yellow Medicine County Commissioners were surprised to see us after so many years. After a friendly visit, the Muetzel tract was certified. The extensive drainage in Yellow Medicine County has eliminated most of the prime natural wetlands and acquisition is difficult because of the intensive farming.

Waterfowl Production Areas often appear as islands in the black desert. 11/13/87 BLA 87-5

2. Easements

Relatively few easements were taken in 1987 because of the Farm Bill work. Only 111 wetland acres were added by the five easements taken in 1987. This compares to 82 wetland acres added by new easements in 1986. Under the terms of a wetland easement, the Service purchases the rights to burn, drain or fill wetlands from a willing seller. Easements of highest priority have been those which would preserve wetlands within two miles of a waterfowl production area. However, wetlands located near Minnesota Department of Natural Resource's Wildlife Management Areas (WMA's) or other acceptable nesting cover can also be protected by easement. Easements are taken on some marshes that had earlier been identified for fee roundout of waterfowl production areas to avoid possible drainage.

EASEMENT PROGRAM STATUS - MORRIS WMD - 1987

County	Easements	Wetland Acres	Total Easement Acres	Total Goal Acres
Big Stone	159	5,678	20,544.02	47,640
Lac Qui Parle	12	470	1,397.56	23,540
Pope	129	5,562	20,986.91	54,180
Stevens	38	944	3,082.36	6,090
Swift	32	605	2,253.38	14,540
Traverse	29	1,031	3,446.96	8,440
Yellow Medicine	1	17	80.00	7,860
Total 1987	**400**	**14,307**	**51,791.19**	**162,290**
Total 1986	**395**	**14,196**	**51,514.76**	**162,290**
Total 1985	**389**	**14,114**	**51,223.02**	**162,290**
Total 1984	**381**	**13,894**	**50,482.21**	**162,290**
Total 1983	**370**	**13,699**	**49,841.76**	**162,290**

The majority of the landowners who contacted our office in the past three years have been more interested in actually selling land to the Service rather than placing wetlands under easement. This was apparently due to the extreme economic pressures that many farmers were experiencing. Extreme financial hardships have forced many to actually sell parcels to reduce debt and interest costs. Land prices have stabilized so easement opportunities may increase in 1988. In addition, wetlands restored by the Service on Conservation Reserve Program lands should provide many permanent easement opportunities.

Big Stone and Stevens Counties were the only counties in which easements were taken during 1987. The county boards of commissioners must review all easement proposals for certification as with fee tracts. Except for Swift County, easement certification is usually routine. There seems to be less opposition to easements in comparison to fee tracts because the land remains "on the tax rolls" and no upland is taken out of agricultural production. In general, county commissioner opposition has been minimal in the past several years.

There are still privately owned marshes that need the protection provided by an easement. 11/6/87 BLA 87-6

The future of the easement program is directly related to the funds and manpower available to our Division of Realty. There are numerous wetlands that are still available and that need protection. Hopefully this program will continue until goal acres are acquired or there are no unprotected basins remaining in western Minnesota.

3. Other

Five possible trades involving fee tracts were being pursued at the end of 1987. Hopefully the transactions can be completed in 1988. The Waterfowl Production Areas involved include:

McNally Slough WPA, Stevens County
The McNally Slough trade would provide for the exchange of uplands on the west side of the unit for a roundout tract on the south side of the unit.

Svor WPA, Swift County
An exchange with Mr. Luverne Simonson has been in the works for a long time but the exact trade conditions have not been agreed upon by the parties involved. This trade, if completed, would protect the key marsh of the Svor WPA complex.

Sedan WPA, Pope County
The 40 acre Sedan WPA includes a portion of a large marsh that has been partially drained. This private drainage project violated the protected waters law of the State of Minnesota as well as reducing the value of the WPA. The landowner who violated the law went bankrupt and the new owners have placed the total farm acreage under a Conservation Reserve Program (CRP) agreement. The Service is working out an agreement that will deed the Sedan WPA to the new owners in exchange for an easement on several wetland basins that are scheduled for restoration in 1988.

Blue Mounds WPA, Pope County
A proposed trade with the Minnesota DNR is being processed. This trade will allow Glacial Lake State Park to roundout boundaries at two locations along the south boundary. This trade will also relieve a hunter trespass problem that has developed on a co-owned wetland. Hunters are entering the park, which is closed to hunting, via the WPA. The Fish and Wildlife Service will gain fee ownership of land that the Minnesota DNR owns within the boundaries of the Minnesota Valley National Wildlife Refuge.

Bentson Lake WPA, Big Stone County
Less than five acres of fee property located along the south boundary of Bentson Lake WPA is being offered in exchange for a wetland easement on five restored wetland basins on private property. A group of hunters recently purchased the farm adjoining the Bentson Lake WPA. The Service completed restoration on the five basins under a free lease agreement. This trade will protect the newly restored wetlands in perpetuity.

A. James R. Cook

Mr. James R. Cook (Investment Rarities, Inc.) continues to be a force in marsh habitat preservation and development, especially in Pope County. Mr. Cook is actively buying farms and developing habitat specifically for waterfowl. Ditch plugs are being constructed and farm fields are converted to nesting cover. Cook, a waterfowl enthusiast, has also purchased land in the Dakotas and other midwestern states. Biologists manage Cook's property, which is posted and closed to hunting. Two farms that were covered by Fish and Wildlife Service wetland easements were purchased by Mr. Cook. We support his efforts in the battle to preserve wetlands and provide habitat for waterfowl production. Some farmers are very concerned about his activities because he is competing with local land buyers. Wildlife certainly has benefited, however, and we have had an easy time working with his staff. Local rumors indicate that Cook has financial problems but we are not certain.

B. Farm Bill

In 1986, our role in implementing the Food Securities Act of 1985, the Farm Bill, was obscure. By the end of 1987, Farm Bill work was our primary concern. Farm Bill work can be divided into three categories: FmHA deed restrictions, swampbuster consultations, and private land wetland restoration.

FmHA

Manager Radtke began evaluating land owned by Farmers Home Administration late in 1987. Eventually deed restrictions will be placed on tracts with critical habitat. Table 1 shows 1987 FmHA accomplishments.

Table 1 - FmHA Accomplishments - Morris WMD - 1987

County	Farms to be Reviewed	Farms with Potential FWS Deed Restrictions	Farms with Potential MDNR Deed Restrictions
Big Stone	3	1	1
Lac Qui Parle	1	0	1
Pope	3	not yet reviewed	
Stevens	*		
Swift	6	2	1
Traverse	*		
Yellow Medicine	3	1	1

*List of FmHA farms not received yet.

Swampbuster

The Morris staff found a new pastime in 1987 - swampbuster appeals. Managers Radtke, Bober and Delehanty, Biologist Lewis and Soil Conservationist Angus all made field visits to classify areas as wetland or non-wetland if the initial wetland determination by Soil Conservation Service (SCS) had been appealed by the landowner.

If the landowners appealed the Service's determination, we gave our opinion to the Soil Conservation Service Area Conservationist at the next appeal level.

Another swampbuster role was adivising local Agricultural Stabilization and Conservation Service (ASCS) committees on appeals for "commenced" exemptions. Table 2 summarizes 1987 swampbuster work.

Table 2. Swampbuster Work - Morris WMD - 1987

	Wetland Determination Appeals		Requests for Commenced Exemptions	
County	Number Landowners	Number Areas Appealed	Number Landowners	Number Areas Appealed
Big Stone	10	29	0	0
Lac Qui Parle	18	51	0	0
Pope	3	14	1	1
Stevens	14	35	1	1
Swift	75	164	0	0
Traverse	0	0	0	0
Yellow Med.	27	44	0	0
Total	**147**	**337**	**2**	**2**

During routine travel around the district, possible swampbuster violations were noted and turned in to the county Agricultural Stabilization and Conservation Service (ASCS) office.

One of many potential swampbuster violations turned in.
11/13/87 BLA 87-7

Wetland Restoration

Western Minnesota enjoyed a new phenomenon in 1987; the Service restored drained wetlands on private land!!! Most of the restorations were on Conservation Reserve Program (CRP) land enrolled in our "piggyback" program. A few restorations were on other CRP or non-CRP land.

The "piggyback" or Wildlife Management Agreement was a one time program which provided a $5.00 per acre bonus as incentive for landowners to enroll cropland into CRP in targeted areas and encouraged these landowners to allow various wildlife management practices on their land. We received many more applications (251) for the piggyback program than we could accept. Selections were based on the distance to the nearest waterfowl production area, easement, or state wildlife management area.

Manager Radtke explaining the piggyback program to CRP enrollees. 2/87 BLA 87-8

We contacted each piggyback enrollee who had restorable basins to request permission to restore their wetlands. Of the 59 piggyback agreements accepted, 13 landowners allowed restoration of 26 wetlands covering 45.5 acres (see Table 3).

Several of the 12 ditch plugs built on this tract of piggyback CRP land, Stevens County. 11/87 BLA 87-9

The piggyback program led to another new program with a more permanent future, the so-called "free lease" or Wetland Development Agreement. Under this agreement the Service pays for the wetland restoration and the landowner agrees to leave the restoration intact for the life of the agreement, typically 10 years. This is the program we will use for 1988 private land wetland restoration. Table 3 shows our 1987 "free lease" work. We restored 7 wetlands covering 33.5 acres using this agreement.

Table 3. Private Land Wetland Restoration - Morris WMD - 1987

County	Piggyback Restorations		Free Lease Restorations		Total Restorations	
	Basins	Acres	Basins	Acres	Basins	Acres
Big Stone	3	5	6	27	9	32
Lac Qui Parle	3	2	0	0	3	2
Pope	3	5	1	6.5	4	11.5
Stevens	16	32	0	0	16	32
Swift	1	1.5	0	0	1	1.5
Traverse	0	0	0	0	0	0
Yellow Medicine	0	0	0	0	0	0
Total	**26**	**45.5**	**7**	**33.5**	**33**	**79**

The Conservation Reserve Program (CRP) will have a tremendous impact on wildlife populations. In just two years, over 165,000 acres of land in the Morris district have been enrolled into CRP. That is over 3 1/2 times the combined acreage of our waterfowl production areas. Watching wildlife's response to this new habitat base will be a pleasure.

Table 4. CRP Enrollment in the Morris WMD through 1987

County	Acres Enrolled	Acres Enrolled Per Square Mile
Big Stone	20,583	41.9
Lac Qui Parle	31,780	41.4
Pope	31,237	46.7
Stevens	25,899	46.4
Swift	22,029	29.8
Traverse	8,593	15.1
Yellow Medicine	25,438	33.8
Total	**165,559**	----

D. PLANNING

1. Master Plan

After purchase of a new tract, an on-site inspection is done to examine existing man-made structures and habitat conditions. Then, all supporting historical, topographical, biological, and geological information is assembled. Needed habitat developments and public use facilities are outlined and compiled into a Land Use Development Plan.

5. Research and Investigations

Morris WMD NR87 - "Nest Dragging Investigation"

Four waterfowl production areas in Stevens County (Pomme de Terre River, Pomme de Terre Lake, Edwards, Long Lake) were selected as study sites in 1987. Nest dragging operations began on May 6 and 7, 1987, and concluded July 13 and 14. All fields were searched a total of four times. Nests were revisited on foot ten days after each nest drag. None of the study sites were subject to a predator management program.

Thirty-nine nests were located during 1987. One of these nests was abandoned and was not used in the Mayfield calculations. Thirty-six of the nests were blue-winged teal and three were mallard.

The overall observed hatching success was 47 percent (18 of 38). Based upon a total of 524.5 nest exposure days, the daily survival rate was 0.9619. Using 34 days as the expected life of a successful nest, the overall hatch rate for all species was 27 percent (Mayfield corrected).

Blue-winged teal with troops heading for water.
6/29/87 BLA 87-10

NESTING STUDY SUMMARY - MORRIS WMD - 1987

	Acres	Total Nests	Success Nests	Mayfield Success	Exp. Total Nests	Mayfield Nest Density	DSR
Warm season	83	8	3	20	107	.18	.9533
Cool season	109	27	14	27	357	.48	.9636
Native prairie	9	3	1	32	60.5	.35	.9669

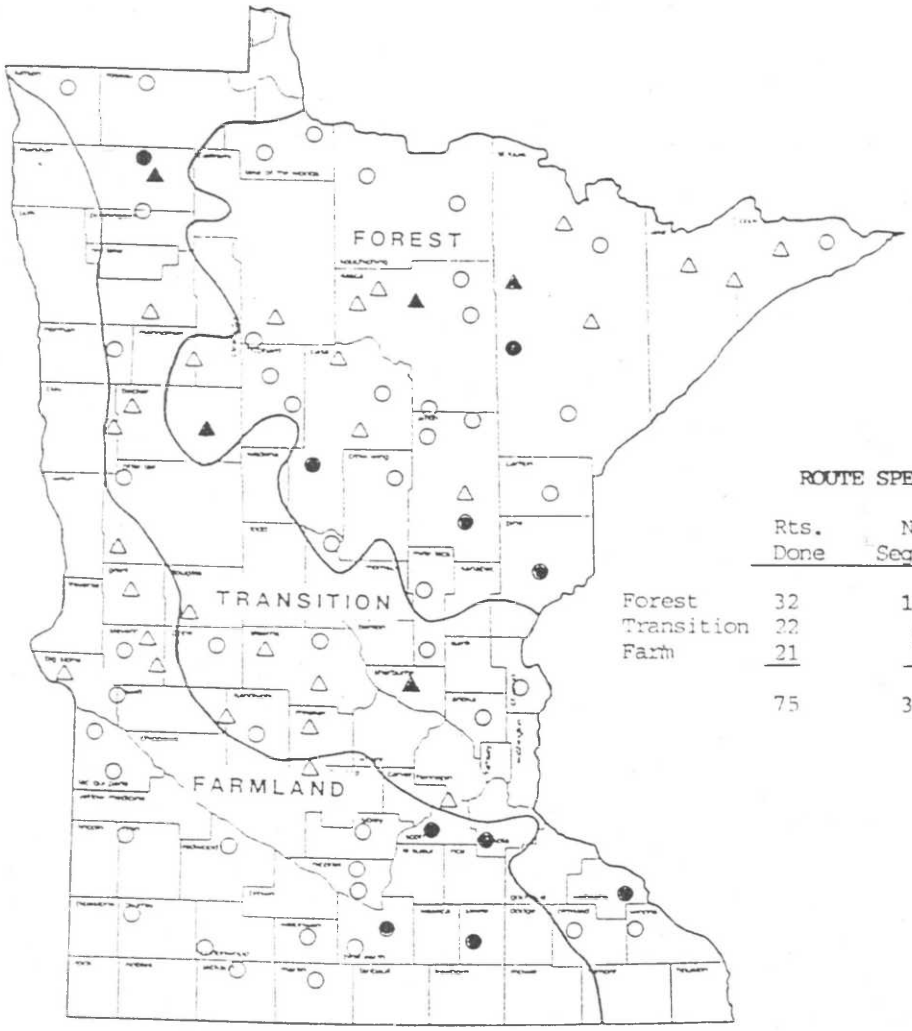
Morris WMD NR87 - "Scent Post Survey"

Under the coordination of the Minnesota Department of Natural Resources (DNR), the Morris Wetland Management District conducted four scent post survey routes in Stevens and Pope counties. This same survey was run throughout Minnesota to determine the occurrence of predators. Each route consisted of a 2.7 mile segment. Each segment contained ten study plots spaced 0.3 miles apart on roads bordering waterfowl production areas.

Skunks were the predominant visitor to our study plots. Raccoon and cats were also frequent visitors. No coyotes were recorded.

In our General Survey Zone (farmland), record high indices were established for red fox. Skunk indices declined in all zones compared to past year. However, Morris was one of three routes documented as having the highest index for skunk this year. Dog visits increased in all zones while cats remained stable. Raccoon visits increased only in the forest zone and were relatively stable in the other zones.

Statewide, skunk and red fox visits occurred on 81 percent of the routes. Cats visited 65 percent, raccoon 53 percent, dogs 47 percent, and coyote 41 percent. Deer visited 69 percent of all routes.



ROUTE SPECIFICS - 1987

	Rts. Done	No. Segments	Station Nights
Forest	32	146	1,411
Transition	22	95	906
Farm	21	79	737
	75	320	3,054

Approximate locations of scent post routes run by DNR (O) and non-DNR agencies (△) in the Forest, Transition, and Farmland Survey Zones. Shaded symbols indicate routes not completed in 1987.

E. ADMINISTRATION

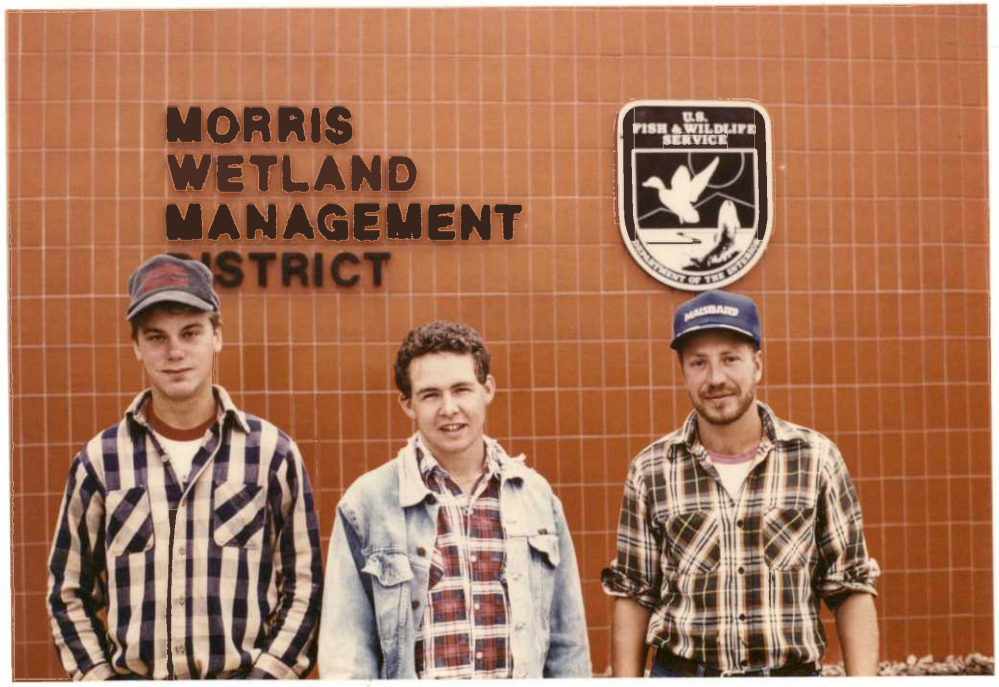
8 5 11 10 2
9 1 3

1. Alfred L. Radtke, Wetland Manager, GS-12, PFT.
2. Gaylord J. Bober, Assistant Wetland Manager, GS-11, PFT.
3. Bernard L. Angus, Soil Conservationist, GS-11, PFT.
4. Richard S. Sojda, Wildlife Biologist, GS-11, PFT, Transferred 5/22/87.
5. Larry E. Lewis, Wildlife Biologist, GS-11, PFT, E.O.D. 8/2/87.
6. John T. Hutchinson, Biological Technician, GS-7, PFT, Retired 5/15/87.
7. Electa L. Pollitt, Biological Technician, GS-5, PFT, Transferred 1/1/88.
8. Steven J. Delehanty, Refuge Manager Trainee, GS-5, PFT, E.O.D. 6/15/87.
9. Karen M. Stettner, Secretary, GS-5, PFT.
10. Rodney G. Ahrndt, Motor Vehicle Operator, WG-7, PFT.
11. Victor H. Gades, Tractor Operator, WG-5, PFT.
12. Pamela S. Steinhaus, Biological Aid, GS-4, PFT-Seasonal.

Pamela Steinhaus

TEMPORARY PERSONNEL

1. Marty J. Baker, Biological Aid TFT, 4/6/87-8/28/87.
2. Pete J. Boma, Biological Aid, TFT, 4/6/87-11/13/87.
3. Roland L. Brown, Biological Aid, TFT, 9/13/87-11/13/87.
4. Kent W. Undlin, Biological Aid, TFT, 4/6/87-8/28/87.



Kent Undlin, Marty Baker, Pete Boma

YCC PERSONNEL

1.	Dennis W. Osborne,	Work Leader, GS-5	5/31/87-8/7/87.
2.	Richard A. Carlson,	Enrollee	6/8/87-7/31/87.
3.	Mike J. Molden,	Enrollee	6/8/87-7/31/87.
4.	Bruce Zimny,	Enrollee	6/8/87-7/31/87.

OTHER

1. Mike Hawkenson, Work Study, 6/15/87-9/15/87.
2. LeRoy Hoffman, Green Thumb Worker, 3/2/87-7/31/87.

Mike Hawkenson

1. Personnel

MORRIS WMD STAFF SIZE, FY83-87

	Full Time	Seasonal Full Time	Temporary GS & WG	Other Programs*
FY87	9	1	5	5
FY86	8	2	5	11
FY85	8	1	6	12
FY84	8	1	5	13
FY83	8	1	3	12

*YCC, Green Thumb, Work Study, etc.

The permanent staff remained at ten positions this year. However, several changes occurred. John Hutchinson, a GS-7 Biological Technician, retired in early summer. John was a long time employee in the Benson and Morris Wetland Management District and his experience will be missed.

John "Hutch" Hutchinson turns in his brief case after a long and distinguished career. 4/87 BLA 87-11

Pam Steinhaus remains a Biological Aid as a permanent, full-time seasonal employee. She attends Mankato State University in pursuit of a degree when she isn't working for the Morris Wetland Management District.

Victor Gades, Tractor Operator, was converted from a permanent, full-time seasonal to a permanent, full-time employee. Victor is needed to assist with increased maintenance and biological activities carried out during the late fall to spring period.

Lee Pollitt, a GS-5 Biological Technician, transferred to the Soil Conservation Service office in North Dakota. Lee actually filled the old Assistant Manager Trainee position vacated by Rick Schultz several years ago. Steve Delehanty arrived at our station in June and filled the trainee slot. Our intention is to fill Lee's Biological Technician position in early 1988. This will be a permanent, full-time position.

Rick Sojda transferred to the east coast to fill a biologist position. Larry Lewis then moved from Agassiz National Wildlife Refuge to fill Rick's position as a Wildlife Biologist in charge of law enforcement. Larry received his promotion to a GS-11 and has adapted well to his very important role.

Something for Rick to remember his days in Minnesota.
5/22/87 BLA 87-12

Therefore, when all positions are filled, the staff will include nine permanent, full-time employees and one permanent, full-time seasonal employee.

Four temporary Biological Aids were hired to assist with operation and maintenance and run biological programs. A Social Service Assistant supervised our three YCC enrollees. In addition, a work study student and a Green Thumb worker were added as summer laborers.

The current, permanent staffing pattern is not adequate for the station's work load. Temporary positions have been needed for the heavy summer work load. YCC has helped fill part of these staffing needs, but this program was reduced from ten to three enrollees in 1987. The additional Farm Bill work, continuing fee acquisition, and the backlog of habitat restoration has resulted in an over-worked staff. Fortunately, additional funds for Farm Bill work should relieve this problem in 1988.

2. Youth Programs

The 1987 Morris YCC program was an eight week, non-residential camp consisting of three enrollees and one Social Service Assistant as work leader. The enrollees ranged in age from 16 to 18. Of the three enrollees, two had farm experience. The Social Service Assistant worked directly with the environmental education and safety programs, and also with the enrollees in the field on each work project.

Eight different types of projects were worked on at 13 different waterfowl production areas during the eight-week period. These activities included odd jobs at the Morris office, hoeing a five acre shelterbelt, and removal of several beaver dams. Other work projects included trash pickup and disposal, vegetation control, old fence removal, and the construction of new fence, parking lots and gates. The enrollees appreciated the variety of work and the opportunity to travel in a five-county area.

Safety played an important role in day-to-day events. All personnel were required to wear steel-toed boots, long pants, gloves (usually leather), hard hats, and long-sleeved shirts for their personal protection. Some aspect of safety was discussed daily with an occasional intensive session. There were no major injuries in the eight-week period, although several individuals received minor cuts.

Environmental Awareness (EA) played an important role in the day-to-day routine. Upon entering the program the enrollees were given the Environmental Awareness Test. At the end of the eight-week session they were again tested and were found to have improved their scores. An effort was made to incorporate EA into the daily schedule. Additional opportunities were taken to interview staff members on their areas of expertise as well as visiting Big Stone National Wildlife Refuge and Glacial Lakes State Park where the local managers briefed them on the importance of their areas.

Staff working hours totaled 400. Total enrollee working hours equaled 952. Total number of miles driven was 2,096 with no vehicle damage.

1987 YCC Enrollees: (left to right) Bruce Zimny, Mike Molden, Richard Carlson, and work leader Dennis Osborne.
8/87 BLA 87-13

MAJOR YCC ACCOMPLISHMENTS - MORRIS WMD - 1987

Building Site Clean-up	2 Sites
Weed Control	21 Acres
Fence Removal	2.6 Miles
Boundary Fence Construction	1.2 Miles
Parking Lot Construction	3 Lots
Remove Beaver Dams	5 Dams

YCC crew and work leader cleaning up old stock loading pens on Hutchinson WPA, Stevens County.
7/87 BLA 87-14

3. Other Manpower Programs

One Work Study student, Mike Hawkenson, was employed at this station from June through September. Most of Mike's time was spent in the upkeep of the headquarters area and our two nature trails.

From March through July 13, the station served as a work site for LeRoy Hoffman under the Green Thumb program. LeRoy was able to work between 20 and 25 hours per week. LeRoy found other employment in July and Green Thumb was not able to replace him because Stevens County was over the ceiling for enrollees under this program.

LeRoy Hoffman putting finishing touches on the new mail box he constructed for the office. 6/87 BLA 87-15

4. Volunteer Program

This station was unable to obtain the services of any volunteer this past year.

5. Funding

The station's operating funds were slightly greater than the FY86 level. The Refuge Operations and Maintenance funding under Activity 1260 was inadequate. ARMMs funds were again used to supplement 1260 money and conduct O & M functions. This system has permitted the district to operate, but if ARMMs funding is withdrawn or reduced, the regular O & M funds will be grossly inadequate. Inflation continued to reduce the money available for development and management.

MORRIS WMD FUNDING LEVELS - FY83-FY87
(Dollars in Thousands)

FY	1260	1220-1240	3110	YCC	Rehab. Const.	Total Budget
87	507.6*	5.0	5.0	5.3		522.9
86	453.6*	-0-	5.0	20.6	5.0	484.2
85	449.6	-0-	5.0	17.7	-0-	472.3
84	352.0	-0-	5.0	14.6	800.0	1171.6
83	298.5	43.0	5.0	22.7	-0-	369.2

*Includes ARMMs & RPRP

The active acquisition program continues to cause funding problems. Development monies are inadequate to provide materials and staff for the new acres purchased. New fee lands will need surveys, ditch plugs, cleanup, seeding and posting in 1988.

The lack of staff resulting from funding and ceiling problems remained our major concern. Numbers of temporary personnel dropped from over 20 people to five during the past several years. The YCC and other employment programs were able to complete some maintenance jobs, but these supplemental labor sources have also been cut. The BLHP program left the District's equipment and facilities in excellent shape. Hopefully, future funding can maintain this condition and provide for needed development.

6. Safety

There were two minor accidents at the Morris Wetland Management District in 1987. Wildlife Biologist Richard Sojda punctured his finger with a sharp wire when he was setting up the station's movie projector. The puncture was so deep he had a doctor examine it and was given a tetanus shot.

The other accident occurred when Biological Technician Lee Pollitt was in the field checking water control structures. One of her eyes suddenly began to water and became swollen. She was sent to the doctor who said her eye may have reacted to plant pollen. She was given medication which took care of the problem.

The station Safety Committee, consisting of three staff members, rotates every three months and remains the most viable part of our safety program. This committee is responsible for planning and presenting our monthly safety meetings, and conducting inspections and accident investigations for the station.

Following is a list of topics of our monthly meetings:

Winter Driving	Power Equipment
Tire Safety	Heat Stroke
Safe Driving	Electricity
Road Safety	Tornadoes and Thunderstorms
Hypothermia	Nutrition and Weight
Ice Safety	Heavy Equipment

The station now stands at 6,476 days without a lost-time accident.

7. Technical Assistance

Considerable technical assistance involved Farm Bill work, covered in C.3

Assistant Manager Bober and Soil Conservationist Angus, along with Jay Rendall of the Minnesota Department of Natural Resources, described purple loosestrife problems and control methods at the annual Field Day of the West Central Experiment Station, Morris, MN.

Bernie Angus with Jay Rendall of the Minnesota DNR describing loosestrife control. 9/87 GJB 87-16

Station personnel helped select sites for acceptance into the waterbank program which is administered by the Soil Conservation Service.

Several staff members provided assistance to counties selecting wetland restoration sites enrolled in the state funded Reinvest in Minnesota (RIM). RIM pays landowners a single fee to convert cropland to restored wetlands, nesting cover, or tree plantings.

Soil Conservationist Angus advised state wildlife managers and local conservation reserve program participants on native grass establishment.

F. HABITAT MANAGEMENT

1. General

"It was a long burn, but enjoyable."
5/7/87 BLA 87-17

Habitat types in the Morris Wetland Management District are summarized in the following table.

HABITAT SUMMARY - MORRIS WMD - 1987

Cover Type	Acres
Wetland	15,812
Cropland	682
Grassland	26,726
Timber	1,411
Total	**44,631**

Type IV marshes comprise 52 percent of the wetland acreage and type III's, 29 percent. These marshes, combined with numerous type I and II wetlands, offer a wide variety of waterfowl habitat. The upland:wetland ratio for our district is 1.8:1. Upland nesting cover is comprised of 7,158 acres of seeded natives, 5,637 acres of native prairie, and 12,397 acres of introduced grass/legume seedings, most of which are at least 10 years old. The seed for the planted native grass fields has been primarily of Nebraska-Kansas origin. Through the harvest of local seed, we have been shifting to indigenous grass types in the mixture. Seed fields of South Dakota 149 switchgrass, North Dakota 444 Indiangrass, South Dakota 27 big bluestem, and indigenous big blue and Indiangrass are now established and will provide the bulk of future seed.

2. Wetlands

Many permanent wetlands still remain devoid of emergent vegetation due to the wet cycle of 1985-1986. The total precipitation for 1987 was 15.77 inches, the fourth driest year on record. Precipitation from April 1, 1987 through August 31, 1987, was 8.45 inches, about half the normal. It was also the second warmest year recorded at Morris. Evaporation from wetlands was considerable during the summer. Many of the temporary wetlands on private land were plowed again after a three to four year reprieve.

3. Forests

The Morris Wetland Management District lays within what was once the "tall grass prairie". Thus, less than four percent of the fee acreage is covered by timber.

Of the 1,411 acres of timber, the majority consists of older farm groves and shelterbelts. Stevens County Pheasants Forever chapter provided half the funding for a five-acre wildlife shelterbelt planted on Edwards WPA. The other half was funded with O & M funds.

4. Croplands

In 1987, 682 acres of cropland were managed as resident wildlife food plots. These plots were located on waterfowl production areas identified by the Minnesota Department of Natural Resources as significant wintering areas for ring-necked pheasant and white-tailed deer. All food plots were located near shelterbelts and/or cattail sloughs which provide escape and winter cover. Plots were located on soils

and slopes which have minimal soil loss potential. Most of the food plots consisted of two, ten-acre fields where corn was planted in one field and a grass mixture was seeded in the other. These fields are then alternated every three to five years. This rotation has helped reduce disease and insect problems in corn and also provided nesting cover in the grassland field. Occasionally soybeans were planted one year instead of corn to also break an insect or disease cycle. The cooperator has been responsible for all field work, seed, fertilizer and weed control. The wildlife's (government's) share has been left standing in the field in alternate rows. The alternate rows helped disperse snow and reduced the chances of the entire plot being buried in snow. The cooperator has been allowed to harvest any corn or soybeans remaining the following spring.

FOOD PLOT SUMMARY - MORRIS WMD - 1987

County	No. WPA's With Plots	Total Acres in Corn, Soybeans	Total Acres In Plots
Big Stone	10	121	221
Pope	4	46	66
Stevens	12	106	206
Swift	6	80	105
Traverse	4	42	84
Totals	**36**	**395**	**682**

The Stevens County Pheasants Forever chapter financed winter food plots and feeder cribs throughout the county, predominantly on private land. One plot was planted on Edwards Waterfowl Production Area (Stevens County).

5. Grassland

Approximately one-half of our grasslands are in a vigorous and productive state for waterfowl nesting. This includes reseeded native grasses, managed native prairie, and introduced cool-season grasses and legumes which have been seeded in the last ten years and are actively managed with fire, grazing or haying. The remaining grassland habitat consists of former crop fields seeded to various introduced grasses and legumes and some prairie in need of management. Approximately 500 acres are seeded to native grasses each year. New fee acquisition has provided the acres to be seeded. Occasionally new acquisition land is cash rented back to the original landowner. The purpose is to have soybeans planted making a good seed bed for native grasses.

Prairie Larkspur 6/29/87 BLA 87-18

SPECIAL USE PERMITS USED FOR SEEDBED PREPARATION
MORRIS WMD - 1987

County	WPA	Acres	Revenue	Date Expires
Big Stone	Artichoke	22	$ 660	11/87
	Johnson	20	700	11/87
	Redhead Marsh	80	400	11/88
Pope	Westport	70	1,400	11/87
Stevens	Edwards	37	1,295	11/87
	McNally Slough	116	2,060	11/87
	Mero	27	81	11/87
	Wente	90	3,600	11/87
Swift	Brady	48	1,440	11/87
	Brady	7	210	11/87
	Loen	100	2,700	11/87
Traverse	Lawrence	110	3,850	11/87
	Robinhood	124	1,240	11/87
Total		**851**	**$19,636**	

Weed control on new seedings is very critical. A combination of herbicides (roundup, 2,4-D), burning, and haying are used to aid the establishment and maintenance of both native and cool-season grass and legume stands. For native grass establishment and maintenance, prescribed burning reduces competition from unwanted cool-season grasses but may also stimulate broadleaf weeds. This may necessitate the subsequent application of 2,4-D.

CHEMICAL TREATMENT OF SEEDINGS - MORRIS WMD - 1987

County	2,4-D		2,4-D & Banvel	Roundup
	Aerial	Ground		
Big Stone	86	961	548	20
Lac Qui Parle	0	110	0	47
Pope	248	427	0	188
Stevens	99	889	64	160
Swift	0	64	58	30
Traverse	213	362	87	163
Yellow Med.	17	17	0	0
Total	**663**	**2830**	**757**	**608**

Solicitations were sent out in April for aerial application of 2,4-D. However no bids were received for the first application. Bids were then solicited locally for ground application. Clinton Ag Service of Clinton, Minnesota was the low bidder. A total of 2,800 acres were sprayed at a cost of $21,453 (which included chemical). Oleen Aerial Spraying of Morris, Minnesota was awarded the second application of 2,4-D. The contract amount was $2,997.47 for 403 acres. In addition, 260 acres of seedings were sprayed by helicopter under the noxious weed contract. Oleen Spraying also applied a combination of banvel and 2,4-D in the fall. A total of 757 acres was sprayed at a cost of $5,550.13. The chemical 2,4-D was supplied by the contractor in all cases and the government supplied the banvel. Most areas are sprayed twice during the growing season. The fall application of banvel/2,4-D is targeted toward Canada thistle. The thistle is quite susceptible to chemical at that time. The problems of volatilization and drift are also lower at that time of the year and agricultural crops are not as susceptible to injury from the banvel.

a. Reseeded Native Grasslands

Since 1973 the Morris Wetland Management District has planted 7,158 acres of native grasses of which 569 were seeded in 1987. The primary mixture consisted of: switchgrass 1.0, big bluestem 5.0, Indiangrass 0.4, little bluestem 0.1, side oats grama 0.1, green needle 2.1, and western wheat 0.75 (all expressed in pounds pure live seed/acre). A 19 acre field of indigenous Indiangrass was seeded on Edwards Waterfowl Production Area as a future seed harvest field.

All fields seeded in 1987 were farmed for at least three years prior to seeding. Fields were sprayed with one pound active ingredient of roundup and 1/4 pound active ingredient of 2,4-D per acre prior to seeding. Truax drills were used on all seedings. Seedings were sprayed force account with 1/2 pound active ingredient 2,4-D in July or August.

NATIVE GRASS SEEDINGS - MORRIS WMD - 1987

County	WPA	Acres	Seeding Date
Big Stone	Anderson	7	6/3
	Barry Lake	15	6/3,5
Lac Qui Parle	Colbert	47	5/13
Pope	Blue Mounds	119	5/14,18,29,30
	Scofield	47	5/11
	Walden	37	5/30, 6/1
Stevens	Edwards	40	6/1
	Edwards	19	5/29 indig. Indian
	Sherstad Slough	6	6/8
	Welfare	37	6/2,3
Swift	Appleton	32	5/14
Traverse	Lawrence	163	6/4,5,6
Total		**569**	

The Morris Wetland Management District, in cooperation with Big Stone National Wildlife Refuge, harvested approximately 30 acres of native grass from seeded, indigenous big bluestem and Indiangrass fields on refuge land. A total of 4,562 pounds was the final product after cleaning. Switchgrass (SD-149) was also harvested on Lamprecht Waterfowl Production Area (Stevens County). Yield was 1,663 pounds of cleaned seed.

b. Cool-Season Grasslands

A total of 153 acres was seeded to introduced cool-season grasses in 1987. Cooperative farming agreements were utilized to seed 131 acres on five waterfowl production areas. The cooperator furnished all seed and used small grain as a nurse crop. The small grain was harvested and the straw removed from the field. Twenty acres were seeded with an air flow fertilizer spreader by station personnel. A multi-weeder was used on the 20 acre field to cover the seed after it was broadcast.

As soon as the photographer leaves, they're off.
6/29/87 BLA 87-19

The following table summarizes cool-season seedings in 1987.

COOL-SEASON GRASS SEEDINGS - MORRIS WMD - 1987

County	WPA	Acres	Date	Mixture
Big Stone	Bentson Lake	6	4/?	1
Pope	Ben Wade	31	4/?	1
	Nelson Lake	20	4/28	2
	Krantz Lake	48	4/?	1
Swift	Rice	12	4/?	1
	Svor	34	4/?	1
Stevens	Edwards	1	5/1	3
	Sherstad Slough	1	5/6	4 (islands)
Total		**153**		

Mixture:
1) orchard 3 lb., tall fescue 2 lb., Timothy 2 lb., tall wheatgrass 6 lb.
2) intermediate wheatgrass 7.5 lb., orchard grass 3 lb., Timothy 2 lb., brome 0.5 lb.
3) intermediate wheatgrass 3 lb., tall wheatgrass 0.5 lb., orchardgrass 1.6 lb., green needle 2 lb., brome 1.6 lb.
4) alsike clover 1 lb., Timothy 3 lb., tall fescue 2 lb., orchardgrass 2 lb., green needle 2 lb., birdsfoot trefoil 2 lb., big bluestem 1 lb., tall wheatgrass 5 lb.

c. Native Prairie

The original upland vegetation within the Morris District was tallgrass prairie. Each year small tracts of privately owned prairie are still being converted to agricultural production.

The total native prairie acreage on waterfowl production areas was 5,637 in 1987. The areas vary in size from less than one acre to 311 acres. Active management consisting of prescribed burning and grazing has been limited to the larger acreages. The small remnants have not been actively managed because of size, location, and staff limitations.

Prairie violet. 5/87 BLA 87-20

7. Grazing

Controlled grazing has been used as an alternative to prescribed burning. The grazing period utilized by the Morris Wetland Management District has been May 1 to May 31. Occasionally an additional seven to ten days have been needed to clean up residual material and cool-season grass growth. Three waterfowl production areas were grazed in 1987.

GRAZING SUMMARY - MORRIS WMD - 1987

County	WPA	AUM's	Fee/AUM	Upland Acres
Big Stone	Rothi	150	$2.75	113
	Twin Lakes	73	$2.75	55
Lac Qui Parle	Hastad	65	$1.50	100
Total		**288**		**268**

8. Haying

Haying has been used on a very limited basis for weed control and upland habitat management. It has been utilized on pure stands of alfalfa where chemicals cannot be used to control broadleaf weeds. The hay must be cut after July 1 and the second cutting taken before September 1. The July 1st date was selected to allow most of the nesting to be completed and still result in control of Canada thistle. Prohibiting cutting after September 1 allows the alfalfa to harden-off and provide residual growth for nesting the next spring.

HAYING SUMMARY - MORRIS WMD - 1987

County	WPA	Acre	Number of Cuttings	Rate/ Acre
Big Stone	Anderson	22	2	$5, $15.
	Boehnke	45	1	$5
	Karsky	24	1	$5
Pope	Krantz Lake	10	1	$7.50
	Rolling Forks	50	2	$5, $17.50
Total		**151**		

9. Fire Management

A total of 333 acres were prescribe burned in 1987. The Morris District was in a state fire ban most of the season.

PRESCRIBED BURN SUMMARY - MORRIS WMD - 1987
(In Acres)

County	WPA	Date Burned	Native Prairie	Intro. Natives	DNC	Marsh	Total
Big Stone	Dismal Swamp	4/07/87		120	17		137
Stevens	Edwards	5/07/87	116		16		132
	Fults	5/14/87		64			64
Total			**116**	**184**	**33**		**333**

A moment to enjoy the hard work.
5/7/87 BLA 87-21

10. Pest Control

As usual, a great amount of staff time and funds were expended in June and July in the control of noxious weeds. Over 150 individual waterfowl production areas were searched for noxious weeds. One hundred seventeen units required weed control. Each had a map prepared showing both the weedy areas and the crops on the surrounding private property. The larger areas and those with access problems were sprayed by contract. The

remaining weedy areas were sprayed by our own staff using an invert sprayer. Compared to ten years ago, our present weed control program is deemed adequate by the county commissioners. Recently, none have used weed control as an issue to deny acquisition.

This past year Scott Helicopter Services from LeSueur, Minnesota was awarded the bid for the aerial spraying of noxious weeds. A helicopter has been used the last several years because of the irregular shape, hard to reach and small size of many Canada thistle areas that need to be controlled. Low volatile ester 2,4-D was used at a rate of one quart active ingredient in four gallons of water per acre. Under this contract, 1,280 acres were sprayed at a cost of $21,079.10.

Several large fields infested with Canada thistle were treated at less cost by a large ground sprayer. Clinton Ag Service, Inc. sprayed these areas at an average cost of $8.00 per acre. Also, 140 acres were sprayed force account with the station's invert sprayer.

Leafy spurge was sprayed on seven waterfowl production areas. Where possible, the invert sprayer was used applying a mixture of 2,4-D and Tordon. In the wooded areas a four-wheeler A.T.V. with a 20 gallon tank and hand gun using a 2,4-D and banvel mixture was used.

Four waterfowl production areas were treated with 500 pounds of the herbicide Spike to control trees which were invading native prairie areas. A total of 550 acres was treated for invading trees.

The staff of this district continues to battle the spread of purple loosestrife. In previous years the plant was found on only three waterfowl production areas and we thought it was being held in check. This year loosestrife was sprayed on seven waterfowl production areas. There were many more infested areas on private land this year, primarily in the east half of the district. The struggle to control this plant will continue but it is very evident that we are fighting a losing battle with the present tools we have. With the number of acres in the district now infested with loosestrife, there is no available method to control its spread into wetland basins within waterfowl production areas.

Tractor Operator Gades spraying purple loosestrife.
7/29/87 BLA 87-22

NOXIOUS WEED CONTROL - MORRIS WMD - 1987

	Contract Spraying		Force Account Spraying		Force Account Mowing		Totals	
County	No. WPAs	Acres	No. WPAs	Acres	No. WPAs	Acres	No. WPAs	Acres
Big Stone	17	311	22	64	--	--	29	375
Lac Qui Parle	9	164	10	511	--	--	13	675
Pope	21	308	14	38	1	10	29	356
Stevens	18	350	17	61	--	--	28	411
Swift	9	197	4	60	--	--	11	257
Traverse	5	186	4	8	1	10	7	194
1987 Total	**79**	**1516**	**71**	**742**	**1**	**10**	**117**	**2268**
1986 Total	**91**	**1241**	**76**	**427**	**9**	**240**	**135**	**1908**
1985 Total	**98**	**1919**	**61**	**151**	**5**	**50**	**131**	**2120**
1984 Total	**119**	**1589**	**37**	**102**	**14**	**198**	**133**	**1889**
1983 Total	**117**	**2233**	**27**	**97**	**9**	**157**	**153**	**2487**

*Same waterfowl production areas may have received contract and force account control efforts.

13. WPA/Easement Monitoring

a. Easements

EASEMENT ENFORCEMENT SUMMARY - MORRIS WMD - 1987

Cases closed during 1987	10
Cases forwarded for legal action	6
*New fall 1987 violations (unresolved)	0
**Total cases outstanding December 31, 1987	6

*Aerial flights completed, but due to weather and Farm Bill work, confirmation of possible violations will be made in spring, 1988.

**Includes four co-owned cases for which legal guidance has been requested and court action may not be necessary or advisable.

There were ten cases closed in 1987. They were:

Easement No.	Problem/Solution
BS-47X	Fill/removed.
BS-111X	Fill/removed.
BS-219X	Fill (2 rock piles)/removed.
P-44X	Fill (irrigation travelways)/removed.
P-45X,1	Drain & fill/restored.
P-60X	Drain & fill/restored.
P-86X	Plow furrow ditching/new owner advised to farm through and "don't repeat."
P-95X	Drain & fill/restored.
T-13X	Burn/warning letter sent.
T-136X	Burn/warning letter sent.

The notable easement cases include P-44X where the owner received criminal conviction in March, 1984. He was placed on probation and instructed to remove several illegal irrigation travelways and a road. Two years of subsequent wet weather prompted delays until drought this summer facilitated restoration.

In another case involving irrigation travelways, P-43X, restoration of a long-standing fill violation was completed only to have the owner commit another fill violation shortly thereafter. Restoration of this second violation was achieved and a citation issued. Before his court date arrived, he also violated provisions of a permit he was

issued regulating travelway improvements he wished to make. The citation was withdrawn and will be re-issued with the permit violation charges added. The final outcome is pending, and destined to continue into next year's narrative.

Fall easement flights were completed for the district in November. Work load and weather prevented fall ground checks. Much ditching activity on all private lands was noted throughout the district. Higher than average confirmed violations are expected when spring ground checks are completed. Factors encouraging the noticeably abundant drainage activities were early harvest, several wet years preceding a dry one, and swampbuster regulations spurring the thought, "If I don't drain it now I may never be able to." During the easement flights, potential swampbuster violations observed were also documented to report to appropriate Agricultural Stabilization and Conservation Service offices.

b. Waterfowl Production Areas

Most waterfowl production area problems are detected during routine work activities or while flying easement checks. Typical problems include farming encroachment, rock dumping, sign damage, vehicle trespass, dead animal and/or garbage dumping, and private drainage affecting waterfowl production area wetlands.

Most problems are caused by neighbors or unknown individuals. The preferred procedure in resolving most problems is to negotiate a solution without creating a neighboring enemy. Legal action is usually a last resort.

The only fee area problem in 1987 receiving legal action is the continuing Krantz Lake WPA case in Pope County. In June 1986 a neighbor dug a 3/4 mile long ditch along the disputed WPA boundary. At least three co-owned wetlands were drained in addition to wetlands on the neighbor's property. The case was turned over to our Law Enforcement Division who, working with the Solicitor and/or U.S. Attorney, must resolve the boundary dispute and then address Service rights regarding their portion of the drained wetlands. Considering the legal complications, it could be a long time before final resolution is achieved!

SUMMARY OF NOTABLE WPA PROBLEMS - 1987

County	WPA	Problem	Action Taken/Status
Big Stone	Boehnke	trespass/ junk pile	Neighbor contacted and trespass resolved by repairing/padlocking gate shut. Removal of junk is scheduled for 1988.
Lac Qui Parle	Quaal	Ag trespass	Resurveyed and reposted.
Pope	Greiner	Ag trespass	Reposted and *O.L.M.'s added.
Pope	Krantz Lake	Boundary dispute/co-owned drainage via disputed ditch.	Explained in above paragraph. Also, the new tract south of the boundary was posted.
Stevens	Miller	Ag trespass	Resurveyed, reposted, O.L.M.'s added.

*On-Line Markers--consisting of steel fence posts placed on the boundary between sign posts at intervals appropriate to correct the problem.

G. WILDLIFE

American bittern - not just another pretty face.
6/29/87 BLA 87-23

1. Wildlife Diversity

Waterfowl production areas in the Morris Wetland Management District contain a complex of habitat types that help support over 260 species of birds, 55 of mammals, and numerous species of reptiles, amphibians and insects. The keys to maintaining this diversity are habitat preservation, and secondarily, habitat manipulation. Activities that help maintain wildlife diversity on waterfowl production areas in western Minnesota include land acquisition, water level management, prescribed burning, grassland establishment, woodlot improvement and wildlife food plot establishment.

2. Endangered and/or Threatened Species

A total of four bald eagles were observed within our District during 1987. Three adults and one immature were observed during spring. During summer, one golden eagle was observed near the district office.

3. Waterfowl

a. **Swans**

Tundra swans are a spring and fall migrant through the Morris Wetland Management District. Spring migration peaked in late March. The largest flock reported was 50 swans, seen on March 21st.

Most of the fall migrants moved through the district during the week of November 8th. Two flocks of approximately 75 birds each were spotted over Pope County on November 9.

b. **Geese**

The first Canada geese were seen on Edwards WPA, Stevens County, on February 20th. On March 16th, 1,500 Canada geese were observed on Quaal WPA, Lac Qui Parle County. Fifty snow geese were seen over a Stevens County unit on March 22.

Canada goose production continues to climb in the district. The first brood was reported on May 13th. Production on fee and easement acres was estimated at 600.

The Lac Qui Parle goose zone, an area including a state managed goose refuge, had a peak Canada goose population for the fall of 130,000.

c. **Ducks**

A few common goldeneyes and mallards announced the approach of spring with their arrival on February 25th. Many other species arrived during the first week in March. These arrivals were several weeks earlier than normal.

As reported in the 1986 Annual Narrative Report, in late 1986 we erected 299 nest baskets which were donated by Ducks Unlimited. We were pleased with the use of the baskets in 1987. Thirty-one nests were established, all by mallards. One nest was abandoned. The other thirty nests were all successful. We saw no signs of predation.

Over 10 percent of our nest baskets were used with no signs of predation and only one abandoned nest.
6/29/87 BLA 87-24

Total breeding population for the state was estimated at 615,000, up from 598,000 last year.

Our method of estimating waterfowl production changed this year. Previously, we estimated the breeding pair population using the results of our Quarter Section Survey. In 1987, we switched to the "Four Square Mile Survey" designed and managed by Northern Prairie Wildlife Research Center in North Dakota. This survey produces better estimates of the breeding pair population.

Production estimates for mallard, blue-winged teal, pintail, shoveler, and gadwall were calculated by Northern Prairie using complex species-specific production formulas. We estimated production for other duck species by assuming 40 percent hen success (50 percent for wood duck), and 5.5 young per brood. For example, 100 pair x 40 percent of the hens successfully nesting x 5.5 young per successful nest = 220 ducks produced.

Northern Prairie was unable to provide us with breeding pair estimates for Canada geese and American coots. Production estimates for these species were based on old breeding pair surveys and casual staff observations.

Production estimates for several species and total Morris Wetland Management District waterfowl production (fee and easement acres) are shown below.

PRODUCTION ESTIMATES - MORRIS WMD - 1987

Species	Estimated Number Breeding Pairs	Estimated Production
*Blue-winged teal	2,785	4,203
*Mallard	1,588	1,304
Wood duck	348	957
Canada goose	150	600
Redhead	269	592
Other duck species	568	898
American coot	11,850	9,890
Total	**17,558**	**18,444**

*Production figures calculated by Northern Prairie Wildlife Research Center.

The most impressive fall migration sights were a flock of 1000 field feeding wood ducks in mid-October and a major movement of geese and ducks during a snowstorm on November 23.

A white-winged scoter, uncommon in western Minnesota, was shot by a hunter on Page Lake in Stevens County.

4. Marsh and Water Birds

A pair of common loons produced two young on Bangor WPA in Pope County. On June 30th, two adults with two tiny young were spotted on an isolated, deep, clear water marsh. By the next visit in August, both young were nearly adult size. Pope County is in the southern fringe of the loon's present breeding range.

An American bittern nest, found while nest dragging, was successful and produced one chick.

The Minnesota Department of Natural Resources banded 800 white pelicans on two islands in Marsh Lake, Swift County. They estimated pelican production on the lake at 4,500 with several hundred double-crested cormorants also produced on the islands.

Other species commonly seen or heard in the district include: great blue heron, great egret, black-crowned night heron, American coot, western grebe, pied-billed grebe, and sora rail. Least bitterns are probably quite common but are very shy and are rarely seen.

Great egrets are common on our waterfowl production areas. 7/87 BLA 87-25

5. Shorebirds, Gulls, Terns and Allied Species

The annual woodcock singing-ground survey was conducted on April 28 and eight birds were heard. The average number of woodcock heard over the 19 year survey period has been 5.8. This route, located in southeastern Pope County, is part of the nation-wide survey organized by the Office of Migratory Bird Management.

Numerous shorebirds were also observed throughout the district at various times of the year. Lesser yellowlegs, spotted sandpipers, killdeer and others responded to the drawdowns and partial drawdowns of the managed pools. Natural drawdowns due to the dry summer produced mudflats in areas flooded since the high precipitation of 1984.

Bird tracks on a mudflat. 5/87 BLA 87-26

Sightings of some shorebirds infrequently seen in the district included: Wilson's phalarope, American avocet, marbled godwit, and long-billed dowitcher, all seen in late May or early June.

Avocets are an unusual sight in the district.
6/30/87 BLA 87-27

6. Raptors

Common breeding raptors in this area include red-tailed hawk, kestrel, northern harrier, and great-horned owl.

An unusually large number of snowy owl sightings were reported in November and December. Six sightings were reported by the staff, including one road killed immature snowy found in Stevens County.

8. Game Mammals

Based on Minnesota Department of Natural Resources data, white-tailed deer populations remained high in 1987. Spring deer densities in west-central Minnesota were estimated to be 1.7 deer per square mile. Gross productivity was 1.36 fawns/doe.

In Stevens County, deer harvest was up 8 percent from last year. According to the area State Wildlife Manager, this is the second highest number ever harvested. The highest number of deer harvested occurred in 1985. The mild winter of 1987 is believed to have contributed to this year's increased harvest.

Moose are occasionally seen in this part of Minnesota. One bull moose was observed on one of our waterfowl production areas in Pope County.

Furbearer populations continued to be high. Red fox, muskrat, raccoon and mink were highest among those harvested this year.

1987 was another rat race. 10/87 BLA 87-28

One unprotected furbearer that is increasing in distribution and population in western Minnesota is the coyote. Our scent post survey (see Section D.5) did not show evidence of coyotes, but they have been spotted by residents and were regularly seen in southern Pope County. Frequent coyote observations have also been reported from the Minnesota River Valley in Big Stone, Lac Qui Parle, and Swift Counties.

10. Other Resident Wildlife

According to the Minnesota Department of Natural Resources (DNR) August roadside survey, 79.4 pheasants were observed per 100 miles in the west-central portion of the state. This was a 304 percent increase from last year. The average brood size was 5.9.

Most of our waterfowl production areas provide good habitat for pheasants in the form of nesting cover, winter cover, and food. The dense stands of reseeded native grass provide excellent fall and early winter cover.

The DNR reports that its annual survey recorded 58 percent more gray partridge statewide. On the 1987 roadside counts within our district, 14.6 partridge were observed per 100 miles. This is a 45 percent increase over last year's number.

11. Fisheries

During 1987 the Minnesota Department of Natural Resources Area Fisheries in Glenwood and Ortonville utilized some of our type V wetlands for the rearing of walleye fingerlings. These fingerlings have been stocked in local fishing lakes.

The following units were used in the program: Big Stone County - Daly WPA, Haugen WPA, Rothi WPA; Lac Qui Parle County - Bailey Slough WPA; Pope County - Bangor WPA, Larson WPA, McIver WPA.

15. Animal Control

Beaver occasionally disagree with station water management plans on marshes with control structures. They don't always appreciate the benefits of a drawdown. Also, beaver sometimes flood private land from dams on Service land. If the problems are serious we hire trappers to remove nuisance beavers. In 1987, 33 beaver were removed at a cost of $960.00.

Sometimes it is hard to appreciate the industrious beaver.
4/87 BLA 87-29

17. Disease Prevention and Control

During February and March, an estimated 75 mallards were confirmed as having been lead poisoned on Mud Lake in Traverse County. The lead poisoning was first brought to our attention by the Traverse County Conservation Officer who had brought what ducks he had caught or found to our office to be examined. We sent them to the National Health Lab for analysis.

The Mud Lake area was investigated again by the conservation officer along with Biological Technician Pollitt. At that time only the remains of those ducks which could not escape from predators and lame ducks were observed. The lake had small areas of open water where the ducks had concentrated and thus picked up large amounts of lead shot.

This lake area has historically been well known for good duck hunting. Old hunting lodges, now homes, are said to have once hosted such celebrities as Bob Hope.

On August 21, four white pelicans were found dead on Busack Waterfowl Production Area in Yellow Medicine County. Waterbirds had been reported dying from toxic algae in adjacent counties and nearby South Dakota so it is believed that this was the cause of death of the four found on the Busack unit. Botulism was not considered since all waterfowl seen in the same area were healthy.

One of the pelicans had a band on its leg. This was sent to the bird banding lab. The certificate sent back indicated that the pelican had been banded on July 10, 1987, near Appleton, Minnesota, a town in Swift County. The banding location is approximately 52 miles from the waterfowl production area where the bird was found dead. The pelican was not old enough to fly when it was banded which may indicate it was one of the 800 nestings banded by the Minnesota Department of Natural Resources on islands in Marsh Lake in Swift County.

H. PUBLIC USE

1. General

There are seven counties with a total of 3,971,155 acres in the Morris Wetland Management District. How do you adequately inform and encourage people in an area of this size to use the facilities and opportunities we offer on waterfowl production areas? How do we know what takes place on 229 individual refuges each with unique problems? This is the challenge we face, and it is no easy task.

It is a large area to keep track of with a variety of public use activities available, both consumptive and non-consumptive. Some of these activities are carried out positively, others destructively.

We can only try our best to teach and enforce the laws and to increase awareness of the wetlands program. Easement violations persist, hunting laws are broken, complaints continue, time and money are always limiting factors. However, to reach just a few about the whys and wherefores of wetlands and the environment pays off. The word gets spread and we're once again asked to teach, interpret, or explain. It's a slow process, perhaps, but better than no process at all.

4. Interpretive Foot Trails

There are two interpretive foot trails in the Morris Wetland Management District. Both trails are self guided and are approximately one mile long. One trail is located on the Redhead Marsh WPA (Big Stone County) and derives much of its use from the community of Ortonville. The other trail is located on the Froland WPA (Pope County) and serves the communities of Benson, Starbuck and Glenwood. Seasonal tourists use both trails, but to what extent is not known.

6. Interpretive Exhibits/Demonstrations

The "System 70" display, using various subject panels, is exhibited in banks, libraries and schools in the district. When the display is not in the field we use it at the headquarters.

Our permanent headquarters display consists of a series of panels that depict the purpose and work of the wetland management program with photographs, maps, and narrative.

7. Other Interpretive Programs

Twelve programs were presented by the Morris staff during 1987. Some of the subjects were: Waterfowl Management, Marsh Exploration, Planting Native Grasses, and Tours of Waterfowl Production Areas.

Leaflet boxes were placed on 12 waterfowl production areas. A total of 235 general information brochures were distributed.

Station films were provided to schools and sportsmen's clubs 38 times. Ten news releases were given to local papers.

We held our Open House on October 1st. Approximately 200 people attended. Our program featured talks by Rich Papasso of Big Stone National Wildlife Refuge, and Ken Bonnema of the Lac Qui Parle Wildlife Management Area. On display were antique canvasback decoys collected by Steve Kufrin, Editor of the Minnesota Waterfowlers Magazine.

It is nice to have Steve Kufrin (wearing cap and red shirt) on our side. 10/1/87 BLA 87-30

We also showed the movies: Lead Poisoning in Waterfowl and Field Testing Steel Shot. The films were shown continuously and the talks were given several times during the afternoon and evening. Our visitors seemed to enjoy having several options of what to see and when to see it.

Also prominently displayed was our "Take Pride in America" poster until a gust of wind bounced it off the head of one of our guests (no harm done).

Environmental education is for everyone.
10/1/87 BLA 87-31

8. Hunting

Waterfowl hunting in 1987 was rated as poor in the Morris district. Hunting success had declined in this region from good to poor during the last two weeks of the season. The very dry conditions were believed to be the cause of such low numbers of waterfowl. Although notable migrations took place during the end of October and the beginning of November due to cold fronts, the lack of water prevented many birds from stopping.

Our district attracts hunters from across the state.
10/87 BLA 87-32

Pheasant hunting may be considered average these days but when compared to the "good ole days", it's down-right poor. A poor 1986 reproductive season and minimal quality habitat had its impact on 1987 populations. There is hope for this bird, however. The Conservation Reserve Program gives promise of restored habitat and thus higher populations.

Pheasant hunting pressure was heavy all season.
10/87 BLA 87-33

A near record number of deer were harvested in Minnesota and in our district. The harvest did not top the 1985 kill, but the statewide harvest was the second highest ever recorded.

The diversity of the waterfowl production areas in the Morris district offers much to the hunter. Some areas are excellent for fox hunting, some for gray and fox squirrels, some for cottontails or jackrabbits. Snipe, rail and woodcock populations are spotty, but offer good shooting on a few of our areas. Even ruffed grouse in huntable populations are known to exist on at least three waterfowl production areas. Gray partridge are abundant, but tough to hunt over most of the district. All in all, the Morris district offers good to excellent hunting for most game species if the hunter is just willing to become knowledgeable about the critters and their coverts.

9. Fishing

Minnesota, "Land of 10,000 Lakes," is known for its fishing. Walleye, northern pike, bass, bluegill, crappie and catfish abound in many of the area lakes and streams, but only three of our waterfowl production areas receive any fishing pressure. Two units adjoin Artichoke Lake (Big Stone and Swift Counties), and the Chippewa River flows through our Heidebrink unit (Pope County).

10. Trapping

Trapping mink, muskrat, fox and raccoon affords many hours of pleasure and significant profit to local children, sportsmen, and professional trappers throughout the district. The muskrat population continues to increase and is now as high as it has been in the last twenty years.

Since our waterfowl production areas are scattered over a seven county area, we are unable to obtain accurate data on the number of trappers or the amount of fur harvested. We know that one waterfowl production area had 200-300 muskrats trapped from it in one season.

11. Wildlife Observation

As waterfowl production areas are developed and become more and more established in the community, the local residents become aware of the opportunities they offer. Probably the most important aspect is the casual wildlife observations of people "just driving by." Waterfowl, deer, pheasants, and a myriad of other wildlife are there.

Many bird watchers take advantage of the waterfowl production areas. Because of the lack of good habitat in the surrounding areas, migratory and resident birds tend to concentrate on the units, much to the joy of the birders.

12. Other Wildlife Oriented Recreation

Hiking, snowshoeing, cross-country skiing, photography, and mushroom hunting are just a few of the other wildlife oriented recreational opportunities offered on waterfowl production areas. Since no motorized vehicles are allowed on our units, many individuals find that simple peace and quiet is the most beneficial aspect of a visit to a waterfowl production area.

17. Law Enforcement

Four people on the Morris staff have law enforcement authority. However, most enforcement activities are associated with non-public use activities such as easement violations or resolving waterfowl production area boundary problems. As directed by program advise, enforcement during hunting seasons by the Morris staff is de-emphasized. Primary responsibility is left with the State conservation officers. We maintain good rapport with the state officers and work cooperatively with them when we can.

The following cases were made working with local conservation officers during fall hunting seasons. Violations were processed through state court.

Offense	Disposition
One wood duck over daily limit	forfeit $100.00
One hen mallard over daily limit	forfeit $100.00
One duck over daily possession limit	forfeit $100.00
One duck over daily possession limit	forfeit $100.00
Transporting an uncased firearm	forfeit $ 60.00

I. EQUIPMENT AND FACILITIES

1. New Construction

Sherstad Slough WPA Ducks Unlimited Project
The Sherstad Slough project was initiated in 1986 and finished early in 1987. It consisted primarily of a ditch cleanout, construction of two nesting islands, and a water control structure with sheet piling spillway. During June we had our Bio Aids hand seed and rake the islands.

The structure was left open all year for a full drawdown of this pool. Early in the year it was apparent that the ditch didn't extend into the pool far enough to drain the basin completely. Ducks Unlimited had a contractor re-work the east end of the ditch and extend the ditch over 300 feet into the pool.

The drawdown was highly successful with almost complete revegetation of the pool by bullrush and cattail. This pool had been completely devoid of vegetation due to carp and bullheads for the last several years.

Sherstad Slough WPA, Stevens County, before Ducks Unlimited project was completed. Ditch cleanout is visible in upper right corner. 9/12/86 BLA 87-34

Sherstad Slough WPA, Stevens County, after completion of Ducks Unlimited project and complete draw down. Note islands, ditch cleanout and revegetation of area.
11/13/87 BLA 87-35

Long Lake-Edwards WPA Ducks Unlimited Project
Ducks Unlimited completed the design work for this project at the end of the year. During the year, district staff wrote an Environmental Assessment which was approved. This project consists of installing six water control structures, ditch cleanout, and construction of one ditch plug. Upon completion we will be able to manage water levels in six marshes. Construction will start in the summer of 1988.

Minor Projects

a. Conference Room
A conference room was completed in the basement of the district headquarters building. This room had been unfinished since the building was completed in 1983. The outside walls were insulated and sheetrocked, a drop ceiling with recessed lights was installed, windows were boxed in, walls and floor painted. All work was accomplished by a temporary Tractor Operator from the Fergus Falls Wetland Management District, and the two wage grade employees of this district.

b. Contract Heavy Equipment Work
The following work was accomplished by four different contractors at a cost of $4,350.00.

HEAVY EQUIPMENT WORK - MORRIS WMD - 1987

Location	Bury Building Site	Ditch Plugs	Misc.
Big Stone County			
Redhead Marsh WPA	1		
Lac Qui Parle County			
Bolson Slough WPA		1	
Pope County			
Jorgenson WPA		1	
Kolstad Lake WPA		2 (repairs)	
Blue Mounds WPA	1		
Scofield WPA	1		Level parking area
Stevens County			
Mau WPA		1	
Miller WPA		1	
Pepperton WPA		1	
Hutchinson WPA		1	small water control structure
Grossman WPA			field crossing
Total	3	8	

c. Force Account Projects

The following construction projects were completed in the fall by Motor Vehicle Operator Ahrndt using a D-7 cat:

Location	Project
Big Stone County	
Twin Lakes WPA	Build one ditch plug
Pope County	
Krantz Lake WPA	Build three ditch plugs
Stevens County	
Hutchinson WPA	Build one ditch plug, clean 100 foot ditch
Swift County	
Hamann WPA	Build low level dike
Traverse County	
Hormann WPA	Build ditch crossing w/12" CMP
Lawrence WPA	Build one ditch plug
Robinhood WPA	Build two ditch plugs and one ditch crossing

2. Rehabilitation

In the fall of 1987 Motor Vehicle Operator Ahrndt repaired several ditch plugs, rebuilt a parking lot that had been under water, and buried a concrete stock watering tank. This work was done force account at the following locations.

REHABILITATION WORK COMPLETED - MORRIS WMD - 1987

County	Location	Project
Big Stone	Dismal Swamp WPA	Rebuild one ditch plug
	Odden WPA	Rebuild one ditch plug
	Olson WPA	Rebuild two ditch plugs
	Prairie WPA	Rebuild one ditch plug
Pope	Jorgenson WPA	Rebuild one ditch plug
	Kolstad Lake WPA	Rebuild one ditch plug
	Paulson WPA	Repair one ditch plug
Stevens	Mau WPA	Rebuild one ditch plug

Four wells were sealed in accordance with Minnesota State Health Department regulations. Valnes Well Drilling completed the work at a cost of $1,000.00. The wells were located on the following waterfowl production areas.

Big Stone County	-	Redhead Marsh WPA
Lac Qui Parle County	-	Hastad WPA
Swift County	-	Artichoke Lake WPA
Swift County	-	Loen WPA

3. Major Maintenance

Posting
Posting the boundaries of new units and maintenance of existing posting is a major recurring project that consumes a large amount of funds and staff time yearly. This year 12 miles of new posting was completed, and 4 1/2 miles of old posting were removed because of boundary changes due to new purchases.

This district maintains more than 590 miles of posted boundaries. The signs adjacent to roads have a short service life because some of the public continually use them for targets.

Tractor
The main seal of the Ford TW-10 tractor was repaired at a cost of $1,000.00.

Painting
All first floor walls in the Morris headquarters office were painted by contract at a cost of $1,959.00.

4. Equipment Utilization and Replacement

Grinder-Mixer
This station used to mix several thousand pounds of warm season native seed by hand each spring. It was a hard, hot, dusty job done with scoop shovels on a day with little wind (seed blows away easily). For the past three years we have rented a grinder-mixer to mix the different varieties of seed together and it has worked very well. It costs about $100.00 to rent the grinder-mixer for two days.

Rented grinder-mixer used to mix seed.
5/87 BLA 87-36

Survey Equipment
A new level, tripod and rod were purchased this past year. When one looked through the old level everything was upside down, and some of the staff had a hard time adjusting and using it. The new level is self-leveling and the view through the level is normal.

Minor Purchases
Large fan - used for drying harvested native grass seed.
Flame-proof file cabinet - safeguard of easement records.
Three-point blade - used to maintain trails and parking lots.
Used 20 foot John Deere disk - prepare seedbeds.
Two folding ramps - for loading ATV into pickup.

Celebrity
A new 1987 Chevrolet Celebrity was received as a replacement for the 1981 Ford Fairmont.

Chevrolet 4 x 4
A new 1988 Chevrolet one-ton 4 x 4 was received to replace our 1979 4 x 4 Chevrolet. This vehicle, mounted with a 60 foot boom sprayer, is used to spray in excess of 900 acres of seed downs each year which is very hard on it.

5. Communications Systems

There were no additions to the station's communications system this year. The only major repair was to the control head of the base station. A power surge resulting from a lightning strike nearby caused the damage.

6. Computer Systems

Great News!! We surplused our Datapoint 2150!!

The Datapoint system was replaced by two new IBM P.C. Model 60 computer systems. One IBM system with a letter quality printer is for use by the station's Secretary. The other computer system has a pinwriter printer and modem and is used by the remainder of the station staff.

We are presently in the process of learning to use the new computers. It is nice to have computers that work!

Where does that cable plug in?
10/87 BLA 87-37

7. Energy Conservation

The staff continues to work with the Regional Office Engineering section for solutions to the heating problems that have existed in the office building from the day we moved into the building.

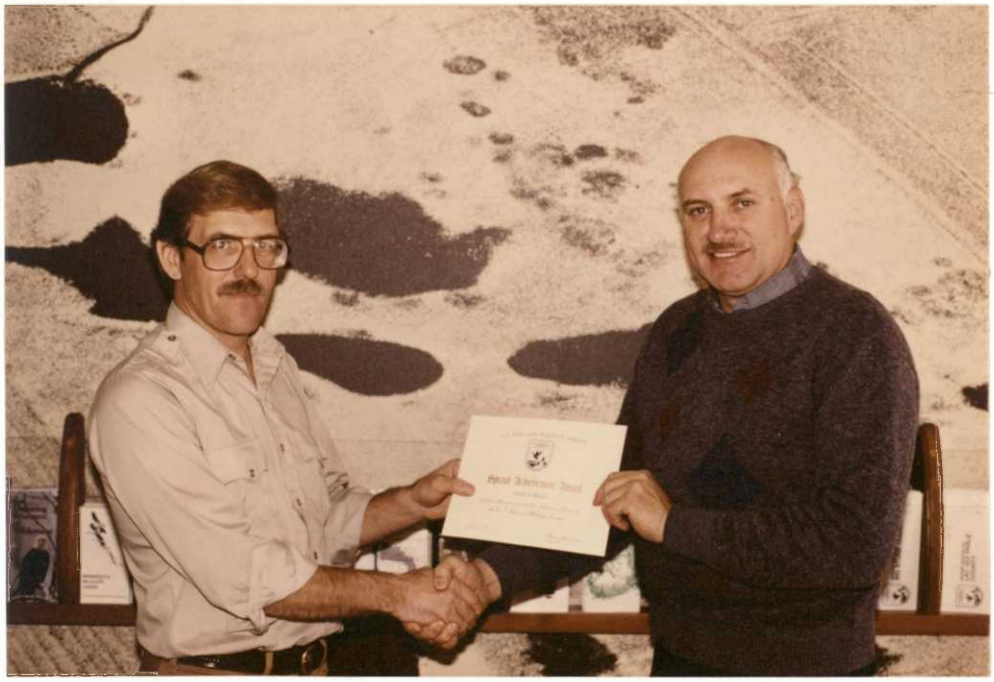
J. OTHER ITEMS

3. Items of Interest

REVENUE SHARING PAYMENTS - MORRIS WMD

County	FY85	FY86	FY87
Big Stone	$20,544	$23,354	$
Lac Qui Parle	10,784	10,062	
Pope	34,638	32,929	
Stevens	32,945	31,960	
Swift	14,634	13,735	
Traverse	14,072	14,839	
Yellow Medicine	382	356	
Total	**$ 127,999**	**$127,235**	

Revenue sharing payments have been important to our acquisition program. The county commissioners are always interested in the percentage of the calculated annual payment their counties receive. Less than 60 percent of full payment will be made in FY87. Checks of 100 percent payment certainly make acquisition presentations to County Boards of Commissioners more pleasant.



Al reaping the benefits of a great staff - "Thanks Crew!!"
11/24/87 BLA 87-38

Gaylord apparently has enjoyed the first 20 years.
4/87/87 BLA 87-39

Farmers aren't the only ones who benefit from the Farm Bill. Special Achievement awards for that extra effort. Bernie Angus, Rodney Ahrndt, Steve Delehanty, Gaylord Bober, Karen Stettner. 1/88 ALR 87-40

4. Credits

The following staff members contributed to this report.

Stettner:	All typing and assembly of report.
Angus:	F (1-12).
Bober:	E (2-4, 6), I and J (1-2).
Pollitt:	D and G (1-2, 7-17).
Radtke:	A, B, C, E (1,5,8), J (2-3) and K.
Delehanty:	E (7), G (3-6) and editing.
Lewis:	F (13) and H (17-19).

1/88 BLA 87-41

The continent has given us much and will give us more, if we work with her. But if we continue our neglect and contempt for her land and waters, she will exact a calamitous penalty, and all the laboratories, all the machines, all the banks, will not offset it.

--Stuart Chase

K. FEEDBACK

Another year has passed and another narrative report is ready to be sent out. As I sit in my office within our almost new headquarters building and glance out across the ice and snow covered marsh behind the office, I find very little to complain about. In fact, even the marsh view reminds me that needed renovation of this pond will be done by the end of the summer of 1988. The fact that Ducks Unlimited will completely fund this pond restoration project along with five other marsh areas on this waterfowl production area makes it even better.

I realize the feedback section is primarily "a forum to address legitimate issues of concern" and I do have a couple. However, as I review the plight of the Benson-Morris Wetland Management District during the past decade, almost everything is positive. We have gone through BLHP, RPRP and ARMMs eras which have enabled this station to bring most of our equipment and buildings up to standards. In addition, significant development and management projects have restored the breeding and nesting habitat to the best condition it has ever been in since the program began in the early 1960's. There is obviously more work that could be done with more people and funds, but we are a long way from the days when we couldn't seed down or post new tracts until several years after the land was purchased.

In addition, our ability to acquire land has continued because funding is available and because the wetlands realty and management personnel in Minnesota have been able to leap each new hurdle that the local and state officials have put in front of us. Therefore, I am extremely happy that more wetland habitat is being protected as each year passes.

Now the Farm Bill presents a new challenge. Fortunately, the wetland program fits the objectives of the Farm Bill well and it appears that we will receive added funding to restore habitat on private lands. The opportunity to plug ditches on private property has been a long time dream of wetland district personnel. So, just when it looks like a down cycle is about to slow our progress, the wetland districts are able to reap the benefits of a new program.

In summary, I feel that Minnesota's wetland districts have much to be thankful for and if you hear me complaining, remind me how good I have it!

I mentioned that there are things that could be changed to make our job easier and more efficient. An obvious problem for the wetland program is the shortfall of refuge revenue sharing funds and the inability of the Fish and Wildlife Service to pay 100 percent of this revenue is making the job of land acquisition and public relations more difficult. In fact, I think we soon will be cut off from land acquisition by the Land Exchange Board because of the protest of local government. It is impossible to explain and convince township or county officials that the Federal government can choose not to pay full tax revenues (called taxes by locals). I have used numerous methods of explanation but my arguments don't even sound good to me. The fact that the Federal government isn't subject to state or local tax carries very little weight with private citizens. Efforts are being made by the Service and by local governments to rectify this problem but it continues to be a major concern.

The most serious and frustrating resource problem I see at the present time is the spread of purple loosestrife through the midwest. Conventional methods are being used as we fight the spread of this weed. I think the Service needs to put more emphasis into finding the answers. This means more dollars and research are needed now before it is too late!!

My other problems aren't of national significance and can best be handled through normal channels. However, a personal concern was recently brought to light with the death of Ron Papike; a hunting partner and friend. Ron's death caused me to be in contact with several managers and many expressed their feelings by saying "If I had only known..." I'm not an expert in such matters, but Ron's death lead to discussions about the need for someone to talk to about problems and concerns. Several of us pledged to try to help each other in the future by more open discussions and by being available to listen at any time. Many will say that they use family members, doctors, religion or some other means to cope with problems and obviously, if that is the answer to your needs, that is what you should do.

However, I was surprised to discover how many of the managers told about their periods of stress, depression, and other related problems. It seemed that the managers really opened up about the subject once the ice was broken. Numerous topics surfaced which included the following:

1. Career moves reduce the number of close personal friends to confide in.
2. Management may be naturally set apart from other staff members.

3. Employees often receive verbal abuse from "taxpayers" and cannot react to get rid of emotional stress.
4. Many stations have one or more serious issues that involve the local community.
5. The majority of managers are males and therefore are more reluctant to admit or talk about inner problems.
6. An older manager expressed his concerns about being unable to "carry the load" as he had done years before.

There were several other subjects covered. You may be able to identify with some of those listed or you may disagree with one or all of the listed items. I am only relating this because of all the feelings that were expressed once the subject was opened up. These problems certainly aren't exclusive to managers and I'm sure many other Service employees can relate to many of the problems.

I only express these thoughts because I think there are others who need to relate their concerns. I realize stress related problems are common throughout our society. However, do Service employees have a special situation? I think there will be more discussion in Region 3 as many have expressed the desire for a workshop or session on the subject. If only one person is helped or saved, it would be worth it.

If you have comments, feel free to relate your thoughts. However, it will take several years before this report makes the circuit and, therefore, I would suggest you voice your concerns to your supervisors.

Notes

Date _____ No. Species _____

Time Afield _____

Observers _____

_____

Weather _____

Remarks _____

_____

_____

_____

_____

_____

_____

_____

_____

Information

Additional information may be obtained by writing the Minnesota Wetland Complex Office, Route, 1, Box 76, Fergus Falls, MN 56537. Phone: (218) 739-2291.

RF-32580-2 June 1982

DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

Birds

Waterfowl Production Areas

Minnesota

Birds of Waterfowl Production Areas

Minnesota

The U.S. Fish and Wildlife Service began the Small Wetlands Program in 1962. Since that time, some 125,000 acres of wildlife habitat have been preserved. These areas are known as Waterfowl Production Areas (WPA's). They are scattered throughout western Minnesota in a 28-county area. The average size is 200 acres for approximately 700 WPA's, but areas range in size from 30 to 2,000 acres.

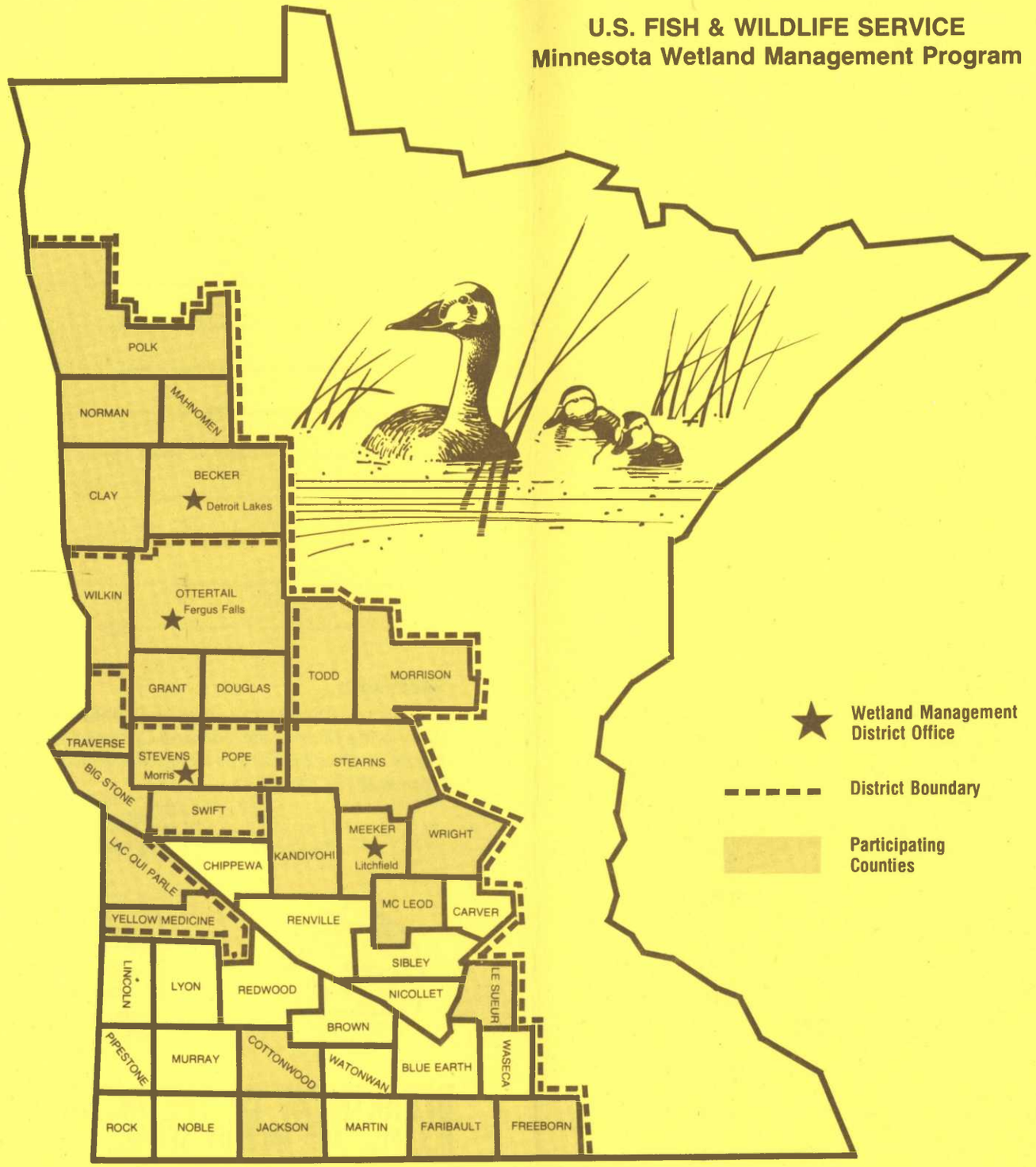
WPA's represent a rich collection of wetlands, prairie, forest and other upland habitat combinations. Most areas are open throughout the year for bird watching and other nature-oriented recreation.

The following list of 266 bird species has been developed based on existing records for western Minnesota, and upon the knowledge of local and visiting ornithologists. This field list is arranged by order (solid lines) and family (dotted lines) according to the latest American Ornithogogical Union (AOU) "Checklist of North American Birds." Good birding!

S - Spring	March-May
s - Summer	June-August
F - Fall	September-November
W - Winter	December-February
a - abundant	present in large numbers
c - common	likely to be seen
u - uncommon	not always seen
r - rare	present only in some years
ac - accidental	seen at intervals of 2-5 years

* Nests locally

U.S. FISH & WILDLIFE SERVICE
Minnesota Wetland Management Program



	S	s	F	W
___ Common Loon*	c	u	c	
___ Red-necked Grebe*	u	u	u	
___ Horned Grebe	u	c	c	
___ Eared Grebe	u	r	r	
___ Western Grebe*	u	u	u	
___ Pied-billed Grebe*	c	c	c	r
___ White Pelican	u		u	
___ Double-crested Cormorant*	c	c	c	
___ Great Blue Heron*	c	c	c	r
___ Green Heron*	c	c	u	
___ Cattle Egret	r	r		
___ Great Egret*	c	c	u	
___ Black-crowned Night Heron*	c	c	c	
___ Least Bittern*	c	c	c	
___ American Bittern	c	c	c	
___ Whistling Swan	c		c	
___ Canada Goose*	c	c	a	c
___ White-fronted Goose	r		r	
___ Snow Goose	c		c	
___ Mallard*	a	c	a	u
___ Black Duck	r		u	
___ Gadwall*	u	u	c	
___ Pintail*	c	u	c	
___ Green-winged Teal*	u	u	c	
___ Blue-winged Teal*	c	a	a	
___ American Wigeon*	c	u	c	
___ Northern Shoveler*	c	c	c	
___ Wood Duck*	c	c	c	
___ Redhead*	c	c	c	
___ Ring-necked Duck*	c	u	c	
___ Canvasback*	c	c	c	
___ Greater Scaup	u		u	
___ Lesser Scaup*	a	c	a	
___ Common Goldeneye	c		c	
___ Bufflehead	c		c	
___ Oldsquaw	r		r	
___ White-winged Scoter			r	
___ Ruddy Duck*	c	c	c	
___ Hooded Merganser*	u	r	u	
___ Common Merganser	c		c	
___ Red-breasted Merganser	u		u	
___ Turkey Vulture	r			
___ Goshawk			r	u
___ Sharp-shinned Hawk	c	r	c	r
___ Cooper's Hawk	c	r	c	r
___ Red-tailed Hawk*	c	c	c	
___ Broad-winged Hawk	c	c	c	
___ Swainson's Hawk	u		u	
___ Rough-legged Hawk	u		u	r
___ Golden Eagle	r		r	r
___ Bald Eagle	u		u	r
___ Marsh Hawk*	c	c	c	r
___ Osprey	r	r	r	
___ Merlin	u	u	u	
___ American Kestrel*	c	c	c	u
___ Ruffed Grouse*	c	c	c	c
___ Greater Prairie Chicken*	u	u	u	u

	S	s	F	W
___ Ring-necked Pheasant*	c	c	c	c
___ Gray Partridge*	c	c	c	c
___ Sandhill Crane	u		c	
___ Virginia Rail*	c	c	c	
___ Sora*	c	c	c	
___ Yellow Rail*	r	r	r	
___ American Coot*	a	c	a	r
___ Semipalmated Plover	u		u	
___ Piping Plover	u		u	
___ Killdeer*	a	a	a	
___ American Golden Plover	c		r	
___ Black-bellied Plover	c		c	
___ Ruddy Turnstone	u		u	
___ American Woodcock*	c	c	c	
___ Common Snipe*	c	c	c	
___ Upland Sandpiper*	u	u	u	
___ Spotted Sandpiper*	c	c	c	
___ Solitary Sandpiper	c	c	c	
___ Willet	u			
___ Greater Yellowlegs*	c	c	c	
___ Lesser Yellowlegs*	a	r	a	
___ Pectoral Sandpiper	c		c	
___ White-rumped Sandpiper	u		u	
___ Baird's Sandpiper	c		u	
___ Least Sandpiper	c		c	
___ Dunlin	u		u	
___ Short-billed Dowitcher	u		u	
___ Long-billed Dowitcher	u		u	
___ Stilt Sandpiper	u		u	
___ Semipalmated Sandpiper	c		a	
___ Western Sandpiper	u		u	
___ Marbled Godwit*	c	c	u	
___ Hudsonian Godwit	u		r	
___ Sanderling	u		u	
___ Wilson's Phalarope*	c		u	
___ Herring Gull	u	u	u	
___ Ring-billed Gull	a	a	a	r
___ Franklin's Gull	a	a	a	
___ Bonaparte's Gull	c		c	
___ Forster's Tern*	c	c	c	
___ Common Tern*	c	c	c	
___ Caspian Tern	u	u	u	
___ Black Tern*	a	a	a	
___ Rock Dove*	a	a	a	a
___ Mourning Dove*	a	a	a	r
___ Yellow-billed Cuckoo*	u	u	u	
___ Black-billed Cuckoo*	u	u	u	
___ Screech Owl*	u	u	u	u
___ Great Horned Owl*	c	c	c	c
___ Snowy Owl	u		u	u
___ Barred Owl*	u	u	u	u
___ Long-eared Owl*	c	c	c	u
___ Short-eared Owl*	u	u	u	u
___ Saw-whet Owl*	r	r	r	r
___ Whip-poor-will	r	r	r	
___ Common Nighthawk*	c	c	c	
___ Chimney Swift*	c	c	c	

	S	s	F	W
___ Ruby-throated Hummingbird*	c	c	u	
___ Belted Kingfisher*	c	c	c	u
___ Common Flicker*	c	c	c	r
___ Pileated Woodpecker*	u	u	u	u
___ Red-bellied Woodpecker	r	r	r	r
___ Red-headed Woodpecker*	u	u	u	
___ Yellow-bellied Sapsucker*	c	c	c	
___ Hairy Woodpecker*	c	c	c	c
___ Downy Woodpecker*	c	c	c	c
___ Eastern Kingbird*	c	c	c	
___ Western Kingbird*	c	c	c	
___ Great Crested Flycatcher*	c	c	c	
___ Eastern Phoebe*	c	c	c	
___ Yellow-bellied Flycatcher	u	r	u	
___ Willow Flycatcher	r	r	r	
___ Alder Flycatcher*	c	c	c	
___ Least Flycatcher*	c	c	c	
___ Eastern Wood Pewee*	c	c	c	
___ Horned Lark*	a	c	a	c
___ Tree Swallow*	c	c	c	
___ Bank Swallow*	c	c	c	
___ Rough-winged Swallow*	c	c	c	
___ Barn Swallow*	c	c	c	
___ Cliff Swallow*	u	u	u	
___ Purple Martin*	c	c	c	
___ Blue Jay*	c	c	c	c
___ Black-billed Magpie	r		u	u
___ Common Crow*	c	c	c	u
___ Black-capped Chicadee*	c	c	c	c
___ Boreal Chickadee			r	r
___ White-breasted Nuthatch*	c	c	c	c
___ Red-breasted Nuthatch			u	u
___ Brown Creeper	u		u	u
___ House Wren*	c	c	c	
___ Winter Wren	u		u	
___ Long-billed Marsh Wren*	c	c	c	
___ Short-billed Marsh Wren*	u	u	u	
___ Gray Catbird*	c	c	c	
___ Brown Thrasher*	c	c	c	
___ American Robin*	a	a	a	r
___ Hermit Thrush	c		c	
___ Swainson's Thrush	c		c	

	S	s	F	W
___ Gray-cheeked Thrush	u		u	
___ Veery	u		u	
___ Eastern Bluebird*	c	c	c	
___ Golden-crowned Kinglet	c		c	r
___ Ruby-crowned Kinglet	c		c	
___ Water Pipit	c		c	
___ Bohemian Waxwing			u	u
___ Cedar Waxwing*	c	c	c	c
___ Northern Shrike	r		u	u
___ Loggerhead Shrike	u	u	u	
___ Starling*	a	a	a	a
___ Yellow-throated Vireo*	c	c	u	
___ Solitary Vireo	c	c	u	
___ Red-eyed Vireo*	c	c	u	
___ Philadelphia Vireo	u		u	
___ Warbling Vireo*	c	c	c	
___ Black-and-white Warbler	c		c	
___ Tennessee Warbler	c		c	
___ Orange-crowned Warbler	u		u	
___ Nashville Warbler	c		c	
___ Yellow Warbler*	c	c	c	
___ Magnolia Warbler	c		c	
___ Cape May Warbler	r			
___ Yellow-rumped Warbler	a	c	c	
___ Black-throated Green Warbler	r			
___ Blackburnian Warbler	u		u	
___ Chestnut-sided Warbler	c		c	
___ Bay-breasted Warbler	u		u	
___ Blackpoll Warbler	c		c	
___ Pine Warbler	u		u	
___ Palm Warbler	c		c	
___ Ovenbird	c		c	
___ Northern Waterthrush	u		u	
___ Connecticut Warbler	r		r	
___ Mourning Warbler	c		u	
___ Common Yellowthroat*	c	c	c	
___ Wilson's Warbler	c		c	
___ Canada Warbler	c		c	
___ American Redstart*	c	c	c	
___ House Sparrow*	a	a	a	a
___ Bobolink*	c	c	u	
___ Western Meadowlark*	a	a	a	r
___ Yellow-headed Blackbird*	c	c	c	
___ Red-winged Blackbird*	a	c	a	
___ Orchard Oriole	r	r		
___ Northern Oriole*	c	c	c	
___ Rusty Blackbird	c	u	c	r
___ Brewer's Blackbird*	u	c	u	
___ Common Grackle*	a	a	a	r
___ Brown-headed Cowbird*	c	c	c	
___ Scarlet Tanager*	u	r	r	
___ Cardinal	r	r	r	r
___ Rose-breasted Grosbeak*	c	c	c	
___ Indigo Bunting*	c	c	c	
___ Dickcissel		u		
___ Evening Grosbeak			u	u
___ Purple Finch	u	r	u	u

	S	s	F	W
___ Pine Grosbeak			r	r
___ Hoary Redpoll			u	u
___ Common Redpoll	c		c	c
___ Pine Siskin	u	r	u	u
___ American Goldfinch*	c	c	c	u
___ Red Crossbill			r	r
___ White-winged Crossbill			u	u
___ Rufous-sided Towhee	u	r	u	
___ Savannah Sparrow*	c	c	c	
___ Grasshopper Sparrow*	u	u	u	
___ LeConte's Sparrow*	u	u	u	
___ Sharp-tailed Sparrow*	r	r	r	
___ Vesper Sparrow*	c	c	c	
___ Lark Sparrow	r	r	r	
___ Dark-eyed Junco	a		a	u
___ Tree Sparrow	c		c	c
___ Chipping Sparrow*	c	c	c	
___ Clay-colored Sparrow*	c	c	c	
___ Field Sparrow*	r	r	r	
___ Harris' Sparrow	c		c	
___ White-crowned Sparrow	u		u	
___ White-throated Sparrow	c		c	
___ Fox Sparrow	c		c	
___ Lincoln's Sparrow	u		u	
___ Swamp Sparrow*	c	c	c	
___ Song Sparrow*	c	c	c	r
___ Lapland Longspur	c		c	r
___ Smith's Longspur	r	r	r	
___ Chestnut-collared Longspur	r		r	
___ Snow Bunting	u		c	c

Casual Species

The following are birds which have been seen irregularly in the WPA's:

	S	s	F	W
Little Blue Heron*		r		
Cattle Egret		ac		
Snowy Egret		ac		
Cinnamon Teal	ac		ac	
Surf Scoter			ac	
Black Scoter			ac	
Red-shouldered Hawk	ac	ac		
Ferruginous Hawk	r	r	r	ac
Gyrfalcon			ac	ac
King Rail	ac	ac	ac	
Common Gallinule	r	r		
Buff-breasted Sandpiper	r		r	
American Avocet	r		r	
Glaucous Gull	r		r	
Barn Owl*		ac		
Great Gray Owl				ac
Black-backed 3-toed Woodpecker			ac	ac
Olive-sided Flycatcher	r			
Vermilion Flycatcher			ac	
Gray Jay				r
Townsend's Solitaire				ac
Golden-winged Warbler	r			
Eastern Meadowlard	r			
Lark Bunting	r		r	

★ **Fergus Falls**
Route 1, Box 76
East Highway 210
Fergus Falls, MN 56537
(218) 739-2291

★ **Litchfield**
305 N. Sibley
Litchfield, MN 55355
(612) 693-2849

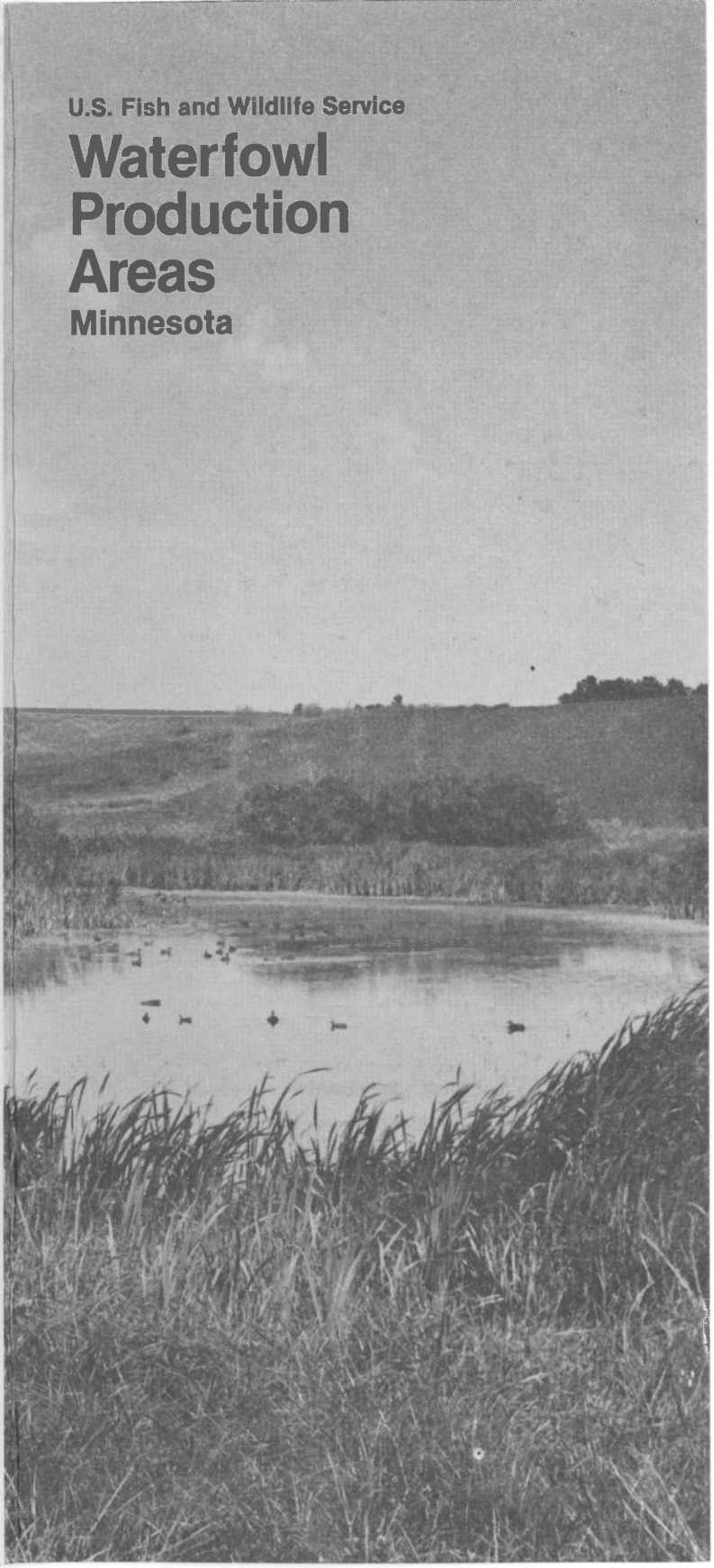
We would like to meet you. Unlike other public lands with easily defined boundaries and entrance roads, our WPAs are spread over many counties, and are usually in remote areas. Because of this, we often do not know who our WPA visitors are; where they have come from; what activities they do on WPAs; and if their visit was rewarding. If you do not have time to stop at one of our Wetland Offices, write a note and let us know about your visit. Tell us what you saw and suggest how we can make your next WPA visit more enjoyable.

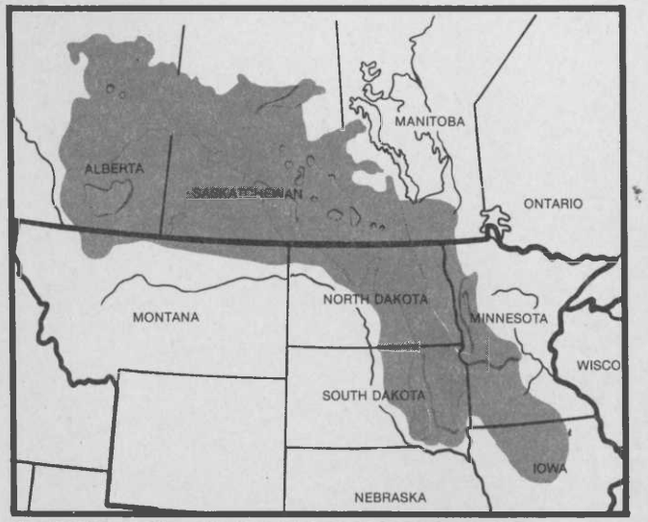
As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

U.S. Fish and Wildlife Service

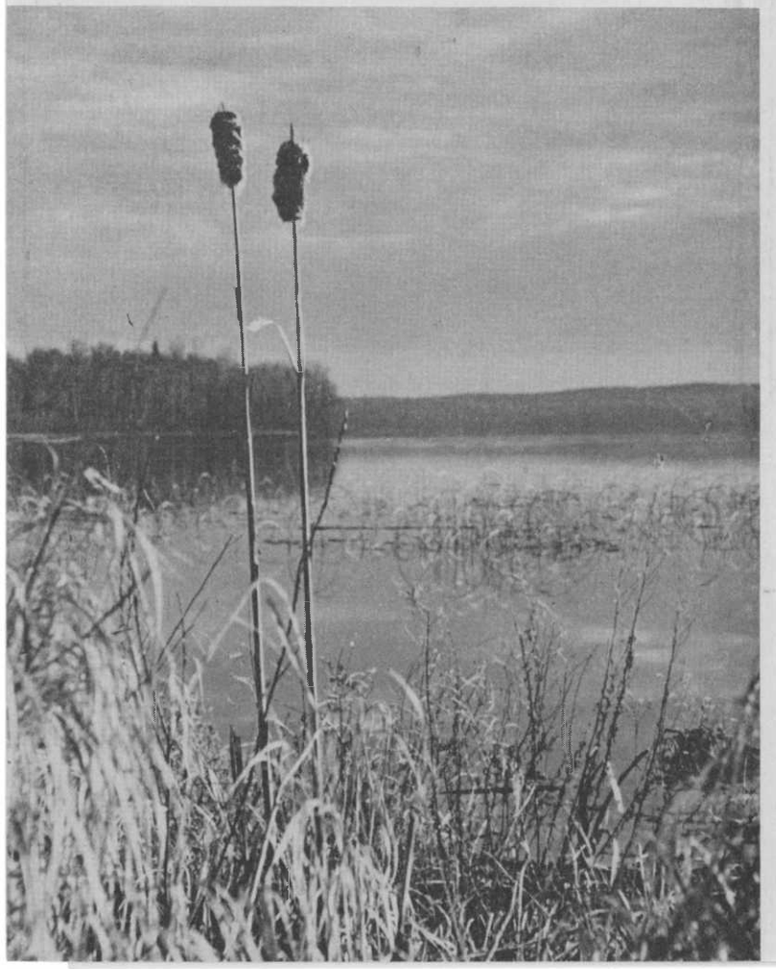
Waterfowl Production Areas

Minnesota



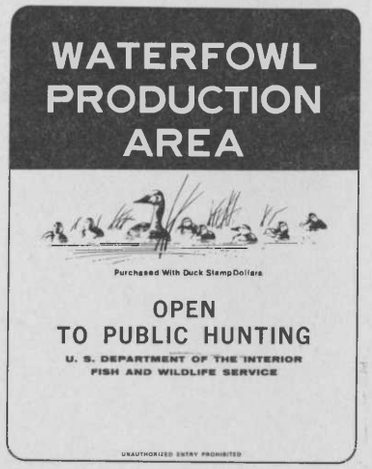


The highly fertile soils in western and southwestern Minnesota are a result of glaciers and centuries of decomposed, deep-rooted, tallgrass prairie plants. This creates prime breeding grounds for prairie ducks and productive agricultural acres.



A bird's-eye view of western Minnesota reveals a landscape pitted with thousands of small marshes. This is the famous Prairie Pothole Region. It stretches northwest into the grasslands of Canada and is the most important nesting ground for ducks in North America. This is where you will find an important Federal wetland preservation program aimed at producing more waterfowl.

WHAT ARE WPAs?



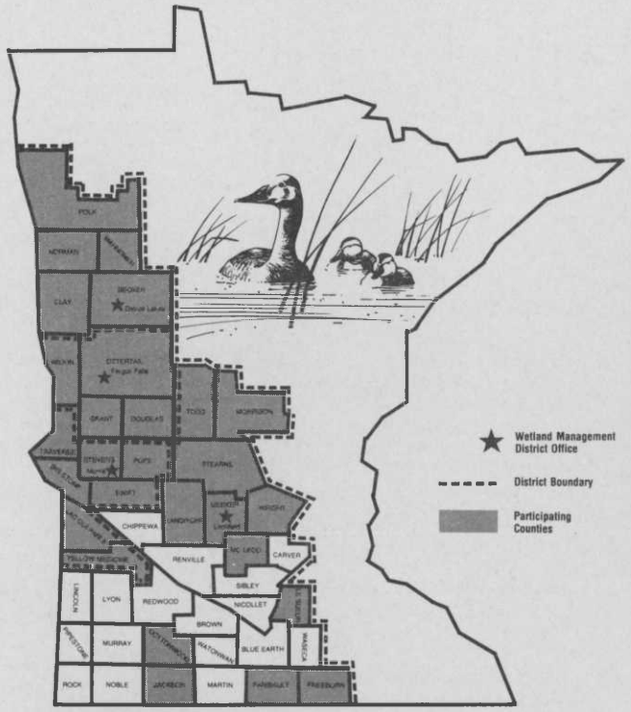
This sign marks the boundary of a Waterfowl Production Area.

Waterfowl Production Areas (WPAs) are primarily prairie wetlands with associated uplands managed to provide nesting areas for waterfowl. Drainage and cultivation of many small wetlands prompted the U.S. Fish and Wildlife Service to begin a program to acquire small wetlands in 1962. This program preserves high quality nesting areas for declining waterfowl populations. These valuable prairie wetlands are bought from willing landowners who, in many cases, want their marshes preserved and managed for this purpose. Acquisition money comes from the sale of "Duck Stamps" to waterfowl hunters. Today, some 125,000 acres of wildlife habitat has been preserved in western Minnesota under this Federal program. There are 700 WPAs located in 22 countries.

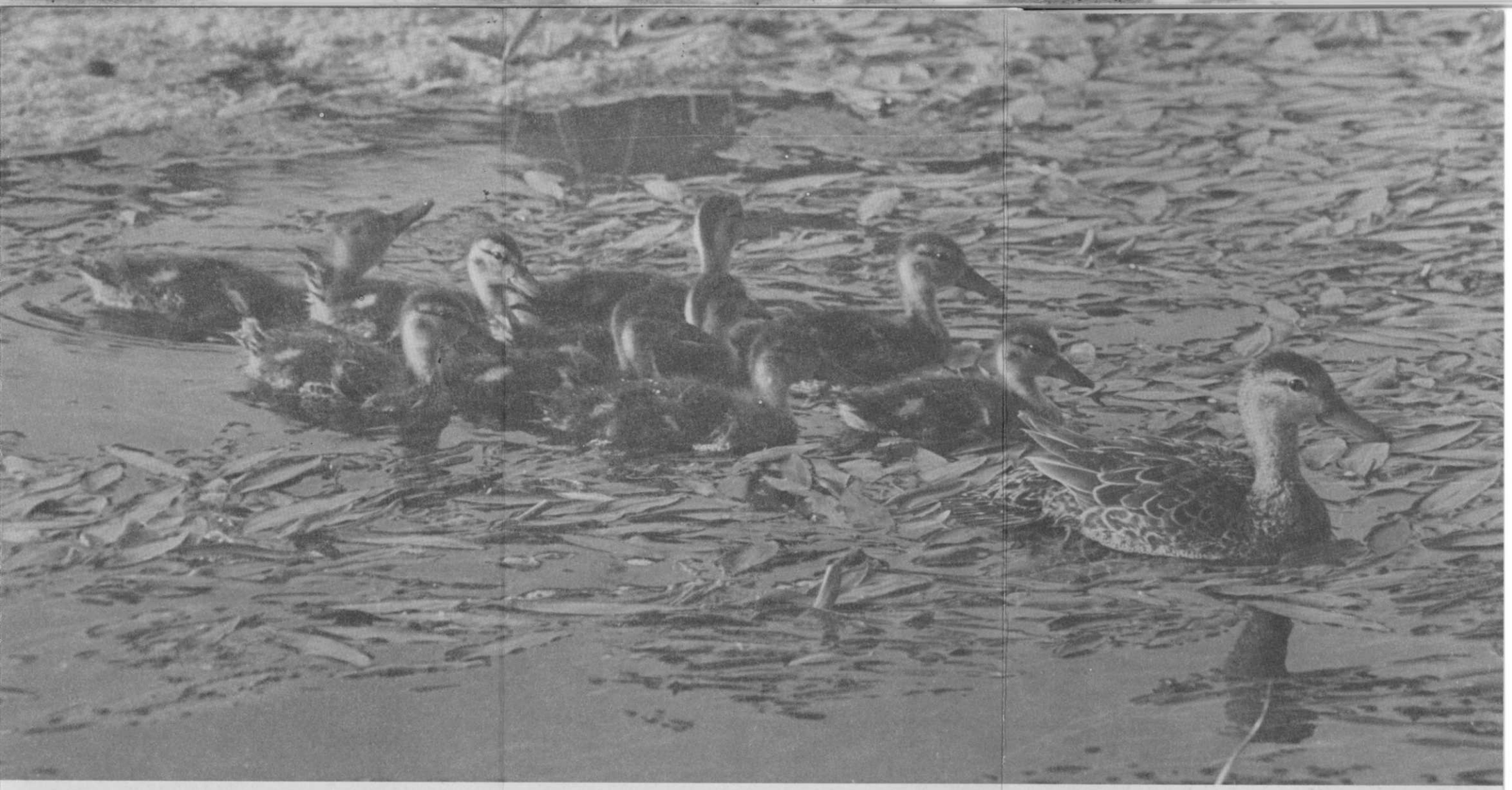
WPA management involves a variety of activities, depending on the property's soils, topography and past history. Management is aimed at encouraging the most favorable wetland and upland food and cover for waterfowl production.

Drained wetlands are restored by plugging ditches or building small water control structures. On the uplands, native grasses, legumes and introduced grasses are seeded to provide dense nesting cover for ducks and other wildlife. Native grasses may be managed by controlling burning, haying or grazing. Sometimes uplands are leased to farmers for cultivation with the agreement that they will leave part of the crop standing for winter feed and cover for resident game.

WPAs ARE AN IMPORTANT NATIONAL RESOURCE



Countless thousands of pothole ponds and marshes were left by the glaciers over a broad band of northern grasslands. This is called the Prairie Pothole Region and it covers 300,000 square miles. 50% of the ducks in North America are raised each year in this region, even though it contains only 10% of the continent's wetlands. It is here that fertile wetland waters and soils which provide abundant, high protein food for your growing ducklings.



WPA wetlands can vary in size from less than a tenth of an acre to one hundred or more acres of water area. Ranging from temporary sheet water which lasts only a few days in early spring to permanent lakes, marshes and potholes, a variety of wetlands meets the varying breeding, nesting and migration needs of many waterfowl species. One marsh usually cannot supply all the requirements of a nesting pair of ducks for the complete production cycle — from courtship to nesting, egg incubation, and raising ducklings to flight stage. Waterfowl biologists have learned that a complex or collection of wetlands, of varying sizes and depths as found in the Prairie Pothole Region, is needed to provide the food, cover and solitude needed by breeding ducks.

WPAs DO MORE THAN RAISE DUCKS

Scientists are just starting to learn about the importance of regional wetland systems — that collection of marshes waterfowl need to breed successfully. Recent studies have examined the benefits to man from flood control, groundwater recharge, pollution and sediment filtration, shoreline erosion protection, soil evaporation rate reduction. All these can affect an area's crops, industry, drinking water, and general quality of life. Although research results are not in yet, these studies suggest there may be significant rewards in preserving wetlands — benefits that go far beyond wildlife preservation.

Wetlands are one of the most productive kinds of wildlife habitat. Besides prairie ducks, they are home to many other kinds of birds such as rails, terns, kingfishers, herons, sandpipers and egrets. The excellent cover in the surrounding upland grass is important for deer, upland game birds, hawks, and many smaller birds such as larks, wrens, and bobolinks. Furbearers including weasels, mink, fox and muskrat are common in WPA habitat. When connected to lakes or streams with fish populations, wetlands may also be important fish spawning areas, especially for northern pike.

WPAs ARE FOR PEOPLE

Whether you are a hunter, trapper, birdwatcher, photographer, or family looking for open space to hike, WPAs are great places to observe and enjoy wildlife and the outdoors.

WPAs are open in the fall to public hunting, except where occasionally posted otherwise. Waterfowl, upland game birds and big game may be hunted and furbearers trapped in accordance with Federal and State laws.

Nature study and appreciation on WPAs are popular activities for individuals, families and school groups. Bird watching, marsh investigation, identification of remnant native prairie grass, or wildlife population studies offer exciting entry to the complex world of prairie wetlands. Some WPAs have interpretive trails and leaflets to help visitors learn more about wetland wildlife and ecology.

General recreation activities such as hiking and cross-country skiing are also welcome on WPAs. Each season of the year offers a different experience of wildlife and vegetation life-cycles — in the solitude of open prairie spaces.

SOME IMPORTANT RULES TO FOLLOW

All motor vehicles including snowmobiles and all-terrain vehicles, are prohibited unless specific areas are posted as open to this use. Please use designated parking areas.

Be careful not to crush or beat down the vegetation. Tire tracks destroy duck nesting cover and may help lead predators to nesting waterfowl.

Respect the neighbors' private property. Make sure you are on the correct side of the boundary line.

Hunting and trapping are subject to all applicable Federal and State laws. Firearms are permitted only during open hunting seasons or as authorized by State regulations.

Camping and overnight use is prohibited.

Fires are prohibited.

DO YOU WANT MORE INFORMATION?

Each of the four District Offices, shown on the map, is assigned to manage WPAs in several counties. They have special leaflets which you will find useful such as bird lists, hunting regulations, and maps.

The District staff may also have specialists in the areas of wildlife, soils or botany who would be pleased to help answer questions or suggest WPAs for specific study pursuits or interests.

Interpretive displays and leaflets at some of the offices may help your understanding of prairie wetlands, waterfowl, and wildlife management.

★ **Detroit Lakes**
R.R.#3, Box 47 D
Detroit Lakes, MN 56501
(218)847-4431

★ **Morris**
Route 1, Box 208, Mill Dam Road
Morris, MN 56267
(612)589-1001