REVIEW AND APPROVALS

MORRIS WETLAND MANAGEMENT DISTRICT

Morris, Minnesota

ANNUAL NARRATIVE REPORT

Calendar Year 1992

Wetland Manager — 3/26/93 Date

Refuge Supervisor Review — 3/29/93 Date

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INTRODUCTION

The Morris Wetland Management District (WMD), originally established in 1964 as the Benson WMD, includes 240 Waterfowl Production Areas (WPA's) totalling 48,241 acres in fee title ownership. The Morris office also administers approximately 17,000 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 Waterfowl and Wetlands Management Complex (MWWMC), 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, canvasback, and Canada geese. 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, especially neotropical birds, and to provide for bio-diversity. Private land habitat improvement for waterfowl and other wildlife is an added emphasis during the 1990's. Waterfowl Production Areas are open to public hunting and a variety of other wildlife oriented uses. The WPA's receive their highest public use on opening days of waterfowl, pheasant, and deer hunting seasons.

Of the 48,241 acres of fee title, 16,609 acres consist of marshes. Grasslands comprise 29,510 acres of the District. This category includes 7,968 acres of reseeded native grasses and 6,335 acres of unbroken native prairie. The balance of the existing grassland contains various cover types including brome, quack and alfalfa. Croplands account for an additional 696 acres and consist primarily of rest-rotation food plots for resident game.

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- Low revenue sharing payments to counties hampers fee acquisition. (Section C.1)
- Red fox and racoon populations were extremely high. (Section D.5)
- Ellen Lake restoration preparations were completed. (Section F.15)
- Artificial nesting structures prove to be highly successful and additional experiments are planned. (Section G.3)
- Avian Botulism outbreak occurs on Mud Lake, Traverse County. (Section G.17)
- White tail deer harvest numbers break State records again. (Section H.8)
- James C. Gritman dedication ceremony held to honor Jim's retirement. (Section J.3)

Glacial Lake and tall grass prairie combination in central Pope County. 92-1 9/30/92 BLA

B. CLIMATIC CONDITIONS

The first three months of 1992 were quite warm averaging 25.3°, 9.5° above the 100-year mean, and the fourth warmest January through March period on record. Snowfall for January through April was 70 percent of normal. April was cooler than normal, but the temperatures returned to above normal for May.

The June through August period was the coldest summer ever recorded at Morris. Temperatures were so far below normal that corn fell behind in growth and carried into the fall season. Small grain yields were generally good, but wet conditions in late July and early August delayed harvest. The early fall period was excellent for harvest, but some crops were not mature enough to harvest on schedule.

The cool summer delayed crop maturity causing late season harvesting with long hours. 92-2 10/16/92 BLA

Substantial snow in early November further complicated corn harvest and fall tillage for private landowners. However, moderate temperatures during much of November permitted most farmers to finish corn harvest and carry out some fall tillage. The moderate temperatures continued until just before Christmas when many daily low temperatures were below zero.

The year ended with a cold December completing seven consecutive months with below average temperatures. The year as a whole was 0.5° warmer than normal, but this was primarily due to the extremely warm weather from January through March. Precipitation was only 1.75 inches below normal, but there were some dry periods during the year.

Monthly Summaries

The new year started off with warm temperatures that commenced on December 21. The average temperature for January was 18.8°, 10.8° above the 100-year mean. This was tied for the ninth warmest January on record. Just two years ago in 1990, the January temperature average was 22.4°. The maximum temperature for the month was 46° recorded on the 30th and the minimum was -17° recorded on the 15th. The average temperature for the period from December 21, 1991, through January 31, 1992, was 20.9°, the third warmest for this period in the Morris weather records. Warmer mid-winter periods were December-January 1943-44 with 24.3° and December-January 1930-31 with 23.7°. The snowfall for January totaled 6.8 inches, slightly below the average of 7.8 inches. Water content of the snow plus rainfall totaled 0.56 inches, again slightly below the average of 0.68 inch.

The warm temperatures of January continued through the month of February. The average temperature for February was 24.7°, 11.9° above the 100-year mean. This tied for the seventh warmest February on record. The maximum temperature was 49° recorded on the 6th, and the minimum was 2° recorded on the 8th. Snowfall for the month totaled 2.4 inches, far below the average of 7.9 inches. This was one of the warmest winters recorded at Morris. The average temperature from December 1 through February 29, was 20.4°, far above the average of 14.1°. Records show that only four years have winter periods with warmer temperatures; 1930-31 with 25.3°, 1986-87 with 23.1°, 1943-44 with 21.8°, and 1941-42 with 20.5°.

The warm temperatures of January and February continued through the month of March. The average temperature for the month of March was 32.5°, 5.8° above the 100-year mean. The maximum temperature of 66° recorded on the 2nd, was a record high for that date, eclipsing a record of 62° set in 1990. The minimum temperature for March was 9° recorded on the 10th. Snowfall for the month totaled 6.7 inches.

Sudden cooling temperature caused steam to rise from crop fields.
92-3 3/2/92 BLA

April was the first month since November 1991 with below normal temperatures. The month averaged 39.7°, which was 3.9° below the 100-year mean. The high temperature for the month was 82° recorded on both 29th and 30th. The low temperature for the month was 16° recorded on both the 2nd and 12th. Total precipitation for April was 1.98 inches, slightly below the long-term mean of 2.26 inches. Snowfall for the month totaled 3.3 inches, which was very close to the average. The daily snowfall record was broken on the 10th with 2.8 inches recorded, almost double the previous record for April 10, of 1.5 inches set in 1932. Snowfall for the 1991-92 winter season totaled 34.0 inches, slightly below the long-term winter season total of 38.5 inches.

The month of May averaged 59.9°, which was 3.8° above the 100-year mean. The high temperature for the month was 93° recorded on the 1st. The low temperature for the month was 31° recorded on the 3rd. Low early morning temperatures from the 23rd through the 26th resulted in spotty light frost (official low temperatures were 36° to 38°). The damage on corn was not serious because the growing point was still below the soil surface and was not affected. Some damage was reported on early emerged soybeans and in home gardens. Total precipitation for May was 1.45 inches, about half the long-term mean of 2.97 inches. The warm temperatures and low precipitation during May resulted in a very dry topsoil. In some cases germination was slow or reduced by this lack of moisture.

Heavy rains temporarily rejuvenated wetlands (Big Stone County).
92-4 6/18/92 BLA

The month of June averaged 63.4°, which was 2.4° below the 100-year mean. This was the coolest June since 1984 when temperatures averaged 4.1° below normal. The high temperature for the month was 90° recorded on the 13th, and the low temperature was 37° recorded on the 7th. West-Central Minnesota did not have the freezing temperatures experienced in south-eastern Minnesota on Sunday night, June 21. Total precipitation for June was 4.72 inches, 0.76 inches above the long-term mean. Over 70 percent of the June precipitation was recorded during the six-day period commencing on the 15th. Temperatures were slightly too cool for optimum corn growth. Early in May the Corn Growing Degree Day weekly totals were above average, but the last week in May and the week of June 21-27, were far below normal.

The month of July averaged 63.1°, which was 7.8° below the 100 year-mean. This was the coldest July ever recorded at Morris since recording began in 1885. The previous record cold July was in 1915, with 65.3°. The high temperature for the month was 85° recorded on the 28th, tying the previous low maximum temperature for July. The low temperature was 45° recorded on the 23rd, which broke the previous low daily temperature for that date of 47°. Precipitation for July totaled 5.56 inches, 2.05 inches above the long-term mean. This made July 1992, the wettest July since 1984. The daily precipitation record was broken on the 12th with 3.02 inches, surpassing the previous record for that day of 1.84 inches set in 1991.

The month of August averaged 63.6°, which was 5.1° below the 100-year mean. This was tied for second place for the coldest August ever recorded at Morris since recording began in 1885. The record cold August was in 1985, with 63.4°. The high temperature for the month was 89° recorded on the 9th, and the low was 39° recorded on the 31st.

Precipitation for August totaled 1.46 inches, about half the long-term mean of 3.01 inches. Temperatures for the summer period (June through August) averaged 63.29°, far below the average for this period of 68.6°, making this the coldest summer every recorded at Morris. The previous record was set in 1915 with 63.32°. There were only three days in the summer of 1992, when temperatures reached or exceeded 90°, two in May and one in June. A check of the records show temperatures reached or exceeded 90° on only one day in 1903 and 1904. Other years with low numbers of 90° or greater days were 1902, 1942, 1981, and 1985 with three days in each year. Precipitation for the growing season (April 1 - August 31) totaled 15.17 inches, very close to the average of 15.71 inches.

The month of September averaged 56.9°, which was 2.1° below the 100-year mean. The high temperature for the month was 81° recorded on the 5th, and the low temperature was 27° recorded on both the 27th and 28th. A light frost (30°)was recorded on the 22nd, but the first killing frost (27°) was on the 27th. Precipitation for September totaled 1.62 inches, 0.58 inch below the long-term mean.

Temperatures during October averaged 45.0°, which was 2.2° below the 100-year mean. The high temperature for the month was 89° on the 2nd. Precipitation for October totaled 0.19 inches, 1.55 inches below the long-term average. Snowfall for the month totaled 1.2 inches, all of which was recorded on the 16th. This broke the daily snowfall record

on the 16th of 0.5 inches recorded in 1905, and was the heaviest early season snowfall since 2.6 inches was recorded on October 10, 1970. This was the driest October since 1978, when only 0.08 inches of precipitation was recorded. The fall period was very dry with only 1.81 inches of precipitation, about half the average for this period of 3.94 inches.

Temperatures during November averaged 27.0°, which was 2.7° below the 100-year mean. The high temperature for the month was 48° recorded on the 12th and the low was 5° recorded on the 27th. Precipitation for November totaled 1.94 inches, 0.97 inches above the long-term average. Snowfall for the month totaled 13.4 inches, over twice the normal November total of 5.5 inches. This was the most November snow recorded since 14.9 inches recorded in 1985. The 6.0 inch snowfall on the 19th broke the daily record of 3.0 inches recorded in 1932.

December temperatures averaged 13.7°, 1.5° below normal. The high temperature for the month was 38° recorded on the 2nd and the low was -19° recorded on the 24th. Overall, temperatures were rather mild for the first half of the month and then fell below normal for the remainder of the month. Snowfall for December totaled 6.8 inches, very close to the long-term average of 6.6 inches. Travel was restricted on Christmas Eve and some days the last week of the month by high winds and blowing snow.

RECORDS OR NEAR RECORDS SET IN 1992
STEVENS COUNTY, MINNESOTA

Period	Observation	Record
March 2	Maximum temperature 66°	Record high maximum
April 10	Daily snowfall 2.8 inch	Record daily snowfall
July 23	Minimum temperature 45°	Record daily minimum
July	Average temperature 63.1°	Coldest on record
August	Average temperature 63.6°	2nd coldest on record
October 2	Maximum temperature 89°	Tied daily maximum
October 16	Daily snowfall 1.2 inches	Record daily snowfall
November 19	Daily snowfall 6.0 inches	Record daily snowfall

COMPARATIVE WEATHER DATA - MORRIS, MINNESOTA - 1992

	Monthly Average Temperature			Precipitation			Snowfall		
	1992	1991	Aver.	1992	1991	Aver.	1992	1991	Aver.
January	18.8	7.9	8.0	.56	.36	.68	6.9	4.9	7.8
February	24.7	21.9	12.8	.29	.86	.67	2.4	11.6	6.9
March	32.5	29.9	26.7	1.66	1.79	1.13	6.7	17.1	8.0
April	39.7	46.6	43.6	1.98	3.72	2.26	3.3	6.3	3.4
May	59.9	60.4	56.1	1.45	3.49	2.97	0	T	0.2
June	63.4	69.8	65.8	4.72	5.58	3.96	0	0	0
July	63.1	69.9	70.9	5.56	6.28	3.51	0	0	0
August	63.6	70.4	68.7	1.46	2.76	3.01	0	0	0
September	56.9	57.7	59.0	1.62	2.88	2.20	0	0	0.1
October	45.0	43.2	47.2	.19	.74	1.74	1.2	T	0.7
November	27.0	22.6	29.7	1.94	.89	.97	13.4	8.7	4.7
December	13.7	17.9	15.2	.62	.61	.68	6.8	6.1	6.6
	42.4	43.3	42.0	22.05	29.96	23.78	40.7	54.7	38.4

Precipitation for the growing season, April 1 - August 31:
1992 = 15.17 inches
1991 = 21.83 inches
Average = 15.71 inches

Highest temperature: 1992 = 93° (May 1)
1991 = 95° (July 17)

Lowest temperature: 1992 = -19° (December 24)
1991 = -18° (January 24 & 25)

Total days maximum temperature 90° or above: 1992 = 3
1991 = 10
Average = 13

Total days minimum temperature 0° or below: 1992 = 22
1991 = 44
Average = 47

Last spring frost: 1992 = May 5 (32°)
1991 = May 3 (32°)
Average = May 11 (32°)

First fall frost: 1992 = September 22 (30°)
1991 = September 26 (32°)
Average = September 25 (32°)

Corn growing degree days: (May 3 through October 24)
1992 = 2,100
1991 = 2,682
Average = 2,246

C. LAND ACQUISITION

1. Fee Title

Five new fee tracts totaling 321.54 acres were added to the Morris Wetland Management District in 1992. This compares to 558.48 acres in 1991. The new tracts averaged 64 acres each. All five tracts were roundouts to existing waterfowl production areas. The current fee acreage of 48,240.96 represents 61 percent of the Morris District's goal acres.

WATERFOWL PRODUCTION AREA ACREAGE - MORRIS WMD - 1992

County	Acquisition Total 12/31/91		Acquisition Total 12/31/92		Goal Acres
	Units	Acres	Units	Acres	Acres
Big Stone	61	10,630.14	61	10,630.14	15,600
Lac Qui Parle	16	3,262.61	16	3,368.85	9,650
Pope	63	13,327.08	63	13,362.58	22,250
Stevens	54	8,850.67	54	8,995.82	12,850
Swift	30	7,276.09	30	7,276.09	10,800
Traverse	12	3,928.98	12	3,963.63	6,720
Yellow Medicine	4	643.85	4	643.85	1,260
Total	**240**	**47,919.42**	**240**	**48,240.96**	**79,130**

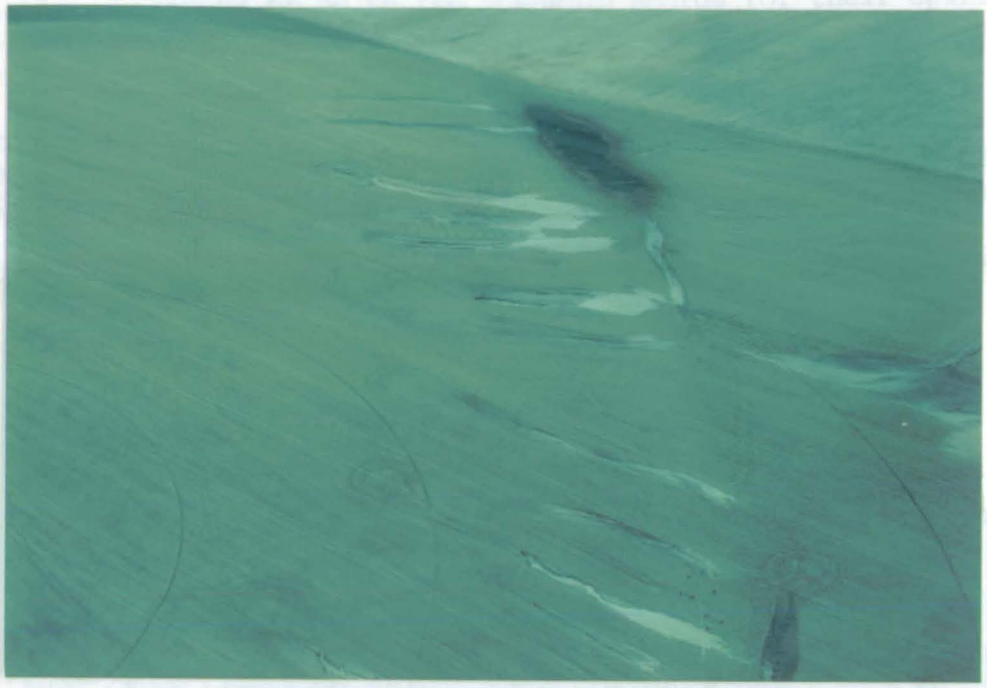
The total fee acres acquired in 1992 is the lowest figure ever purchased in a year's period since the acquisition program began in the early 1960's. Willing seller contacts have decreased because the Service isn't as active in the local land market as in the past. No "door knocking" to locate potential sellers is done now. The fee acquisition is very slow and probably will remain that way in 1993.

The long term future of fee acquisition continues to be an unknown. The farm economy, revenue sharing, Service staff time, acquisition funding, Land Exchange Board attitude, and many other factors will influence the future. However, one thing is certain, and that is the fact that sufficient wetland habitat still exists for the Morris District to reach its fee acquisition goals.

The tax loss issue continues to be the Service's greatest hurdle to future acquisitions. A new trust fund payment will be made to the County government with each new fee purchase where revenue sharing is short. The interest from the trust fund payment, when invested at the current one-year treasury bill rate, should make up the difference between the revenue sharing payments and the taxes that would be paid on land if it remained private property.

The payments will only be made in cases where the estimated revenue sharing payment for the land is less than the current taxes on the property. It is up to the counties to decide what to do with the payments. Previously purchased lands are not covered by this new plan.

A regional committee that includes Wetland Manager Radtke is working with conservation organizations and the Minnesota Association of Counties to try to solve the revenue sharing problems. The only answer appears to be via legislative action and the groups and Association are pursuing that avenue.



The land use intensity continues throughout western Minnesota and erosion and non point pollution are common problems.

92-5 4/3/92 BLA

A county by county analysis of current and future fee acquisition follows.

Big Stone County

The Fish and Wildlife Service currently owns approximately 10,630 fee acres in Big Stone County. This represents 68 percent of the 15,600 acre goal. No fee tracts were purchased in Big Stone County in 1992.

Land acquisition is not an easy task in Big Stone County at the present time. Tax loss seems to be a major issue with the County Commissioners. They are also uncomfortable with the fee acres purchased because of the loss of farmable land. However, the Service has always been successful in Big Stone County and the Commissioners are always "full of surprises." The only way to test their attitude is to take a tract before them and see what happens.

Lac Qui Parle County

The Charles Hanson fee tract (106.24 acres) was certified by the Commissioners in 1992. It wasn't easy. Certification was attained after two Commissioner meetings and a presentation by the Hanson's attorney. The recent roundout purchases for Big Stone National Wildlife Refuge caused a local controversy and made our job more difficult. The current Commissioners would rather not see the Service continue to purchase land but we probably can push tracts through if the tax issue is solved.

Traverse County
The Carrington tract totaling 34.65 acres was acquired in 1992. The process was not difficult but what the future holds is strictly a guessing game. The current Commissioners are having internal problems on other issues and a major turnover is expected as their terms expire.

Yellow Medicine County
No fee tracts were purchased in 1992. An "attitude check" of the Commissioners will occur in 1993 when the Service attempts to increase the Yellow Medicine County goal acreage.

2. Easements

Approximately 890 wetland acres were added by the 20 easements taken in 1992. This compares to 642 wetland acres added by 15 new easements in 1991. 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 or other acceptable nesting cover can also be protected by easement. A large portion of the easements currently being purchased are placed on restored wetlands. This probably will be the trend as long as the private lands program remains active.

Easement tracts provide breeding pair and spring migration habitat.
92-7 6/19/92 BLA

The future of the easement program continues to be directly related to funds and manpower available to our Division of Realty. The number of easements purchased remained high again in 1992 as Realty personnel contacted the landowners who permitted wetland restoration on Conservation Reserve Program (CRP) lands or other private tracts. If manpower was available for additional "door knocking," many other easements could be taken.

Numerous wetlands are still available that need protection. Hopefully this program will continue until goal acres are acquired or there are no unprotected basins remaining in western Minnesota.

EASEMENT PROGRAM STATUS - MORRIS WMD - 1992

County	Easements	Wetland Acres	Total Easement Acres	Total Goal Acres
Big Stone	169	5,876	21,122.60	47,640
Lac Qui Parle	14	589	1,769.89	23,540
Pope	168	6,979	26,440.40	54,180
Stevens	47	1,555	3,984.15	6,090
Swift	43	881	3,269.59	14,540
Traverse	30	1,041	3,486.96	8,440
Yellow Medicine	4	65	234.00	7,860
Total 1992	**475**	**16,986**	**60,307.59**	**162,290**
Total 1991	**455**	**16,096**	**57,908.18**	**162,290**
Total 1990	**440**	**15,454**	**55,963.70**	**162,290**
Total 1989	**421**	**14,931**	**54,010.99**	**162,290**
Total 1988	**410**	**14,673**	**53,081.53**	**162,290**

The county boards of commissioners must review all easement proposals for certification as with fee tracts. Easement certification has usually been routine in the past. However, opposition is increasing and problems occurred with Swift County and Pope County this year.

The Ellingson easement proposal was opposed by neighbors, and after a bitter battle, the Service was able to obtain certification. Swift County Commissioners will continue to use as many weapons as they can to slow the process.

Pope County Commissioners also opposed the Wilburt Anderson easement. Reno Township originally opposed the proposal and this was the excuse the Commissioners used to recommend against certification. Mr. Ralph Ranum, the Chairman of the Commissioners, was the only supporter to pass the resolution. To further complicate the issue, Mr. Anderson died during the certification process. Eventually the Service took the tract to the Land Exchange Board and received a unanimous vote for certification. Pope County work will probably become more difficult because of the retirement of Granny Walburn, a Commissioner who usually was supportive.

3. Other

The Blue Mounds WPA-Glacial Lake State Park trade with the Minnesota Department of Natural Resources is still being processed. An access to Artichoke Lake that is part of the Artichoke WPA, Big Stone County, is also being transferred as part of this trade agreement. The "park" trade is proceeding extremely slow, having been initiated in 1986.

4. Farmers Home Administration Conservation Easements

Wetland Manager Radtke evaluated five Farmers Home Administration (FmHA) tracts and submitted three deed restrictions in 1992. All five tracts were still pending at the end of this reporting period. In addition, several tracts from previous years were also pending as the process seems to move very slowly.

The new rules for restrictions that went into effect in late 1992 are making our job much more difficult. Natural resource protection and development are curtailed under these new guidelines. Hopefully a new political climate in 1993 will alleviate these problems.

FmHA ACCOMPLISHMENTS - MORRIS WMD - 1992

County	Farms Reviewed	Service Deed Restrictions	Service Fee Transfers	Service Wetland Plugs Completed
Big Stone	0	0	0	0
Lac Qui Parle	0	0	0	0
Pope	2	2	0	0
Stevens	0	0	0	0
Swift	6	3	0	0
Traverse	0	0	0	0
Yellow Medicine	0	0	0	0
1992 Totals	**8**	**5**	**0**	**0**
1991 Totals	**3**	**3**	**0**	**0**

D. PLANNING

1. Master Plan

Field inspections of property acquisitions are conducted following each new purchase. Current conditions and physical features are documented along with all pertinent information. This information is put on a resource inventory and planning card. Development needs with respect to habitat improvements, public use facilities, posting and repairs are also identified and summarized in a Land Use Development Plan for each tract. Plans are updated as changes occur.

Work was started in late October on the backlog of updating and writing management and development plans for WPA's. Field checks were conducted on new land acquisitions for Pieske (Stevens County) and Spellman Lake (Yellow Medicine County) WPA's. Updates for Lee (7.32 acres), Hancock (6.50 acres), and Thorstad (40 acres) WPA's in Stevens County, and Olson (135.72 acres) and Henry (80 acres) WPA's in Big Stone County were submitted for review. Plans are to computerize development plans.

4. Compliance with Environmental Mandates

A report entitled "Phase I and II Archaeological Investigations of Sixteen Projects in Minnesota" by Craig M. Johnson of the Institute for Minnesota Archaeology dated July 1992, was received. Results of the survey located on Spellman Lake WPA, Yellow Medicine County, noted previously recorded sites in the area including three ghost towns, one findspot, and the extensive prehistoric site named Gullickson/Hoff site (site 21-YM-2). The site contains Fox Lake, Lake Benson, and Cambria occupations dating between 200 B.C. - A.D. 1300. The area is characterized by scattered chipped stone debitage, pottery, and bone over 30 to 35 acres between Spellman Lake and the drained wetlands. Cultural historic and prehistoric materials found from shovel tests showed prehistoric materials concentrated around the house, garage, and barn areas of the farmstead.

Despite the agricultural and construction activities, it was suggested that small areas may contain intact cultural materials. Therefore, the farm buildings should be sold and removed. Those not sold should be buried in the northern part of the farmstead where the chicken house and granaries are located or in the agricultural field to the north of the buildings. During removal or demolition of the barn, garage, and house, any damage to the surrounding ground should be minimized. If those structures cannot be demolished and material transported over the ground, and not pushed, additional excavation should be conducted to determine if there are any intact cultural materials present.

Site 21-YM-2 has been determined eligible or potentially eligible for the National Register of Historic Places.

5. Research and Investigations

Morris WMD NR92 - "Investigation of Nest Site Selection and Success by Habitat Type"

The objective of the study, Waterfowl Nest Site Selection and Success by Habitat Type, is to obtain data on waterfowl nest site selection and subsequent nesting success by field investigation while looking at a variety of habitats. Nest site preferences, survival in a particular habitat, and the biological conditions present were monitored to give managers a better understanding of waterfowl production in the Prairie Pothole Region of Minnesota. This joint study project was initiated in 1991 by the Minnesota Wetlands and Waterfowl Management Complex Office in Fergus Falls, Minnesota.

Six WPA's in Big Stone County were selected as study sites: Big Stone, Dismal Swamp, Karsky, Malta, Rothi, and Wagner. The WPA's were divided into 400 foot wide grid segments, numbered, and randomly assigned priority order for nest searches. The waterfowl nesting season was divided into three search periods of three week intervals. Fifteen search days were allotted for each search period. Searches began May 4 and ended July 9. No more than three days (24 hours) were dedicated to any waterfowl production area search in the three week period. A day and a half was devoted to vehicular search (chains dragged between jeeps and all-terrain vehicles) in grasslands; and one and one-half days for foot search in wetlands, trees, brush, and other odd areas. Some habitats required a hand pulled drag, while in others a flushing pole was used. Searches were started from grid segment one, then followed numerically through the randomly established order. Vehicular searches were conducted first and then the foot searches following the same grid sequences.

Nest sites were marked with willow branch flags. Habitat data was recorded along with nest abandonment, predation, and predator sightings. Searches for nests were conducted between 7:30 a.m. and 2:00 p.m. Nest re-checks were conducted at 10 day intervals until the nest hatched, was destroyed, or abandoned. Re-checks took place during normal search time frames and/or between 2:00 p.m. and 4:00 p.m. Nest locations were plotted on aerial photographs following the end of each day's search.

One hundred six (106) nests were found during the 1992 field season. Results are presented as Mayfield nest success rates for the different habitats and species. Nest success estimates by study area and field are shown in Table 1.

Table 1 - Nesting Results By Study Area and Field (All Species Combined)

Study Area	Field	Normal Nests	Successful Nests	Unsuccessful Nests	Apparent Hatch Rate	Mayfield Hatch Rate
BIG	007	1	0	1	0.000	0.002
BIG	012	1	0	1	0.000	0.005
DIS	001	8	1	7	0.125	0.037
DIS	003	1	0	1	0.000	0.001
DIS	006	2	0	2	0.000	0.009
DIS	007	5	3	2	0.600	0.396
KAR	001	6	1	5	0.167	0.097
KAR	002	1	1	0	1.000	1.000
KAR	003	2	0	2	0.000	0.030
KAR	004	3	0	3	0.000	0.007
KAR	007	1	0	1	0.000	0.000
MAL	001	4	0	4	0.000	0.029
MAL	007	2	0	2	0.000	0.002
ROT	001	10	1	9	0.100	0.080
ROT	002	21	8	13	0.381	0.267
ROT	003	5	0	5	0.000	0.111
ROT	004	1	1	0	1.000	1.000
ROT	006	14	4	10	0.286	0.118
ROT	007	8	4	4	0.500	0.269
WAG	001	1	0	1	0.000	0.002
WAG	006	4	0	4	0.000	0.011
WAG	007	5	4	1	0.800	0.661

Study Area Codes:

BIG	Big Stone WPA
DIS	Dismal Swamp WPA
KAR	Karsky WPA
MAL	Malta WPA
ROT	Rothi WPA
WAG	Wagner WPA

Field Codes:

Field	Description
1	Seeded natives
2	Native prairie
3	Dense nesting cover (DNC)
4	Planted grasses (monotype)
5	Food plots
6	Brome/quack (go back)
7	Wetland
8	Brush
9	Timber
10	Right-of-way (if different than adjacent field)
11	Over-water nesting structures
12	Seeded non-native mixed grasses
13	Ditch

Nesting results by study area and species are shown in Table 2. Blue-winged teal was the most numerous nesting duck making up 69 percent of the total nests; followed by the mallard, 19 percent; redhead, 7 percent; gadwall, 2 percent; canvasback, 2 percent; green-winged teal, 1 percent; and northern pintail, 1 percent. No northern shoveler nests were found, whereas a nest was located in 1991. The two diving species were not reported in the 1991 season.

Table 2 - Nesting Results By Study Area and Species

Study Area*	Species	Normal Nests	Successful Nests	Unsuccessful Nests	Apparent Hatch Rate	Mayfield Hatch Rate
BIG	Gadwall	1	0	1	0.000	0.002
BIG	BWT	1	0	1	0.000	0.005
DIS	Mallard	1	0	1	0.000	0.000
DIS	BWT	12	1	11	0.083	0.019
DIS	Redhead	3	3	0	1.000	1.000
KAR	BWT	13	2	11	0.154	0.070
MAL	Mallard	3	0	3	0.000	0.050
MAL	BWT	3	0	3	0.000	0.001
ROT	Mallard	15	6	9	0.400	0.166
ROT	Gadwall	1	0	1	0.000	0.135
ROT	GWT	1	1	0	1.000	1.000
ROT	BWT	39	9	30	0.231	0.151
ROT	N Pintail	1	1	0	1.000	1.000
ROT	Redhead	1	0	1	0.000	0.001
ROT	Canvasback	1	1	0	1.000	1.000
WAG	Mallard	1	1	0	1.000	1.000
WAG	BWT	5	0	5	0.000	0.009
WAG	Redhead	3	2	1	0.667	0.427
WAG	Canvasback	1	1	0	1.000	1.000

*Study Area - See Table 1 for identification.

Species: BWT - Blue-winged teal
GWT - Green-winged teal

Overall nest success for all species combined on all the study sites and Mayfield success estimates for individual species on all study sites combined, are shown on Tables 3 and 4, respectfully.

Table 3 - Nesting Results by Study Area All Species and Fields Combined

Study Area	Normal Nests	Successful Nests	Unsuccessful Nests	Apparent Hatch Rate	Mayfield Hatch Rate
BIG	2	0	2	0.000	0.003
DIS	16	4	12	0.250	0.084
KAR	13	2	11	0.154	0.070
MAL	6	0	6	0.000	0.016
ROT	59	18	41	0.305	0.177
WAG	10	4	6	0.400	0.177
Total	**106**	**28**	**78**	**0.264**	**0.128**

Table 4 - Nesting Results by Species
All Study Areas Combined

Species	Normal Nests	Successful Nests	Unsuccessful Nests	Apparent Hatch Rate	Mayfield Hatch Rate
Mallard	20	7	13	0.350	0.145
Gadwall	2	0	2	0.000	0.049
GWT	1	1	0	1.000	1.000
BWT	73	12	61	0.164	0.083
N Pintail	1	1	0	1.000	1.000
Redhead	7	5	2	0.714	0.540
Canvasback	2	2	0	1.000	1.000
Total	**106**	**28**	**78**	**0.264**	**0.128**

This study provides managers some measure of productivity for waterfowl production areas and baseline information about preferred/successful nesting sites within the District. Combining breeding pair data, pond conditions, predator population indexes, and additional nesting data, estimates of waterfowl production and recruitment within the Prairie Pothole Region of Minnesota should raise to a better quality. This was the second year of a three year study.

Morris WMD NR92 - "Scent Post Survey"
The Scent Station Survey in Minnesota (17th annual) is an interagency cooperation between the Minnesota Department of Natural Resources-Section of Wildlife, St. Croix State Park, Superior and Chippewa National Forests, all U.S. Fish and Wildlife Service National Wildlife Refuges and Wetland Districts, Fon du Lac and White Earth Indian Reservations, Beltrami and Cass County Land Departments, Brainerd Technical Institute, and the Itasca Biological Station and Crookston Campuses of the University of Minnesota.

The routes show the distribution and annual visitation indices for fur bearers, dogs, and cats in the state. Routes are generally run in a three week interval between late August and early October. Scent stations spaced 0.43 km apart along a route are baited with a biodegradable plaster-of-paris patty acid scent (Fas) disc and left overnight. Each scent station is checked and all tracks identified and documented. Data is used primarily to develop a population index.

The Morris Wetland Management District participation commenced on September 9 and all routes were completed September 22, 1992. Fifteen routes of 10 scent stations each located in four counties were run: Stevens County-7 routes, Pope County-4 routes, and 2 routes each in Big Stone and Swift Counties. Survey results from Morris are shown in Tables 5 and 6.

Of the 150 stations, 46 were not visited. All 150 scent stations were operational during the collection period.

Table 5 - Predator/Furbearer Scent Post Survey
Morris Wetland Management District
1992

Predator Species	Stevens	Pope	Big Stone	Swift	Total
Red fox	16	5	9	7	37
Raccoon	10	9	4	5	28
Skunk	1	1	1	1	4
Dog	5	2	1	-	8
Cat	4	2	-	-	6
Other Species					
Small birds	1	1	1	2	5
Pheasant	5	4	-	-	9
Deer	2	4	2	2	10
Rabbit	-	-	-	1	1

Table 6 - Comparison of Scent Station Survey Data
Morris Wetland Management District
1990-1992

Species	1990	1991	1992	Percent Change
Red Fox	14	19	37	increase 49%
Raccoon	2	14	28	increase 50%
Skunk	5	17	4	decrease 77%
Dog	15	10	8	decrease 20%
Cat	17	18	6	decrease 67%
Pheasant	-	6	9	increase 33%
Deer	10	7	10	increase 30%

Statewide, 95 of the 101 routes were completed (Figure 1). Despite the wet September weather, a total of 3,823 scent station nights of a possible 3,990 was among the highest (96 percent) on record.

Red fox were recorded on 86 percent of the routes followed by skunk (80 percent), raccoon and domestic cat (65 percent each), dog (62 percent), and coyote (53 percent). Deer occurred on 78 percent of all routes. Bear, wolf and bobcat occurred on 42 percent, 39 percent, and 27 percent, respectively. Coyote occurred on 50 percent of the Transition routes and on 52 percent of the Farmland Zone routes. Visitation indices for red fox set new records in the Forest and Transition Zones and remained at near record levels on Farmland routes (Figure 2). Record highs were also recorded for raccoon and coyote in the Farmland Zone. A very high species indices for raccoon was recorded at Big Stone National Wildlife Refuge (35 percent).

Red fox populations are on the increase.
92-8 6/5/92 BLA

FIGURE 1

SCENT STATION ROUTE SPECIFICS - 1992

Zone	Rts. Done	No. Segments	Segment Density	Station Nights
Forest	41	180	1/180 mi²	1729
Transition	30	120	1/211 mi²	1160
Farmland	24	99	1/265 mi²	934
	95	399		3823

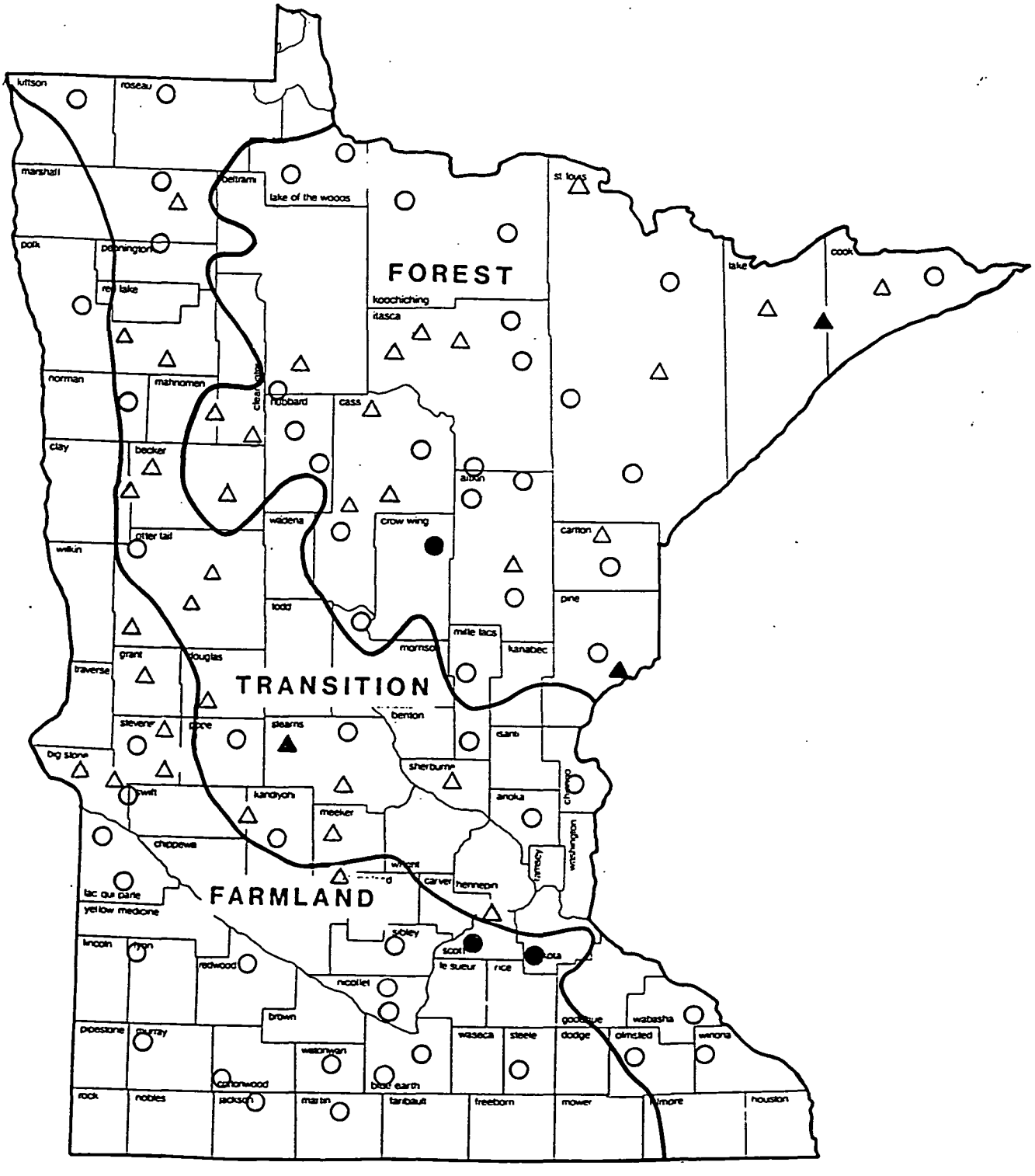
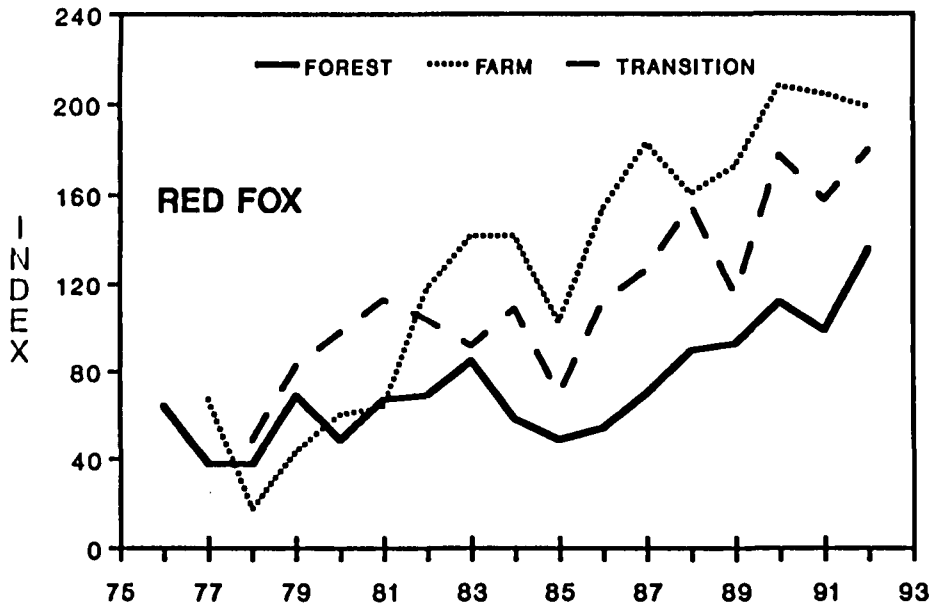
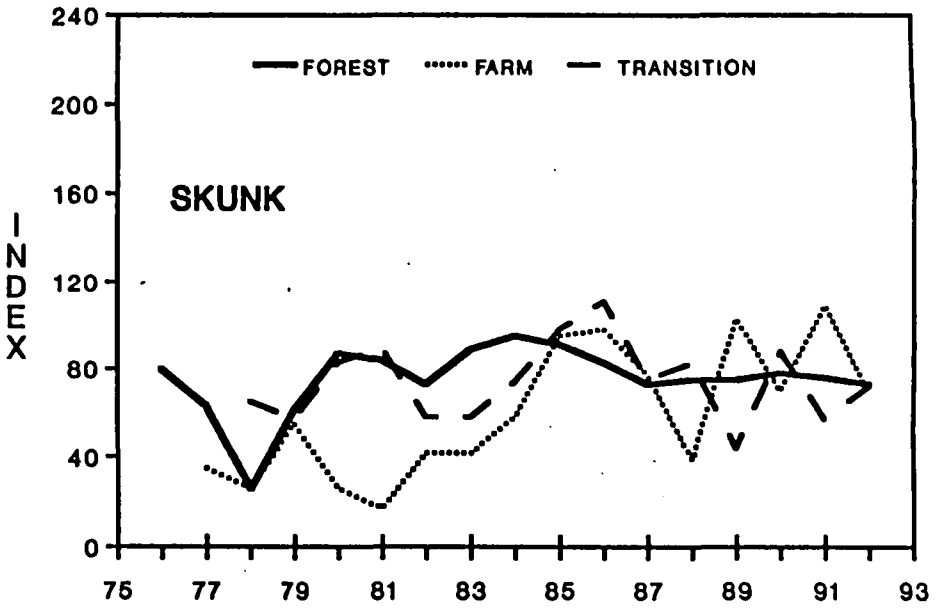
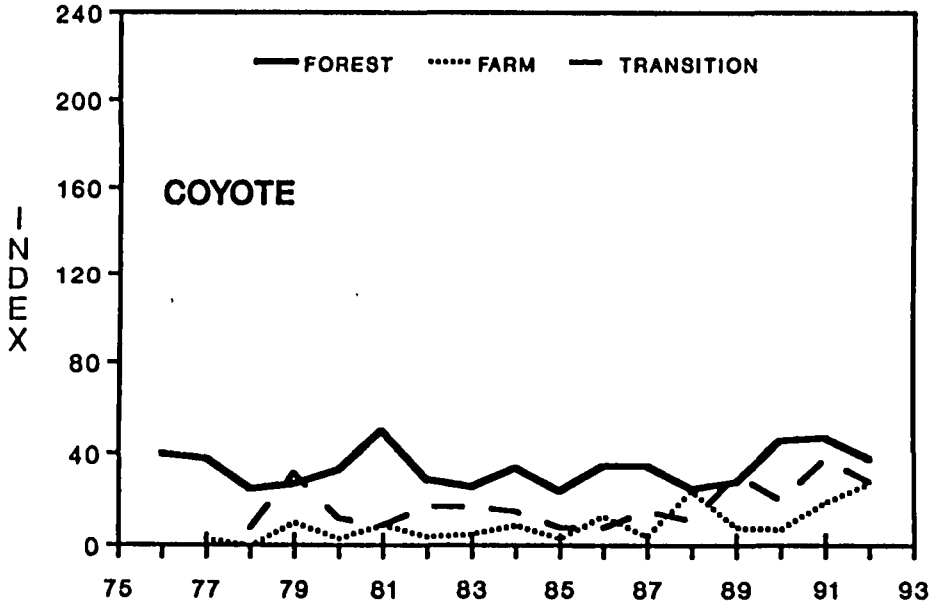


Figure 1. Approximate locations of scent station routes conducted by DNR Section of Wildlife (○) and other cooperators (△) in the Forest, Transition, and Farmland Survey Zones, 1992. Shaded symbols indicate routes not completed in 1992.







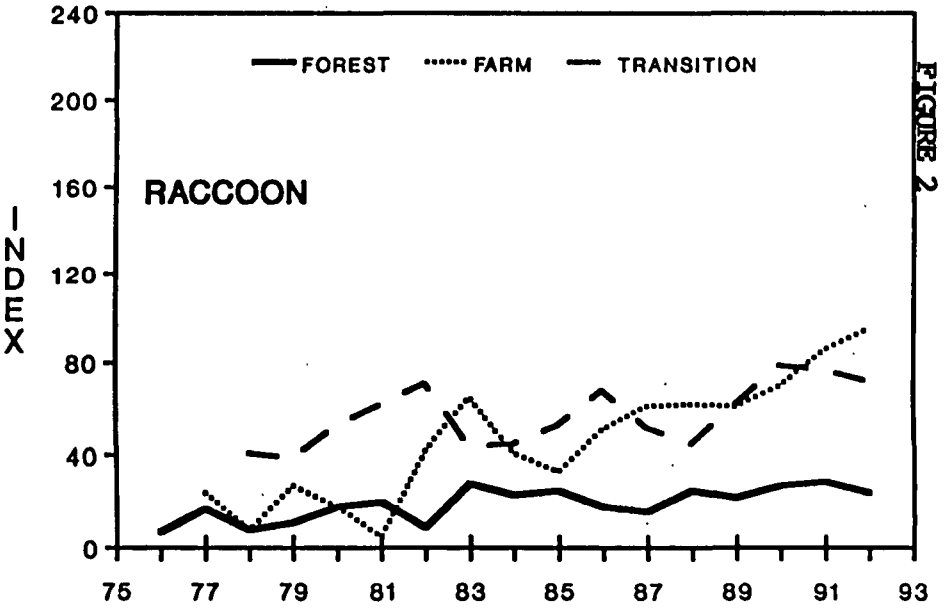


Figure 2. Scent station visitation indices for red fox, skunk, coyote, and raccoon in the Forest, Transition, and Farmland Survey Zones, 1976-1992.

Morris WMD NR92 - "Effects of the Insecticide Asana (Esfenvalerate) on Wetland Wildlife"

The Patuxent Wildlife Research Center initiated a research study in 1991 to determine the effect of an insecticide-induced reduction in the aquatic invertebrate food base on one-to-three week old mallard ducklings on prairie wetlands. This study continued in 1992.

Preliminary results:

In 1992, numbers of invertebrates in activity traps in treated wetlands declined immediately after application of esfenvalerate and remained at levels lower than those observed in untreated wetlands during the rest of the experiment. Insects captured in emergence traps were primarily chironomids which occurred in 99 percent of the samples collected and constituted 91 percent of the overall mean number of insects in samples. In treated wetlands, numbers of emerging insects declined immediately after application of esfenvalerate and remained at levels lower than those observed in untreated wetlands during the rest of the experiment.

Emergence traps funnel aquatic invertebrates into collection jars for research into the effects of insecticide spraying. 92-9 6/4/92 BLA

Growth and behavior of mallard ducklings released onto study wetlands:

There was no mortality in ducklings due to the application of esfenvalerate. Description of trends in response variables may not be statistically significant in all cases. Immediately after application of esfenvalerate, duckling weight gain per feeding session was higher on treated wetlands than on reference wetlands. Weight gains in the different treatments were

nearly equal 8 days after treatment, after which time the gain per feeding session was higher on reference wetlands than on treated wetlands. This trend persisted until 18 to 20 days after spray when weight gains in different treatments were nearly equal. In the case of a single mallard brood allowed to forage on multiple wetlands, as in this study, change in weight per feeding session is an indication of short-term food intake as opposed to long-term growth. Further analysis, including extrapolation from weight gain per session to estimates of long-term growth, will provide a basis for more fully evaluating duckling growth and survival on wetlands to which esfenvalerate is applied.

Preliminary summaries of behavioral observations indicate that the activity budgets of ducklings on the reference wetland were consistent throughout the duration of the study. In contrast, the feeding and resting patterns of ducklings on the treated wetlands varied. During the six days immediately after application of insecticide, ducklings foraged less and rested more on treated wetlands than they did on reference wetlands. This trend was reversed from 8 to 12 days after the application.

In 1992, no evidence of direct, acute toxicity of esfenvalerate to ducklings was observed but some birds on two of six sprayed wetlands appeared to die because they were unable to maintain or increase body weight. Mortality among ducklings that was attributable to treatment effects appeared to be much less than that attributable to weather and predators. During May, low temperatures and snow at 4-5 days after application resulted in the death of ducklings, including all birds in one brood assigned to a sprayed wetland. To preserve the potential to measure growth of ducklings over the course of the experiment, the remaining birds were brought indoors and given supplemental food. Ducklings were returned to forage on wetlands as soon as temperatures increased. During June, ducklings on one reference wetland grew at such a low rate that it was determined at four days after application that they would not survive for more than a few days. Consequently, all ducklings were given supplemental food at night when they were off the wetlands. Nevertheless, it was apparent that ducklings on the problem reference wetland were still in difficulty even though broods on all other wetlands were gaining weight. Consequently, the brood was removed from the problem reference wetland and reared on a non-experimental wetland. In addition, severe predation pressure from mink reduced brood sizes.

At the end of the experiment, at 15 days after application, there appeared to be little overall effect of treatment on duckling weight. Duckling weights appeared to be lower on treated wetlands than on reference wetlands during May and July, but this trend was reversed during June when overall weights were approximately twice those observed in May and 38 percent greater than observed in July.

Morris WMD NR92 - "Productivity in 1991 of Migratory Birds on Conservation Reserve Program Lands"

The study initiated by biologists from Northern Prairie Wildlife Research Center, Jamestown, North Dakota, to assess the value of the Conservation Reserve Program (CRP) for avian diversity in North Dakota and Minnesota continued. Avian diversity may be enhanced by the conversion of cropland to perennial cover on CRP fields. The objectives were to estimate bird density and nest success in CRP fields, cropland, and established grassland on WPA's. The WPA's provided a basis for comparison with CRP fields, indicating whether CRP fields serve an ecological function similar to the function of established grasslands with respect to attractiveness of a safe nesting cover. Understanding CRP functions compared to established grassland may hold important elements for determining the cause of recent population declines in grassland migratory neotropicals.

In Minnesota, five grassland plots of approximately 10-15 hectares were selected for study on the following WPA's: Lake Emily and Snetting, Pope County, and Fish Lake, Mud Creek, and Struck, Stevens County. In the area of each WPA, a 10-15 hectare plot of CRP or cropland was also selected for study. A field crew of three to six people conducted two nest searches on each plot using hand-drawn rope drags. Various measurements were taken at each nest. The fate of each nest was determined by visits at two to four day intervals. The breeding population of birds (except waterfowl) was estimated at each field using a series of strip transects 100 meters wide. Robel readings were taken on six randomly selected transects in each field.

Table 7 - Findings of Northern Prairie Wildlife Research Center, Minnesota - 1992

	CRP				WPA				OVERALL	
Species	Total	Success	Abandoned/ Predated	Percent Successful	Total	Success	Abandoned/ Predated	Percent Successful	Total	Percent Successful
Mallard	3	-	3	0	4	-	4	0	7	0
Gadwall	2	-	2	0	1	-	1	0	3	0
Blue-winged teal	7	2	5	28	13	2	11	15	20	20
Ring-necked pheasant	3	1	2	33	2	-	2	0	5	20
Common yellowthroat	1	-	1	0	-	-	-	0	1	0
Bobolink	6	-	6	0	17	7	10	41	23	30
Western meadowlark	3	1	2	33	2	1	1	50	5	40
Red-winged blackbird	1	-	1	0	-	-	-	0	1	0
Savannah sparrow	8	1	7	13	20	10	10	50	28	39
Grasshopper sparrow	10	3	7	30	1	1	-	100	11	36
Clay-colored sparrow	-	-	-	-	13	8	5	62	13	62
Song sparrow	3	-	3	0	2	1	1	50	5	20

Preliminary results of the 1992 field season are shown in Table 7. For waterfowl in the CRP fields, twelve duck nests were located. Only two nests hatched producing a 17 percent success rate for CRP land. On WPA's, 18 duck nests were found, two hatching for an 11 percent success rate. Overall, 30 duck nests were observed showing a 13 percent success rate in the 1992 season. Songbird nests in the CRP fields numbered 32, of which five were successful, equating to a 16 percent success rate. On the waterfowl production areas, 55 nests were observed with 28 hatching showing a 59 percent success rate. Brown-headed cowbird eggs were discovered in the nests of songbirds. Two nests containing four eggs were observed in the CRP tracts. Two of the young survived. Cowbird parasitism numbered 11 nests, with 15 eggs found. Five of these survived. Overall, 87 songbird nests were located during the 1992 field season with a 38 percent success rate. Productivity was up from the 1991 season. Field work is anticipated through 1994 and results will be published in 1995.

Morris WMD NR92 - "Prairie Pothole Pesticide Use"
This study was conducted by personnel of the Twin Cities Ecological Services Field Office. The objective was to determine whether pesticides commonly employed in the production of major agricultural crops in the Prairie Pothole Region of Minnesota may be entering wetlands.

Field techniques utilized were similar to those used by the U.S. Geological Survey (USGS) in 1989 on a survey of the distribution of herbicide concentrations in mid-western streams (Goolsby and Thurman 1990). Up to 50 wetlands were selected of which 30 were located on private farmland with appropriate agricultural land use patterns and 20 located on WPA's where adjacent land use and/or cover type maximizes protection of the basins from agricultural chemical input. Krantz Lake, Overby, Larson, and Heidebrink WPA's in Pope County were selected while private landowners were as follows: D. Henderson, Chippewa Falls Township, Sections 4, 9; Braaten, Chippewa Falls Township, Section 7; Amundson, Gilchrist Township, Sections 32, 33; and Jacobson, Gilchrist Township, Section 31; all of Pope County.

Immunoassay technology was utilized to detect residues of herbicide (in particular, alachlor, triazines, and 2,4-D) giving on-site analysis from water samples collected in each wetland. The actual pesticide products screened were determined based on the predominant agricultural practices. Samples were taken during three general time periods throughout the spring and summer: 1) prior to planting season; 2) early post-planting; and 3) during mid-growing season when post-emergent treatments predominate. With the above criteria, sampling took place immediately following a rainfall event causing runoff.

A review of agricultural production and pesticide use data began in late February. Study site selection and field evaluation began in April. Wetland sampling and habitat mapping were conducted from April through July. The average, minimum, and maximum surface water concentrations for wetlands in the Morris Wetland Management District were condensed from preliminary charts and are presented in Table 8.

Table 8 - Surface Water Concentrations
Morris Wetland Management District
April - July, 1992

Unit	Average	Minimum	Maximum
		Parts Per Billion	
2,4-D			
Control:			
Krantz Lake	.144	.087	.188
Overby	.214	.036	.547
Larson	.113	.057	.217
Heidebrink	.095	.004	.240
Treatment:			
Krantz Lake N. #1	.106	.030	.165
Krantz Lake S. #2	.108	.040	.169
Private Landowner:			
Henderson	.039	.005	.079
Braaten	.022	.035	.553
Amundson	.040	.000	.081
Jacobson	.326	.064	.577
Alachlor			
Control:			
Krantz Lake	.229	.066	.432
Overby	.125	.065	.201
Larson	.136	.082	.178
Heidebrink	.139	.057	.240
Treatment:			
Krantz Lake N. #1	.647	.396	.975
Krantz Lake S. #2	2.66	.931	5.82
Private Landowner:			
Henderson	4.61	2.77	6.56
Braaten	1.95	1.29	2.55
Amundson	2.83	2.17	3.59
Jacobson	.628	.056	1.19
Triazine			
Control:			
Krantz Lake	.137	.028	.281
Overby	.084	.035	.170
Larson	.123	.035	.233
Heidebrink	.076	.019	.139
Treatment:			
Krantz Lake N. #1	.552	.079	1.90
Krantz Lake S. #2	1.57	.214	4.17
Private Landowner:			
Henderson	.150	.040	.311
Braaten	.425	.135	.850
Amundson	.150	.050	.257
Jacobson	.199	.045	.390

At Krantz Lake during July, detection for Alachlor (Lasso or Duel) in legal ditches rose to 5.82 ppb; however, concentrations less than 1000 ppb pose no biological problem. Results will be presented in a technical report due early next year. This project will be repeated next year, however, some changes in the approach to herbicide/wetland issue may occur.

E. ADMINISTRATION

3 17 18 8 4 5 1

12 2 Gaw 11 10

1. Alfred L. Radtke, Wetland Manager, GM-13, PFT.
2. Gaylord J. Bober, Refuge Operations Specialist, GS-12, PFT.
3. Bernard L. Angus, Soil Conservationist, GS-11, PFT.
4. Larry E. Lewis, Wildlife Biologist, GS-12, PFT.
5. Darrell D. Haugen, Wildlife Biologist, GS-11, PFT.
6. Debra L. Kimbrell-Anderson, Refuge Operations Specialist, GS-9, PFT, Transferred to Rachel Carson NWR 1/24/92.
7. Alan G. Anderson, Refuge Operations Specialist, GS-7, PFT, Transferred to Great Bay NWR 1/24/92.
8. Chad G. Raitz, Refuge Operations Specialist, GS-5 PFT, E.O.D. 5/17/92.
9. John T. Paulson, Biological Technician, GS-5, E.O.D. 2/9/92, transferred to USDA 11/28/92.
10. Donna Rieckmann, Biological Technician, GS-6, E.O.D. 10/18/92.
11. Maureen Gallagher, Coop Student, GS-5, E.O.D. 6/10/91.
12. Karen M. Stettner, Administrative Technician, GS-6, PFT.
13. Gwyn M. Goodwin, Office Clerk, GS-4, PPT--Resigned 2/28/92.
15. Patrick J. Molitor, Forestry Technician, GS-5, PFT, seasonal, E.O.D. 9/6/92.
16. Stephen A. Revering, Forestry Technician, GS-4, PFT, seasonal, E.O.D. 8/23/92.
17. Rodney G. Ahrndt, Engineering Equipment Operator, WG-8, PFT.
18. Victor H. Gades, Maintenance Worker, WG-7, PFT.

Christine Minch, Patrick Molitor, Stephen Revering, Kenton Moos

TEMPORARY PERSONNEL

1. Chad G. Raitz, Biological Tech., TFT, 4/05/92-05/16/92
2. Kenton G. Moos, Biological Tech., TFT, 4/05/92-10/30/92
3. Christine M. Minch, Biological Tech., TFT, 5/17/92-10/30/92
4. Patrick J. Molitor, Forestry Tech., TFT, 4/05/92-09/06/92
5. Stephen A. Revering, Forestry Tech., TFT, 4/05/92-08/23/92

YCC PERSONNEL

1. Dan VanEps, Social Service Assistant, GS-4, 6/01/92-9/11/92
2. Larissa Anderson, Enrollee 6/08/92-7/31/92
3. David Berning, Enrollee 6/08/92-6/30/92
4. Charles Swanson, Enrollee 6/08/92-7/31/92

Katina Rode

OTHER

1.	Gerald Gau, Green Thumb	4/16/90 - Present
2.	Katina Rode, Work Study	5/05/92 - 8/28/92

1. Personnel

MORRIS WMD STAFF SIZE, FY88-92

	Permanent Full Time	Permanent Full Time Seasonal	Permanent Part Time	Temporary GS & WG	Other Programs*
FY92	11	2	0	3	6
FY91	10	1	1	6	6
FY90	10	1	1	3	7
FY89	10	1	1	6	4
FY88	9	1	0	9	5

*YCC, CETA, Work Study, Green Thumb, etc.

Once again there were several staff changes during the year. Alan and Debra Kimbrell-Anderson transferred to Region 5 on January 24, 1992. Debra is the Project Leader at Rachel Carson National Wildlife Refuge and Alan is an Assistant Manager at Great Bay National Wildlife Refuge. In February, John Paulson arrived from the Department of Agriculture in Mississippi to fill our open Biological Technician position. John stayed until November and then accepted another position with the Department of Agriculture in Mississippi. They offered him a position that was too good to pass up. Chad Raitz was appointed to fill our Assistant Manager Trainee position in May. Ms. Donna Rieckmann from the Bureau of Reclamation in Bismarck, North Dakota, accepted a position as Biological Technician in October. We end the year with a permanent Biological Technician position open. The selection has been made and by mid-January, 1993, we should have a complete staff on board.

Maureen Gallagher, a Coop Student, arrived in Morris on January 2 for her second work period. She worked through August 25, and then returned to college to complete her degree. Ms. Gallagher is to return in January, 1993, as a permanent Wildlife Biologist on our staff.

Our Forestry Technician positions were converted to permanent seasonal positions during the year. The temporary employees in these positions, Patrick Molitor and Stephen Revering, applied for the positions and were selected.

2. Youth Programs

The 1992 Morris YCC program was an eight week, non-residential camp with three enrollees and one Social Service Assistant as the Supervisor. We had the misfortune of losing one enrollee early due to lack of interest in his work. The ages of the enrollees ranged from 15 to 17 and even with the wet, cool summer, still managed to get lots of work done.

Many different projects were worked on at 20 different WPA's and the office complex. The main tasks included fence maintenance, construction and removal, along with vegetation control and trash pick-up. Other interesting projects included helping design and construct beaver exclusion devices and modification of nesting cylinders for ducks.

Charles Swanson, Dan VanEps, Larissa Anderson
92-10 7/23/92 BLA

Each person was required to wear steel toed boots, long pants, leather gloves, and a hard hat. Safety discussions were held each morning before going to work with each enrollee giving his/her own safety talk. No injuries occurred over the eight week period. All personnel were given a blood test for lyme disease before and after the eight week session.

An environmental awareness test was given to the enrollees at the beginning of the program to find out their knowledge and interest of the environment. While working, time was given for tailgate sessions about work projects and how it benefitted waterfowl along with other wildlife in the surrounding area. The enrollees worked well together and showed interest in the projects.

Staff working hours totaled 400 and enrollee working hours totaled 736. YCC started the year with an old truck, putting on 1,378 miles. They then had the pleasure of breaking in a brand new truck, putting 1,997 miles on it for a total of 3,375 miles driven using 271 gallons of gasoline. YCC enrollees worked in five counties, saw a wide variety of waterfowl and other wildlife, learned a great deal, and had a good time working with no accidents.

MAJOR YCC ACCOMPLISHMENTS - MORRIS WMD - 1992

Fence Construction	1,820 Linear Feet
Fence Removal	2,640 Linear Feet
Fence Repair	15,840 Linear Feet
Vegetation Control	138 Acres
Nesting Cylinder Construction	50 Nests

3. Other Manpower Programs

Green Thumb
Mr. Gerald Gau continued under this program for the entire year. Gerald works 20 hours each week. His primary duties continue to be maintenance of the headquarters area and the nature trail in Pope County. Jerry has now been with us three years.

Work Study
This station was able to obtain a Work Study student from Concordia College for the period of May 5 through August 28. For the second year, Miss Katina Rode was the student and assisted primarily in the office. She also assisted as a rod person on a survey crew, maintenance at the headquarters, and willingly handled many odd jobs for the entire staff.

4. Volunteer Program

This station had three volunteers during the past year. Patrick Molitor, a temporary Forestry Technician during the summers of 1991 and 1992, was our "Volunteer of the Year" for volunteering over 360 hours of time working on the station's private lands program from January through March. Mrs. Kathryn Narasimhan, an Electrical Engineer, entered farm bill program data into our computer between March 11 and April 30. She volunteered 40 hours. Chris Simmons, a Communications Instructor at the University of Minnesota-Morris, volunteered over 75 hours during the period of August through December producing a booklet to be used in the recruitment of volunteers.

5. Funding

The station's total funding went up in FY92 as the following table shows.

MORRIS WMD FUNDING LEVELS - FY88-FY92
(Dollars in Thousands)

FY	1260	9120	3110	YCC	1221	1230	1120	Total Budget
92	592.3**	37.9	5.6	6.3	5.0	125.0	11.0	783.1
91	482.0	56.1	15.0	6.3	3.0	202.0	15.0	779.4
90	431.7	23.3	5.0	5.1		82.0	27.0	574.1
89	430.6	-0-	5.0	5.1			52.9	493.6
88	504.3*	-0-	5.0	5.1			57.5	580.9

*Includes ARMM's & RPRP
**Includes $176.1 of MMS and other project specific funds

In 1992 we received an increase of over $100,000 in 1260 funds. However, $142,000 of MMS funds was spent for a semi-tractor and trailer and other equipment replacement, and $34,048 was Challenge Grant-Joint Venture funds, Watchable Wildlife and Wetland Restoration money. Thus, there was $461,300 of actual funds in 1260 for O & M. Station salary costs exceed this figure.

6. Safety

There were five accident reports filed during this past year. Two of the accidents were a recurrence of Rodney Ahrndt's muscle spasms in his back brought about by lifting. Two reports were for puncture wounds as the result of handling injured hawks during rehab. The station's last accident of the year was the result of loading a muddy 4-wheel ATV. The ATV slipped during loading and the employee sprained her ankle.

The entire staff has been tested for lyme disease. Temporaries, YCC, and Work Study personnel were tested the first and last day of work. Permanent personnel were tested once in late fall.

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 Survival Kit	Agriculture Rescue
Escaping Home Fires	Freeway Driving
Defensive Driving	Back Wellness
ATV Safety	On the Job General Safety
Tractor Safety	Winter Safety Driving
Winter Safety Hazards	Four Main Reasons for Accidents
Operating Tractors & Equipment	

The station now stands at 126 days without a lost-time accident.

7. Technical Assistance

Throughout the year technical assistance was provided to local agencies and individuals on the following variety of topics:

- Assistance provided to lake associations on water quality projects (Haugen, Lewis, Gallagher, Raitz)
- Participated in Minnesota Department of Natural Resources/Fish and Wildlife Service Coordination Meeting (entire staff)
- Assisted with outdoor classroom planning and native grass planting at Minnewaska Area High School (Angus, Gades)

- Assisted with the instruction of Hunter Education classes in Morris (Paulson)
- Assisted Ecological Services with their pesticide study on waterfowl production areas in our District (entire staff)
- Assisted Lac Qui Parle Valley School with water problems, wetlands, and environmental education (Angus, Gallagher)
- Participated in Conservation Day for Traverse County students (Haugen)
- Judged Morris High School Science Fair projects (Angus, Gallagher, Haugen)
- Assisted Minnesota DNR Scientific and Natural Area personnel on actively managing an FmHA tract in the granite outcrops of the Minnesota River Basin for the endangered five-lined skink (Eumaces fasciatus) (Radtke)
- Provided assistance to Scandia Woods Environmental Learning Lab (Angus)

The Natural History Series offered a bird watching field day at Scandia Woods Environmental Learning Lab.
92-11 5/9/92 BLA

- Provided assistance in planning next year's programs for the Natural History Series at Morris (Angus)
- Participated in the Niemeckel Watershed Restoration meeting (Bober, Paulson)
- Provided assistance to scientists at the USDA Soil Research Lab in Morris to discuss restorable wetlands for data collection (Angus)
- Participated in county Conservation Review Group meetings (Radtke, Paulson, Raitz)
- Participated in county Re-Invest In Minnesota screening meetings (Paulson, Haugen, Raitz)

- Assisted SCS and ASCS with the development and plan of operations for the Wetland Reserve Program (Lewis, Paulson, Haugen, Raitz)
- Developed several Minimal Effect Agreements with SCS offices (Lewis, Raitz)
- Assisted SCS with Wetland Determination Appeals (Lewis, Raitz)
- Assisted Minnesota DNR in conducting Scent Post Surveys (Paulson, Raitz, Moos, Minch)
- Assisted Sauk River Watershed officials concerning Krantz Lake (Radtke, Bober, Lewis)
- Participated in watershed district meetings concerning water quality through a number of conservation practices including wetland restorations (Haugen, Radtke, Bober)
- Attended Soil and Water Conservation District and SCS meetings to rate Wetland Reserve applications (Radtke)
- Assisted the SCS and ASCS offices with Waterbank Proposal Ratings (Raitz)
- Provided assistance to Minnesota DNR Area Game Manager concerning prescribed burning, native prairie, and native grass seeding and management (Angus)

Gaylord Bober talking with students at University of Minnesota-Morris Career Days. 92-12 11/5/92 BLA

F. HABITAT MANAGEMENT

1. General

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

HABITAT SUMMARY - MORRIS WMD - 1992

Cover Type	Acres
Wetland	16,609
Cropland	696.5
Grassland	29,511.5
Timber	1,424
Total	**48,241**

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 1.9:1. Upland nesting cover is comprised of 7,968 acres of seeded natives, 6,335 acres of native prairie, 16,709 acres of introduced grass and/or legume seedings, most of which are at least 15 years old, and cropland on new fee purchase property. Native grass seed fields consist of South Dakota 149 (Forestburg) switchgrass, North Dakota 444 Indiangrass (Tomahawk), South Dakota 27 big bluestem (Bonilla), and indigenous big blue, Indian, side oats grama, and little bluestem. These fields provide the bulk of seed needed for native grass plantings.

2. Wetlands

Spring wetland conditions were generally good. Many temporary wetlands had water. Most type III and IV wetlands contained average water levels.

Permanent wetlands have made a good come back with good water conditions. Lubenow WPA, Swift County. 92-13 7/14/92 BLA

3. Forests

The Morris WMD lays within what was once the "tall grass prairie." Thus, less than four percent of the fee acreage is covered by timber. Of the 1,424 acres of timber, the majority consists of older farm groves and shelterbelts.

4. Croplands

In 1992, 696.5 acres of cropland were managed as resident wildlife food plots. These plots were located on waterfowl production areas identified by the Minnesota DNR 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 are planted one year instead of corn to break an insect or disease cycle. The cooperator is responsible for all field work, seed, fertilizer, and weed control. The wildlife's (government's) share is left standing in the field in alternate strips. The alternate strips help disperse snow and reduce the chances of the entire plot being buried in snow. The cooperator is allowed to harvest any corn or soybeans remaining the following spring.

FOOD PLOT SUMMARY - MORRIS WMD - 1992

County	No. WPA's With Plots	Total Acres in Corn, Soybeans	Total Acres In Plots
Big Stone	10	117	213
Pope	4	48	73
Stevens	12	100.5	199.5
Swift	6	92	117
Traverse	4	52	94
Totals	**36**	**409.5**	**696.5**

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 WPA (Stevens County). Big Stone Pheasants Forever sponsored one plot on Artichoke WPA, Big Stone County.

5. Grasslands

Grasslands consist of native prairie, native grass, and introduced cool-season grass seedings and legume plantings. Management practices include fire, grazing, and haying. Some fields have not had any active management for 20 years but still provide good cover. New fee acquisition has provided the acreage for seeding each year. 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.

Western Ironweed (Vernonia fasciculata) is found throughout our wet prairies. 92-14 8/13/92 BLA

Weed control on young seedings is very critical. A combination of herbicides (roundup, 2,4-D, banvel), burning, and haying are used to aid the establishment and maintenance of both native and cool-season grass seedings and legume plantings. 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.

TREATMENT OF SEEDINGS - MORRIS WMD - 1992
(in Acres)

County	2,4-D & Banvel	Roundup	Mowing
Big Stone	239	35	149.5
Lac Qui Parle	0	0	18.5
Pope	357	0	40.0
Stevens	746	0	89.0
Swift	65	0	16.0
Traverse	205	0	30.0
Yellow Medicine	37	0	0.0
Total	**1649**	**35**	**343.0**

All chemicals were applied by ground driven equipment. Clinton Ag Service applied one pound active ingredient of low volatile ester 2,4-D on 834 acres in Pope and Stevens Counties. Application cost was $6.50 per acre. Clinton Ag Service supplied the equipment and labor and the government supplied the chemical. All other herbicide application and mowing was done in-house.

Sideoats Grama (Bouteloua curtipendula) on a native prairie tract. 92-15 8/13/92 BLA

a. **Reseeded Native Grasslands**
Since 1973 the Morris Wetland Management District has planted 7,967 acres of native grasses. An attempt was made to plant a 36 acre field to native grass in 1992 but it remained too wet. A one-acre field was seeded to indigenous little bluestem for further seed harvest. The District also planted three acres at the Minnewaska Area School, Pope County, for their outdoor classroom.

NATIVE GRASS SEEDINGS - MORRIS WMD - 1992

County	WPA	Acres	Date	Seeding
Stevens	Edwards	1	6/92	Indigenous little bluestem

b. **Cool-Season Grasslands**
A total of 135 acres was seeded to introduced cool-season grass or alfalfa in 1992. Cooperative farming agreements were used to seed this acreage. The cooperator furnished all seed and used small grain as a nurse crop. The small grain was harvested at maturity and the straw chopped at the time of harvest or removed within 10 days after harvest.

The following table summarizes cool-season seedings in 1992.

COOL-SEASON GRASS/LEGUME SEEDINGS - MORRIS WMD - 1992

County	WPA	Acres	Date	Pound/Acre Mixture
Big Stone	Olson	61	May	8# tall wheatgrass, 3# orchardgrass, 2# tall fescue, 2# smooth brome
Stevens	Thorstad	37	April	11# vernal alfalfa
Swift	Artichoke Lake	37	April	6# tall wheatgrass, 3# orchardgrass, 2# tall fescue, 3# smooth brome
Total		**135**		

c. **Native Prairie**
The original upland vegetation within the Morris District was tall grass prairie. The total native prairie acreage on WPA's within the District was 6,335 in 1992. The areas vary in size from less than one acre to 424 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 time.

Native sunflowers (Helianthus sp.) on Hutchinson WPA, Stevens County. 92-16 8/13/92 BLA

7. Grazing

Controlled grazing has been used as an alternative to prescribed burning. Objectives are to reduce litter buildup and reduce competition from cool-season grass invaders. A high concentration of livestock is needed to remove a dense litter buildup and the new growth in a 30 day period of time. Grazing does not begin until approximately April 25 for two reasons:

1. Most permittees are not through calving until May 1.
2. The combination of spring rains and high A.U.M.'s can cause degradation of the sod.

Fall grazing has been considered but permittees are hesitant to have their livestock on a public area when it is open to hunting.

The grazing period is 30 days. In dry years there may not be enough vegetation to support the number of A.U.M.'s and livestock needs to be taken off early. Permittees have been good to work with. This grazing period on WPA's gives their own pastures a break. However, it is becoming more difficult to find permittees as each year there are fewer cow/calf operators. Grazing is targeted more to native prairie. Areas are normally grazed two years in a row and then rested for three to five years. Kentucky bluegrass (Poa pratensis) comes on very strong if grazing takes place only one year.

GRAZING SUMMARY - MORRIS WMD - 1992

County/WPA	Acres	Actual AUM's	Planned AUM's	Fee/AUM	Grazing Period	Scheduled Period
Big Stone						
Hillman	63	56	70	$3.00	4/25-5/26	4/25-5/25
Redhead Marsh	105	45	70	$3.25	4/28-6/01	4/25-5/25
Twin Lakes	126	118	150	$3.25	4/28-5/28	4/20-5/20
Lac Qui Parle						
Farrell	34	22	30	$3.00	4/25-5/25	4/25-5/26
Hastad	68	51	55	$3.00	4/25-5/25	4/25-5/25
Pearson	175	117	120	$2.50	4/25-5/26	4/25-5/25
Stevens						
Mau	69	30	30	$3.25	4/25-5/25	4/25-5/25
Struck	35	31	30	$3.25	4/25-5/25	4/25-5/25
Wente	25	19	20	$3.25	4/25-5/25	4/25-5/25
Total	**700**	**489**				

8. Haying

Haying has been used on a limited basis for noxious weed control and upland habitat management. It has been utilized primarily on pure stands of alfalfa. The annual manipulation keeps the alfalfa in a more vigorous condition.

HAYING SUMMARY - MORRIS WMD - 1992

County	WPA	Acres	Rate/ Acre	Harvest Date
Big Stone	Anderson	20	$10.00	after 7/15
	Hillman	45	$15.00	7/25
	Karsky*	24	2/3 - 1/3	7/27
Total		**89**		

*Hay was share cropped with the government receiving 1/3.

9. Fire Management

A total of 880 acres was prescribe burned in 1992. One of the prescription fires turned into a wildfire. Ignition was initiated according to the plan and the forecast. Updated forecasts were obtained with existing wind conditions. Three wind shifts occurred and none were any of those forecasted. One hundred acres of private CRP land was burned before the fire was put out. The Starbuck Fire Department was called to assist.

PRESCRIBED BURN SUMMARY - MORRIS WMD - 1992
(In Acres)

County/WPA	Date Burned	Native Prairie	Intro. Natives	DNC	Marsh	Trees	Total	Cost/ Acre
Stevens								
Freeman	4/27			77.0	29		106.0	$1.82
Big Stone								
Wiley	4/27	2.0		40.9			42.9	$4.51
Pope								
Gullickson	4/29	6.5	19.0	2.0	15		42.5	$3.88
Kolstad Lake	4/29	46.9	23.0	134.5			204.4	$1.56
Hagstrom	5/04	62.6	177.6	11.0	3		254.2	$2.27
Jackson	5/05	4.7	31.5		10		46.2	$2.35
Stevens								
Welfare	5/05	11.0	42.0		3	3.5	59.5	$2.33
Hutchinson	5/05	39.0			3		42.0	$8.53
Edwards	5/05						1.0	
Big Stone								
Artichoke	5/28			36.0			36.0	
Total		**172.7**	**293.1**	**301.4**	**63**	**3.5**	**834.7**	
Minnesota DNR							45.0	
							879.7	

The track truck has proven to be a very good asset to our prescribe burn program but can get stuck easily. 92-17 5/4/92 BLA

10. Pest Control

a. **Insect**
Nothing to report.

b. **Plant**

NOXIOUS WEED CONTROL - MORRIS WMD - 1992

	Contract Spraying		Force Account Spraying		Force Account Mowing		Totals	
	No.		No.		No.		No.*	
County	WPAs	Acres	WPAs	Acres	WPAs	Acres	WPAs	Acres
Big Stone	0	0	11	147	2	32	13	179
LacQuiParle	0	0	5	40	0	0	5	40
Pope	1	18	13	113	1	35	15	166
Stevens	0	0	15	238	1	5	16	243
Swift	0	0	8	103	0	0	8	103
Traverse	0	0	2	12	0	0	2	12
Yellow Med	0	0	0	0	0	0	0	0
1992 Total	**1**	**18**	**54**	**653**	**4**	**72**	**59**	**743**
1991 Total	**2**	**73**	**58**	**321**	**5**	**62**	**65**	**456**
1990 Total	**0**	**0**	**65**	**922**	**20**	**337**	**85**	**1259**
1989 Total	**8**	**183**	**62**	**599**	**29**	**268**	**99**	**1050**
1988 Total	**70**	**2420.5**	**75**	**1045**	**6**	**160**	**122**	**3625.5**
1987 Total	**79**	**1516**	**71**	**742**	**1**	**10**	**117**	**2268**

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

In 1992, 743 acres received treatment for noxious weed control. Canada thistle continues to be the main noxious weed when acres impacted and number of complaints received are considered. Control of Canada thistle received a large assist from the thistle caterpillar in 1992. This larval stage of the painted lady butterfly is not new, and visits Minnesota every year. However, numbers were much higher this year as a result of strong, persistent southerly winds that blew large numbers of egg-laying adults into the area during May.

During the period of 1985 through 1988 this station was able to control thistle in a more aggressive fashion and virtually eliminate it from some areas. Thus the problem was improving. Now we can only treat the very severe problems and those areas we receive complaints about. The untreated thistle produces seed year after year and these untreated areas become severe problems in future years. We are now receiving increasing complaints from

neighbors, county agricultural inspectors, and county commissioners. From past experience we know that a reduced noxious weed control program will have a negative impact on land acquisition and lead to contemptuous relationships with neighbors and local elected officials. The 743 acres that received some type of weed control during 1992 is below the past six year average of 1,567 acres.

Leafy spurge was sprayed on 7 different waterfowl production areas this past year. In most cases the spurge was sprayed using our invert sprayer with 2,4-D and Tordon.

Loosestrife was sprayed on two units this year. We sprayed 3.0 acres along the west side of the Beaver Pool on Nelson Lake WPA, Pope County, and 2.8 acres on Darnen WPA, Stevens County. In 1989 we gave up control efforts on several units until such time as a more efficient control method is developed.

Three different patches of marijuana were controlled this year. Those on Farrell WPA, Lac Qui Parle County, and Loen WPA, Swift County, were sprayed. The large plants on Spellman Lake WPA, Yellow Medicine County, were pulled and burned. None of the marijuana was of good quality but were remnants of hemp production for rope during World War II.

13. WPA/Easement Monitoring

a. Easements

EASEMENT ENFORCEMENT SUMMARY - MORRIS WMD - 1992

Cases closed during 1992	1
Cases forwarded for legal action	0
*New fall 1992 violations (unresolved)	0
**Total cases outstanding December 31, 1992	10

*No confirmed new potential easement violations were observed in the fall flight. Those questionable will be ground checked in the spring of 1993.

**Includes four co-owned cases. Action to be taken is pending the outcome of a continued wetland values study.

Fall easement flights were made October 28-30. Potential easement and swampbuster violations were photo documented. Snowfall started October 31, the day after flights were completed, and remained through winter. Ground checks will occur next spring. Much of the normal easement enforcement attention remains diverted into Farm Bill swampbuster activities. We have given swampbuster this priority because of the far reaching effect the swampbuster program has on all wetlands throughout our District.

When conducting our easement flights we also photograph potential violations and report them to ASCS, Minnesota DNR, and Corps of Engineers. Duplicate photos are usually sent with the turn-in so responsible authorities can see the situation. They then also realize that original photos are in the possession of a public agency who may generate a challenge if they fail to enforce wetland protection laws appropriately. Those who are sincere about protecting wetlands appreciate and use the photo evidence in resolving the problem. Others usually do what they have to or will be concerned that the photos may haunt them if they fail responsibility.

Equipment Operator Ahrndt was detailed to Detroit Lakes Wetland Management District for 11 days to assist in the restoration of the Lhotka easement case in Mahnomen County.

b. **Waterfowl Production Areas**

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

Most problems are caused by neighboring landowners or renters. The preferred procedure is to negotiate a solution without creating a neighboring enemy. Legal action is usually a last resort. Other violations such as vehicle trespass, dumping, littering, etc., are highly visible, but catching someone is rare.

With tighter restrictions on private dumps and landfills we have noted increased dumping of chemical containers, tires, etc., on Service land. Our policy of immediately cleaning up any new found dump sites seems to be keeping the problem at a minimum.

One fee area problem remains with Law Enforcement and is pending legal action. It is the Krantz Lake WPA case in Pope County. In June 1986 a neighbor dug a 3/4 mile long ditch along a disputed boundary of the unit. At least three co-owned wetlands were drained in addition to privately owned wetlands on the neighbor's property. The case was turned over to our Law Enforcement Division who, with the Solicitor and/or U.S. Attorney, must resolve the boundary dispute and address drainage rights on the Service's portion of the drained wetlands. Meanwhile, in the field we have continued to document additional downstream drainage which includes impacts to co-owned wetlands across the county line in the Litchfield District. Corps of Engineers, Swampbuster, and Minnesota DNR regulations all apply in some way. Resolution will not be easy, but the case needs to move forward in 1993.

15. Private Lands

In this report we have divided Private Lands into three categories: a. Private Lands-Enhancement, b. Private Lands-Wetland Restorations, and c. Swampbuster.

a. **Private Lands-Enhancement**
The Private Lands-Enhancement program is an extension and educational program aimed at improving wildlife habitat on private property. This is accomplished through educational presentations to schools, scout groups, and 4-H programs as well as programs and meetings with local government agencies and sportsman groups. One-on-one contacts are also made with private landowners and other interested parties in which advice and technical assistance is given on specific wildlife development projects. The majority of the projects dealt with in 1992 were wetland restorations. These projects were designed and construction costs paid for by the Morris WMD. On those projects such as food plots and tree plantings in which only technical assistance was available through the Morris office, interested parties were advised as to the projects which would be beneficial to their property and referred to the Minnesota DNR, Soil and Water Conservation District, Pheasants Forever chapter, or some other agency where further assistance, including financial assistance, may have been available.

A very close and fruitful working relationship has developed with the SCS in our seven counties. We actively promote their programs such as Waterbank and Wetland Reserve Program and they in return promote and refer interested landowners to our private lands program. We have restored and/or enhanced a number of wetlands for private landowners making them eligible for the Waterbank program following referrals from the SCS.

Lake associations and watershed districts are also turning to us for assistance in improving the water quality of area lakes. Over the past three years we have worked closely with the Upper Minnesota River Watershed District in improving the water quality of Big Stone Lake by restoring wetlands as filters and sediment traps within the watershed. We work together in locating potential restorations, engineering and design of the restoration, and paying the construction cost. This past year Traverse Lake, Niemackel Lake, and Grove Lake Associations have asked for our assistance in improving the water quality of their lakes through restoration projects. Four potential restoration sites, two of which are former lakes, have been identified within the Grove Lake watershed. Restoration of the two former lakes is being actively pursued at this time.

As part of the private lands program, the Morris WMD has promoted and made available waterfowl nesting structures designed to deter or limit nest predation. Three types of structures have been used. The fiberglass nesting cone, a

42-inch by 6-foot high fiberglass tub or culvert, and a floating nest structure. The cone has received very light use from waterfowl while only two of the fiberglass culverts have been given out as landowners shy away from the work involved in setting them out. They are set out in three feet of water and filled with dirt. The floating structures are well received by both waterfowl and landowners but are rather labor intensive. This structure was developed and experimented with on a limited basis by the District staff in 1991. The program was expanded in 1992. See Section G.3d for the results of this year's program.

Two fiberglass waterfowl nesting barrels were placed in this restored wetland on Berland CRP property. Barrels are filled with soil allowing them to grow their own nesting cover. The barrel in the foreground produced a mallard brood. The other was not utilized. 92-18 4/8/92 BLA

b. Private Lands-Wetland Restorations

Wetland restorations under the Service's Partners for Wildlife program continued in 1992, however more work or salesmanship was needed to gain restorations than in previous years. It appears the majority of the easy restorations, especially those on CRP land, have been completed. This past year many landowners wanted to know what was in it for them before signing restoration agreements. Financial incentives seemed to be more important to landowners this year than in previous years. Thirty-five to 40 restorations were lost this year after surveys and agreements were drawn up because there was not enough in it for the landowner. Many of the landowners do not approve of permanent easements, which is the main program available offering financial incentives, because they do not want anyone else having control of their land. Benefits to wildlife and the environment are of minor importance to them.

Knute Christenson restoration (Stevens County) with rock spillway. 92-19 7/14/92 BLA

To notify the public of our free restoration program, a full page ad (see next page) was run in the Classy Canary and Peach, as in previous years. These local advertising supplements, with an estimated circulation of 100,000 copies, were again sponsored by the Minnesota Waterfowl Association ($180), Ducks Unlimited-Alexandria Chapter ($180), Stevens County Chapter of Pheasants Forever ($180), and Swift County Chapter of Pheasants Forever ($180).

Because of the low response rate (only a half dozen calls) to the full page ad, a one page flyer with a mail-back post card was sent to landowners in Big Stone and Stevens counties. Mailing labels for owners and operators in each county were obtained from the respective county ASCS office. Approximately 1,200 landowners in Big Stone County and 1,100 landowners in Stevens County were notified of our free restoration program and were asked to return the enclosed post card if interested in more information. Approximately 75 cards were returned from Big Stone County and 25 from Stevens County. Many of those returning cards did not have restorable wetlands but the response was far greater than from the newspaper ad. We do not feel the time was wasted in contacting all those people without restorable wetlands as we were able to educate and advise many of them as to better wildlife management practices applicable to their property.

THE CLASSY CANARY

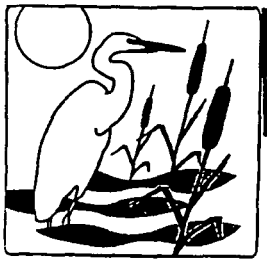
Supplement to: LAKE REGION ECHO, Alexandria, MN; POPE COUNTY TRIBUNE, Glenwood, MN; SAUK CENTRE HERALD, Sauk Centre, MN; WHEATON GAZETTE, Wheaton, MN; SWIFT COUNTY MONITOR-NEWS, Benson, MN; LONG PRAIRIE LEADER, Long Prairie, MN; GRANT COUNTY HERALD, Elbow Lake, MN; WADENA PIONEER JOURNAL, Wadena, MN; HOFFMAN TRIBUNE, Hoffman, MN; MORRIS SUN, Morris, MN; PAYNESVILLE PRESS, Paynesville, MN

48 pages

March 30-Apr.3, 1992

ATTENTION

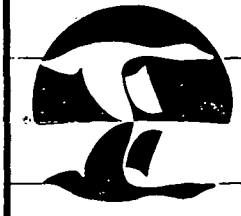
FARMERS & LANDOWNERS



Partners for Wildlife

Private interest groups and government agencies working together, reaching out to fish and wildlife on private lands.

RESTORE YOUR WETLANDS FREE!



North American Waterfowl Management Plan

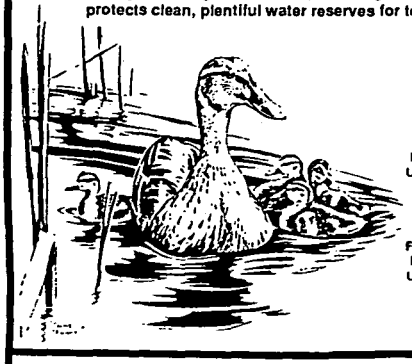
To improve the valu of your property, the U.S. Fish and Wildlife Service is continuing **FREE WETLAND RESTORATION** for farmers and landowners in Minnesota.

Since 1987, the USFWS has restored more than 5,500 previously drained wetlands in Minnesota, amounting to over 16,400 wet acres. Again in 1991, privately owned wetlands will be restored - **AT NO COST** - to improve water quality, to increase water supplies and to enhance fish and wildlife habitat.

Why Restore Wetlands?

- To reduce soil erosion caused by wind and water.
- To replenish soil moisture and to recharge groundwater supplies and aquifers.
- To improve water quality and water resources for profitable farming, ranching, irrigation and livestock operations.
- To reduce the potential of downstream flooding, typically associated with spring runoff and heavy thunderstorms.
- To improve habitat for migratory waterfowl, game/nongame wildlife and fish, thereby increasing recreational opportunities to stimulate rural economies.
- To contribute to goals of the North American Waterfowl Management Plan.

Considering the drought of 1988-90, restoring wetlands creates, ensures and protects clean, plentiful water reserves for today and tomorrow.



Farmers, ranchers and landowners are eligible to restore - **AT NO COST** - drained or partially drained wetlands-- marshes, sloughs, potholes and low-lying wet areas-- that were previously drained by ditches, tile lines and culverts. This free wetland restoration service is available on privately owned land enrolled in CRP and RIM programs, on unprofitable or hard-to-farm acres, on pastures, native prairies and hunting properties.

It's ALL FREE...It makes sense

Conservation easements on restored wetlands can provide bonus dollars!

For More Information Contact:

MORRIS WETLAND MANAGEMENT DISTRICT
U.S. Fish and Wildlife Service
Route 1, Box 877
Morris, MN 56267
612-589-1001

DETROIT LAKES WETLAND MANAGEMENT DISTRICT
U.S. Fish and Wildlife Service
Route 3, Box 47D
Detroit Lakes, MN 56501
218-847-4431

FERGUS FALLS WETLAND MANAGEMENT DISTRICT
U.S. Fish and Wildlife Service
Route 1, Box 76
Fergus Falls, MN 56537
218-739-2291

LITCHFIELD WETLAND MANAGEMENT DISTRICT
U.S. Fish and Wildlife Service
971 E. Frontage Rd.
Litchfield, MN 55355
612-693-2849

WINDOM WETLAND MANAGEMENT DISTRICT
U.S. Fish & Wildlife Service
Route. 1, Box. 273A
Windom, MN
56101
507-831-2220

TAKE PRIDE IN AMERICA

DUCKS UNLIMITED
10400 Bren Rd. East
Minnetonka, MN 55343

Minnesota Waterfowl Association

On behalf of a better Minnesota environment, this ad is sponsored by:

Swift County Pheasants Forever
RR 1 DeGraff, MN 56233

5701 Normandale Rd
Minneapolis, MN 55424

Stevens County
Pheasants Forever
RR 1 Box 12
Hancock, MN 56244

PHEASANTS forever

An agreement between the Fish and Wildlife Service and SCS calls for all restoration projects to follow SCS guidelines. District personnel are allowed to engineer restoration projects with watersheds of less than 100 acres. Restorations with watersheds over 100 acres must be designed by a professional engineer. This is accomplished either through the Fish and Wildlife Service private lands engineer in St. Cloud, Regional Office engineers, or SCS engineers. Once designed, the plan must be signed off by the county ASCS for CRP land and the local watershed district where applicable. In some cases a Minnesota DNR permit is also required.

WETLAND RESTORATIONS - MORRIS WMD - CALENDAR YEAR 1992

County	CRP Restorations		Other Restorations		Total Restorations	
	Basins	Acres	Basins	Acres	Basins	Acres
Big Stone	0	0	7	32	7	32
Lac Qui Parle	0	0	0	0	0	0
Pope	2	2	26	78	28	80
Stevens	16	29	2	5	18	34
Swift	5	8	12	26	17	34
Traverse	3	8	3	4	6	12
Yellow Medicine	0	0	3	12	3	12
Total 1992	**26**	**47**	**53**	**157**	**79**	**204**
Total 1991	**62**	**126**	**51**	**723**	**113**	**849**
Total 1990	**50**	**136**	**54**	**201**	**104**	**337**
Total 1989	**81**	**249**	**16**	**97**	**97**	**346**
Total 1988	**199**	**623**	**9**	**50**	**208**	**673**
Total 1987	**26**	**46**	**7**	**33**	**33**	**79**
GRAND TOTAL	**444**	**1227**	**190**	**1261**	**634**	**2488**

92-20 5/11/90 AGA

Twenty-two acre Berland restoration on CRP land in Stevens County. This was a joint project between the Fish and Wildlife Service and the Soil Conservation Service.

92-21 3/10/92 BLA

A total of 29 landowners cooperated with the Service to restore 79 wetlands during the calendar year. Wetland restorations took place in each of the seven counties of our District except Lac Qui Parle County. Typical wetland restorations were small comprising an average of 2.5 acres per restoration at a cost of $822.00 per restoration or $318.00 per wetland acre restored. Agreements were signed on an additional nine restorations. However, the early snow put an end to the construction season before they could be completed.

During the past year a backlog of larger projects with watersheds over 100 acres had developed because of the lack of available engineers to design the projects. With the hiring of Dennis Hall, the Fish and Wildlife Private Lands Engineer at St. Cloud, Minnesota, this backlog has dwindled substantially. Two larger projects, Roger Granberg and Louis Paulson restorations, were completed during the year with another ten projects in various stages of the design process. The majority of these projects should be ready to go by early to late summer, 1993. The limiting factor on completing these projects is no longer a lack of engineering help but rather a lack of dollars.

A rock spillway instead of a deep inlet water control structure was used on the Louis Paulson restoration because of the large watershed and limited water storage area.

92-22 10/92 BLA

One larger project of special interest is the Ellen Lake restoration project in Pope County. Ellen Lake is a 172 acre meandered wetland partially drained in the early 1900's by a legal ditch system. Some interest in restoring the lake for waterfowl and water quality reasons had been expressed over the past 30 years, however, agreement between all six adjoining landowners could not be reached. Landowner contacts made by Morris District staff in late 1990 found all six landowners willing to listen to easement and restoration possibilities. The hydrology study and preliminary structure design was completed by the SCS and initial realty contacts were completed in 1991.

During 1992 all six adjoining landowners signed an easement document allowing for the restoration of Ellen Lake. The Joint Ditch Authority, consisting of the county commissioners of Douglas and Pope counties, also gave their unanimous approval of the project after concerns of upstream landowners were satisfied. The upstream landowners felt the project may slow down the flow of water through the ditch system above Ellen Lake. Their concerns were satisfied through an agreement calling for the Fish and Wildlife Service to pay the cost to remove approximately one foot of silt from 1,000 feet of ditch immediately upstream of Ellen Lake. Normally the ditch authority would pay the cost for the ditch cleanout through a ditch assessment tax to the upstream landowners. The cleanout was completed in late fall, 1992, at a cost of $1,760.00. It is doubtful the cleanout will have much effect on upstream water levels as the planned water level for Ellen Lake will place approximately two feet of water in the section of ditch cleaned. However, the cleanout satisfied the upstream landowners.

Bids were solicited for the sheet pile structure restoring the lake in late summer with the bid awarded on September 3 to Commerford Construction of Danvers, Minnesota, for $41,495.00. Prior to the awarding of the construction contract, Federal Land Bank foreclosed on one of the six landowners involved in the easement. Before the project could proceed, Federal Land Bank's approval was needed. This was not obtained until November, after heavy snow and cold weather had set in. Construction was put off until spring when conditions will be more favorable.

The Morris WMD expended 2.1 FTE's of effort over the past year to restore wetlands on private lands. Funding for the wetland restoration program was from Fish and Wildlife Service private lands funds, Challenge Grant programs, and donations from private clubs and organizations. The FY92 budget was $146,000, supplemented by an additional $38,990 from Challenge Grant and private donations. This budget must cover salaries, supplies, and construction cost for new dikes and repairs of old dikes.

Contributions to the Partners for Wildlife wetland restoration program for 1992 are contained in the following list.

Contributed funds in 1992

Ducks Unlimited	$ 7,680
Upper Minnesota River Watershed District	4,000
Minnesota Waterfowl Association	2,100
North American Wildlife Federation	2,050
Swift County Soil & Water Conservation District	1,500
East Yellow Medicine County Pheasants Forever	1,000
Pope County Pheasant Restoration Project	500
Minnesota Chapter of the Wildlife Society	400
Traverse County Pheasants Forever	400
Swift County Pheasants Forever	180
Stevens County Pheasants Forever	180

Plaques were presented throughout the year to groups and individuals for their efforts in restoring and preserving Minnesota wetlands. 92-23 1/15/92 Carl Anderson

Dike construction on the Roger Granberg restoration in Pope County. 92-24 10/92 Dennis Hall

Setting the drop-inlet water control structure on the Roger Granberg restoration. 92-25 10/92 Dennis Hall

c. **Swampbuster**

The swampbuster provisions of the Farm Bill legislation have us involved in several areas. The main areas are wetland appeals, exemption requests, turn-ins of possible violations via wetland impact reports, and the new Wetland Reserve Program. The legislation gives the Fish and Wildlife Service "consultant" responsibilities. However, in many situations the Service is the primary authority involved preventing drainage of readily recognized wetlands.

Wetland Appeals

The wetland appeal process is initiated when a landowner challenges the SCS determination that some areas of his property should be classified "wetland." As a consultant, a Service employee and the SCS representative visit the site, review ASCS slides, check available wetland inventories, and then confirm or reverse the initial SCS determination. Most are upheld and most SCS field offices are doing a good job. If the landowner still disagrees he must appeal his case to the next level of authority.

In 1992, the Morris Wetland staff reviewed 80 landowner appeals involving 364 wetlands. Cumulative totals since the beginning of swampbuster are 860 appeals involving 2,542 areas. Of these, 1,777 were upheld as wetlands and 768 were determined non-wetlands.

Exemption Requests

Another portion of the Farm Bill Swampbuster legislation allows landowners or ditch authorities exemption from swampbuster provisions if they meet specific criteria. Exemption from swampbuster provisions could be granted if either commenced or third party requirements were met.

Commenced exemptions were intended to allow landowners to complete drainage projects already started in 1985 when swampbuster legislation took effect. We have no outstanding commenced exemption requests, but it is important to note that much more drainage was allowed than should have been under this exemption. "Relief provisions" were enacted that rewarded county committees for endorsing drainage and ignoring swampbuster regulations. This left them unaccountable for their irresponsible acts and the responsible county committee who enforced the rules came out looking like the "bad guys" to their neighbors.

Third party exemption provisions are intended for situations where a landowner has no control over or involvement in wetland conversion activity. We had only one case in 1992 and denial was recommended. While we get many third party inquiries, few formal requests are filed by landowners when they realize the written rules will be applied and they offer no loopholes. Generally a landowner wants a township or similar entity to drain something on their behalf. When this occurs, they are clearly not third party victims and exemption criteria doesn't apply.

Turn-ins of Potential Violations via Wetland Impact Reports
Another key role has been our reporting of potential violations. Swampbuster legislation of 1985 provided that if a landowner seeded a crop in a converted wetland, he was to lose his total Federal farm subsidy payment. The updated 1990 FACTA regulations reduced the penalty if the wetland was restored.

In 1992, 20 Wetland Impact Reports of potential wetland conversions were sent to ASCS offices in the Morris District. A total of 190 have been submitted since swampbuster began. The 1985 legislation required wetland conversion, seeding, and participation in Federal farm programs before benefits could be withheld. Changes in the 1990 Farm Bill made only the act of converting a wetland the trigger for penalties. However, it encouraged restoration of the wetland by offering a reduced penalty if the wetland was restored. If the owner decided not to restore, all payment was to be forfeited.

Swampbuster, combined with Corps of Engineers 404 authority and the new Minnesota Wetlands Conservation Act, has done a lot to curb drainage. We have gained respectful attention of drainage proponents and have witnessed a significant reduction in drainage of larger wetlands. Old opportunities to purchase and destroy wetlands for profit without being challenged no longer exist. The message we hope to groom is "If you buy a wetland—you own a wetland—and you have a social obligation to pass it on in tact to future generations."

Wetland Reserve Program
Minnesota was one of nine states in a USDA pilot program to pay for the restoration of drained wetlands. In Minnesota there were 249 intents to bid, 116 bids, and 11 accepted for 705 acres. Three of the 11 were in the Morris District. Two for 73 acres were accepted in Stevens County and 1 for 307.2 acres in Yellow Medicine County. The staff contributed 1,152 hours in support of the program. With the manpower invested into this program and the potential restorations from those whose bids were not accepted, we hope the program will continue in 1993 and future years.

G. WILDLIFE

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 species of mammals, and numerous species of reptiles, amphibians and insects. The keys to maintaining this diversity are habitat preservation and manipulation. Manipulation activities that help maintain wildlife diversity are: water level management, prescribed burning, grassland establishment, woodlot improvement, and wildlife food plot establishment.

Pileated woodpecker feeding young at nest...an uncommon nester within the area. 92-26 6/20/92 BLA

2. Endangered and/or Threatened Species

During the early part of the year, several reports of over-wintering bald eagle observations were reported. On March 30, 27 eagles were observed at Lake Hassel in Swift County. In Lac Qui Parle County, Minnesota DNR reported two bald eagle nesting attempts. At one nest the incubating adult abandoned the nest after being harrassed by humans. The other nest showed signs of activity in March, however, no other activity progressed. In late summer/early fall, a new nest (nest number 3) was discovered near the Lac Qui Parle State Wildlife Management Area headquarters. Two eaglets successfully fledged from the nest between Montevideo and Granite Falls, along the Minnesota River. Actual population numbers are unknown; however, at least a few eagles are present yearly.

Other species found on units within the Morris District and determined species of special concern by the State of Minnesota or the Service are: common loon, horned grebe, American white pelican, American bittern, red-shouldered hawk, osprey, peregrine falcon, sandhill crane, yellow rail, piping plover, upland sandpiper, marbled godwit, Wilson's phalarope, common tern, Forester's tern, black tern, short-eared owl, burrowing owl, loggerhead shrike, sharp-tailed sparrow, Henslow's sparrow, and chestnut-collared longspur. The Minnesota state endangered five-lined skink occurs in the southern part of our District.

Presently there are efforts to evaluate black tern populations in Minnesota. There appears to be variation in nesting season and habitat use within the state. The Minnesota DNR has initiated a baseline study to determine when and where efforts should be concentrated in future studies. The Service has expanded its Four Square Mile Survey routes within the Morris District to include black tern observations with the hopes of identifying areas of use locally.

Several observations of the common loon were reported in the Morris District. The most noteable sighting was on June 11, when an adult with a chick was observed near Marlu Lake in Pope County.

3. Waterfowl

a. **Swans**

Tundra swans are common migrants throughout the Morris District. Highlights of the spring migration period included 12 observed at Pomme de Terre Park on March 31 and 35 on Bahr WPA on April 1. Both observations were in Stevens County.

b. **Geese**

Canada geese are common in the Morris District, becoming extremely abundant during the fall. With the mild winter, some geese remained in the area with sightings of 15 and 30 on January 17 and 21, respectively. Northward migrants began showing up in Stevens County on February 26. Local populations of resident breeders are experiencing very high productivity. Seventy-five goslings were trapped from the Twin City area and released at Mud Lake, Traverse County, by the Minnesota DNR in July.

Although the white-fronted goose is a common visitor during migration, only a single observation of 60 birds at a wetland restoration project near Artichoke WPA in Big Stone County on April 3 was documented.

Snow geese are very common during spring migration. Over 3,000 were using McNally Slough WPA in Stevens County on March 30. Early snow in the fall caused the migration of these geese to by-pass the District.

c. **Ducks**

Although most ducks arrive on their breeding ground from late March to early May, the first observation of spring migrants in the Morris District was on March 7, 2 1/2 weeks

earlier than usual. Northern pintail, redhead, lesser scaup, common goldeneye, and common mergansers were the first arrivals. Number and species diversity increased as wetlands opened. Other species recorded in the District during the year include: mallard, gadwall, green-winged teal, blue-winged teal, American wigeon, northern shoveler, wood duck, redhead, ring-necked duck, canvasback, greater scaup, buffle head, and ruddy duck.

The wood duck....third most abundant nesting duck during 1992. 92-27 5/7/92 BLA

Redheads were a common sight in 1992. Hutchinson WPA, Stevens County. 92-28 6/24/92 BLA

During the avian botulism outbreak (Section G.17), the following species of ducks suffered mortalities: mallard, gadwall, northern pintail, green-winged teal, blue-winged teal, American wigeon, northern shoveler, ruddy duck, wood duck, and redhead.

d. **Waterfowl Production**

Although good natural nesting opportunities exist on WPA's, additional nest baskets, grass bales, wire cylinders, nest boxes, and floating structures are provided. Most structures are checked yearly and maintenance performed. During 1992, monitoring of all artifical nests was not done due to lack of manpower. However, because "Lewgen" (cedar floater) nest structures were highly successful in 1991, more structures were placed in marshes in 1992. Additional floating type structures and nesting cylinders were also placed in wetlands.

The flexible track truck makes many jobs easier and more efficient. 92-29 1/21/92 BLA

The different nesting structures were as follows:

- A cedar floater ("Lewgen") with two wire duck nest cylinders and one goose nest on top were used in deeper open water.

- A wire cylinder attached to the side or on the top edge of a large, round hay bale (brome/quack grass).

- A double floater made of hardware cloth folded around rigid styrofoam with two wire cylinders and one goose nesting site on top, was placed on wetlands 2-3 feet deep.

- A single floater made of rigid styrofoam inside a plastic agriculture grass seed sack with a single wire cylinder wired to it. The single floaters were used in shallow wetlands 1-2 feet deep.

Cedar Floaters: Intended for use in larger wetlands, these well constructed structures are the most durable, successful, and costly ($40-$50 for materials). Having two wire duck nesting cylinders and a goose nest site on top, these are recommended for placement 100+ yards from shore in open water. 92-30 5/26/92 BLA

Bales With Cylinder: Round bales readily attract nesting Canada geese, but ducks seldom choose to nest there. Also, a duck nest on a bale with a goose present should have the advantage of added predator protection supplied by the goose. For this reason, cylinders were either attached to the side or the top edge of a bale to see if duck nesting would occur. 92-31 5/7/92 BLA

Double Floaters: Intended for use in smaller Type III or IV wetlands, these are less costly and durable. They are made of hardware cloth sandwiched around rigid styrofoam with two duck nesting cylinders and a goose nesting site on top. They are light weight and can be placed and retrieved with waders or hip boots. 92-32 8/19/92 LEL

Single Floaters: Intended for use in small, shallow wetlands that are typically dry by fall. They are made of rigid styrofoam inside a plastic grass seed sack with a single wire cylinder attached to it. 92-33 6/92 PJM

Table 9 - ARTIFICIAL NESTING STRUCTURES FOR WATERFOWL MORRIS WETLAND MANAGEMENT DISTRICT - 1992

	Cedar Floater	Wire Cylinder Bale	Double Floater	Single Floater	Total
Available Structures	32	9	6	10	57
available nest sites	77	9	18	10	114*
nest sites used	33	7	4	6	50**
successful nests	26	6	3	2	37
predated nests	2	1		3	6
abandoned nests	2				2
unknown fate	3		1	2	6
unused structures	6	2		4	12
Percent Sites Used	**43**	**78**	**22**	**60**	—
Percent Successful	**79**	**86**	**75**	**33**	—

* 94 duck, 20 Canada goose
** All nests were mallard, except 1 Canada goose nest

On the cedar floater, 63 duck and 14 goose nest sites were available, of which 25 duck and 1 goose were successfully hatched. Productivity from the wire cylinder on bales showed a high success rate for ducks. Nests of four geese and one mallard occurred on the tops of the bales and were not included in the data for the cylinder bales. The structure usage percentages for the cedar floater, wire cylinders on bales, double and single floaters were 43, 78, 22, and 60 respectively. Overall, nesting success was high (see table 9) but more testing is planned for next year.

"Traditional" nesting sites were short, so this innovative couple adapted---and were successful at it.
92-34 6/10/92 BLA

4. Marsh and Waterbirds

Common loon, red-necked grebe, horned grebe, eared grebe, western grebe, pied-billed grebe, American white pelican, double-crested cormorant, great blue heron, green-backed heron, cattle egret, great egret, snowy egret, black-crowned night heron, least bittern, American bittern, sandhill crane, Virginia rail, sora, yellow rail, and American coot can be found using the District's lakes and marshes during the summer. A new species was added to the above list as two white faced ibis were observed at Artichoke WPA, Big Stone County, on May 18.

This looks like a good fishing spot. 92-35 7/15/92 BLA

Mortality tolls from Avian Botulism Type C and New Castles outbreaks in the District were reported as follows:

Avian Botulism	Number
grebe	33
American white pelican	11
double-crested cormorant	2
great blue heron	5
least bittern	3
sora	6
American coot	251

New Castle	Number
American white pelican	1960
double-crested cormorant	620

The botulism outbreak occurred on Mud Lake, Traverse County (Section G.17) and the New Castle outbreak in a rookery on Marsh Lake, Traverse County (Section G.17).

5. Shorebirds, Gulls, Terns and Allied Species

Species of this category occurring within the District are: common snipe, upland sandpiper, spotted sandpiper, solitary sandpiper, willet, greater and lesser yellowlegs, pictoral sandpiper, baird's sandpiper, least sandpiper, Dunlin, short-billed and long-billed dowitcher, stilt sandpiper, semipalmated sandpiper, marbled godwit, sanderling, Wilson's phalarope; herring, ringbilled, Franklin's, Bonaparte's and Sabine's gulls; and Forster's, common, Caspian, and black terns.

The North American Woodcock Singing Ground Surveys are coordinated by the Office of Migratory Bird Management and run by individuals throughout the United States and Canada. Woodcock breeding populations are indexed through results. The survey route in Pope County on May 11 documented 12.

The first killdeer was observed in New Prairie Township, Pope County, on March 23.

Seven ring-billed gulls and eight Forster's tern's deaths were attributed to the new castle disease outbreak (Section G.17).

Results of the 1992 Colonial Bird Surveys conducted by the Minnesota DNR found black terns on 14 waterfowl production areas in surveys held in Stevens, Pope and Traverse Counties. Probable nesting was found on Wendt, Stimmler, and Edwards WPA's.

6. Raptors

At least 27 representatives of the vulture, buteo, osprey, falcon, accipiter, and owl families occur within the Morris District. Turkey vulture, northern goshawk, rough-legged hawk, golden eagle, osprey, merlin, prairie falcon, peregrine falcon, and gyrfalcon pass through on migration. Hawks such as sharp-shinned, Cooper's, red-tailed, broad-winged, Swainson's, red-shouldered, and Ferruginous, northern harrier, bald eagle, American kestrel, and the eastern screech, great horned, barred, long-eared, short-eared, and burrowing owls, have been identified as nesters. The rough-legged hawk, northern goshawk, snowy owl, and northern saw-whet owl winter in the region.

Bald eagles have been known to nest in Lac Qui Parle County. Only one nest in three fledged young in 1992 (Section G.2).

An immature gyrfalcon mortality occurred in late December after it hit the side of a building located in Croke Township, Traverse County. The bird was the gray morph color phase of the gyrfalcon.

A snowy owl was observed on November 27 near Fitzgerald WPA, Stevens County.

7. Other Migratory Birds

Of the over 150 species of non-game birds that occur in the Morris District, not much is known on their status. Nationwide population declines have been recorded for neotropical birds. A higher priority to monitor and manage non-game birds should be undertaken.

Only eight nesting species of prairie grassland birds were recorded during the 1992 Productivity of Migratory Birds on CRP Lands Survey (Section D.5) in the District by Northern Prairie Wildlife Research Center, Jamestown, North Dakota.

The comon yellowthroat, bobolink, western meadowlark, red-winged blackbird, savannah sparrow, grasshopper sparrow, clay-colored sparrow, and the song sparrow were found.

8. Game Mammals

Deer populations remain high in west-central Minnesota.
92-36 7/15/92 BLA

The Minnesota DNR reported a third consecutive record harvest of white-tailed deer. The deer population has remained high in the past couple of years due to mild winters and increased habitat.

Several moose sightings within the District were reported. Moose are occasionally seen in western Minnesota but rarely stay long.

Coyote sightings are becoming more common throughout the District. Sightings from landowners and staff have been reported in all seven counties.

Red fox and raccoon have shown quite an increase in numbers from last year while skunks show a decrease according to the Scent Post Survey results (Section D.5).

Locally, the cottontail rabbit population went up 8 percent over 1991 but jackrabbits showed a 77 percent decline.

Muskrat numbers appear to be increasing as evidenced by an increased number of houses observed. If water levels remain about the same, we are optimistic that next year's numbers should increase significantly.

Several sightings of a mountain lion in Pope County have been reported. Tracks have also been identified to confirm the sightings.

10. Other Resident Wildlife

The Minnesota DNR's August roadside count reported a 43 percent decline in pheasant numbers statewide. Locally, they reported a 62 percent decline. Despite mild winter conditions, we had record snowfalls and ice storms which brought earlier-than-usual winter conditions. This was followed by a cool, wet, and somewhat late spring with localized areas of heavy rain, high winds, tornadoes, and hail storms in mid-June. The month of July was the coolest on record for Minnesota (Section B). Even after all this, late season pheasant numbers looked good once corn was harvested and birds became more visible.

The August roadside count of gray Partridge showed a population decline of 67 percent from that of last year.

11. Fisheries

In 1992, as in the past seven years, the Minnesota DNR Area Fisheries Office in Glenwood requested the use of four type V wetlands on waterfowl production areas for rearing walleye fry to fingerlings.

MINNESOTA DNR FISHERIES STOCKING PROGRAM
MORRIS WMD - 1992

County	WPA	Species	Number of Fingerlings	Pounds
Pope	Rolling Forks	Walleye	1,604	282 (5.6/lb)
	Kolstad	Walleye	1,830	305 (6/lb)

15. Animal Control

Beaver
Twenty-eight beaver were removed from seven wetlands with water control structures. Exclusion devices were installed on five of the structures. Beaver/man conflicts will continue on our WPA's but hopefully, by installing beaver exclusion devices, we can both survive comfortably.

Beaver activity at water control structures was a problem in 1992. 92-37 10/2/92 BLA

17. Disease Prevention and Control

An outbreak of Avian Botulism, Type C, took a total of 2,622 birds on Mud Lake located in Traverse County along the Minnesota/South Dakota border. This shallow lake receives water from Lake Traverse to the south flowing north to become the Bois de Sioux River. Mud Lake is about 3,500 acres in size and about 75 percent of the lake supports emergent vegetation. This large wetland is very attractive to molting waterfowl.

Avian botulism is a paralytic, often fatal disease resulting from ingestion of toxin produced by the bacterium Clostridium botulinum. Once botulism occurs it is usually perpetuated by bird-maggot cycle. Bacterial growth and various environmental conditions (water depth, water fluctuations, water quality, presence of vertebrate and invertebrate carcasses, rotting vegetation, high ambient temperature) combined to favor toxin production in wetlands. Toxin production occurs when the vegetative form of Clostridium botulinum bacteria multiply following spore formation. Optimum growth stage for toxin production occurs at 25°C (77°F). Marsh soil rapidly warming in shallow water during high ambient temperature favors toxin production. Soil containing spores of Clostridium botulinum and suitable organic nutrients along with high temperatures favor spore germination and reproduction. Carcasses and high temperature are all conducive to the buildup of fly population involved in bird-maggot cycle of avian botulism transmission.

Botulism is a threat to migratory birds when birds eat in infected areas or eat insects having fed on dead birds. It first affects the peripher/nerves resulting in paralysis of voluntary muscles making sustained flight impossible. Once power of flight is lost and paralysis of leg muscles, along with paralysis of inner eyelid and neck, the bird is unable to hold the head erect. Death from drowning or respiratory failure usually occurs.

The outbreak was first discovered by two graduate students from South Dakota State University (SDSU), Brookings, South Dakota. Clean-up efforts started August 12 and ended on September 22. Up to five airboats operated on the lake cleaning up dead birds. These came from Agassiz NWR, Sand Lake NWR, Sherburne NWR, Kulm NWR, and South Dakota Game, Fish and Parks. Agencies involved in the clean-up were U.S. Fish and Wildlife Service, Minnesota Department of Natural Resources, and South Dakota Game, Fish and Parks. The Morris staff contributed 689.5 man hours to help with the collection and incineration of the dead birds. Expenses for our office totaled $2,376.55 which included aircraft fuel, airboat repairs, and many miscellaneous items. We would like to extend a special "thank you" to Agassiz NWR, Sand Lake NWR, and Sherburne NWR for allowing us to use their airboats.

Species and Number of Mortality Due to Avian Botulism Outbreak, Mud Lake, Traverse County August 12-September 22, 1992

Waterfowl Species	Number
Mallard	1050
Blue-winged teal	173
Green-winged teal	122
Gadwall	54
Wood duck	60
American wigeon	2
Ruddy duck	11
Northern pintail	24
Northern shoveler	10
Redhead	4
Unknown duck	308
Total	**1818**

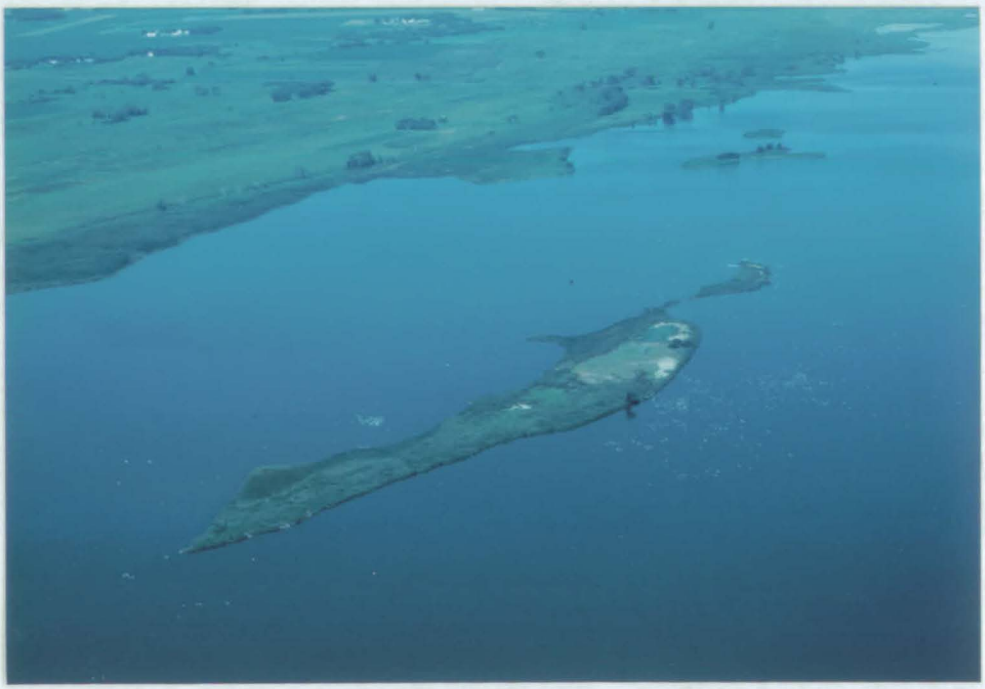
Other Species	Number
American coot	251
Grebe species	33
American white pelican	11
Double-crested cormorant	2
Yellow-headed blackbird	16
Ring-billed gull	1
Sora	6
Great blue heron	5
Least bittern	3
Total	**328**

The two South Dakota State University students picked up 411 dead birds prior to the clean-up initiation on August 12. Ken Bonema, Minnesota DNR Game Manager, picked up 65 dead birds on August 11. However, a species breakdown was not available on these two totals. These two figures bring the grand total of birds picked up to 2,622.

While outbreaks of avian botulims are not uncommon, the last known occurrance on Mud Lake and Lake Traverse was believed to have been in the late 1960's. The outbreak was confined to the Mud Lake area. Cool weather and rainfall of over 1 1/2 inches helped stabilize the outbreak.

New Castles Disease outbreak affected the Lac Qui Parle Wildlife Management Area and Marsh Lake within our District. Reported die-offs were 1,960 pelicans, 620 cormorants, 8 Forester's terns, and 7 ring-billed gulls. This lasted from mid-June to mid-September.

An outbreak of avian cholera took a total of 6,584 birds at the State of Minnesota's Lac Qui Parle WMA in the fall of 1991. Occasional die-off continued until March of 1992.



Island at Lac Qui Parle WMA where outbreak of New Castles Disease occurred. 92-38 7/14/92 BLA

H. PUBLIC USE

1. General

Public use for the Morris Wetland Management District is spread over seven counties and 240 individual units. It is difficult to adequately encourage and inform the public in an area of this size to use the facilities and opportunities we offer on WPA's. Therefore, we focus our effort on trying to increase public awareness of the value of wetlands through our demonstration area, visitor contact station, environmental education programs, and news releases.

Soil Conservationist Angus appeared on the local television program "Prairie Yard and Garden." Collecting seed, germination, and use of native flowers and grasses for ornamental purposes were discussed.

Native wildflower display at the Morris WMD headquarters site.
92-39 7/15/92 BLA

2. Outdoor Classrooms - Students

Tours and programs covering a variety of topics on wildlife, wetlands, grasslands, and the environment were given upon request to area students and school groups. The majority of the requests this past year came from the Morris area including the University of Minnesota-Morris, Morris School District, boy scout and girl scout groups.

Maureen Gallagher with second grade students from the Morris Elementary School. 92-40 4/29/92 BLA

The Morris WMD participated in Conservation Day at Neimackl Park sponsored by the Traverse County Extension Service. Conservation Day is an environmental education program put on by area conservation organizations. Each conservation organization presented five, one hour educational programs on a topic under their expertise. Such topics as recycling, boating safety, soil conservation, and upland nesting surveys were presented to 120 sixth grade students from five area schools throughout the day.

3. Outdoor Classrooms - Teachers

An environmental education tour and talk was given to 30 school teachers attending a summer school session on environmental education. Topics on wildlife, wetlands, and grass management and their values to the environment were covered.

4. Interpretive Foot Trails

There is one interpretive foot trail in the Morris WMD. The Froland WPA, Pope County, serves the communities of Benson, Starbuck, and Glenwood. The trail is approximately one mile long and is self-guided. Unfortunately, our work load prevents us from doing more than basic trail maintenance. Although both local residents and tourists use the trail, we do not know the amount of use it receives.

The foot trail on Redhead Marsh WPA, Big Stone County, was abandoned in 1991 because of lack of use and lack of funds and manpower for bridge maintenance.

Dick Sorenson, Landscape Architect from the Regional Office, visited our office to discuss our plans and ideas for a walking trail at the headquarters site. Ideas for making it handicap accessible were discussed.

5. Interpretive Tour Routes

The demonstration area developed in 1989 at the headquarters site received very positive reviews during the year. The 2.5 mile gravel road through the Edwards WPA is a "show me" tour of wildlife habitat and wildlife management techniques such as: water level management, wetland restoration, grassland seedings, food plots, artificial nesting structures, nesting island, predator exclusion fence, and wildlife tree planting. The route is continuously open to the public for hiking, bicycling, or horseback riding, but is only open to vehicular traffic by special appointment.

Horseback riders using the James C. Gritman Demonstration Area and Auto Tour Route. 92-41 7/15/92 BLA

The tour route was dedicated to honor retired Regional Director Jim Gritman on August 20. Friends and family attended the dedication.

The trail was opened on April 22, July 10 and 11, and again on September 30 as special events for private vehicles. Traffic control signs were set up and a leaflet corresponding to numbered signs along the tour route were made available to the public to enhance their experience. The traffic control signs and numbered markers were made by the District maintenance staff or borrowed from the Minnesota Department of Transportation.

In addition to the self-guided tours, auto or bus tours are given to groups by appointment or as part of environmental education programs. During the past year tours were given to groups from the University of Minnesota-Morris and Morris area schools.

6. Interpretive Exhibits/Demonstrations

Displays were set up at a number of functions during the year. Some of these functions included local Ducks Unlimited banquet, Farm Progress Days, Earth Day, Morris High School Science Fair, and at Water Quality Workshops sponsored by the University of Minnesota-Morris Continuing Education Program.

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

The Morris Wetland office was one of the sponsors for the Natural History Series again this year. The series of environmental education programs is directed at the entire family, both young and old. An example of some of the programs presented last year include:

1. "The Bat Man of St. Cloud and His Friends" - Professor David Mork provided an up close look at bat life.

2. "Conserving Our Critters: Rehabilitation and Banding" - Marion and Gary Otnes shared experiences from rehabilitating injured wild animals and bird banding.

3. "Bird Watching Made Easy" - Tom Straw lead an early morning bird watching tour.

4. "Third Annual Walk on the Prairie" - Loretta Bates talked about purple loosestrife and eurasian milfoil. Bernie Angus and Margaret Kuchenreuther led the group in native prairie wildflower identification.

5. "Wings of the Wild" - Barb Walker gave a nose-to-beak encounter with different birds of prey while learning about their preservation and protection.

The Natural History Series is sponsored by the Morris Wetland Office, Stevens County Soil and Water Conservation District, University of Minnesota-Morris Division of Education, Morris Area Chamber of Commerce, Minnesota Department of Natural Resources, Advanced Hunter Education, University of Minnesota-Morris Division of Biology, U.S. Department of Agriculture Soil Research Service, Morris Area Community Education, Minnesota Extension Service, Girl Scouts, Pheasants Forever, and University of Minnesota Conferences.

A number of programs were presented to area youth and conservation groups by Morris District staff during the year. Some of the topics covered were: Waterfowl Production and Management, Wetland Restorations, Prairie Plant Identification and Management, Prescribed Burning, and Hunter Education.

Station films were provided to schools and other groups as requested. News releases were given to local papers.

8. Hunting

The diversity of WPA's in the Morris District offers different options to the hunter.

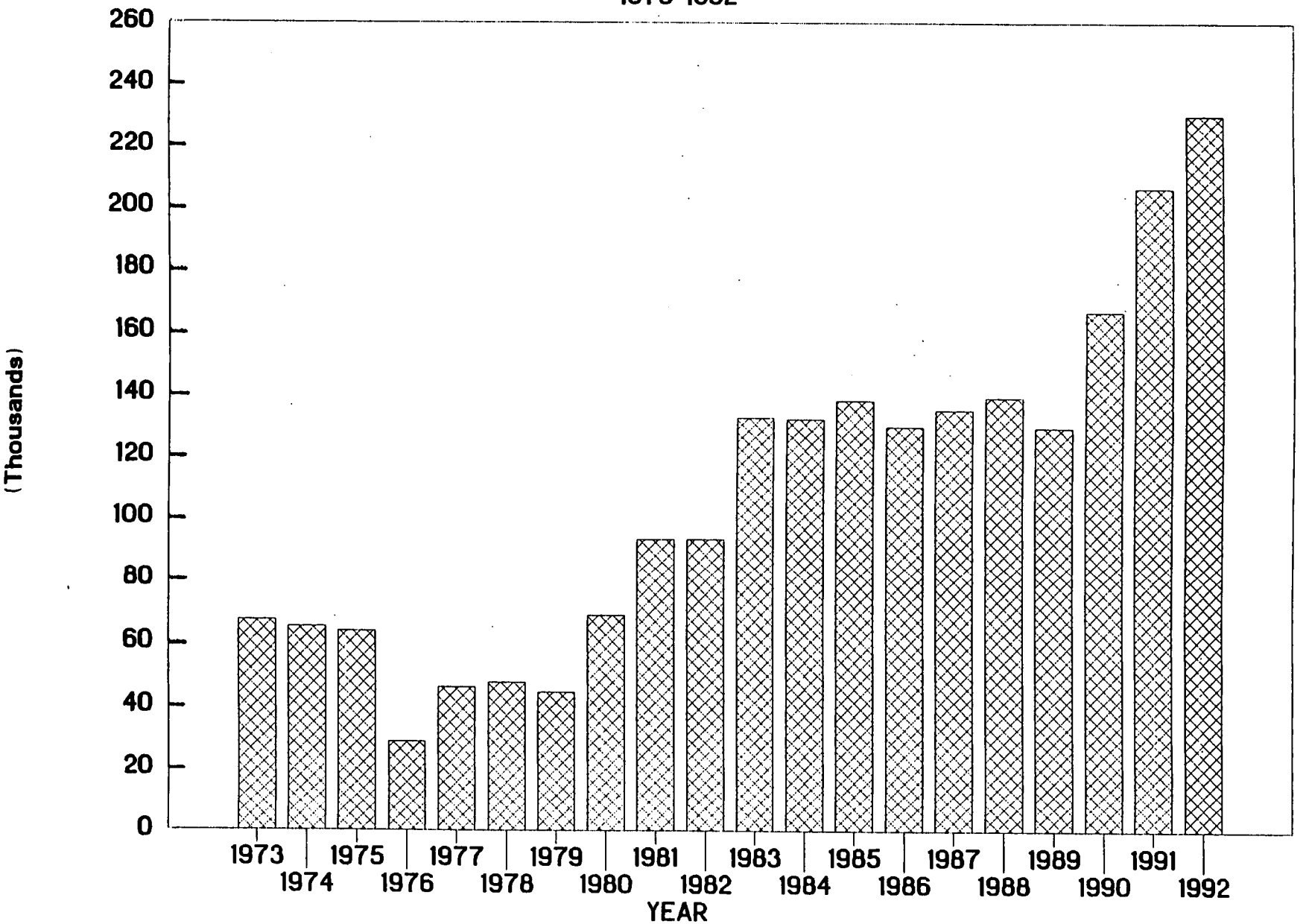
A significant decrease in pheasant populations throughout the District was recorded for 1992. August roadside counts were down an average of 62 percent throughout the District. Early hunting was poor due mostly to unharvested corn. Late season hunting improved as more corn was harvested.

Waterfowl hunting in general was fair to good over the District. The first two portions of the season (October 3-11 and October 15-November 1) had good mallard numbers with increasing diver numbers toward the end. The third portion of the season (November 6-8) saw many bodies of water frozen, limiting areas of accessibility. Local goose populations did very well and success was good.

Firearm and bow hunters registered 3,251 deer in the Morris area during the 1992 hunting season, up 22 percent from 1991. This makes three consecutive record seasons. Statewide, the 1992 firearms deer harvest totalled a record 230,000 deer, an increase of 11 percent from the previous record set last year, according to the Minnesota DNR. Due to delayed corn harvest in some areas of the state, deer kill was below harvest objectives. A four day extended season in parts of the state, including most of our District, allowed hunters a second chance to fill their tag. The extended season was successful and resulted in an additional harvest much closer to harvest objectives for those areas.

FIREARMS DEER HARVEST

1973-1992



9. Fishing

Although good fishing opportunities abound within the Morris Wetland District's seven county area, minimal fishing resources exist on the WPA's. Two units, Artichoke WPA (Big Stone County), and Heidebrink WPA (Pope County), offer the best fishing opportunities. Shoreline fishing along Artichoke Lake could result in northern pike, walleye, crappie, and blue-gill catches. During the spring months, northern pike can be found along a section of the Chippewa River that runs through Heidebrink WPA.

10. Trapping

The 1992 trapping season got off to an early start with fox opening September 19 and raccoon opening October 16. Even with the early opening, relatively few trappers began trapping before the end of October. This was primarily due to the condition of fur not being prime so early in the fall. The Morris area trapping was also hindered by the heavy snow we received in early November. However, according to one local fur buyer, the 1992 harvest was up from last year. Fur prices remained about the same as last year with the exception of mink decreasing in price by about $10, and beaver also decreasing slightly.

Just a short snooze while waiting for Mom to bring lunch.
92-42 5/26/92 BLA

The Minnesota Predator/Furbearer Scent Post Survey (Section D.5) showed a general increase in furbearers within our District. Within the last couple years we have also seen an increase in coyote in our area.

11. Wildlife Observation

As WPA's 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 observation of people "just driving by." Waterfowl, deer, pheasants, and a myriad of other wildlife are there.

Many bird watchers take advantage of the WPA's. Because of the lack of good habitat in the surrounding areas, migratory and resident birds tend to concentrate on the units 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 WPA's. 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 WPA.

17. Law Enforcement

Two people on the Morris staff have law enforcement credentials. This year, due to budget reductions, only officer Lewis was sent to training to maintain his enforcement authority. Most enforcement activities are associated with wetland drainage violations or resolving WPA problems. Citations are seldom used in resolving these problems but the training and the authority to arrest or cite an individual are essential assets in these contacts.

State Conservation Officers have primary responsibility for hunting season enforcement. We maintain good rapport with these State Officers and work cooperatively upon request and during waterfowl season.

The following cases, made cooperatively with Minnesota DNR Officer Mike Sheldon, were processed through state court.

Offence	No. Cases	Disposition
Allow dog to chase big game	1	Forfeit $75.
Unsigned (floating) waterfowl stamp	4	Forfeit $39. each
One bird over daily bag limit-waterfowl	1	*Forfeit $190.
Two birds over daily bag limit-waterfowl	1	*Forfeit $276.

*includes $50/duck restitution.

I. EQUIPMENT AND FACILITIES

1. New Construction

1991 Ducks Unlimited project on Artichoke WPA, Big Stone County. There was enough run-off this year to bring the water level up to the desired level.
92-43 7/14/92 BLA

Ditch plugs constructed in 1991 on Hillman WPA, Big Stone County. Wetlands were filled to spillway this year.
92-44 7/14/92 BLA

Fourteen ditch plugs were constructed on the Lindor tract (a 138 acre addition to Pieske WPA, Stevens County). These wetland restorations were paid for by Ducks Unlimited and will result in 27 acres of wetlands.

Farm Bill
There was a great amount of activity in this area which was reported earlier in this report (Section F.15).

2. Rehabilitation

Landscaping For Wildlife
The Morris District received "Watchable Wildlife" funds to initiate a "Landscaping For Wildlife" project around the headquarters building. After consulting with several experts and research, the area around the office building was landscaped with plant materials suitable for wildlife. The plant materials will provide food and cover during all four seasons. The landscaped area will serve as a living exhibit for the public of how they can use different plant materials to attract a variety of wildlife species to their yards. There will also be a pamphlet available for the public to go along with the visual display.

Site Clean-up
A trash dump on a new fee tract that was a roundout to Lawrence WPA in Traverse County, was cleaned up. All the tires, herbicide cans, and appliances were picked up and properly disposed of. The remaining items were buried on site.

Several staff members spent three days cleaning up trash from a building site on Spellman Lake WPA in Yellow Medicine County. The buildings will be advertised for sale in February, 1993.

3. Major Maintenance

Ford 7600 Tractor
Over $1,200 was spent on this tractor to replace the injector pump, service the injectors, and other service work.

Mott Interstater Mower
The mower required replacment of bearings, blade hangers and blades, and repair of the hydraulic oil radiator at a cost of over $1,500.

Pump
A replacement pump was installed on one of the 300 gallon slip-on fire units.

Airboats
During the waterfowl die-off on Mud Lake (Section G.17), the station borrowed three airboats. The plastic bottom on Sherburne NWR's boat was torn. A small plastic replacement section was purchased and installed. The airboat from Sand Lake NWR had a piston let loose from the rod. The repair of this airboat cost $2,120.

The airboat borrowed from Sherburne NWR with a tear in the plastic covering the bottom of the hull. The area of the tear was cut out and a new piece of plastic rivited onto the hull. 92-45 8/24/92 BLA

4. Equipment Utilization and Replacement

Vehicles - Pickups
Two Dodge Dakota pickups were received this past summer. These were ordered in FY91. Two additional replacement pickups were ordered this year and will be received sometime during 1993.

Vehicles - Semi-Tractor and Trailer
A new Ford semi-tractor and a Trail King trailer with hydraulic tail were received this summer. This equipment was needed so the station could safely transport the D-6 cat to various work sites in this District and sometimes to work sites in other Districts.

Boom Sprayer
The station's pump sprayer was replaced this summer with Maintenance Management System (MMS) funds. The new sprayer is the same size as the old 52 foot boom with a 300 gallon tank. The new booms are heavy duty and hopefully will not snap as easily as the old ones did (twice just before the trade-in).

Fire Funds

Four major items were purchased with fire funds in 1992. A trailer was purchased to move the track truck around the District. Also purchased was a small pumper to be mounted on the track truck for fire control. A 6 x 6 Polaris ATV was purchased and a small tank and pump were mounted on the rear for use in the control of fires. A weather station was also purchased and will provide a readout of wind direction and speed.

New trailer and pumper on track truck purchased with fire funds this year. 92-46 5/28/92 BLA

5. Communications Systems

There were no major breakdowns this past year with the radio system. We did need to have three service calls during the year for minor problems. The Motorola equipment purchased in 1983 has continued to perform very well for this District's needs. We have good communication ability when work sites are up to 50 miles from the office.

6. Computer Systems

At this station we have two independent IBM P.C. Model 60 computer systems. We continue to add programs that help save time for us and for Regional Office personnel.

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 since the day we moved in.

J. OTHER ITEMS

3. Items of Interest

REVENUE SHARING PAYMENTS - MORRIS WMD

County	FY90	FY91	FY92
Big Stone	$23,921	$22,901	$
Lac Qui Parle	5,679	5,437	
Pope	25,900	24,819	
Stevens	25,859	24,757	
Swift	23,426	25,978	
Traverse	8,885	9,675	
Yellow Medicine	1,028	984	
Total	**$114,698**	**$114,551**	

*Payments for 1992 have not been received at this time.

Revenue sharing payments are important to our acquisition program. The county commissioners are always interested in the percentage of the calculated annual payment their counties receive. The reduced payments are now causing the slowdown of acquisition in several counties in Minnesota. Big Stone, Swift, and Pope Counties will probably not certify additional fee tracts until 100 percent payments are received.

Public Participaton

The staff participated in the Minnesota Roadside Cleanup effort. The fun was the picnic after the work was completed.

92-47 5/27/92 BLA

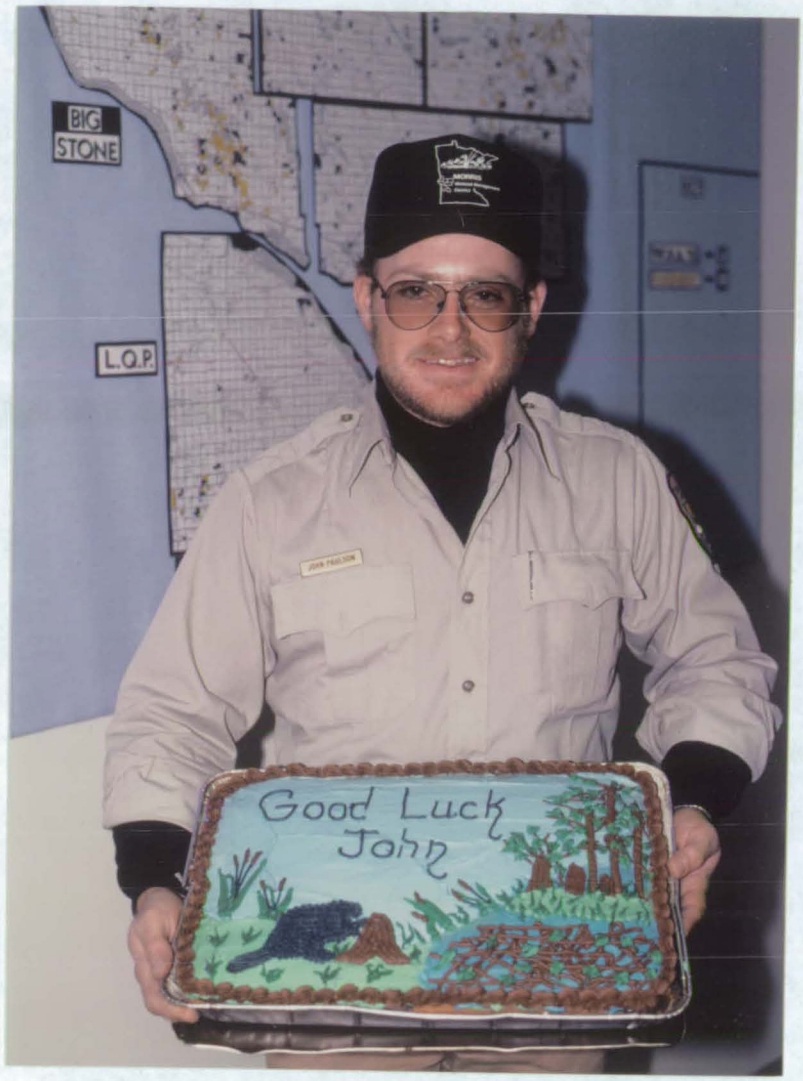
The James C. Gritman Demonstration Area and Auto Tour Route, a two and one-half mile auto tour route through a wetland demonstration area, was dedicated to honor retired Regional Director Jim Gritman. A ceremony was held on Thursday, August 20. Sam Marler, Regional Director of Region 3, was keynote speaker. The ceremony concluded with the unveiling of a cairn dedicated to James C. Gritman.

Former Regional Director Gritman was honored at the August 20 dedication of the James C. Gritman Demonstration Area and Auto Tour Route. 92-48 8/20/92 BLA

The area demonstrates the values of wetlands, shows the tools and techniques used in wetland restoration projects, and also wildlife management practices available to private landowners.

Employment at the Morris WMD brought Debra Kimbrell and Alan Anderson together and they left us for Region 5 as husband and wife. 92-49 1/21/92 BLA

Gwyn Goodwin, Office Clerk, left her career with the Fish and Wildlife Service to seek employment in the private sector.
92-50 2/10/92 BLA



Biological Technician John Paulson's stay was much too short as he decided to heed the "Call of the South."
92-51 11/18/92 BLA

4. Credits

The following staff members contributed to this report.

Angus:	B, F (1-12) and editing.
Bober:	E (1-6), I, and J (1-2).
Raitz:	E (7), G (8-17), H (1-16).
Lewis:	F (13, 15) and H (17).
Radtke:	A, C, J (3-4) and K.
Haugen:	F 15.
Rieckmann:	D, G (1-7).
Stettner:	I (6), all typing and assembly of report.

THE END!!