

VALLEY CITY WETLAND MANAGEMENT DISTRICT  
VALLEY CITY, NORTH DAKOTA

ANNUAL NARRATIVE REPORT  
CALENDAR YEAR 1994

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

VALLEY CITY WETLAND MANAGEMENT DISTRICT

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ANNUAL NARRATIVE REPORT

CALENDAR YEAR 1994

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

Review and Approvals

Harris Hoistad 2-12-96

Submitted by: \_\_\_\_\_ Date  
Harris Hoistad, Wetland Mgr.  
Valley City WMD

Ken Shugart 2/16/96

Refuge Supv. Review \_\_\_\_\_ Date

[Signature] 2/20/96

Regional Office Approval \_\_\_\_\_ Date

## INTRODUCTION

The Valley City Wetland Management District (WMD) is located in east-central North Dakota and includes Cass, Traill, Barnes, Griggs, and Steele counties. The District is operated as a substation of the Arrowwood National Wildlife Refuge Complex at Pingree.

There are 82 Waterfowl Production Areas (WPAs) totaling 16,897.67 acres, 40,980 acres of wetlands protected by FWS easement, four easement refuges totaling 5,502 acres, 1373 acres of which are owned in fee by the FWS, and 12,620 acres protected by FmHA Conservation Easements. WPA acreage is roughly one-third wetland and two-thirds upland, with the bulk of the upland comprised of DNC, native prairie, and seeded native grass.

The eastern one-third of the District is located in the Red River Valley. This area, characterized by flat, intensively farmed land was once the lake bed of Glacial Lake Agassiz. The remaining two-thirds of the District is in a part of the glaciated prairie pothole region known as the drift prairie. The area is characterized by an ever so gently and smooth rolling topography with numerous wetlands ranging from under an acre to several hundred acres.

Land use throughout the District is primarily agriculture with small grains such as wheat, barley and sunflowers being the main crops. The meandering and wooded Sheyenne River Valley, with its numerous draws and pastures, offers a welcome contrast and visual relief from the intensively farmed land throughout the District. Besides visual relief, the valley provides habitat for a variety of non-prairie wildlife such as wood ducks, tree squirrels, beavers, and a multitude of woodland passerines.

The headquarters of the WMD is located at the Valley City National Fish Hatchery two miles northwest of Valley City along the Sheyenne River. Office space, shop facilities and some equipment are shared between both entities, while the office assistant divides her time between hatchery and WMD affairs. This setup has worked very well and provides the WMD with necessary facilities at an acceptable cost to the FWS.





2

3

1

#### Personnel

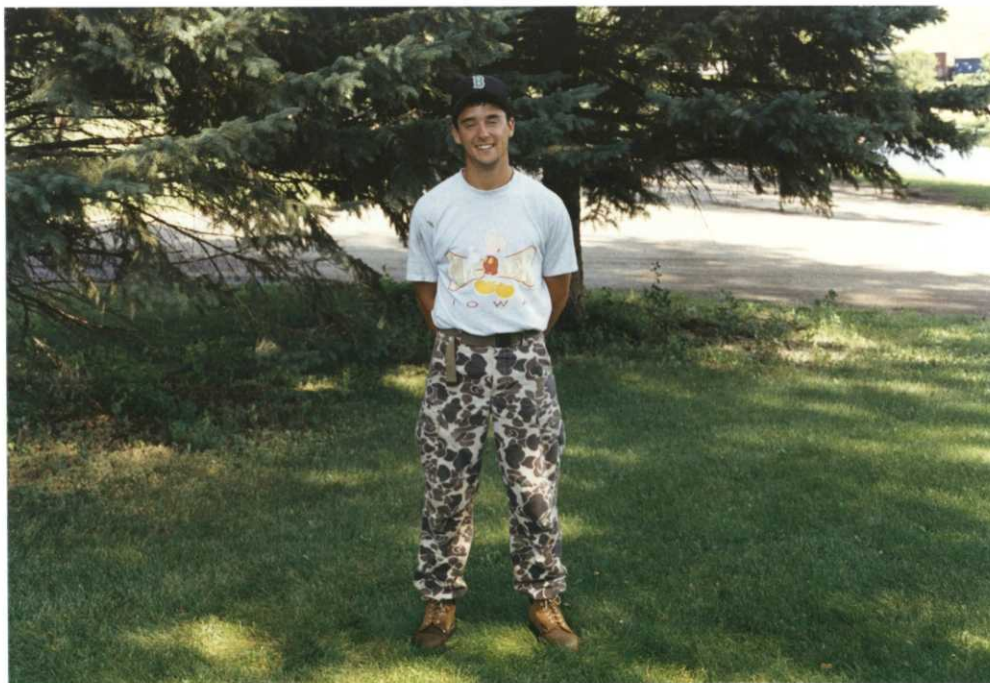
1. Harris J. Hoistad, Wetland Manager, GS-11 PFT
2. Lee B. Albright, Biological Technician, GS-7 PFT
3. Renee D. Stangeland, Office Assistant, GS-6 PFT
4. Todd King, Bio. Aid., GS-4, 4/94-10/94
5. Doug Leier, Bio. Aid., GS-3 5/94-9/94
6. Bret Abner, Volunteer, 6/94-9/94
7. Brent Bultema, NDSYETP, 6/94-8/94
8. Kevin Zaun, NDSYETP, 6/94-9/94

TEMPORARY STAFF 1994



Doug Leier

Photo by LBA



Bret Abner

Photo by LBA



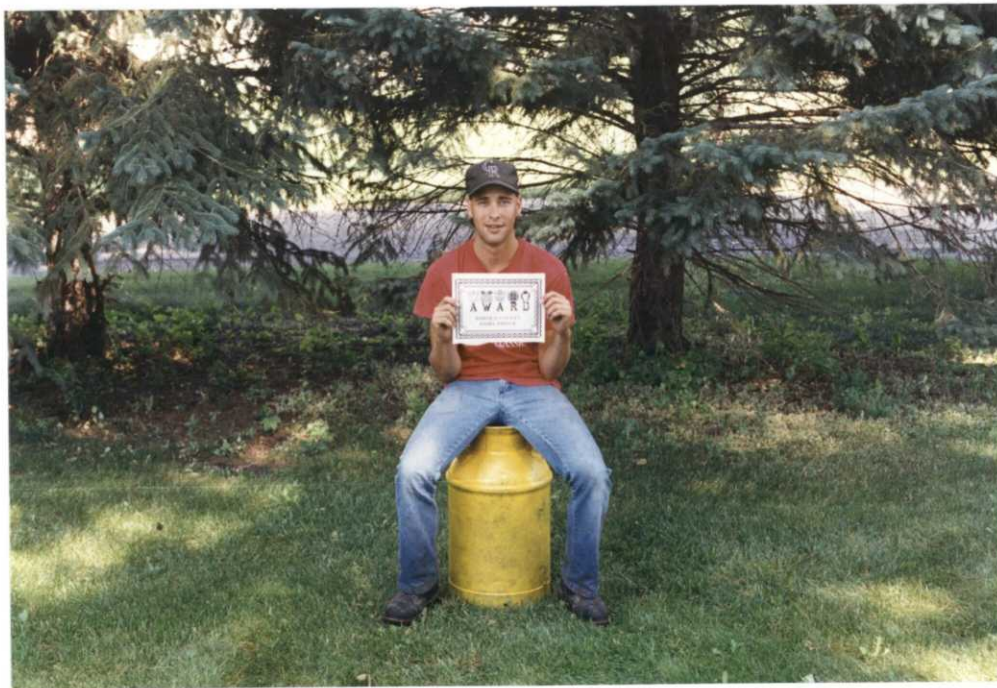
NDSYETP PERSONNEL 1994



Brent Bultema

Photo by LBA

Brent and Kevin were presented with various awards commemorating their employment with the FWS. Their awards were related to some humorous events that occurred on the job.



Kevin Zaun

Photo by LBA

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## A. HIGHLIGHTS

High water levels continued throughout the WMD.

The Food Security Act continues to be a major focus of staff time.

Breeding waterfowl numbers increase as a result of the excellent water conditions.

"Team Management" comes to the Arrowwood Complex.

## B. CLIMATIC CONDITIONS

Weather records are kept at the National Fish Hatchery in Valley City.

Total precipitation in 1994 was 23.73 inches, 4.55 inches above normal. Winter snowfall amounts were average. The largest 24 hour accumulation was 2.51 inches. Total snowfall from January to April was 32.75 inches.

Most wetlands in the District were in good shape as a result of the heavy rains received in the summer and fall of 1994.

In July, 7.66 inches of rain led the way for what proved to be, a very wet summer. District wide, seasonal and semi-permanent marshes were full or flooded by fall.

Winter temperatures ran below normal with below zero readings occurring as late as mid March. The coldest temperature of the year was -42 on January 16.

## C. LAND ACQUISITION

### 1. Fee Title

There were no tracts acquired in fee title.

### 2. Easements

Only a few tracts were considered for possible easement acquisition. They did not contain suitable wetland habitat to qualify however.

## D. PLANNING

### 2. Management Plans

Eight prescribed burn plans were submitted and approved by the Regional Office Fire Coordinator.

## E. ADMINISTRATION

### 1. Personnel

A comparison of District staffing the past five years is shown below. Our FTE 's have increased very slightly thanks to an MMS funding



package. The increase in FTE's from the MMS funding are for temporary positions only. No permanent salaries are paid with MMS funds. Management responsibilities and new initiatives continue to outpace funding and people.

	<u>Permanent</u>		<u>Temporary</u>	<u>Total</u>
	<u>Full-Time</u>	<u>Part-Time</u>		<u>FTE</u>
FY 94	2	1	4	3.54
FY 93	2	1	2	3.46
FY 92	2	1	1	2.79
FY 91	2	1	2	2.65
FY 90	3	1	4	2.48

## 2. Self-Directed Work Team

In April, Complex Manager Darold Walls took the retirement buy-out option and left the Service. At that time, the first ever (for Refuges), Team Management system was put in place for the Arrowwood NWR Complex. All staff members were introduced to the Team concept through a series of training sessions and staff meetings. The new approach to doing business in the Complex was well received by the staff and the process was working fairly well at years end.

## 3. Other Personnel Programs

The following training sessions were attended during the year.

<u>Training</u>	<u>Place</u>	<u>Hours</u>	<u>Staff</u>
Law Enforcement Refresher	Marana	40	Hoistad, Albright
Pumps and Engines	Carrington	40	Albright, King
Firearms Requalification	Aberdeen	16	Hoistad, Albright
Team Management Sessions	Jamestown	16	Hoistad, Albright

Although not formal training, staff attended the North Dakota Chapter of the Wildlife Society Annual Conference in 1994.

## 4. Volunteers

We were able to secure the services of one volunteer during the summer. Bret "Lil" Abner was paid a food subsistence and travel costs in exchange for many valuable hours of hard work. His assistance was greatly appreciated in several fence construction projects and replacing signs throughout the District. A total of 225 volunteer hours were logged in 1994. The majority of the volunteer hours were spent on our WPA signing project.

## 5. Funding

Valley City WMD prepares an annual work plan each year, but overall funding is part of the Arrowwood Complex. The maintenance and operations budget of the complex for the past five years is shown below. A more specific breakdown of funding can be found in the Arrowwood narrative report. The increases in FY 93 and 94 are from the 9100 fire funding.

FY94 - \$920,200  
 FY93 - \$886,200  
 FY92 - \$801,000  
 FY91 - \$804,100  
 FY90 - \$834,100

The Valley City WMD operates at minimal expense because of the facilities shared with the Valley City National Fish Hatchery.

## 6. Safety.

There were no lost time accidents during the year.

The following safety films were shown during the year: Noise, The Invisible Barrier, When Teenagers Drive, Safety is Your Responsibility, Radon in Perspective.

## 7. Technical Assistance

The District staff maintains an open line of communication with county ASCS, SCS and FMHA offices regarding 1990 farmbill policy and issues. The high amounts of rainfall received beginning in summer 1993 and continuing into 1994 created a very heavy technical assistance workload. Flooded roads, farmsteads, basements and cropland became the sole focus of both permanent staff members. The time required for this type of work left little available for normal FWS management activities. All of the flooding caused the tension to rise higher than the water levels. In all cases we were willing to allow drainage to take place if it involved a threat to health or safety. Many temporary drainage permits were issued for easement wetlands. In most cases, the reason the draining was not accomplished was because the downstream landowner did not want any more water. Our attendance at Water Resource Board meetings became a common event. Many contacts were made to the Congressional staff as a result of water problems. WMD staff attended two public meetings hosted by Senator Conrad, Senator Dorgan and Representative Pomeroy.

## Minimal Effects Agreements

District staff assisted local Soil Conservation Service offices in completing 32 minimal effect agreements. Based on the amount of time spent on farmbill work, having 32 signed and completed agreements doesn't look like much. We did not keep track of the number of projects we reviewed that were not completed.

## F. HABITAT MANAGEMENT

### 1. General

Roughly two-thirds of the 82 WPA's in the Valley City WMD are upland, most often former cropland seeded to grass upon purchase. Upland management goals include preservation and enhancement of any native prairie, and creation and maintenance of vigorous stands of a variety of vegetative cover types for waterfowl and other ground nesting birds.



Flooded farm fields led to increased drain "improvements" across the WMD. This photo shows the Maple River in northeast Cass County. A lovely stretch of riparian habitat. HJH

Wetland management seeks to maintain or improve the waterfowl attraction of WPA wetlands. Siltation, nutrient runoff from private land and natural succession have made many WPA wetlands unproductive due to monotypic stands of vegetation, mainly cattail. Wetland management practices seek to restore marshes to a more productive 50-50 ratio of open water to emergent vegetation. However, such management is costly, and therefore limited without help from private organizations like Ducks Unlimited and area sportspersons clubs.

## 2. Wetlands

Burning, haying, and grazing of wetlands was not practical in 1994 as a result of high water conditions throughout the District. The high water levels were beneficial in magnifying the effectiveness and results of the treatments made to several wetlands using Rodeo herbicide in 1992. These severely choked wetlands were transformed into open water marshes over the course of just one year. They are now less attractive to blackbirds as roosts and once again more attractive to waterfowl. The high water levels experienced across the District created exceptional marsh conditions. Wetlands that were refilled soon began providing rich food supplies for migrating birds. It was a welcome sight to see water back in the prairie potholes once again.



#### 4. Croplands

Farming is done primarily to prepare ground for seeding of native grasses or dense nesting cover (DNC). Agreements generally last three to four years with the cooperator's payment being a share of the crop. The District's share is used for resident wildlife feeders, left standing as food plots, or put up in bales for distribution to WPA's holding deer and upland game birds through the winter.

In 1994, 18 cooperative farming agreements were in effect. Total acreage farmed was 926\* acres.

\* Includes 269 acres seeded back to DNC.

<u>WPA</u>	<u>COUNTY</u>	<u>Acres</u>
Evers	Griggs	72
Goose Lake	Barnes	42
Knudtson	Barnes	35
Stoney Slough	Barnes	85
Goose Lake	Steele	24
Streich	Cass	22
Hagglund	Barnes	27
Ernie	Barnes	30
Peterson	Barnes	83
Alice	Cass	80
Thompson	Traill	57
Thykeson	Steele	97
Tvedt	Barnes	22
Fullers Lake	Steele	150
Rogers	Steele	65
Erickson	Traill	35

#### Grasslands

##### a) Seeding

Most WPA's in the Valley City WMD were purchased 15-20 years ago. Original seedings of legumes and grasses have since lost their density and vigor, requiring reseeding. A variety of mixtures are used. In the past, native grasses have dominated due to seed availability and low cost. Now with the mandatory decrease in chemical usage, seeding natives has become less desirable because they are difficult to establish without using chemicals.

Pure stands of alfalfa are planted on certain sites as are mixtures of legumes and tame grasses. These types of grasses are shorter lived, but they are much easier to establish and less likely to result in a noxious weed problem that we then have to contend with at a later time.

Farming cooperators interseeded a DNC grass mixture with small grains on 269 acres of cropland in 1994.

<u>WPA</u>	<u>COUNTY</u>	<u>ACRES</u>
Stoney Slough	Barnes	25
Knudtson	Barnes	35
Alice	Cass	45
Tvedt	Barnes	22
Evers	Griggs	32
Rogers	Steele	20
Thykeson	Steele	25
Fuller's Lake	Steele	20
Goose Lake	Barnes	45

## 7. Grazing

Grazing is used to manage uplands and wetlands on WPA's and refuges in order to rejuvenate decadent stands of grassland and to create open water areas in cattail choked wetlands. There were no permits issued for grazing wetlands in 1994, as high water levels have returned throughout the District. A cooperator on the Blikre WPA constructed cross fencing on this unit in the Spring of 1993 and a rotation grazing system was implemented as per a five year agreement.

The 400 acre leafy spurge grazing project on the Shaw WPA in Steele County was initiated in late summer. By the time the fencing was completed, much of the spurge was too rank for any good control. Our cooperator also needed some prodding to get his animals into the WPA so our results were less than spectacular. We are hopeful that 1995 will be much better.

## 8. Haying

Three hundred and one acres of WPA and refuge grasslands were hayed in 1994 as compared to 160 acres in 1993. The majority of these acres were hayed for grassland rejuvenation. Haying was delayed until after July 15th.

<u>WPA</u>	<u>COUNTY</u>	<u>ACRES</u>
Leegard	Barnes	15
Leegard	Barnes	15
Stoney Slough	Barnes	20
Stoney Slough	Barnes	20
Knudtson	Barnes	20
Knudtson	Barnes	20
Wogsland	Griggs	18
Wogsland	Griggs	18
Wigen	Steele	32
Knudtson	Barnes	20
Stoney Slough	Barnes	20
Dassenko	Barnes	21
Evers	Griggs	30
Stoney Slough	Barnes	32

Roadside mowing on isolated WPA's was completed by farmers under provisions of their cooperative farming agreements. All remaining WPA tracts were mowed force account.

## 9. Fire Management

Conditions for prescribed burning were good in 1994. The Valley City District again benefited from the three person Arrowwood Complex fire crew. The crew is supervised by Fire Management Officer Dan Dearborn, stationed at Arrowwood. The crew's time is divided between Arrowwood Refuge and the three wetland districts within the complex. Three prescribed burns were conducted in the Valley City District this year that totalled 363 acres. No wildfires were reported in 1994.

<u>WPA</u>	<u>COUNTY</u>	<u>ACRES</u>
Thompson	Traill	163
Erickson	Traill	80
Elken	Traill	120

## 10. Pest Control

All weed spraying conducted in 1994 was done force account. Seventy-two acres of Canada thistle and 733.5 acres of leafy spurge were sprayed force account, compared to 60 acres of Canada thistle and 554 acres of leafy spurge in 1993. Eight hundred and five total pounds of active ingredient of 2,4-D were applied in 1994 compared to 614 pounds in 1993. There was no Tordon applied in 1994.



Weed spraying proved to be a challenge during summer 1994. HJH





"Abandon Ship", get the rope. HJH

There were two releases of insects in the Valley City District in 1994. Approximately 500 Aphthona nigriscutis were released on the Dronen WPA in Steele County and 500 were released on the Kemmer WPA in Cass county.

### 13. Wetland Easement Monitoring

Valley City administers 652 perpetual easement contracts protecting 40,980 acres of wetlands. For ease of reporting, the WMD's FmHA Conservation Easements will be summarized here also. Currently there are 25 contracts covering approximately 12,620 acres managed through this office. The enforcement of the wetland buffer strips is the most difficult task associated with these contracts. Enforcement of the FmHA and wetland easement contracts is a time consuming task.

#### Easement Violations Closed in 1994

Drainage	5
Fill	3
Burn	1
FmHA	4
Total	13

There were three violations carried into 1995. In addition to these violations, there were 17 burn permits issued for the District.

#### 14. Habitat Management - Partners for Wildlife Private Lands Initiative

In 1994 only one private lands project was evaluated by the Valley City WMD staff. This project involved an oxbow restoration on the Red River south of Fargo. The project was forwarded to the Private Lands Technician at the Chase Lake Project. All other potential projects were also sent over to the Chase Lake Office.

#### Nesting Structures

The District continued to give out Canada goose nesting baskets during 1994. Eight goose baskets were distributed.

Four wood duck boxes were given away during spring 1994.

Survey cards are mailed to each cooperator every winter. Responses indicate that the structures are generally successful.



The Cass County Wildlife Club purchased and installed 200 Delta Waterfowl Foundation hen houses. This one was successfully used. HJH

### G. WILDLIFE

#### 1. Wildlife Diversity

While WPA's are purchased with Duck Stamp funds, they are managed with wildlife diversity as our main goal, because they receive use by a wide variety of other game and non-game species. The development of standing food plots as part of the DNC rotation combined with the availability of unharvested grain and bales on WPA's has greatly increased use of WPA's

by resident species such as ring-necked pheasants, gray partridge, and white-tailed deer, particularly during the winter months when food becomes scarce. This food source, along with excellent cover provided by cattail marshes and healthy grass stands, makes very attractive habitat for these species. While management objectives do not dictate this attention given to resident wildlife, it is achieved without deviation from migratory bird management considerations and is important in public receptiveness of FWS programs.

## 2. Endangered and/or Threatened Species

Bald eagles are occasionally observed in the District during the spring and fall migration periods. Almost all sightings are along the Sheyenne River, usually near the Baldhill Dam seven miles northwest of WMD headquarters.

## 3. Waterfowl

### a) Ducks

#### Four-Square Mile Pair Counts

The four-square-mile pair count is a survey designed to get more realistic and accurate production figures on all lands within a wetland district. The survey was developed by staff at Northern Prairie Wildlife Research Center, who also analyze the count data using the Mallard Management Model. This model uses a variety of production factors gleaned from years of nest, hen, and brood success data.

The District currently surveys 19 four-square-mile plots to determine breeding population and duck production estimates. All plots and wetlands were chosen by random sampling. A total of 200 basins were surveyed in the 19 plots. In 1994, personnel changes in the HAPET Office delayed the final tabulation of the survey results. At this time the final results had not been distributed to the field stations. Excellent pond conditions during the survey would lead us to conclude that breeding pairs and production estimates would both be up from prior years.

#### Island Management

##### Natural Islands

For the tenth year nest searching was conducted on natural islands in the District. Two islands were searched in 1994, Island Lake, southwest of Eckelson, and Karnac Island on Lake Ashtabula.

	<u># Successful/# Nests Located/Apparent Success</u>		
Karnac Island 9.2 Acres	39	39	100%
Island Lake 1.6 Acres	13	23	59%
Total	52	62	84%

Predator control on natural islands was again conducted by Jim Larson and paid for through the extension program. Trapping at Karnac Island concluded with three animals taken. Island Lake was trapped and one animal was taken. Twenty-three animals were trapped on the 285 acre Baldhill Creek Peninsula. Following is a summary of animals trapped in 1994.

#### 1994 EXTENSION TRAPPING COMPARISON

	<u>Karnac Island</u>	<u>Island Lake</u>	<u>Baldhill Creek</u>
Skunk	0	0	2
Raccoon	1	1	16
Mink	2	0	0
Fox	0	0	0
Ground Squirrel	0	0	5
Others	0	0	0
Total	3	1	23

#### Manmade Islands

In 1994 two islands were searched on the Utke WPA and the island on Kemmer WPA and Sibley Lake easement refuge were searched.

	<u># Successful/# Nests Located/Apparent Success</u>		
Sibley island	46	50	92
Utke	14	14	100
Kemmer	15	16	94

#### Nest Dragging

The predator exclosure fence on the Alice WPA was energized in April. There were some modifications required to get it operational. High water levels caused some problems. This was the second year that nest data was obtained from within the fenced area. The results were as follows.

#### ALICE WPA PREDATOR EXCLOSURE 1994 NEST SEARCH RESULTS

#### UPLAND NESTS

There are approximately 430 upland acres available for nesting inside the fence area. In 1994, 150 acres were searched. This equals 35% of the upland acres. Two searches were made and 19 nests were found.

<u>SPECIES</u>	<u>#NESTS</u>	<u>#SUCCESSFUL</u>	<u>#PREDATED</u>	<u>#ABANDONED</u>	<u>#OTHER</u>
MALLARD	0	0	0	0	0
BW TEAL	11	9	1	1	0
GADWALL	0	0	0	0	0
SHOVELLER	2	1	0	1	0
PINTAIL	6	3	3	0	0
TOTALS	19	13	4	2	0
APPARENT SUCCESS	68% (13 OF 19)				



## ISLAND NESTS

Ten of the small islands and one 18 acre island inside the fence area were searched in 1994. Eighty-one total nests were found during the searches.

<u>SPECIES</u>	<u>#NESTS</u>	<u>#SUCCESSFUL</u>	<u>#PREDATED</u>	<u>#ABANDONED</u>	<u>#OTHER</u>
MALLARD	64	50	10	4	0
BW TEAL	7	5	2	0	0
GADWALL	1	0	0	1	0
PINTAIL	8	8	0	0	0
SHOVELER	1	1	0	0	0
TOTALS	81	64	12	5	0

APPARENT SUCCESS 79% (64 OF 81)

OVERALL AVERAGE SUCCESS IN 1994 77% (77 OF 100)

Ducks - Miscellaneous

There are 40 wood duck boxes placed at various locations around the hatchery grounds. In 1994, 16 of the 40 boxes (40%) were used producing 185 ducklings.

## c) Headquarters Waterfowl Flock

A total of 24 structures were available for use in 1994 as well as the natural island approximately one mile downstream of the headquarters. Thirteen of the 24 structures were used by Canada geese, with all 13 successfully hatching a brood. On June 20, 50 goslings were captured and banded. All of the birds were released back on the hatchery grounds.

## d) Swans and Coots

Tundra swans are a common sight during spring and fall migrations. Peak populations were estimated at 1,000 and 22,000 birds respectively. The large alkali lakes west of Valley City and the Kemmer WPA receive the highest concentrations of swans within the District.

## 4. Marsh and Water Birds

Great-blue herons and black-crowned night herons are frequently observed on WPA's during summer field work, but no good population estimates exist. White pelicans are also fairly common in the western portion of the WMD. Most are believed to be from the Chase Lake NWR flock located 70 miles west of Valley City.

## 5. Shorebirds, Gulls, Terns and Allied Species

Greater and lesser yellow legs, avocets, willets, killdeer, and sandpipers are the most common shorebirds in the District. Ring-billed

and Franklin's gulls are the most common gulls. These and other species nest here, but no surveys are currently conducted.

## 6. Raptors

Common nesting raptors include redtail hawks, Northern Harrier's, Swainson's hawks, kestrels, and great-horned owls. Shelterbelts serve as good nesting sites and the wooded valley of the Sheyenne River also provides important habitat. Snowy owls are occasionally sighted during the winter months.

## 7. Other Migratory Birds

Two mourning dove coo counts were conducted the end of May. The Cass County route was down 31 percent from last year (27 individual doves heard). The Barnes County route was down about 19 percent from 1993 (51 individual doves heard). This information is compiled and used by the Office of Migratory Bird Management in Laurel, Maryland in determining nationwide breeding status. Dove hunting remains a popular early fall sport. Although the season runs until October 30th, cold weather generally pushes the majority of the birds out of the state by early October.

In 1994 a Neotropical Bird Survey was initiated on the Alice WPA. With the assistance of Jean Legge the area search survey was conducted three times during the nesting season. A total of 22 species were recorded. Most common observations included common grackles, marsh wren, chipping sparrow, blackbirds, vesper sparrow and swallow species. No unusual sightings were noted.

## 8. Game Mammals

White-tailed deer numbers were still much above average. A good harvest of white-tailed deer was achieved.

The results from individual units indicate that the District had hunter success rates of around 85%, comparable to the state average.

The Barnes County Wildlife Club held their 11th Annual Big Buck Contest for Barnes County residents after the 1994 deer gun season. The WMD and fish hatchery staffs assisted in scoring using the Boone and Crockett guidelines. The contest included three top prizes in the regular division and one prize in the junior division (hunters under 18). The top three racks scored 144 4/8, 140 6/8, and 138 5/8 respectively. The junior division winner scored 125 5/8. Fifty-one heads were scored.

District and hatchery staff also served as official scorers for the 7th Annual Griggs County Big Buck Contest sponsored by the Hannaford Wildlife Club. Thirteen heads were scored. The three top scores were 134 4/8, 123 7/8, and 123 7/8 under Boone and Crockett scoring criteria.

Moose have become a common occurrence throughout the District. Parts of the District are included in the ND Game & Fish Department state season. Hunter success is usually in the 80-90% range.

Coyote numbers continue to increase. Sightings of coyote have become quite common throughout the entire WMD.

Beaver populations remain high. They are concentrated along the Sheyenne River, its tributaries, various coulee systems, and deeper ditches. The high water levels have allowed new colonies to become established in many areas.

Other common furbearers include raccoon, skunk, mink and badger.

#### 10. Other Resident Wildlife

Ring-necked pheasants and gray partridge have decreased throughout the District due to very harsh winters. Many birds succumbed to the elements.

Sharptailed grouse occur on many WPA's throughout the WMD.

Food plots and grain bales are maintained on selected WPA's throughout the WMD. Several local wildlife clubs and private landowners participated in these wildlife feeding programs. Millet and wheat bales were hauled to the hatchery grounds and provided to local landowners who were interested in feeding upland game birds in the vicinity of their farmsteads.

#### 16. Marking and Banding

On June 20, 50 Canada geese from the hatchery flock were banded.

### H. PUBLIC USE

#### 1. General

Public use on Waterfowl Production Areas is generally geared towards the hunting of waterfowl, deer, pheasant and fox, and the trapping of furbearers such as mink, muskrat, raccoon and fox. Wildlife observation is an important but moderate use, occurring most in the spring during the waterfowl migration.

In the intensely farmed agricultural land of eastern North Dakota, WPA's provide the few, and sometimes only, natural places where the public can at least get a feeling of the original prairie pothole country.

Public relations goals in the District are threefold: 1) keep the public informed of FWS programs, 2) develop good rapport and working relationships with various private groups and public entities which affect natural resources, and 3) educate the public on the values of sound resource management, particularly the preservation of wetlands, soil and the wildlife that depends on them.

In 1994, several news releases were issued. Topics included waterfowl ID workshop, waterfowl nesting structure availability, WPA hunting regulations and the opening of Sibley Lake Refuge to deer hunting.



The items from our  
Cargo for Conservation  
Kits were very  
popular attractions  
for ND Winter Show  
visitors.

HJH



The following is a list of the meetings attended or groups worked with during 1994:

- Congressional meetings and tours relating to water issues
- Cass County Soil and Water Conservation District
- Barnes County Water Resource District
- Griggs County Water Resource District
- County Commissioners
- Township Boards
- County Soil Conservation Service
- County Agricultural Stabilization Conservation Service
- County ASCS Committees
- County FmHA
- Hannaford Wildlife Club
- Barnes County Wildlife Federation
- Cass County Wildlife Club
- Dakota Wildlife Trust
- ND Game and Fish Department Advisory Meeting
- Corps of Engineers
- Lake Ashtabula, Users and Landowners Association
- Red River Valley Water Resources Council
- District Weed Control Association
- County Weed Boards
- Ducks Unlimited
- ND State Highway Department

## 2. Outdoor Classrooms-Students

For the past six years the Barnes County Soil Conservation District has hosted an Ecological Education Camp. All the sixth grade students in Barnes County attend this two-day camp. In 1994, the FWS participated in the camp and used some of the natural setting around the camp to point out a variety of reasons why natural resource protection is important.

## 6. Interpretive Exhibits/Demonstrations

A combination wetland district-fisheries exhibit was set up at the North Dakota Winter Show in March. A display about the FWS mission was obtained from the Regional Office. A touch table of wildlife parts, video of fish spawning techniques and an aquarium were popular among the passers by. The event was also used to promote the Wildlife Extension Program.

## 7. Other Interpretive Programs

Presentations were made as a part of the Finley-Sharon High School Environmental Awareness Day and also at the Career Day for the Barnes County Schools.



Bio-tech Albright gave this group of University of Missouri students a tour of several WPA's. LBA



Nancy Pope from the University of Minnesota Raptor Rehab Center held everyone's attention with the live birds she used during her show. HJH

## 8. Hunting

Hunting within the District focuses mainly on waterfowl, pheasant and white-tailed deer. Opening weekend of waterfowl season saw hunters scattered District wide. Flooded farm fields created very attractive marsh conditions for migrating birds. Groups of hunters were scattered across WPA's in Barnes and Griggs counties. Goose numbers remained low all season long and this contributed to the lack of interest among hunters.

Deer numbers continue to increase even after two years of excellent harvests and hunter success. Hunter success averaged about 85 percent within the District.

Pheasant hunters used several WPA's where stocking has occurred for the past several years. Opening day of the season saw very few hunters take to the fields. Hunter success varied depending on the location, but was generally poor District wide.

## 10. Trapping

All WPA's are open to trapping by the general public. North Dakota Game and Fish Department regulations apply, while vehicle use is restricted by Federal law. Mink, fox and muskrat are the principal target species. Permits for trapping easement refuges are discussed in each refuge section at the end of the narrative.

## 17. Law Enforcement

Outside of easement monitoring, most law enforcement takes place during the waterfowl and deer seasons. Areas that were known to be holding huntable numbers of ducks were patrolled on the first two weekends of the season. Officers Hoistad and Albright contacted many groups of hunters and issued four violation notices.

Opening weekend of firearms deer season was worked by Harris and Lee. Lee concentrated his efforts along the Sheyenne River Valley between Valley City and Enderlin, North Dakota. Harris worked WPA's throughout the WMD. Lee and Harris issued five pink slips for potential violations that were turned over to the State Game and Fish Department. All were cited by the ND Game & Fish Department warden.

Hoistad and Albright attended the fall law enforcement/firearm regualification and training held in Aberdeen in September. This was a joint session with officers from South Dakota also attending.

## J. OTHER ITEMS

### 1. Cooperative Programs

General

Wildlife Clubs

The District works with several wildlife clubs throughout the five county area. Many clubs maintain resident wildlife feeders, food plots or distribute feed bales in known deer and pheasant wintering areas. Some clubs raise or purchase pheasants for release on WPAs. Below is a summary of wildlife club cooperative programs in 1994.

Cass County Wildlife Club - Food Plot/Predator Fence, Alice WPA  
 Barnes County Wildlife Club - Nesting Structures/Feed Bale Distribution  
 Henderson WPA Food Plot



The Barnes County Wildlife Club placed Christmas trees in Lake Ashtabula for use as perch habitat. HJH

ND Game and Fish Department - whenever possible, assistance is offered the ND Game and Fish Department and vice versa.

Assistance was also given on several state wildlife surveys during the year.

## 2. Other Economic Uses

One permit allowing bee hives to be placed on WPA's was issued during the year. The permittee put out 200 hives for a fee of 50 cents each. Hives are restricted to just off established accesses to limit damage to cover.

## 4. Credits

This document was prepared with input and assistance from all staff. Photo credits are noted under each snapshot.





Engineering Equipment Operator Jerry Wolsky from Arrowwood NWR repaired a road grade on the Sortland WPA.

HJH

HOBART LAKE NATIONAL WILDLIFE REFUGE  
BARNES COUNTY, NORTH DAKOTA

1994 ANNUAL NARRATIVE REPORT

Hobart Lake NWR is a 2,077 acre easement refuge located five miles west of Valley City. Of the total, 245.89 acres is owned in fee title by the FWS with the remaining acreage covered by easement rights. These easement rights give the FWS control over the taking of all wildlife and also implied water rights. Hobart Lake is actually divided in half by I-94 with the south end being somewhat fresh from the many springs and the north half being alkaline, fed only by precipitation and local runoff. The lake is an important migration stop for ducks, snow geese and tundra swans.

In July 1993, the lake was filled to record levels in a matter of a few hours. Extremely heavy rains throughout the area created flash floods and caused the lake to reach very high levels. Old Highway #10 on the north shore of the lake was completely submerged by the high water. This road had to be closed for the remaining months of 1993. In 1994 the Barnes County Highway Department let a contract to raise the road grade four feet. In order to meet the mitigation requirements for the federal highway monies used on the project, they had to create wetland acres. The only area close to the site that was dry enough to work on was on the corner of the refuge. Two small wetland areas were created.

The three Ducks Unlimited nesting islands located in the northeast corner of the lake were also completely overtopped. It is hard to tell what will be left of the islands when they finally surface again.



Highway 10 was overtopped in 1993. Repairs were initiated in 1994. A four foot grade raise made the road barely usable. HJH



As part of the required mitigation for the grade raise project, these two wetlands were created. HJH

SIBLEY LAKE NATIONAL WILDLIFE REFUGE  
GRIGGS COUNTY, NORTH DAKOTA

1994 ANNUAL NARRATIVE REPORT

Sibley Lake NWR is a 1,077 acre easement refuge located 45 miles northwest of Valley City. The FWS does not own any land or make any improvements on the refuge but has easements granting perpetual flowage and refuge rights. Refuge rights are related to restrictions on hunting, trapping, and unauthorized entry. The area has one large 525 acre fresh water Type IV marsh that provides excellent migratory bird habitat.

The refuge was opened again in 1994 to all deer gun hunters possessing a valid license and tag for unit 2F1. The area received a tremendous amount of use through the 16 1/2 day season.



STONEY SLOUGH NATIONAL WILDLIFE REFUGE  
BARNES COUNTY, NORTH DAKOTA

1994 ANNUAL NARRATIVE REPORT

Stoney Slough is a 1,908 acre refuge partially owned in fee title with the remaining area covered by refuge easement. The 1,290 acres owned by FWS has the potential for both water and upland management.

The wetland areas on the refuge cover approximately 600 acres in four permanent pools and two temporary pools. Water management is possible by regulating water flow on a natural coulee by means of a screw gate. This gate when closed forces water eastward through two other stoplog structures before entering the permanent "lakes" on the refuge. Management is dependent on sufficient spring runoff to raise and move water from one area into another.

Below is a summary of major management activities at Stoney Slough during 1994.

Two special use permits were issued for this refuge in 1994. One permit was for trapping furbearers. The second permit was issued to Jack Olson for haying and non-chemical weed control.

Water Management

The decision was made in 1994 that until we could replace our control facilities, no attempts would be made to manage the water in the two smallest pools. The screw gate built in 1936 has become totally non-functional.

Wildlife Use

Approximately 1000 geese (mostly snows & whitefronts with a few Canada's) moved onto the refuge in early October and remained into early November. The low numbers of waterfowl using the area resulted in a lack of interest among the goose hunters.



Even without a functional control structure, Pool 1 in Stoney Slough held water for a short time in 1994. A new structure is planned for 1996.

TOMAHAWK NATIONAL WILDLIFE REFUGE  
BARNES COUNTY, NORTH DAKOTA

1994 ANNUAL NARRATIVE REPORT

Tomahawk NWR is an easement refuge located approximately 17 miles northwest of Valley City. The refuge contains 440 acres of which 150 acres is an impounded permanent wetland. A fixed spillway controls the maximum water level.

Waterfowl use of the area during migration is light due to sparse submergent vegetation. The area is surrounded by overgrazed native prairie but provides adequate nesting habitat for a few blue-winged teal.

One trapping permit for furbearers was issued in 1994.