

RG 22 Narrative Report Crosby Wetland Management District
July 1974 - June 30, 1975

NARRATIVE REPORT
For
July 1, 1974 - June 30, 1975

PERMANENT PERSONNEL

Willard B. Hesselbart.....Wetlands Manager
Willard E. Steffen.....Asst. Wetlands Manager
 (Transferred 2/28/75)
Ruth J. Smaaladen.....Clerk-typist (Part Time)
 (Terminated 5/13/75)

TEMPORARY PERSONNEL

Ronald A. Stromstad..... Biological-Aid
Curtis A. Sorbo.....Biological-Aid

U.S. Fish and Wildlife Service
Crosby Wetland Management District
and
Lake Zahl National Wildlife Refuge
Crosby, North Dakota 58730

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I. GENERAL

A. Weather

Weather conditions throughout the reporting period were very erratic. The Burke-Divide county region had one of the wettest springs on record in 1974. The heaviest deluge of water in the history of Crosby weather reporting took place the afternoon of July 11, when 4.15 inches of rain fell in 2.5 hours.

Figure 1 (above) - 2 (below) - A draw that flows into Carlson WPA became a small river. Several roads in the WMD were flooded.

Powers Lake, in Burke County, reported 6 inches of rain. Some hail, as high as 100 percent damage, occurred during the storm. A severe "snirt" storm passed through the area on January 10 and 11. Strong winds and sub-zero temperatures created wind chill factors as low as -100° . Another severe snow storm dumped nearly 10 inches of snow on the WMD on April 9. Travel came to a standstill and power outage of 40 hours affected parts of the District. A 36 hour rainfall dumped 3-5 inches of moisture throughout the WMD on June 13 and 14.

B. Habitat Conditions

1. Water

Type I marshes held water through mid-July because of the unusually wet season. Complaints from farmers were numerous in attempts to drain sheetwater from fields. Burke County experienced the worst problems, with some fields having standing water nearly all summer. The late winter snowstorms caused considerable run-off in the spring. Many fields could not be seeded until June 10 and some fields were not seeded at all. Excellent water conditions prevailed throughout the reporting period.

Figure 3 - Burke County wetlands in prime condition.

2. Habitat - Food and Cover

The wet season had good effects on DNC. Stands of sweet clover and alfalfa were often over 3 feet in height. Native prairie was in good to excellent condition throughout the District. With the high price of grain, good native prairie continues to be broken on private land in the WMD. Cover and food were available most of the winter, until the heavy April snows packed it down. The sunflower food patches at Lake Zahl NWR and Stady WPA (Divide County) were utilized heavily by deer, pheasants and sharp-tailed grouse.

II. WILDLIFE

A. Migratory Birds

1. Waterfowl

Canada goose production increased this reporting period. An estimated 75 young were raised in the District. The nesting increase is due to pioneering birds from the Lostwood NWR flock.

Duck production increased nearly 20 percent to 47,926. Quarter section survey data gave a total of 7,462 pairs on fee lands. This figure was multiplied by the assumed productivity rate of 45 percent to determine broods produced. Total broods produced was multiplied by 5.9 ducks per brood to flight stage. This resulted in 19,812 ducks produced on fee land. Another .5 ducks per wetland easement acre (56,288 acres) were added resulting in a total of 47,288 ducks produced on fee and easement lands in the WMD. Dabbling ducks comprised 62 percent of the total.

Artificial nesting structures supplement duck production in the WMD. For the 1975 nesting season 27 structures were available, 22 were used, and of the 25 nesting attempts, 20 were successful. A total of 252 eggs were laid and 208 ducklings were produced. The structures are refurbished every third year. Rocket type boxes have been placed at Missouri Bottoms WPA, near the Missouri River. The five boxes have received no wood duck nesting to date, but have been used by tree swallows.

The cable-chain nest drag is a method of evaluating upland nesting cover in the District. The upland on six units was dragged. High nesting density is an excellent indicator of preferred nesting habitat. A summary of each unit follows:

Cy Wigness WPA

This unit was grazed during the month of May at a rate of .37 AUM's/acre. The area was dragged on June 16 and 17, and the 144.0 acres of upland yielded 48 nests (1 nest per 3.0 acres).

Soo Grade WPA

The native prairie on this unit was dragged on June 23 and 24. The 145 acres dragged yielded 102 nests (1 nest per 1.42 acres). The area was grazed during May.

Lincoln WPA

The 70.0 acres of DNC mixture of alfalfa, sweet clover, tall and pubescent wheatgrass, yielded 17 nests (1 nest in 4.1 acres). The area was dragged on June 18.

State Slough WPA

This unit was dragged on May 23, and the 23.3 acres of crested wheatgrass yielded 10 nests (1 nest per 2.33 acres). One nest located was quite strange. A mallard was incubating 13 mallard eggs and 2 pheasant eggs.

Figure 4 - Upon re-checking the nest, one egg had hatched.

Loucks WPA

This unit of 88.8 acres of upland was dragged on May 21 and 22. Four nests were located on the DNC mixture that now is mainly alfalfa with brome interspersed (1 nest per 22.2 acres). From data received from other units, Loucks WPA could possibly use a treatment to reduce the litter and mulch; thus, providing better nesting cover.

Fagerland WPA

The 11.4 acres of crested wheat and 19.4 acres of alfalfa yielded 18 nests on June 24 (1 nest per 1.71 acres). All of the nests were located on the 19.4 acres of alfalfa (actual use of 1 nest per 1.07 acres).

Waterfowl populations remained excellent throughout the first half of the reporting period. A cold snap with snow saw most local birds migrating south around October 22, but on November 1 a large influx occurred. A flock of 15,000 mallards and pintails were observed near Fortuna. The migration from the north was shortlived, as nearly all ducks left the District by November 4. Goose sightings during migrations have increased recently. A flock of approximately 2000 snows and blues were observed north of Noonan on October 21. Sightings of 200-300 snows, blues, Canadas, and white-fronts are now common. This increase is possibly due to excellent water and food conditions in the WMD in recent years and slight shifting west of the migration route.

The first spring duck observations were on April 3, but no large numbers of ducks were seen until April 15-16. The spring migration was not as spectacular as the fall.

Nearly 1,000 whistling swans were observed during the fall migration, but less than 50 were observed during the spring.

The spring of 1975 was the first year that the released flock of Canada geese at Lake Zahl NWR were to have nested. Fiberglass tubs and round hay bales were set in the marsh for nesting. One of the six fiberglass tubs was used. It is believed that Zahl and surrounding area produced 50 giant Canadas. Efforts have been made to protect the Canadas, and the surrounding land owners posted their land to "No Hunting". The giant Canadas stayed within the closed area to feed.

Figure 5 - Four goslings were produced in this structure.

The first spring observation of the giants was on April 15, when 22 birds were identified by leg bands. On April 16, nine individual pairs of geese were observed on the refuge.

The refuge was intensively checked for goose broods on June 16.

Figure 6 - One of the broods produced on Lake Zahl NWR.

Total goslings observed at this time on the refuge was 16 birds. Others were sighted on Appham Lake, 3 miles NE of Zahl, and Blue Ridge Game Management Area, 5 miles NE of Zahl. There were unconfirmed sightings of 3 other broods around the Zahl area.

2. Other Water Birds

Up to 500 pelicans were observed at Lake Zahl NWR, and smaller flocks were observed on a few WPA's. Only sub-adults and non-breeders are usually seen.

Double-crested cormorants are quite common, with flocks of 30-40 birds observed on Lake Zahl. Smaller flocks of 5-15 birds were observed over most of the district.

Black-crowned night herons were observed nesting in a colony of approximately 800 pairs on Beaver Lake WPA (Burke County). This colony has increased from 250 to 800 pairs since the last reporting period. They nested on several other WPA's, but not in such large numbers. Ten or more great blue herons were observed in the district, but no nesting has been documented.

American bitterns were observed infrequently, but it is probable that they inhabit most units.

Western grebes nested on Lake Zahl NWR and Beaver Lake WPA in small numbers. Eared and horned grebes nested on nearly all WPA's, but the largest colony of eared grebes was on Lake Zahl NWR where nearly 2,000 pairs were observed. Pied-billed grebes nested also, but not in such high numbers.

Common and hooded mergansers were observed during migration, but none were observed throughout the summer months.

3. Shorebirds

Use by shorebirds during the reporting period was low, possibly due to high water. Avocets showed a decrease in numbers, with a few observed on some units.

Figure 7 - A beautiful shorebird. Use decreased because of high water.

Virginia and sora rails were heard on a few units, and a Virginia rail was observed on Beaver Lake WPA on May 8. Nesting by these elusive birds was not verified.

4. Doves

Mourning doves were first observed on April 22. The dove population has shown a dramatic decrease in the past year. Although doves were seen nesting occasionally, the data from the coo-count reveals that 34 doves were seen or heard in 1974, and none were seen or heard during the 1975 count.

B. Upland Game Birds

Ring-necked pheasants - Pheasants have decreased slightly in numbers. The fall of 1974 provided a good surplus of roosters and a sizeable number of hens. A severe snirt storm with wind-chill temperatures to -100° F on January 10 and 11, and a wet, heavy snow storm in late March were probably quite damaging to the population. A few nests were located during cable-chain dragging operations, and although the spring was cold and wet, the 1975 hatch appeared to be fairly productive.

Hungarian Partridge - Hungarian partridge are on the upswing with more birds spotted this year than in many previous years. These hardy little game birds prefer extremely dense cover for nesting.

Sharp-tailed Grouse - The five dancing grounds visited in the spring indicated that these birds are at a low in their population. Only four males were sighted on all of the grounds. The north-western portion of Divide County has a good sharptail population, because of the large areas of unbroken native prairie.

Sage Grouse - A sage grouse was shot near Fortuna and turned into our office. The sage grouse is a new species on our bird list as there was no record of any previous sightings in the WMD. The bird was turned over to NPWRC.

C. Big Game Animals

White-tailed deer - The first half of the reporting period showed a tremendous white-tailed deer population. Hunters were successful in taking a large percentage of bucks this year. The severe January storm had some adverse effects on deer statewide. Spring showed a good population of white-tails making it through the winter. White-tailed deer can be found on nearly all of our WPA's.

Figure 8 - A white-tailed fawn discovered on Fenster WPA during quarter-section survey.

Pronghorn antelope maintain a near normal population, no more than 300-400 animals district wide. Farmers occasionally complain about crop damage from these animals.

D. Fur Animals, Predators, Rodents and Other Mammals

Mink, weasel, skunk and raccoon were all seen occasionally. Populations of these are near normal.

Red fox populations are low, possibly due to an increasing coyote population. Coyotes have been observed numerous times and reports from landowners are frequent. A sheep rancher in western Divide County claimed to have lost 64 lambs to coyotes, and subsequently went out of business.

White-tailed jackrabbits were low in numbers during the reporting period. Observations were occasional.

Porcupine numbers were low, with only infrequent observations made.

Muskrat populations were excellent in the Coteau in 1974. "Rat houses" were observed on nearly every marsh. Trappers did well, with prime pelts bringing over three dollars. The spring population appeared to have suffered a decrease, probably due to unusually high water conditions.

Mice and voles were abundant in heavy cover. Raptors are in a good food supply with these numerous little rodents.

E. Hawks, Eagles, Owls, Crows, Ravens and Magpies

Marsh hawks are the most common in the WMD and nest on several WPA's.

Rough-legged hawks were observed on four occasions. Red-tailed hawks were observed eight times during the spring.

Swainson's hawks were observed occasionally, with nesting documented in eastern Divide County.

Ferruginous hawks were documented as local nesting birds, with one nest located.

Several sparrow hawks were observed during the reporting period.

A lone prairie falcon was observed one mile west of Crosby on April 10th.

A pigeon hawk was observed 4 miles south of Crosby on April 23.

Eleven eagles were observed during the period. of these, seven were bald, one was golden and three unidentified.

Three species of owls nested in the district: horned owls, short-eared owls, and burrowing owls. Burrowing owl observations were infrequent. Snowy owls were observed eleven times.

Crow and magpie populations were normal.

F. Other Birds

Two adult whooping Cranes were observed for over one week four miles south of Ambrose (Divide County).

One hundred thirty seven different species of birds were observed during the period.

G. Fish

Powers Lake is the only WPA where game fishing occurs. Northern pike and yellow perch are caught by local fishermen on the WPA. Many species of minnows can be found on a few WPA's.

H. Reptiles and Amphibians

Painted turtles, common garter snakes and plains garter snakes were the only reptiles observed in the district.

Tiger salamanders, great plains toad, chorus frog and leopard frog were the only amphibians recorded.

I. Disease

Nothing to report.

III. REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development

Fence construction continues on WPA's that have cattle trespass problems or where grazing can be used as a management tool.

A total of 760 rods of three strand barbed wire fence was constructed on four WPA's. The cost of doing 360 rods force account was \$2,025.80 to the Government, and the remaining 400 rods was done by adjacent landowners with the Government supplying the material at a cost of \$1,124.00.

Figure 9 - Fencing in the water is an annual maintenance problem on units when we do not have complete ownership of the marsh.

Posting and re-posting was completed on 26 units.

All five of the WPA recognition signs were restrained.

Site clean-up was completed on 4 units.

Hunt Oil Company installed a salt water disposal system for its wells. This pipeline was buried, as we were opposed to having it above ground.

B. Plantings

Cooperative farm agreements were issued to 19 cooperators on 17 WPA's and Lake Zahl NWR. A total of 858.8 acres were put into agriculture production through these agreements. Of the 858.8 acres, 37.1 acres were seeded to a DNC mixture of 4 lbs. tall wheatgrass, 2 lbs. pubescent wheatgrass, and 2 lbs. alfalfa per acre. Cooperators receive 90% of the nurse crop as compensation for the seeding, and the remainder is left standing for wildlife food. The following table is a breakdown of farm agreements by unit:

Table 1. Cooperative Farm Agreement

<u>UNIT</u>	<u>COUNTY</u>	<u>OPERATION</u>	<u>ACRES</u>
Alamo WPA	Williams	Wheat	88.0
Alamo WPA	Williams	Summerfallow	96.6
Alamo WPA	Williams	Fall Plow	32.8
Beaver Lake WPA	Burke	Summerfallow	47.2
Drawbond WPA	Divide	Fall Plow	13.0
Eckert WPA	Burke	Oats*	9.6
Fortuna WPA	Divide	Fall Plow	8.6
Green Lake WPA	Williams	Fall Plow	37.6
Hamlet WPA	Divide	Summerfallow	50.0
Hamlet WPA	Divide	Fall Plow	45.6
Hamlet WPA	Divide	Wheat	37.3
Kittleson WPA	Divide	Fall Plow	16.6
Mullen WPA	Divide	Summerfallow	20.0
Mullen WPA	Divide	Wheat	24.0
Myhra WPA	Divide	Fall Plow	43.5
Nelson WPA	Burke	DNC*	15.0
Nelson WPA	Burke	Summerfallow	6.0
Nelson WPA	Burke	Wheat	12.0
North Lake WPA	Divide	Fall Plow	8.0
Stady WPA	Divide	Barley	10.0
Stady WPA	Divide	Wheat	10.0
Stady WPA	Divide	Sunflowers	10.0
Stady WPA	Divide	Summerfallow	10.0
Stady WPA	Divide	Wheat*	12.5
State Slough WPA	Divide	Fall Plow	23.3
Truax WPA	Divide	Fall Plow	65.0
Thueson WPA	Divide	Fall Plow	18.0
Lake Zahl NWR	Williams	Wheat	22.1
Lake Zahl NWR	Williams	Summerfallow	23.0
Lake Zahl NWR	Williams	Barley	21.0
Lake Zahl NWR	Williams	Sunflowers	5.0

* indicates DNC mixture seeded with nurse crop listed.

Approximately 12 acres of sunflowers were seeded in food patches on two WPA's. Deer and upland game utilized the food patches for a winter supply of food.

Two acres of trespass ag. land on Monger WPA (Divide County) was seeded to DNC.

No clump plantings were made this year, although some are planned for the district.

C. Collection of Seeds, Specimens and Receipts

Eggs were collected for an office display and demonstration purposes. The eggs were mounted on glass slides with identification tags and put in a display case.

A few plants were collected for our station herbarium.

D. Control of Vegetation

Cultivation continues on tree plantings on Miller, Carlson, Wigness and Bratlien WPA's (Divide County) for weed control. The above cultivating was done by station personnel at an approximate cost of \$300.00. The trees at Lake Zahl NWR were cultivated by a cooperator.

Leafy spurge was sprayed on two units, Canada thistle was sprayed on one unit by a cooperator, and perennial thistle and Canada thistle were mowed on three units. Mowing can be effective in control of perennial sowthistle and Canada thistle if done shortly before a rain. Rain fills the hollow stems and drowns out the plant. This was quite effective on Carlson WPA (Divide County). A total of 74.05 acres were sprayed or mowed for noxious weeds this reporting period. Weed control could consume most of our operating money if we complied with the North Dakota noxious weed law, as noxious weeds can be found on nearly every unit.

Farm cooperators sprayed some crops where no grass and legume mixture was seeded.

E. Planned Burning

None

F. Fires

None

IV. RESOURCE MANAGEMENT

A. Grazing

Spring grazing can be used as a management tool to check invading brome and reduce litter and mulch, thereby stimulating growth and variety of vegetation. Nine grazing permits were issued for the spring of 1975. A summary of permits follows:

Table 2. Grazing for Spring of 1975

<u>UNIT</u>	<u>COUNTY</u>	<u>AUM'S</u>	<u>ACRES</u>	<u>REVENUE</u>
Anderson WPA	Divide	56.8	130.0	\$147.60
Brightwater Lake WPA	Divide	40.9	125.0	\$106.32
Brightwater Lake WPA	Divide	53.5	153.0	\$139.10
LaBounty WPA	Divide	28.2	60.0	\$ 73.24
Long Creek WPA	Divide	36.9	105.5	\$ 94.86
Soo Grade WPA	Divide	98.4	280.0	\$255.78
Troy WPA	Divide	26.9	78.0	\$ 70.04
Twin Lakes WPA	Williams	43.4	155.0	\$112.74
Cy Wigness WPA	Divide	60.5	165.0	\$157.27

It is anticipated that many of our units will need a periodic treatment to maintain suitable habitat.

B. Haying

Three cooperators cut 167 acres of hay for a total yield of approximately 125 tons. This haying was done to facilitate the plowing of monotypic brome stands which are being plowed and re-seeded to more diverse cover. One cooperator was allowed to hay 10 acres of Oien (Divide County) WPA in exchange for round hay bales for use as nesting structures for geese at Lake Zahl NWR.

C. Fur Harvest

No commercial trapping permits were issued. Several inquiries were received for trapping Lake Zahl NWR, but the refuge does not have a trapping plan. Sport trapping is discussed under public relations.

D. Economic Benefits

Nine grazing permits generated revenue of \$1,143.33, and one application for a power line access generated \$10.00 of revenue.

Two buildings were sold by informal bid from the Osbold WPA (Williams County). A two story house sold for \$40.00, and a one stall garage sold for \$102.00.

Two station vehicles were sold on excess by bid through GSA. A 1960 Ford 1/2 tone pickup truck sold for \$151.50, and a 1952 GMC 2-1/2 ton truck sold for \$775.00.

V. FIELD INVESTIGATIONS OR APPLIED RESEARCH

A. Formal Studies

None

B. Informal Studies

Two WPA's in Divide County (Lincoln and Cy Wigness) were seeded to DNC in 1967. These areas had been very productive for duck nesting, upland bird nesting, and use by big game. From observations by station personnel and reports from surrounding landowners, the use of the area by wildlife seemed to be declining. It was decided to graze one of the areas in May of 1974 to reduce the mulch and litter. Both of the areas were dragged for nests in June 1974. The area that was grazed (Lincoln) had 3 nests on 70 acres and the ungrazed area (Wigness) had 37 nests on 144 acres. In 1975 Cy Wigness WPA was grazed and Lincoln was left idle. Both areas were dragged for nests in June 1975. Wigness yielded 48 nests on 144 acres, and Lincoln WPA yielded 17 on 31.6 acres dragged. Both areas will be dragged in 1976. Our objective in this study is to find at what point in time wildlife use on the area begins to decline and if we can halt this decline by grazing on a periodic basis.

We have been monitoring the giant Canada geese that were released at Lake Zahl NWR in 1973. Round hay bales and fiberglass tubs have been placed on the marsh at Lake Zahl for nest structures. Most of the bales were not wound tight enough and wave action destroyed them.

VI. PUBLIC RELATIONS

A. Recreational Uses

Wildlands appreciation was the largest public use activity during the reporting period. Nearly all of the WPA's were used for hunting and trapping. The ecology class from Divide County High School uses a few of the management units for environmental studies. A few units are used for nature photography by local amateurs.

B. Refuge Visitors and Participation

Our exhibit booth at the Divide County Fair was discontinued this year due to lack of manpower and funding. Personnel at Crosby gave 16 programs to a total of 400 people. The Crosby 7th grade science class was taken on a two day field trip to Carlson WPA and Lake Zahl NWR.

Figure 10 - These kids were very enthusiastic and really enjoyed the field trip. We even got some litter picked up.

Hesselbart, Steffen and Stromstad taught Hunter Safety to local youngsters.

C. Hunting and Trapping

The hunting season were again excellent within the district. High water and plenty of food provided excellent hunting for waterfowl on the marshes and in the fields. Upland game hunting was good in spotty locations. Hunting pressure on sharp-tailed grouse and partridge has been limited in the past, but interest in these birds is increasing. As in the past, there was heavy hunting pressure on pheasants, and the pheasant hunting was generally good. Most WPA's are used for some form of hunting or trapping.

Lured by high fur prices, the art of trapping was renewed. Muskrat populations were high, and quite popular to young trappers because of ease in trapping. One fourteen year old made over \$300.00 in two weeks of muskrat trapping. Fox populations were fair to good, and a few coyotes were taken during the fall. Because of demand for the traps, the price of them has tripled in the past two years.

D. Violations

Steffen and Stromstad worked on the Ports of Entry in northwestern North Dakota for one weekend. No violations found. Stromstad and Special Agent Cooper from Minot worked enforcement on opening weekend of pheasant season. One apprehension was made on an out of season deer hunter, and the case was turned over to the State Warden. Six easement violations were recorded and all landowners complied in filling their ditches when contacted. Easement burning violations reached a high of 99 violations. All violators were sent a certified letter.

E. Safety

This station has never had a lost time accident since its inception in 1962. Safety meetings were held monthly, with stress put on motor vehicle accidents during the summer months. The station safety plan was completed. A safety inspection at our storage building was completed. The station lowboy was painted yellow for safety reasons.

VII. OTHER ITEMS

A. Items of Interest

Excess native grass seed totaling 1500 pounds was delivered to the Fergus Falls WMD (Minnesota).

Depredation complaints against ducks and blackbirds totaled 48 this season. We loaned out scare cannons and pest control bombs with oaw-oaw rope. Most farmers seemed pleased with our efforts, and agreed that the PCB's and cannons were quite effective.

A dead snowy owl was turned over to the Natural Sciences Department of Minot State College.

Hesselbart assisted in preparation of a management plan for the Buford-Trenton bottoms area, which is an area near the Missouri River. This area has potential to become a NWR.

We received a request to band 400 mallards prior to the hunting season. Salt plains traps were used. We fell far short of our quota, and banded 131 mallards.

B. Highway Projects and Sewage Lagoons

Four highway projects were inspected, three in Burke County, and one in Williams County. Recommendations generally consist of leaving culverts at the same elevation, and to bypass quality wetlands. If wetlands are to be filled or destroyed, a request is made for some form of compensation. We also request that inslopes and backslopes be seeded to prevent erosion.

The Crosby sewage lagoon was inspected for a discharge permit on July 2, and an inspection was made on the proposed Noonan sewage lagoon. Our normal recommendations are that quality wetlands are not used for lagoon sites. We have received good cooperation in this area.

C. Rehabilitation

Rehabilitation money was obligated for repair work on the dam at Lake Zahl NWR. The dam is going to be re-shaped and packed to eliminate animal burrows.

D. Training and Meetings

The following training courses and meetings were attended by station personnel:

<u>Meeting</u>	<u>Date</u>	<u>Personnel</u>
Rehabilitation (Lostwood NWR)	7/7	Hesselbart
Range Condition Workshop	7/8-9	Hesselbart & Steffen
Personnel Meeting	7/22-24	Hesselbart
Enforcement Meeting	9/19	Hesselbart & Steffen
Managers Role in Performance Evaluation	1/27-30	Hesselbart
Problem Solving (CSC)	2/10-13	Hesselbart
Gyroscope (Salt Lake City)	4/14-18	Hesselbart
Hugh Cosby on WPA's	6/19-20	Hesselbart

E. Saline Seeps

Interest by farmers in relief of saline seeps is strong in the WMD. A Saline Seep Association has been formed in Crosby to study these. Claims have been made that wetlands can contribute to saline seeps, so we have received requests to drain wetlands on easements. No drainage has been allowed, as the seeps need to be studied further. It is believed that if the recharge area is seeded to a deep-rooted vegetation, such as alfalfa, the seep will be eliminated.

F. Personnel

Biological Aids Curtis A. Sorbo and Ronald A. Stromstad were both on staff beginning July 1. Sorbo, asstuent at UND, Grand Forks terminated on August 16. This was his first year with the Service and he was a welcome addition to the staff.

Stromstad, a fourth year summer student for the WMD, terminated on November 29, and E.O.D. on March 31 on a career-conditional Biological Aid appointment. His position replaced that of Assistant Manager Willard Steffen, who transferred to the Devils Lake WMD on February 28.

Our clerk, R. Joann Smaaladen terminated on May 13.

The personnel shuffling (replacing an Assistant Wetland Manager with a Biological Aid, and termination of our clerk) in our office is the beginning of our new administration. As of July 1 the Crosby WMD was placed under the administration of the Des Lacs NWR. Although difficult at times, the transition was made without many problems.

Manager Hesselbart is busy with many organizations in the community. Being president of the Concordia Lutheran Church Men, Crosby Country Club, and Divide County Quarterback Club along with being wildlife chairman for the Kiwanis Club keep him on a tight schedule. An active role in the community helps the public relations aspect of our office.

Biological Aid Stromstad is the Crosby scoutmaster, Sec/treasurer of the Divide County Quarterback Club, and member of the JayCees.

VIII. CREDITS

The narrative was written by Stromstad, edited by Hesselbart, and typed by Don Lindberg of the Des Lacs NWR. All photos by Stromstad.

SIGNATURE PAGE

Date: 1-5-76

Submitted by:

Willard B. Hesselbart
Willard B. Hesselbart

Wetlands Manager
Title

Approved: Area Manager

Date: _____

Signature

Area Manager
Title

Concurrence

Date: _____

Signature

Chief, LM, Area Office
Title

Approved: Regional Office

Date: _____

Signature

Title

Unprecedented 4-Inch Rain Drenches Area With Some Hail

The heaviest deluge of water in the history of Crosby weather reporting, which dates back to 1907, took place here Thursday afternoon, when 4.15 of rainfall fell during a 2½ hour period beginning about 1:15 p.m.

What made the rainfall even more remarkable, however, was the size of the cloud that opened up. It began a short distance west of Crosby, and traveled at least as far east as Noonan, and as far north as neighboring Estevan. Estevan also got violent winds which uprooted trees and tore down power lines leaving the community without power for several hours.

While rainfall measured from 3 to 4½ inches in the broad area mentioned above, there were also good rains of .75 to 1.25 in much of the rest of the Burke-Divide area. But as always happens, many farmers had only slight showers.

Some hail was reported, most of it falling in a strange pattern hard to define. But it affected a number of fields of crop land both north and south of Noonan, and there were a few claims as high as 100 percent.

The heaviest rains appear to have fallen in the northern part of the county, mostly to the north of highway five. Frank Lukach, who farms north of Noonan, said his farm gauge registered 4.4 inches. Noonan officially reported 3.50 and Estevan 3.75.

In Burke county the rains appeared to be somewhat lighter, more like they were in the southern part of Divide County. But most farmers were reporting nice showers of an inch or more, although there are also exceptions in Burke.

Columbus and Lignite both had nice rains, and Powers Lake experienced a morning cloudburst, with reports as high as 6 inches of rain in the hills near there.

The rain at Crosby was the heaviest ever recorded in a 24 hour period. The previous record was 4.02 which fell in a freak storm during November, 1915. A four hour early morning rain of 3.23 in August, 1963, is the heaviest fall for any August day, and a 3.20 collection July 14, 1970, is the previous high for any July day.

Thursday's deluge has also established one other 67 year old Crosby weather record. Rainfall for the month now stands at 5.27, eclipsing the previous July record of 5.13 measured in 1928.

The year becomes even more puzzling, weather wise, inasmuch as the Burke-Divide region had one of its wettest springs, followed by a June which set an all time record low precipitation mark, and now the new all time high for July.

At any rate, although much of the state has benefited from showers the past ten days, this area is among the most fortunate, and has the most plentiful moisture supply in the state.

County Almanac

	1974			1973		
	Lo	Hi	Pr.	Lo	Hi	Pr.
July 9	59	86		55	89	
July 10	67	90		58	93	
July 11	63	80	4.15	68	90	
July 12	52	82		48	80	
July 13	54	82		53	75	
July 14	52	82		45	78	
July 15	57	88		51	91	
July 16	65			59	83	

Precipitation July 1974 to date—5.27

Precipitation July 1973 to date— .54

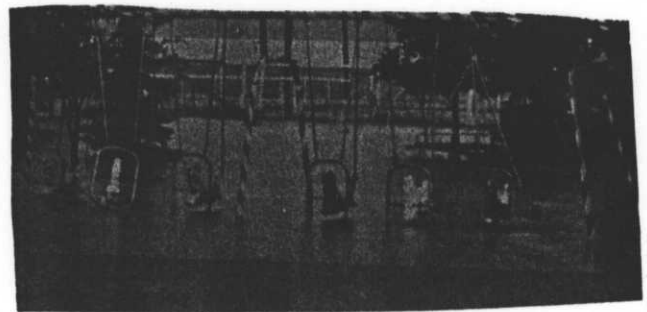
Total Precipitation 1974 to date—12.51

Total Precipitation 1973 to date— 5.67

THE AFTERMATH OF JULY RAIN



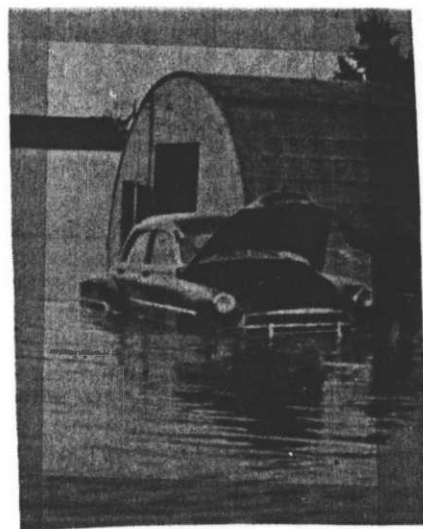
Floating cars...



Playground equipment...



Motorcycles...



and more cars!!!

THE DIVIDE COUNTY JOURNAL
JULY 17, 1974

Duck depredation fought by sound

MINOT, N.D. (AP) — The U.S. Fish and Wildlife Service said Wednesday it is ready to "bomb" its ducks in order to save them and the farmers' fields they sometimes invade.

Service spokesmen said the bombs are actually explosive shells and amplified firecrackers which drive ducks away with sound.

John L. Cooper, special agent for the service in Minot, said the service was aware the late harvest this year might be vulnerable to ducks returning south and the agency has prepared itself to help farmers drive the ducks out of their fields.

He said the program has been decentralized by bringing wildlife refuge managers into the fight against duck depredation, making it closer for farmers who might have a hard time getting their explosives from the service's regional office in Bismarck.

"If it weren't for farmers' cooperation, our wetlands program would never work," he said. "It's because we do care about the farmers' problems that we have taken the effort and money to set up our program to help the farmers drive away ducks

and blackbirds, which can also be a problem in the fields."

Under the wetland program farmers are paid for setting aside their property for ducks.

Cooper said the farmers having problems with ducks or blackbirds will be given "shellcrackers," 12-gauge shotgun shells with a propellant to send them 100 yards before their sound charge fires.

He added if the ducks and blackbirds have already begun to use the field as a feeding ground, those devices will not drive them away.

In the case of already feeding birds, the farmers are given an "exploder," a 55-gallon drum with explosive charges inside, he said. The drums, which amplify the sound, have a string of cherry bomb-type devices, one of which explodes every 10 minutes, he added.

Cooper said there should be no danger of a fire in the field if the devices are used properly and with common sense.

He also said the devices are provided at no charge, but the farmers must take the initiative.

Hunting Classes Begin in Crosby

Hunting is a sport which is among the safest; however, each year a number of people are injured or killed by a carelessly handled firearm. To help reduce these tragedies, a Hunter Safety Program is being offered by the Crosby Wetland Management District and the Crosby Jaycees.

Anyone 12 years or older must pre-register for the program by visiting or calling 965-6488, the Crosby WMD office in the Wallin Building.

Classes will meet at the New Divide County Junior High September 12, 17, 19, 24, and 26 beginning at 7:00 P.M. and lasting for approximately 2 hours.

Students that pass both written and practical exams will receive certificates and shoulder patches.

Big Canada Geese Return to Region

The giant Canada geese that returned to Lake Zahl NWR this past spring have been observed in Williams, Divide and Burke Counties throughout the summer. Each of the released birds wears a U.S. Fish and Wildlife Service aluminum band on the left leg and a black plastic band with white numerals on the right leg.

On September 4, 1974, 64 giant Canada's were observed on Lake Zahl NWR and 32 were observed on Appam Lake. Anyone that has observed the banded geese at any other location should call the Wetland Office in Crosby (965-6488).

The birds are more wary than they were last fall, but they will still be pretty vulnerable to the hunter. To help preserve this nucleus flock of giant Canada geese, that will breed next spring, much of the land in the Zahl and Appam area will be posted closed to hunting. If land on both sides of the road is posted closed to hunting, this means that no hunting is allowed from the road or the ditches. The Crosby WMD office is requesting that hunters refrain from shooting these birds. If the geese are left alone so they can return next spring some young will be produced and then the flock will continue to expand.

The Crosby WMD appreciates your cooperation and efforts to establish these giant Canada at Lake Zahl NWR.

Habitat Called Key to Animal Survival

"WE CARE ABOUT WILDLIFE HABITAT" is the theme for the 38th annual National Wildlife Week.

More than 7,000,000 teachers, and members of state and local organizations will participate in the nation-wide, week-long observance from March 16-22, according to Bill Hesselbart, wetland manager of the Crosby Wetland's Management District. Wildlife Week is sponsored by The National Wildlife Federation, which has 3.5 million members.

This year's theme focuses on the vital relationship between wildlife and its habitat. All who are concerned about the future of wildlife in this country must spread the word that protection of habitat is the key to healthy, abundant wildlife populations. Many wildlife habitats are now trampled by the march of unplanned growth and development.

Habitat is not just the place where an animal lives. It includes all the things an animal needs to continue living. The four basic requirements of habitat are food, water, cover for protection, and a place to raise young.

The 1975 National Wildlife Week poster will show a healthy blacktail deer standing in an ideal wooded setting, symbolizing the fact that wildlife cannot live without adequate habitat.

This year's observance is going to be one of the most exciting in the long history of this event. There are many things anyone can do to improve habitat right where he lives. It's amazing, for example, how a few new plantings in a backyard can pay dividends for wildlife and people.

But Wildlife Week has an even larger goal. People everywhere must be concerned about the broad habitat problems facing wildlife. It is not going to be easy, and it is going to take careful planning of our use of land.

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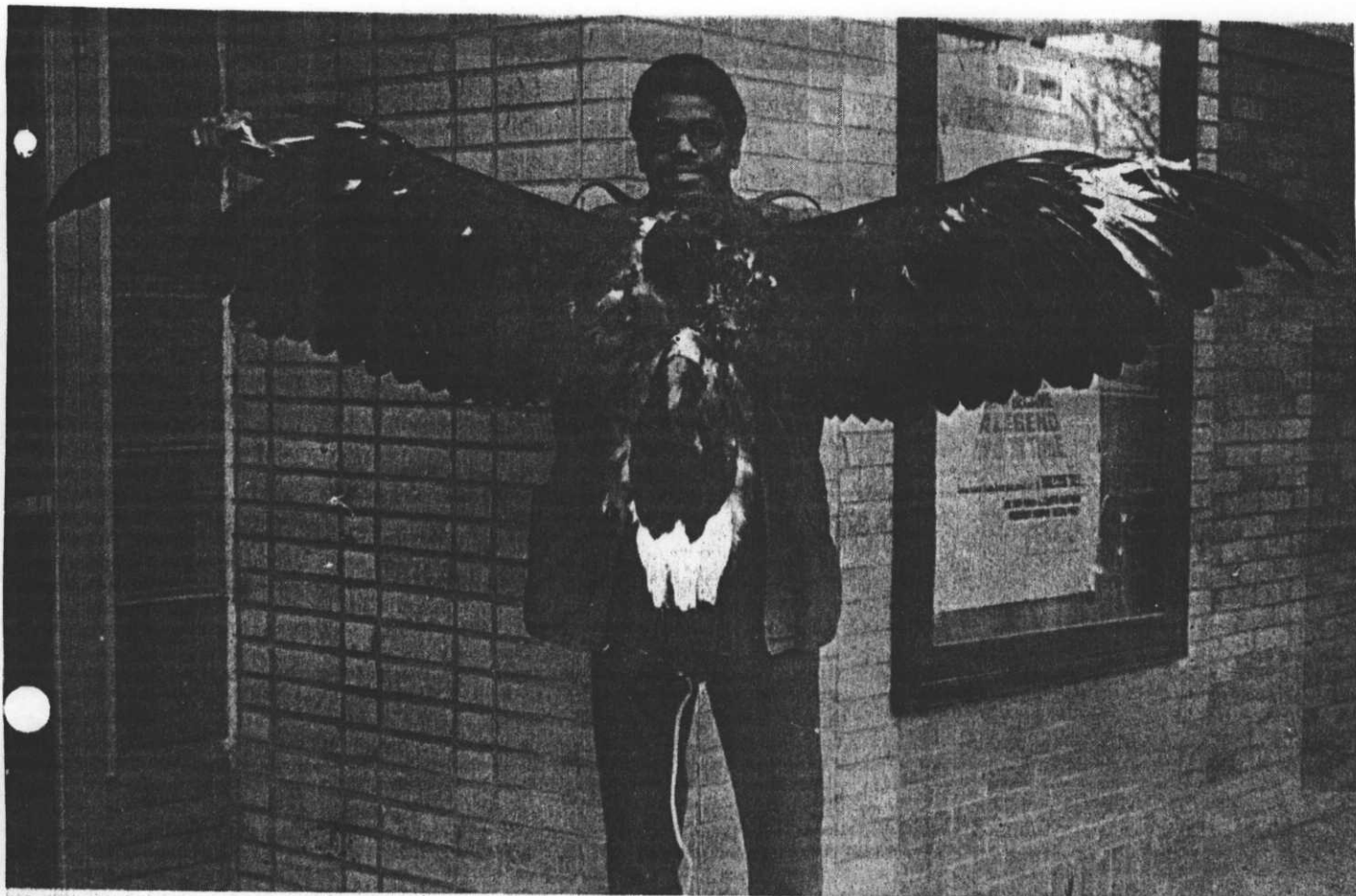
Stromstad Speaks to Garden Club

Mr. Ron Stromstad, representative of the Wild Life service presented a program for the Green Thumb Garden Club at their meeting Wednesday. His program was on birds, wild life, and flowers including pictures he had taken in Divide County.

April 26 has been proclaimed as State Bird Day. The date honors Mr. Audubon's birthday. Mr. Audubon is a man nationally known for his great interest in birds.

The garden club meeting was hosted by Mrs. Alice Redvold with Mrs. Emma Aarum as co-hostess.

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GOLDEN EAGLE. ...Ray Hart of the U.S. Fish and Wildlife Service, holds one of two dead Golden Eagles found in the area and turned in by Roger Cooper

of Ray, district game warden. The Eagles were taken to Minot for autopsy. One of them appeared to have been shot. The Golden Eagle is on the

protected species list, because its numbers have been reduced so sharply. This adult had a wing span in excess of seven feet.

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