TREMPEALEAU NATIONAL WILDLIFE REFUGE

Trempealeau, Wisconsin

ANNUAL NARRATIVE REPORT

Calendar Year 1985

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

REVIEW AND APPROVALS

TREMPEALEAU NATIONAL WILDLIFE REFUGE

Trempealeau, Wisconsin

ANNUAL NARRATIVE REPORT

Calendar Year 1985

Robert S. Drieslein	2-19-86	Richard F. Berry	2/20/86
Refuge Manager	Date	Complex Supervisor	Date
R.E. [illegible]	4/9/86		
Division Supervisor Review	Date	Regional Office Approval	Date

Page

INTRODUCTION

TABLE OF CONTENTS

INTRODUCTION

1. Location

The Trempealeau National Wildlife Refuge is located in southwestern Trempealeau and southeastern Buffalo Counties, Wisconsin (Map 1). La Crosse, Wisconsin, a city of about 50,000 people, lies about 25 miles to the south. Winona, Minnesota, located just across the Mississippi River, has a population of about 25,000. Trempealeau adjoins both Upper Mississippi River National Wildlife and Fish Refuge and Perrot State Park lands.

2. Topography

Trempealeau Refuge lies within the floodplain of the Mississippi River flanked by forested bluffs rising 400 feet above the valley floor. The refuge includes a 700-acre centrally located upland portion consisting of rolling sand prairies with scattered groves of oaks and planted pine plantations. This upland portion is surrounded by a large shallow lake created by railroad dikes and barrier dikes built around the turn of the century. These dikes protect the Trempealeau pool from floodwaters from the adjacent Mississippi and Trempealeau Rivers.

3. History and Points of Interest

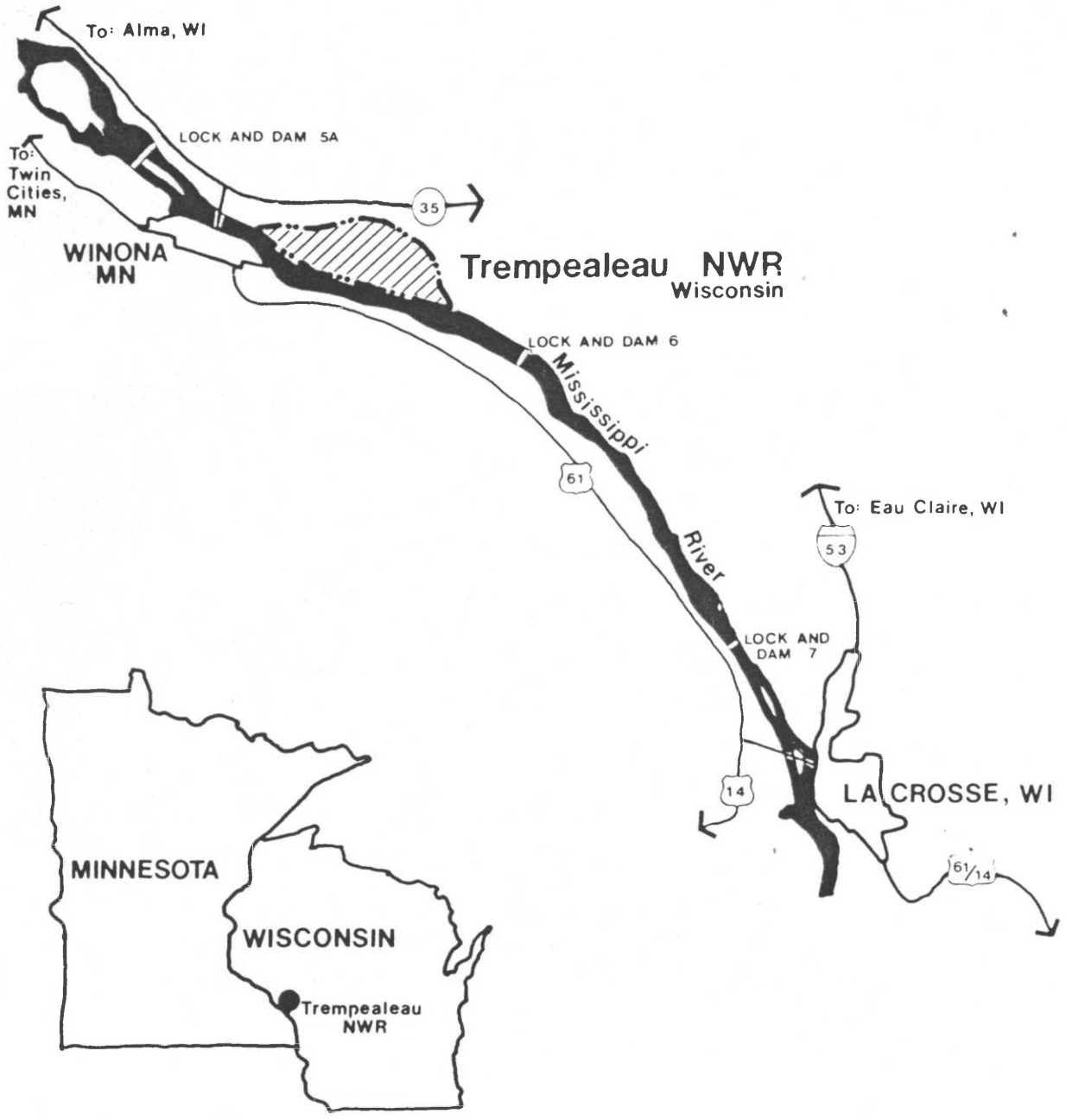
Prior to 1979, the refuge pool which includes nearly all of the significant wetlands on the property was owned and managed by the Delta Fish and Fur Farm Corporation. The operation included commercial harvest of both rough and game fish, furbearer trapping, waterfowl hunting leases, and cash-crop farming and cattle grazing in bottomland areas.

The Mississippi River Valley in the refuge area has a rich and varied history. Small river towns are unique with many residents making a significant portion of their living through commercial fishing and furbearer trapping. The river provides a tremendous resource for recreationists engaged in fishing, hunting, boating, camping, sight-seeing, etc.

4. Purpose for Establishing the Refuge

The original 706.9 acre portion of Trempealeau Refuge established by Executive Order in 1936 was set aside as "a refuge and breeding ground for migratory birds and other wildlife". With purchase of the former Delta Fish and Fur Farm in 1979 under LWCF, the purposes of the refuge were broadened to provide for public educational and recreational benefits.

Location


To: Alma, WI
LOCK AND DAM 5A
To: Twin Cities, MN
35
WINONA MN
Trempealeau NWR
Wisconsin
LOCK AND DAM 6
Mississippi River
61
To: Eau Claire, WI
53
LOCK AND DAM 7
14
LA CROSSE, WI
61/14
MINNESOTA
WISCONSIN
Trempealeau NWR

Strategically located within the Mississippi River migration corridor, Trempealeau NWR will become more important as a resting and feeding area for waterfowl as surrounding habitats on private lands are altered or destroyed.

5. Size and Acquisition

Trempealeau National Wildlife Refuge includes 5,617 acres under existing ownership. The former Delta Fish and Fur Farm consisting of 4,778 acres, was purchased from Dairyland Power Cooperative for the sum of $875,000. An additional 132 acres were acquired through a land exchange with Dairyland for FWS property adjacent to their Alma, Wisconsin, power plant.

6. Refuge Habitats

A breakdown of the acreage of the major habitat types on the refuge is as follows:

Habitat Type	Acres
Open water	1,350
Marsh and aquatics	2,470
Wetland shrub and wet meadow	490
Upland forest	280
Bottomland forest	590
Upland shrubs	110
Grassland	320
Developed land	7
	5,617

7. Physical Facilities

Refuge headquarters is located on the property. Facilities include a combination office and shop building, three-stall garage, storage barn, and pumphouse.

8. Master Plan

A Master Plan for the Trempealeau NWR was approved by the Director in April, 1983.

A. HIGHLIGHTS

Drieslein presented revenue sharing checks to Trempealeau and Buffalo townships for $6,507.00 and $3,220.00 respectively. Based on a revenue sharing appraisal in April, payments to townships for the next five years may be significantly reduced (Section E.8).

A crew from Northern States Power Company installed two osprey nesting platforms at former nest sites on power poles on the refuge. Ospreys nested on both platforms later in the year (Section G.6).

Following two meetings with affected land-owners, a final draft of the Trempealeau land protection plan was submitted to the R.O. on March 31, 1985. The plan received Washington office approval in October, 1985 (Section C.3).

In April, 2,000 wild celery tubers were collected from Lake Onalaska and planted at two sites in the refuge pool. Plants became well established at both sites by early summer. Based on the encouraging results from this experiment, an expanded planting effort is planned for 1986 (Section D.5).

Student trainee Steven R. Tapia spent 6 months at Trempealeau NWR working under the cooperative education program. He was terminated in December and returned to New Mexico to finish school (Section E.3).

The Service is presently considering a proposal from the Wisconsin DNR to route bicycles from the adjacent Great River Trail through the Trempealeau NWR on existing roads. An M.O.U. between the two agencies on this project is under review (Section H.12).

The entrance to the 4.5-mile wildlife drive was redone along with construction of an information kiosk and landscaped parking area. YCC enrollees performed a major share of the work to complete this project (Section I.1).

Wood duck trapping consumed a major share of staff time this fall. A total of 224 birds were banded in spite of an abundant crop of wild foods which made it difficult to attract ducks to baited sites (Section G.16).

The volunteer program gained additional momentum in 1985 with over 1,300 hours of time donated by local individuals (Section E.4).

With some funding help from the R.O. the Kiep's Island bank stabilization project was completed this fall. The old house foundation was filled and more than 1500 yards of fill and 900 yards of rip-rap were placed over the eroded bank adjacent to the archaeological site (Section D.4).

An unprecedented fall movement of bald eagles through the refuge occurred with a partial count of 101 birds on 11-13-85 (Section G.2).

Twelve legal bucks and 16 antlerless deer were harvested during the two-day refuge gun deer hunt (Section H.8).

The winter of 1985-86 began with a vengeance with prolonged sub-zero temperatures and heavy snowfall. Eighteen inches of snow fell during a 24-hour period on 12-1-85. On 12-19-85, the mercury in the thermometer at headquarters dipped to -36°F (Section B).

Extreme weather conditions and low fur prices have discouraged refuge trapping activity. As of 12-31-85, about 1,200 muskrats have been harvested (Section H.10).

As a result of a State trapping zone boundary change, the refuge fall season in 1986 will open in late October allowing some open water trapping and a greater harvest of muskrat, mink, and raccoon (Section H.10).

B. CLIMATIC CONDITIONS

Table 1. Precipitation and Temperature Data 1985

Month	Precipitation (in inches) Precipitation	Normal	Snow	Max.	Min.
January	.85	1.02	10.6	48	-34
February	.94	.97	4.7	54	-46
March	2.59	2.02	8.0	70	-6
April	2.12	2.69	5.5	90	13
May	.93	4.15		89	33
June	2.08	4.87		101	36
July	2.49	3.98		98	46
August	3.57	3.72		95	45
September	5.7	3.23		95	31
October	1.58	2.07		71	23
November	2.84	1.61	13.25	59	-8
December	1.32	1.13	25.47	36	-36
Annual Totals	27.01	31.37	67.52	101	-46

Snowfall for the year totaled 67.52" of which 28.8" was received during January through April and 38.72" during November through December. An 18" snowfall occurred on December 1 followed by brisk winds which caused considerable drifting.

Warm temperatures and near normal rainfall in March and April created a rapid snow melt causing severe flooding of the entrance road and segments of the wildlife drive bordering the Trempealeau River. The river rose 19 inches overnight and within two days dropped 14 inches.

In spite of ample moisture through late spring, rainfall during the summer months was below normal causing a semi-drought. Refuge pools were approximately 6" below their normal summer levels but in September 5" of precipitation was received bringing everything back to normal. The summer was very mild with no severe thunderstorms and low humidity.

The first snowfall occurred on November 10 with 6 inches of the white stuff. Another 3 inches fell on November 22 creating a good snow cover for opening day of deer hunting on November 23.

Temperatures went below the freezing mark on November 20 and remained as such through December with the exception of two days in December when highs of 33° and 36° were recorded.

C. LAND ACQUISITION

3. Other

An initial draft of a land protection plan for the Trempealeau NWR was presented to affected land-owners and other interested persons at a meeting on February 27, 1985. An attorney representing several land-owners voiced concerns of his clients, principally their fear of condemnation of lands by the government. Manager Drieslein and representatives from the Twin Cities Realty division explained that the plan is based on a "willing seller" approach to land acquisition. Portions of the plan were re-drafted and copies re-routed to land-owners at a follow-up meeting on March 25, 1985. A final LPP draft was re-submitted and approved by the Directorate on October 1, 1985.

Basically, the LPP proposes that the Service acquire an additional 964 acres of adjacent land through a combination of fee title, easement and land exchange bringing the total refuge acreage to 6,581.

A proposed land exchange between the Service and Dairyland Power Cooperative involving a management lease on the "upper farm road" adjacent to the west boundary of the Trempealeau NWR is under consideration.

D. PLANNING

2. Management planning

See C.3 above for information on the land protection plan.

Progress on management planning during 1985 and a schedule for next year's submissions is summarized in the following table:

Management Plan	Submitted and Approved in 1985	Scheduled for 1986
Fire	X	
Marsh and Water	X	
Law Enforcement	X	
Search and Rescue	X	
Signs (revised)	X	
Wildlife Inventory		X
Fisheries Management		X

3. Public participation

Public participation in the refuge program took place during the two land protection plan meetings and again during a joint meeting with the Wisconsin DNR in September to solicit input on the proposed bicycle trail.

4. Compliance with Environmental and Cultural Resources Mandates

Notification was received on July 10, 1985, that the Kiep's Island archaeological site (47-Tr-86) was determined to be eligible for the National Register of Historic Places.

Since the salvage of skeletal remains at the site in April, 1984, continued wave erosion caused sloughing of the south bank of the island threatening remaining archaeological materials. With help from the Regional Office, funding was made available to renovate the old house foundation and stabilize the bank. An environmental assessment on the project was submitted and a Finding of No Significant Impact issued by the Regional Director on 7-19-85, and a joint C.O.E./State permit (85-486-12) was obtained.

Work on the project began in early September with rehabilitation of the 300-foot connecting dike to Kiep's Island to permit passage of heavy trucks. Through the loan of a front-end loader and two dump trucks with operators from the village and township of Trempealeau, over 300 truck-loads of fill were hauled from a refuge borrow site and placed over the eroding south bank of Kiep's Island.

(11-82, RLD)
Severe bank erosion at the Kiep's Island archaeological site.

(9-85, RLD)
Placing fill on the Kiep's Island bank.

Utilizing a backhoe rented from Haeussinger Construction Co., Fountain City, WI. maintenance worker Rife spent the month of October shaping the fill and placing rip-rap. Over 900 cubic yards of rip-rap were placed along the bank as protection for the archaeological site. Total cost of the project for materials and equipment rental was $9,500.

5. Research and investigations

a. Water quality studies

In a 26-page mimeographed report dated 8-15-85, Carl E. Korschgen, wildlife biologist at the NPWRC field station in La Crosse, WI., summarized the results of analysis of water samples taken from the Trempealeau refuge pool during the spring and summers of 1983, 1984, and 1985. Sampling parameters included water depth, secchi depth, tubidity, suspended solids, and percent organic matter. Suspended solids and turbidity levels for the Trempealeau samples were lower than Mississippi River main channel levels for the same months but higher than Lake Onalaska water. Korschgen stated that the present lack of submersed plants in areas where water depth exceeds 48 inches indicates an inadequate light regime for survival, that is, the photic zone does not exceed to the bottom where aquatic plant seeds will be germinating. The only plant present in deeper water areas is Potomogeton pectinatus (Sago pondweed) which is most likely reproducing vegetatively each year from tubers. Plants such as P. pectinatus can use the energy stored in the tuber for an initial spurt of growth to place photosynthetic tissues into the photic zone.

Korschgen recommended three management options for increasing the abundance of submersed plants at Trempealeau NWR. The first is to attempt to decrease the turbidity of the waters. Removal of rough fish may accomplish this in part. However, wave action and algae blooms will probably continue to contribute to the turbidity. Secondly, the water level in the spring and early summer should be maintained as low as possible so that even if tubidity levels remain the same the photic zone will extend to, or closer to, the bottom. Thirdly, trasplants of plants such as wildcelery (Vallisneria americana) or sago pondweed could be attempted.

b. Wildcelery plantings

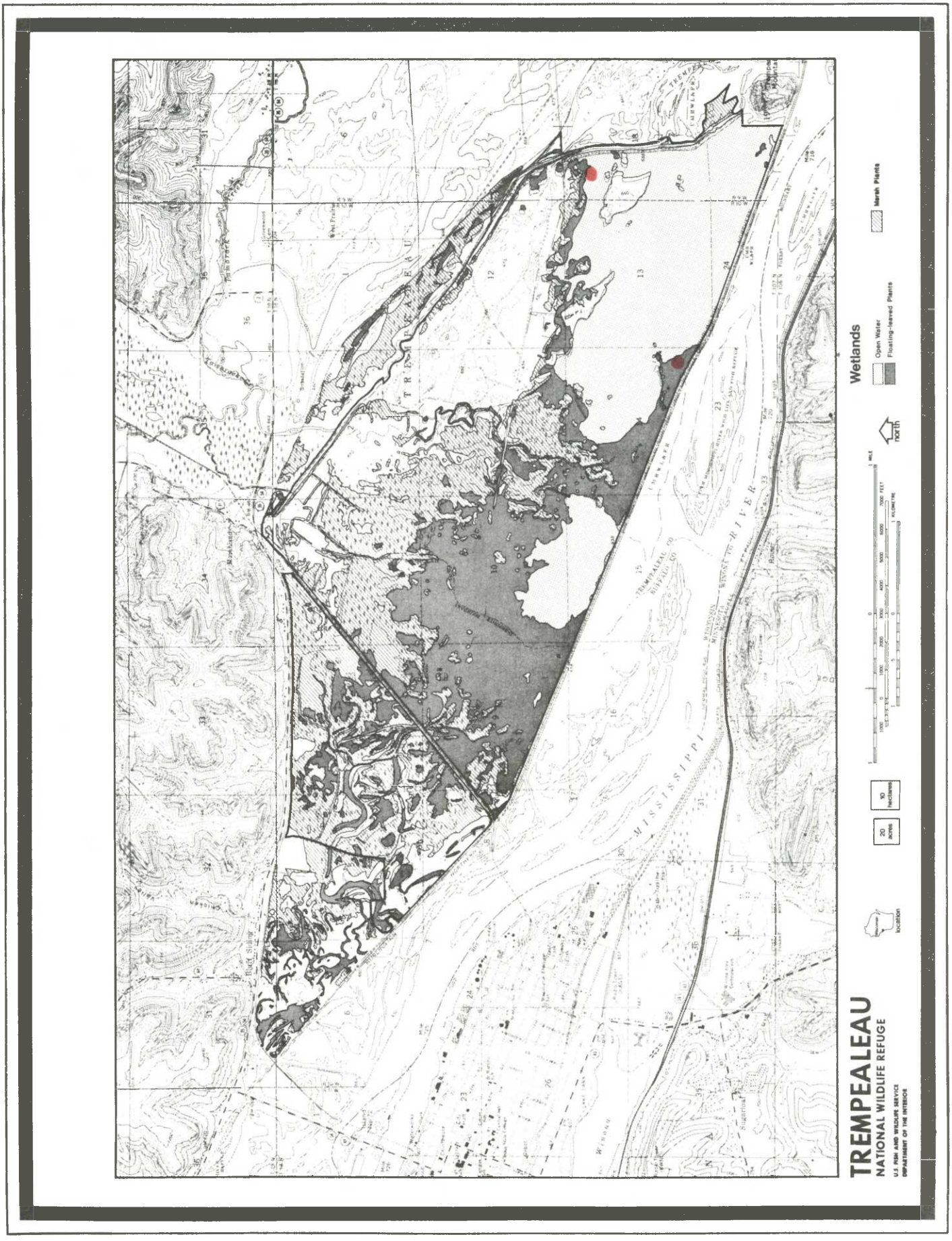
This study was initiated to determine if wildcelery could be established in the refuge pool by hand-planting fall tubers. On April 3, 1985, two enclosures with steel fence posts and four-foot high snow fence were constructed (see Map 2). Each enclosure was approximately 24 feet square, with two additional steel posts marking the corners of a 24-foot square area adjacent to the fenced enclosure. This area was used as a comparison to determine if wild celery will become established without the snow fence protection.

General parameters on the two sites were as follows:

	Site A	Site B
General location	150' from B/N RR just east of large stump field	Just off cattail point near Holton's Corner
Water depth	36" - 40"	32" - 36"
Bottom	Approximately 4" muck over firm sand	2-4" muck over firm sand

Map 2

Wildcelery Planting Sites



(4-85, RLD)
Fenced wildcelery enclosure with adjacent control area.

Assistant Manager Kline assisted NPWRC staff collecting wildcelery tubers at Lake Onalaska. Approximately 2,000 tubers were brought to Trempealeau in a large cooler half full of water. On April 3, Kline and a group of volunteers prepared the tubers for planting. Planting envelopes, previously prepared and fabricated from special towels inpregnated with plastic netting, were used to hold the tubers. Holes had been punched in the towels to provide a way for the wildcelery stem to penetrate the planting envelopes. Two to three tubers were placed in each envelope along with a handful of damp soil. Each envelope was then stapled across the top and placed in a metal tub partially filled with water.

On April 4, tubers were planted at the two enclosure sites. 200 envelopes containing approximately 500 wildcelery tubers were planted both inside the fenced enclosure and within the adjacent unfenced area for a total of 1,000 tubers at each of the two sites shown on Map 2. A total of 2,000 tubers were planted. The envelopes were dropped into the water and distributed throughout the plots to ensure as complete coverage as possible.

(4-85, RLD)

Volunteers preparing wildcelery planting envelopes.

(4-85, RLD)

Fred Priewert's only comment on the wildcelery planting was "You could've picked a warm, sunny day to do this, Drieslein!"

Follow-up checks on May 24 and June 10 showed that wildcelery plants had become firmly established at both sites, both inside and outside of the enclosures. Several plants were sending out runners several inches long with new shoots sprouting from them.

A more extensive planting effort is planned for the spring of 1986 without the benefit of snow-fenced enclosures. Results of this year's experiment confirm that wildcelery plants can be established through planting of fall tubers. The survival of plants outside the fenced enclosures is encouraging, however, there is still concern over the possible impacts of carp when larger beds are established.

Wildcelery plants removed from the enclosure showing development of runners and new plants.

(7-85, RLD)

6. Other

Drieslein participated in a planning evaluation meeting at the R.O. on March 27 along with other project leaders. A team from the Washington office solicited input on the FWS's existing planning programs for a report to be prepared for the Director.

E. ADMINISTRATION

1. Personnel

No changes in permanent personnel occurred at this station during the year.

a. Personnel Training

Refuge personnel attended the following training during the year:

Course	Dates	Hours	Staff Member
Hydro-Axe Operation (FWS)	1/8 and 9	16	Rife
EEO (FWS)	1/23	4	Drieslein
Hypothermia (U.S. Army C.O.E.)	1/31-2/1	16	Kline
LE Refresher	April	40	Drieslein/Kline
Pesticide Applicators Certification (MN. Dept. of Agriculture)	4/16	4	Drieslein/Kline
Pistol Requalification (FWS)	9/24	4	Drieslein/Kline
CPR Refresher (FWS)	6/11	4	Drieslein/Kline Medema/Rife

Trempealeau National Wildlife Refuge Staff

(2-86, RLD)

Medema Rife Kline Drieslein

1. Robert L. Drieslein, Refuge Manager, GS-11, PFT;
   EOD 4-20-80

2. James E. Kline, Refuge Manager (Assistant), GS-9, PFT;
   EOD 10-2-83

3. Alisa J. Medema, Secretary (Typing), GS-4, PPT;
   EOD 10-3-82

4. Allan W. Rife, Maintenance Worker, WG-7, PFT;
   EOD 5-2-83

5. Steven R. Tapia, Student Trainee (Biology), GS-3, TFT;
   EOD 6-10-85, Terminated 12-14-85

6. Jeffrey Tilden, Social Services Aide, GS-4, TFT;
   EOD 6-10-85, Treminated 8-2-85

2. Youth Programs

Trempealeau NWR again hosted a Youth Conservation Corps (YCC) program from June 10 to August 2. Three male and two female enrollees were selected by a random drawing at the Winona, MN., Job Service Office. Jeff Tilden was selected for the staff position for the second consecutive year.

1985 Youth Conservation Corps (7-85, RLD)

Left to Right: Jeff Tilden, Andrea Dickinson, Scott Schroeder, David Mikrut, Brenda Bauer, Darin Olson

An evening open house was held at the refuge during the week prior to the beginning of camp for selected enrollees and their parents.

Enrollees spent the majority of their eight-week work period on the new information kiosk, parking area, and wildlife drive entrance. This project included the installation of several hundred feet of 6x6 curbing, landscaping, gravelling, and sign placement. The job was well done and the enrollees were quite proud of the final results of their labor.

(7-85, RLD)
Jeff Tilden and Scott Schroeder putting the finishing touches on the kiosk walkway.

Other projects accomplished by the YCC group included:

- cutting of about five acres of pole-sized black locust along the wildlife drive;
- staining barrier posts at the boat landing;
- erection of several new signs;
- assisting with splitting and stacking firewood;
- scraping and re-painting farm implements;
- litter pick-up at public use sites;
- lawn maintenance;
- minor dike and road repairs.

YCC enrollees attended an eight-hour, CPR course presented by a Red Cross instructor on June 10.

3. Other Manpower Programs

We were fortunate to be assigned funds and FTE's to support a Cooperative Education student this year. This position was particularly helpful since Vermilion College was not able to provide a work-study employee for 1985.

Steven R. Tapia was employed at Trempealeau NWR for a six-month period from June 10 through December 14. Steve was formerly assigned to the Sherburne NWR for the first half of his Coop. Ed. employment. He assisted in virtually all phases of refuge work, however, his main task was trapping and banding woodducks.

(9-85, RLD)
Student Trainee (Biology) Steve Tapia and one of those "hard-to-catch-woodducks".

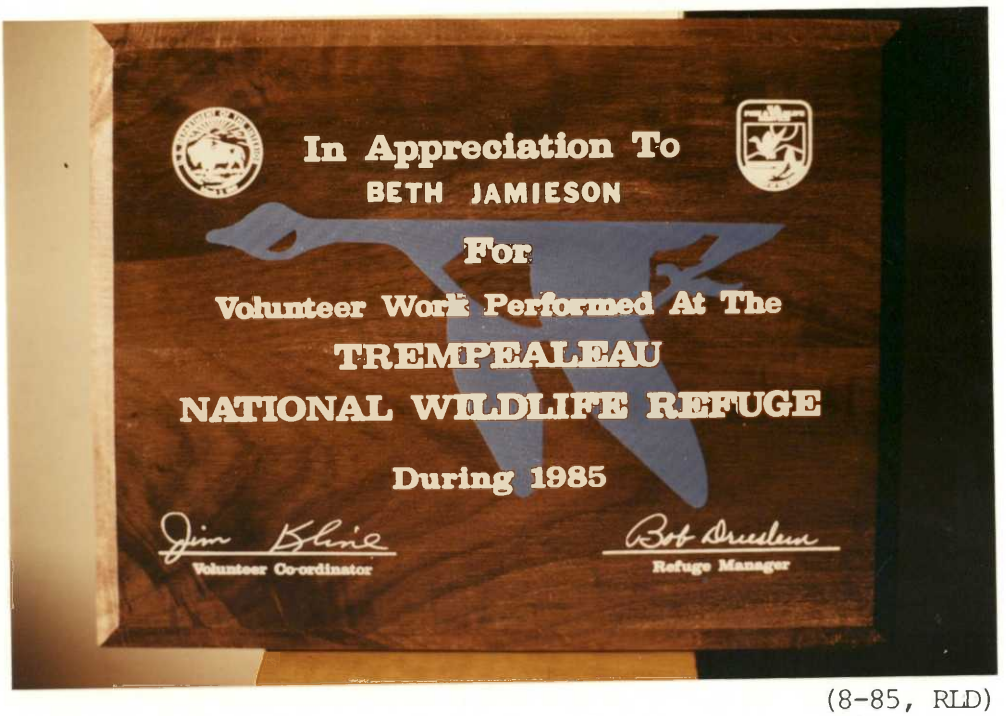
Steve returned to finish his education at New Mexico State University in December. He did an excellent job for us and we feel that he would make an outstanding Fish and Wildlife Service employee.

4. Volunteer Program

The volunteer program at Trempealeau NWR gained considerable momentum in 1985. About 1,310 hours of work were donated by 42 individuals during the year. The following table is a summary of volunteer efforts from those who contributed more than 20 hours of work time:

Name	Work Projects	No. of Hours
Al Skroska	Waterfowl surveys, water sampling, nesting studies, public use surveys	258
Dan Wait	Lawn maintenance, tree watering, landscaping, water sampling	156
Beth Jamieson	Clean office, index for refuge files, make up seasonal kiosk displays	138
Mary Strasser	Waterfowl surveys, osprey nest checks, woodduck banding, nesting studies	105
Angi Remus	Cormorant studies, woodduck banding, brood surveys	97
La Crosse Eagle Scouts	Cut locust	84
Bea Stellpflug	Osprey nest checks, deer check station, woodduck banding, office work	74
Trempealeau Girl Scouts	Assemble wildcelery planting envelopes, landscaping	53
Tom Hunter	Woodduck banding, frog and toad survey, deer check station	50
Helen Davis	Woodduck banding, water sampling, wildlife surveys	42
Larry Finnegan	Public use surveys, sign, kiosk, and nature trail maintenance	37
Rob Drieslein	Kiosk work, locust cutting	33
Martha Skroska	Wildlife surveys, public use surveys	28
Gil Hoesley	Deer car counts	20
Other Volunteers		135
		1,310 hours

A volunteer appreciation night was held at the refuge on September 4 with refreshments served and volunteer appreciation certificates given to all those who attended. In addition, wooden decorative plaques were presented to eight people who had donated more than 25 hours of their time.



(8-85, RLD)

The Regional Sign Center helped us fabricate these plaques for some of the hardest-working volunteers.

In retrospect, we don't know how we could have gotten through the year without the volunteer program.

How not to run a volunteer program!

5. Funding

A breakdown of the funding for this station in FY 1985 is as follows:

Basic operations and maintenance (1260)	$141,250*
Youth Conservation Corps (1520)	$ 9,000

*includes $5,500 re-programmed to Trempealeau from other accounts late in the FY to complete the Kiep's Island rehab project.

6. Safety

Station safety meetings were held monthly covering such subjects as safe driving techniques, woodstove safety, heavy equipment hazards, and proper use of portable power tools.

Earl Markwell and Sally Rygula from the Region 3 safety office visited the refuge on June 18 to view YCC work projects and assist the staff with other safety matters.

The regional sign center made up a small number of warning signs which were placed at several locations in the main pool to alert visitors to hazardous ice conditions.

(2-85, RLD)

Warning sign placed near the water control structure.

On July 26, 1985, Student Trainee Steven Tapia sustained an inguinal hernia while on duty. Following corrective surgery on July 30, Steve missed three weeks of work while recuperating and returned to work in a light duty status on August 15. He returned to full duty status on 9-9-85.

8. Other

Drieslein presented revenue sharing checks to two local township treasurers on February 8. The majority of these payments cover Trempealeau NWR lands located in Trempealeau and Buffalo Townships.

Revenue sharing payments over the last four years are summarized as follows:

	Township		
FY Year	Trempealeau	Buffalo	Total
1984	$6,507	$3,220	$ 9,727
1983	$6,582	$3,346	$ 9,928
1982	$7,744	$3,937	$11,681
1981	$7,487	$3,806	$11,293

Revenue sharing payments for the period 1980 through 1984 were based on three-fourths of 1% of the assessed valuation of refuge lands (5,617 acres valued at $1,634,000).

During the week of April 1, Vince Schurr from the Twin Cities Realty office visited the refuge area to conduct the revenue sharing assessment which is done every five years. It appears that payments to townships during the period from 1985 to 1989 may be reduced significantly due to two factors. Firstly, land values in the refuge area have been declining in recent years. A comparable survey in the Horicon NWR area in eastern Wisconsin showed a 15% decline in land values since the last assessment in 1980. Secondly, Congress has recently changed the procedures for calculating payments by factoring in a reduction of up to 30% in the overall assessment due to the large size of NWR's.

F. HABITAT MANAGEMENT

1. General

Completion of public use facilities including the boat landing, information kiosk, wildlife drive entrance and supporting signs consumed the majority of staff time during 1985. Habitat management projects were limited to wildcelery planting studies, water level management in the main pool, some cutting of black locust in designated grassland areas and prescribed burning. These latter projects will receive greater emphasis in 1986.

2. Wetlands

Flooding of the township access road to the iron bridge occurred several times during the year. On March 13, an ice jam downstream caused water to back up, nearly over-topping the bridge decking.

(3-85, RLD)

Who pulled the plug?

Constraints at the discharge site makes it impossible to de-water all or any significant part of the main pool. Within the limited range of water management capabilities, water levels were held at the lowest elevation possible for the following reasons:

1. minimize the depth of the photic zone in early spring when submerged aquatic plants are initiating growth;
2. minimize wave erosion on dikes and wooded islands;
3. enhance growth of emergent and moist-soil plants on the fringes of the main pool; and
4. concentrate rough fish to accentuate mortality and enhance harvest by commercial fishermen.

This was the first full year of water management since the new water control structure was installed and the old "upper locks" plugged. This, and the dry spring and summer conditions, resulted in lower water levels into late summer and fall of 1985 than have occurred in the five years that water level readings have been recorded.

The wildrice crop in September, 1985, was unprecedented both in terms of plant abundance and distribution, and seed production. The myth of hybrid or sterile plants which produce much vegetation growth but no seed was put to rest this year. Extensive beds of the alien plant, curly-leaf pondweed (Potamogeton crispus), are becoming prevalent in protected bays in the refuge pool. Why this plant is spreading is not known, however, we suspect it could be in response to the lower water level regime and/or carp removal. NPWRC staff report that this species is of relatively low value as a waterfowl food source.

(5-85, RLD)

Curly-leaf pondweed formed nearly solid stands in some protected bays.

Several purple loosestrife plants were discovered about ¼-mile west of the refuge on property owned by Dairyland Power Cooperative. The species has not been located on the Trempealeau NWR, however, it appears that day is fast approaching.

3. Forests

Hardwood trees in the area produced a tremendous crop of fruits and nuts during the fall of 1985. Refuge roads were littered with acorns and the branches of wild plum and black cherry were heavy with fruit. We entered the winter of 1985-86 with an abundance of wildlife food on the forest floor. Unfortunately, it was covered with 18-20 inches of snow by early December.

(8-85, RLD)
Black cherry berries - the birds really had easy pickings this summer.

5. Grasslands

Grassland management consisted of black locust removal and prescribed burning (Section F.9). Approximately five acres of locust were hand cut using YCC enrollees and volunteers. All freshly cut stumps were sprayed with Tordon RTU from a backpack sprayer by a licensed staff member. Although time consuming and labor intensive, this seems to be the most environmentally acceptable, long-term control method for preventing locust encroachment into grassland areas.

9. Fire Management

A total of 162 acres of grassland was burned during the period from April 29 to May 9 (Map 3). Excellent results were achieved in the two large burns within the wildlife drive. Scorching set back cool season grasses and leafy spurge which was mostly blossoming at the time of burning. Results of burning in the lower farm fields were sporadic due to wet conditions and the presence of large amounts of green vegetation. Follow-up burns on these units are scheduled for the spring of 1986 prior to May 1.

On November 14, Biologist Steve Wilds visited the refuge to review the prescribed burning program. There was concern that, in view of the sterile soil conditions and possible negative impacts on some wildlife species, the burning interval may be too short on some units. The annual burning proposal for 1986 was given tentative approval with the understanding that the fire management plan will be re-evaluated for possible revisions.

G. WILDLIFE

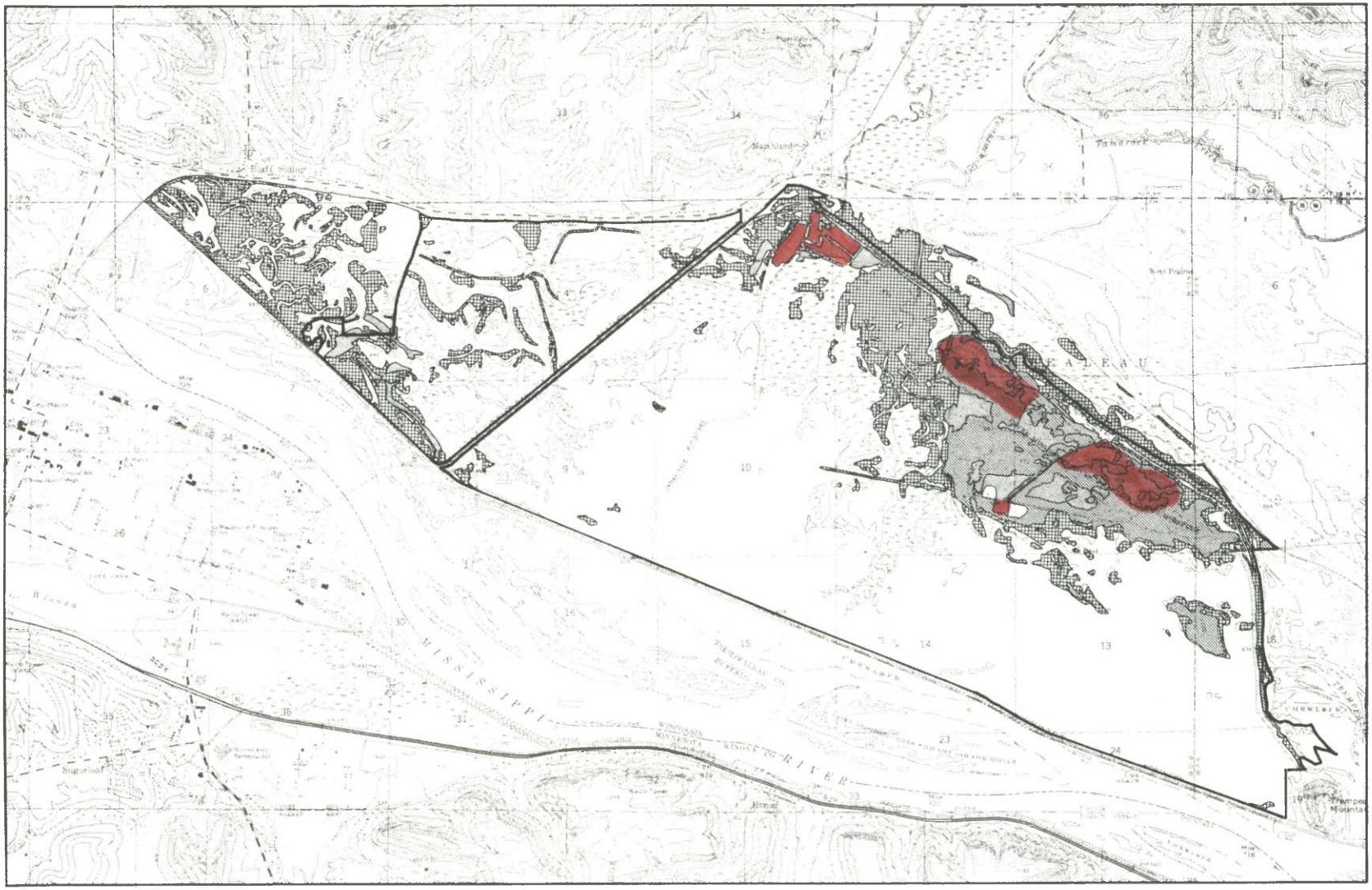
1. Wildlife Diversity

A few new species were added to the refuge list of birds and mammals during the year. A coyote was seen on March 12 - this animal seems to be increasing in numbers in southwestern Wisconsin. A group of six wild turkeys were observed on April 9. This species has increased in numbers rapidly from the small initial stocking effort by the Wisconsin DNR in 1983.

2. Endangered and/or Threatened Species

There were no reported observations of the endangered Peregrine falcon on the refuge in 1985.

Bald eagles were conspicuous again this year. On March 22, 81 birds were counted during ice break-up on the main pool. About 90% of these were immature birds. During the fall migration, 101 bald eagles were seen during a partial count of the refuge. It was estimated that more than 125 birds were present.



Prescribed burns - May, 1985

Map 3

3. Waterfowl

a. Migration

(1) Spring. Canada geese were first seen on February 28; woodducks and hooded mergansers were the first migrant ducks observed on March 13. A male cinnamon teal showed up again this year on April 20 to the delight of local birds-watchers. A peak of 9,230 ducks were counted on April 11.

(2) Fall. Tundra swans were seen in the area as early as October 14, however, the heaviest migration occurred on November 14 when several flocks could be seen passing over throughout the day. In spite of the dismal fall flight forecast, fall duck numbers were the highest since records have been kept. An estimated 30,000 birds were present on October 24, largely wigeon, ring-necked ducks and mallards. The high fall duck numbers were due to a combination of the wildrice crop on Trempealeau NWR and fluctuating water levels on adjacent Mississippi River pools. Stubble flights were virtually non-existent with dabblers apparently feeding entirely on wildrice and other aquatics. All waterfowl departed the refuge following a hard freeze and heavy snowfall on November 20.

b. Nesting season

Based on breeding pair counts, brood observations and nest-dragging data, waterfowl production for 1985 was estimated as follows:

Species	Young raised to flight
Canada geese	30
Mallard	120
BWT	280
Wood duck	1,330

A total of 88 acres of grasslands were dragged by volunteers in June to locate duck nests. Seventeen blue-winged teal and six mallard nests were located. Follow-up checks showed that of the 23 total nests, four hatched for a nesting success rate of 17%. Of the 19 unsuccessful nests, 14 were destroyed by predators and five by fire.

Total waterfowl use days for CY 1985 were 1,106,000, virtually unchanged from 1984.

4. Marsh and Water Birds

The first double-crested cormorant of the year was seen on April 3. By April 24 there were 160 adults observed at the rookery with nest building and egg laying in full swing. Later checks by volunteers showed a total of 68 nests with nearly all available platforms utilized. Dr. Ray Faber from St. Mary's College, Winona, MN., visited the rookery on May 30 and conducted a partial count of 107 nestlings in 35 nests for an average of just over 3 young per nest. Total production for the year was about 200.

(5-85, AR)
The cormorant rookery is a busy place during the nesting season.

Dr. Ray Faber from St. Mary's College using his mirror pole to check cormorant nests.

(5-85, AR)

A cattle egret was observed several times on and near the refuge in early October. Sightings of this species are becoming more frequent in recent years.

This year's wildrice crop attracted many sora's and Virginia rails in late summer.

American coots were again the most abundant water bird during migration. A peak of 43,700 were present on October 31.

5. Shorebirds, Gulls, Terns, and Allied Species

Noteworthy shorebird observations during the year included a whimbrel on March 27 and a black-bellied plover on September 13.

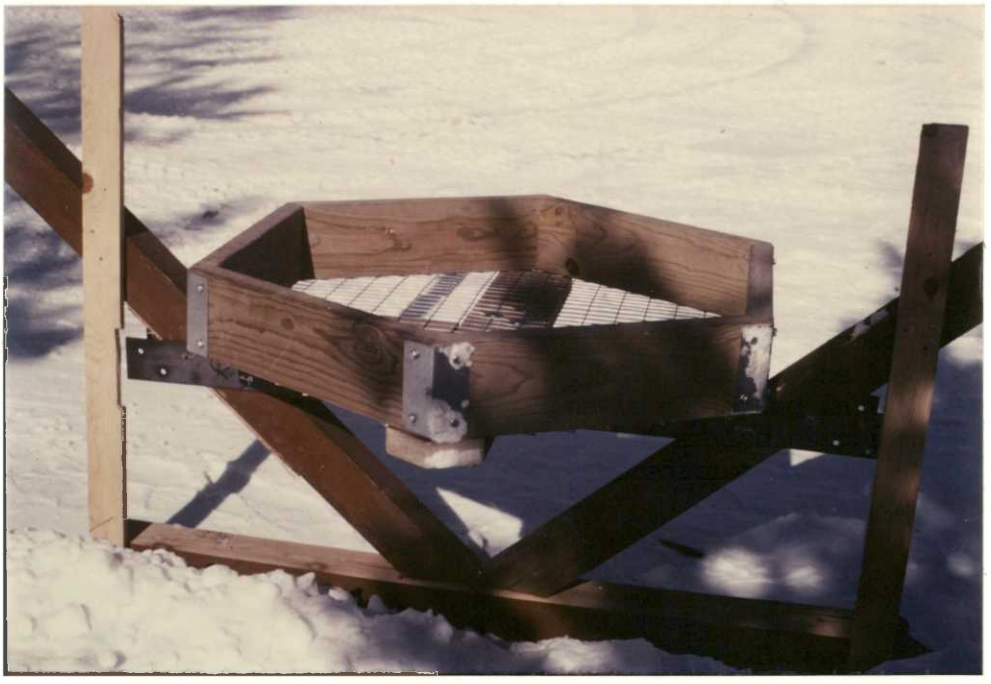
Ring-billed gulls are the most common species of this group on the refuge, particularly in early spring during ice break-up. An estimated 2500 were counted at one time on March 27, however many thousands of "ring-bills" passed through Trempealeau NWR during that month.

Caspian terns were seen regularly, but in small numbers throughout the spring and summer. Dr. Ray Faber, Winona, MN., located one black tern nesting colony on the refuge. This species is declining in the region and Faber reports very low nesting success in the Mississippi River colonies he has examined. He suspects that predation on nests and young may be a major factor.

6. Raptors

Resident raptors on the Trempealeau NWR include the red-tailed and red-shouldered hawks, American kestrel, osprey, great horned, barred and screech owls. Transient raptors observed this year included the turkey vulture, northern harrier, sharp-shinned, Cooper's and rough-legged hawks, and the bald eagle.

As reported in last year's narrative report, one of the two active osprey nests on Trempealeau NWR was blown off a power pole during a spring windstorm in 1984. Working in cooperation with Northern States Power Company, refuge staff modified an osprey nesting platform design developed by the Wisconsin DNR to fit the power pole cross-arms. Maintenance worker Rife constructed two platforms and an NSP field crew erected them on February 27 at the former osprey nest sites. Remaining nesting material from the previous year was removed and placed inside the platforms. As a precaution, a short piece of wire was used to ground the weld-wire mesh on the bottom of each platform to the power pole.



(1-85, RLD)
Maintenace worker Allan Rife modified the DNR's osprey nest platform to fit the power pole cross arms.

NSP crew hoisting the nest platform up the 75-foot tower.

(2-85, RLD)

(2-85, RLD)

Preparing to bolt the platform in place.

On April 11 an osprey was observed sitting on the nest platform at the Green Bay Culvert site. By April 15 both platforms were occuppied by a pair of nesting birds. Subsequently, the nest adjacent to the Burlington-Northern railroad dike fledged two young while the "culvert" nest was unsuccessful.

It is hoped that the new platforms will continue to minimize losses of nests and young birds in the future. NSP has been very cooperative in this project and has expressed a willingness to erect additional nesting platforms here or on other areas based on our recommendations.

7. Other Migratory Birds

The annual mourning dove coo count was conducted on the 20-mile assigned route in Buffalo County on May 24. A total of 27 doves and 158 calls were heard.

8. Game Mammals

a. White-tailed deer

Evening vehicle counts of white-tailed deer were run weekly from mid-September thorugh late November. Count results from the last five years are summarized below.

Year	No. of Surveys	Ave. No. of deer seen per survey	Range
1980	8	67	22-98
1981	7	69	42-106
1982	3	67	27-87
1983	10	61	40-84
1984	8	60	28-88
1985	11	53	14-91

Although counts show considerable variability from week to week, the average number of deer seen for all surveys has remained fairly stable from year to year since the first gun-deer hunt was held in 1982.

b. Furbearers

Refuge muskrat populations have remained relatively stable over the last several years. Fluctuations in trapping harvest from year to year tend to reflect differences in weather conditions and skill level of individual trappers rather than changes in muskrat numbers.

The local State conservation warden provided an airboat to perform the beaver lodge survey on November 8. Results of this survey are used to establish beaver harvest quotas for the following spring trapping season on the refuge. The number of active colonies counted during the last six years is as follows:

Year	No. of Active Beaver Colonies	Subsequent spring Trapping Harvest
1980	35	Closed
1981	33	56
1982	34	64
1983	32	54
1984	Incomplete count	54
1985	31	-

Raccoon activity was a problem at woodduck banding sites again this year (see Section G.15).

10. Other Resident Wildlife

Rife and Drieslein observed six wild turkeys on the Trempealeau River dike on April 9. Sightings of this species have increased following an initial stocking effort by the Wisconsin DNR in the winter of 1983-84. Wild-trapped birds from Missouri were released about six miles north of the Trempealeau NWR.

11. Fisheries Resources

a. Commercial fishing

Mr. Edward Koba's rough fish contract was renewed for CY 1985 for the same bid price as last year ($4,000). His crews harvested and sold the following quantities of fish this year:

Carp	104,000 lbs.
Buffalo	33,300 lbs.
Sheepshead	520 lbs.
	138,220 lbs.

The quantity of rough fish taken in 1985 was about half that of last year, primarily due to poor market conditions.

Late in the year, Mr. Koba informed us that he did not with to renew his contract for 1986 at the existing price of $4,000. Consequently, a sealed-bid auction was held at headquarters on December 23 to award the rough fish contract and a separate bullhead harvesting contract.

Mr. Koba received the rough fish contract for his bid of $3,600; and Mr. Vic Tuschner of Dodge, WI., was awarded the bullhead contract for his bid of $.0225 per pound.

b. Game fish salvage

Due to heavy snow-cover on the ice since mid-November, fish were beginning to show signs of stress at the end of the year. The area DNR fish manager was contacted and State crews will begin salvaging northern pike from the refuge pool in early January, 1986.

12. Wildlife Propagation and Stocking

The pheasant propagation facility on the refuge operated by the Associated Sportsmen's Clubs of Trempealeau County was active again this year. The Wisconsin DNR delivered 5,500 day-old pheasant chicks in early June along with a four-week supply of feed. The birds were released in late August at about 10 weeks of age on private and State lands throughout the county. The club's have a special use permit which will expire in April, 1988. They have been told that the FWS will not renew the permit and that all facilities must be removed on or before that date.

14. Scientific Collections

Ten starlings were collected in the refuge area during the first week in November and turned over to the St. Paul Field Office for pesticide monitoring studies.

15. Animal Control

Live-trapping of raccoons was initiated at the woodduck trapping sites during the pre-baiting period in late July. Thirteen raccoons and five opossums were trapped and re-located off the refuge.

16. Marking and Banding

This year Trempealeau NWR was assigned a pre-season woodduck banding quota of 200 birds. In addition, we were asked to band up to 150 additional birds as part of the Wisconsin quota for the Upper Mississippi River NW&FR. We satisfied the first quota but not the second. A total of 224 woodducks were banded with the sex and age breakdown as follows:

AHYM	AHYF	HYM	HYF	Total
74	35	71	44	224

There was a problem this year in attracting birds to the baited sites. As soon as the wildrice began to ripen in late August, trapping success dropped off rapidly. Although adequate numbers of woodducks were present, the birds were not using traditional sites. This was not surprising due to the tremendous wildrice crop. In short, it took nearly twice as much effort in 1985 to achieve the banding quota as compared to previous years.

H. PUBLIC USE

1. General

A public use information hand-out was developed this year to assist visitors in orienting themselves to refuge facilities and regulations. A sample copy is included in the packet inside the back cover of this report.

Over-all public use increased during the year as new facilities (boat landing, information kiosk and parking) were added. Total visits for CY 1985 were 42,130. The wildlife drive continued to account for more than 75% of refuge visitation. Due to flooding of the township access road, the refuge was closed to public vehicles during the entire month of March.

2. Outdoor Classrooms - Students

Fifth grade teacher Scott Lee from Trempealeau Elementary brought his class to the refuge in January to build snow caves and conduct other winter activities.

3. Outdoor Classrooms - Teachers

Drieslein conducted a field trip to Trempealeau NWR on September 26 for 50 educators attending the Midwest Environmental Education Conference in La Crosse, WI.

4. Interpretive Foot Trails

Based on the trail register log and traffic counter readings, about 1,910 people hiked the self-guiding nature trail and adjacent Pine Creek Dike. This trail is very popular with local bird-watchers.

5. Interpretive Tour Routes

At the beginning of 1985, supplies of the "Prairie's Edge Wildlife Drive" leaflet were running low. A rough draft of a slightly revised version of the leaflet was submitted to the Regional Office for reprinting on February 13. We requested 10,000 copies of the revised leaflet. A preliminary draft of the new leaflet was reviewed and returned to the R.O. with comments on December 13. We are hoping to have the new supply on hand when the wildlife drive is re-opened next spring.

During the summer of 1985, the entrance to the Prairie's Edge Wildlife Drive was changed. Visitors are now routed through a new parking lot past the information kiosk near the main entrance to the refuge. This arrangement has worked out well, eliminating much of the "wrong way" traffic problem experienced in the past.

(8-85, RLD)

The new wildlife drive entrance.

The old deer sign at the entrance to the drive was removed and replaced with a new, more attractive sign featuring a map and additional information to orient the visitor.

(9-85, RLD)
Another nice job by the crew at the Regional Sign Center.

6. Interpretive Exhibits/Demonstrations

Based on a site plan drafted by Landscape Architect Dave Schafer, the wildlife drive entrance was altered to include the addition of an information kiosk with foot path and parking facilities for eight vehicles. The project was a joint refuge/YCC venture. Refuge staff performed the initial site preparation, assembled and mounted the kiosk and placed and shaped the gravel. YCC enrollees placed all of the curbing, performed the landscaping and mounted signs. As somewhat of an afterthought, and with L.A. Schafer's concurrence, a bus/trailer pull-off was added to the parking area to help avoid congestion during peak use periods.

If you've never built a kiosk, you just have not enjoyed life to the fullest!

(6-85, RLD)

The kiosk display panel format generally followed the design approved for the Upper Mississippi River NW&FR. Display panels were fabricated at the Regional Sign Center in Winona, MN., and were very well done. The left hand side of the kiosk will include a two-by-three-foot metal/glass case housing removable seasonal information panels high-lighting refuge features and suggested public use activities. These panels are being fabricated at the sign shop and will be in place by next spring.

(9-85, RLD)

Completed kiosk with one panel to go.

Right hand panels with refuge map.

(9-85, RLD)

7. Other Interpretive Programs

Seven school groups visited the refuge during the year and received an orientation talk at headquarters before touring the wildlife drive or taking a hike on their own.

Trempealeau Refuge was featured in an attractive leaflet entitled "Interesting Birds in the Winona Area", published by the Winona Convention and Visitor's Bureau. A copy of the leaflet is included in the packet inside the back cover of this report.

8. Hunting

a. General

Trempealeau's first hunting leaflet and map was printed and distributed this year. A sample copy is included in the packet inside the cover of this report.

Of the four types of public hunting programs described in the Master Plan, three have been implemented. The refuge was opened to gun-deer hunting in the fall of 1982 and the hunt has continued annually. Trempealeau NWR was officially opened to both archery deer and small game hunting during the fall of 1984. Public waterfowl hunting is still in the planning stages and is scheduled for possible implementation in 1986 depending on acquisition of some interest in the access road on the west boundary. The areas open to the various types of hunting, with the exception of waterfowl, are shown on Map 4. The shaded areas enclosed by dotted lines are off-refuge lands proposed for future land protection.

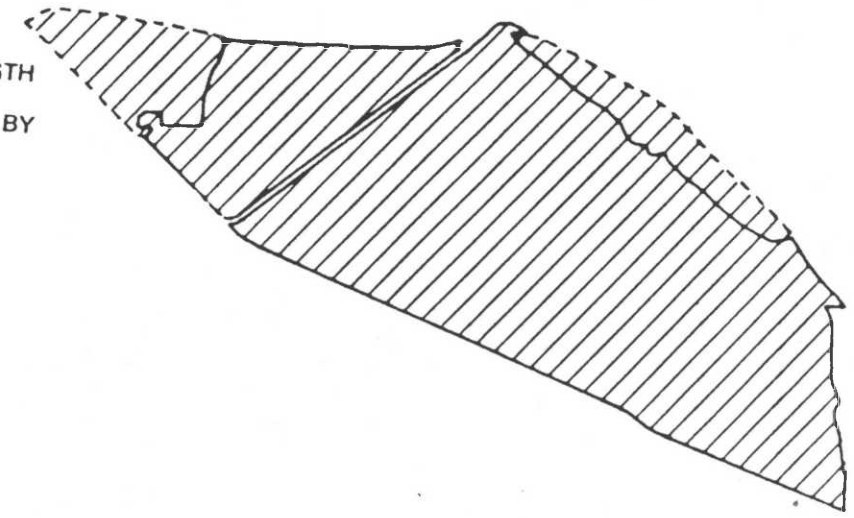
b. Deer hunting - Shotgun

The two-day, refuge gun deer hunt was held on Saturday and Sunday, November 23 and 24. This was the first time in many years that the gun deer season opened in this area with snow on the ground. A total of 40 permits were issued through the State's hunter choice selection process. Total harvest was 28 deer with 25 taken on Saturday, November 23. Many hunters heard the dismal weather forecast with sub-zero temperatures predicted for Sunday and elected to take a deer and go home on opening day. The sex and age breakdown of the harvest was as follows:

	Male	Female	Total
Fawn	4	4	8
Yearling	9	4	13
Adult	4	3	7
TOTALS	17	11	28

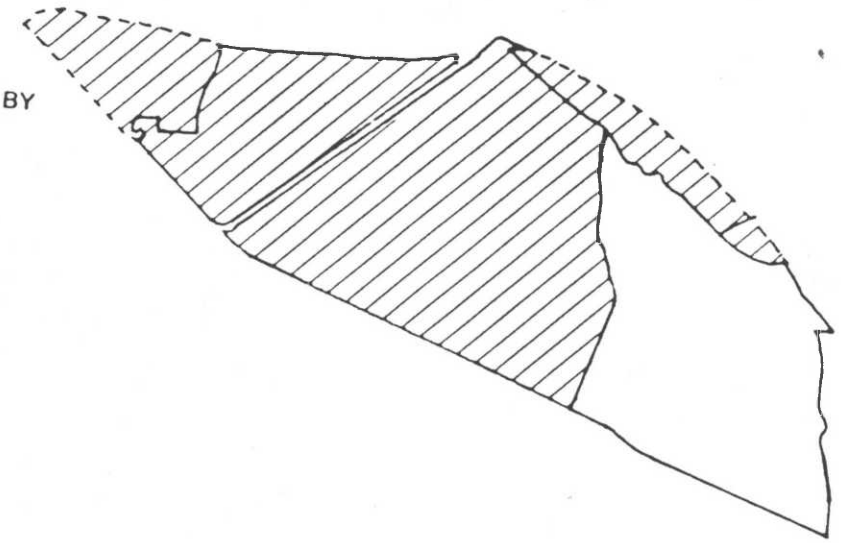
DEER (GUN)

-RESTRICTED SEASON LENGTH
-SHOTGUN ONLY
-HUNTER NUMBERS LIMITED BY DRAWING



DEER (LATE BOW)

-DECEMBER SEASON ONLY
-HUNTER NUMBERS LIMITED BY DRAWING

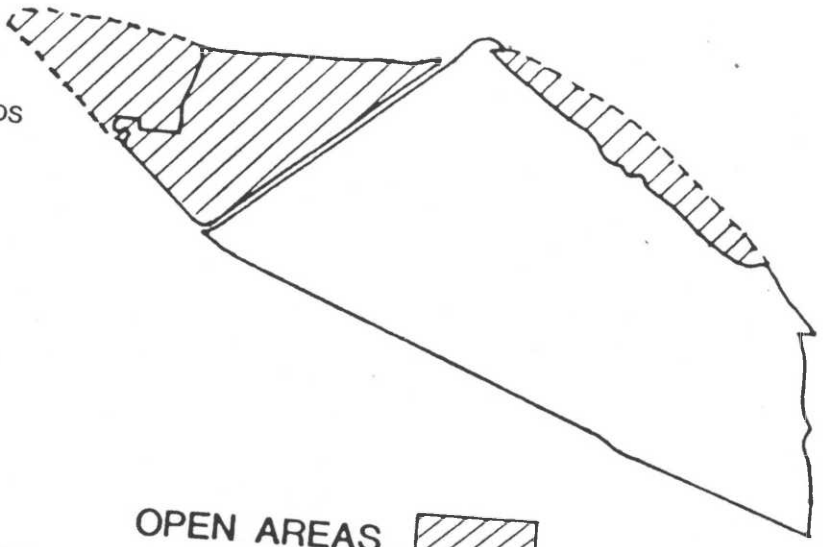


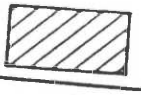
WATERFOWL

-HUNTER NUMBERS LIMITED BY DRAWING
-HUNTERS RESTRICTED TO BLINDS OR DESIGNATED SITES

SMALL GAME

-STATE REGULATIONS APPLY
-NO LIMIT ON HUNTER NUMBERS



OPEN AREAS 

The above harvest included 12 legal bucks and 16 antlerless deer. The largest deer taken was a 9-point buck that weighed 186 pounds field dressed. Of the 38 hunters that actually hunted, 28 harvested a deer for a success ratio of 74%.

c. Deer hunting - Archery

This was the second year for the late-season archery deer hunt on Trempealeau NWR. A total of 135 applications were received for the 30 permits selected at a public drawing at headquarters on October 30. Deep snow and low temperatures during most of the hunting period (December 7-31) forced most of the deer out of the open hunting area and restricted hunter access. As a result, no deer were taken.

d. Small game hunting

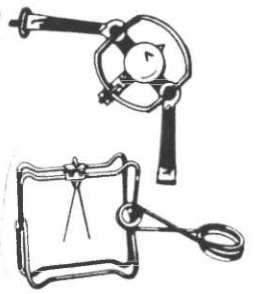
The area west of the Green Bay and Western Railroad grade was open to the hunting of ruffed grouse, pheasants, cottontails, and squirrels. Hunting pressure was very light.

9. Fishing

1985 was the second year that Trempealeau NWR has been open to public fishing. Visits for the year were 4,360. Less than 10% of this figure included ice fishing visits. Bullheads continued to provide the great majority of the catch. A few nice stringers of large northern pike were taken but these were far and few between. Many limits of yellow perch were taken through the ice, both in the main pool and from backwaters of the Trempealeau River near the east end of the wildlife drive. The limited parking at the new boat landing near Kiep's Island has proved adequate to support the number of anglers using this facility.

10. Trapping

Trempealeau NWR was again open to the trapping of furbearers. The refuge was divided into 12 fall units: one senior citizen, eight adult and three youth. In the past, one trapping unit was set aside as a closed area as a possible safeguard against over-trapping. Based on the past four trapping seasons, it was felt that a closed area was unnecessary. Due to the difficult access and typical weather conditions during the late trapping season, it is nearly impossible to over-trap a unit.



Trapping units were awarded on the basis of a random drawing held at headquarters on October 12. Due to the lack of participation in the past, a youth trapper training session was not held. As it turned out, all of the young trappers who applied for a unit in 1985 had attended a previous year's training session.

The fall trapping season opened on November 19, continuing through January 15, 1986. Weather conditions again created difficulty early in the season with heavy snow and sub-zero temperatures coming on November 20. A 16-inch snowfall on December 1 ended the trapping season for all but a few of the hardiest individuals.

With support at the spring fish and game hearings in April, and endorsement by the Fur Harvest Committee of the Wisconsin Conservation Congress, the National Resources Board passed a resolution at their June 26 meeting to change the boundary of the Mississippi River Trapping Zone from Highway 35 to the Burlington-Northern Railroad tracks. This change will become effective during the fall, 1986, trapping season. Basically, this change will include the Trempealeau NWR within the Central Zone which opens for trapping in late October.

We are pleased with this change as it will permit refuge trappers a few weeks of open water trapping in the fall. This will enhance the recreational aspect of the trapping program and should result in a larger harvest of muskrats, mink, and raccoon. These species have been grossly under-harvested in several units in the past under the late-season framework.

Three beaver trapping units were awarded at the October 12 drawing. Each trapper was assigned a quota of 20 beaver for the season which runs from December 7, 1985, through March 2, 1986.

Harvest results for the last five refuge trapping seasons are as follows:

	Number of Animals Harvested				
	1981-82	1982-83	1983-84	1984-85	1985-86*
Muskrat	1,802	2,430	1,547	2,166	1,369
Mink	24	13	11	14	2
Raccoon	0	4	1	4	1
Opossum	2	0	1	27	0
Beaver	56	54	54	54	29
Otter	0	0	0	1	0

*Results through 1-15-86

11. Wildlife Observation

In addition to deer observation while using the wildlife drive, wildlife observation is accomplished through hiking, cross-country skiing, snowshoeing, and bicycling.

12. Other Wildlife Oriented Recreation

Refuge and Winona Complex staff met with Wisconsin DNR on July 2 to discuss a proposal to route bicycles from the adjacent "Great River Trail" through the Trempealeau NWR on existing refuge roads. Following several public meetings, development is planned to begin this summer on the abandoned Chicago and Northwestern Railroad right-of-way. The section of grade from La Crosse to the Trempealeau NWR has been acquired by the DNR and will be opened to bicycling, snow-mobiling, hunting (in designated areas), and other compatible uses.

A Memorandum of Understanding to cover the route portion through the Trempealeau NWR is presently being reviewed by the two agencies. Basically, the plan is to route bicycles onto the one-way wildlife drive and west to the alternative entrance at Highway 35 near Marshland, WI., and return.

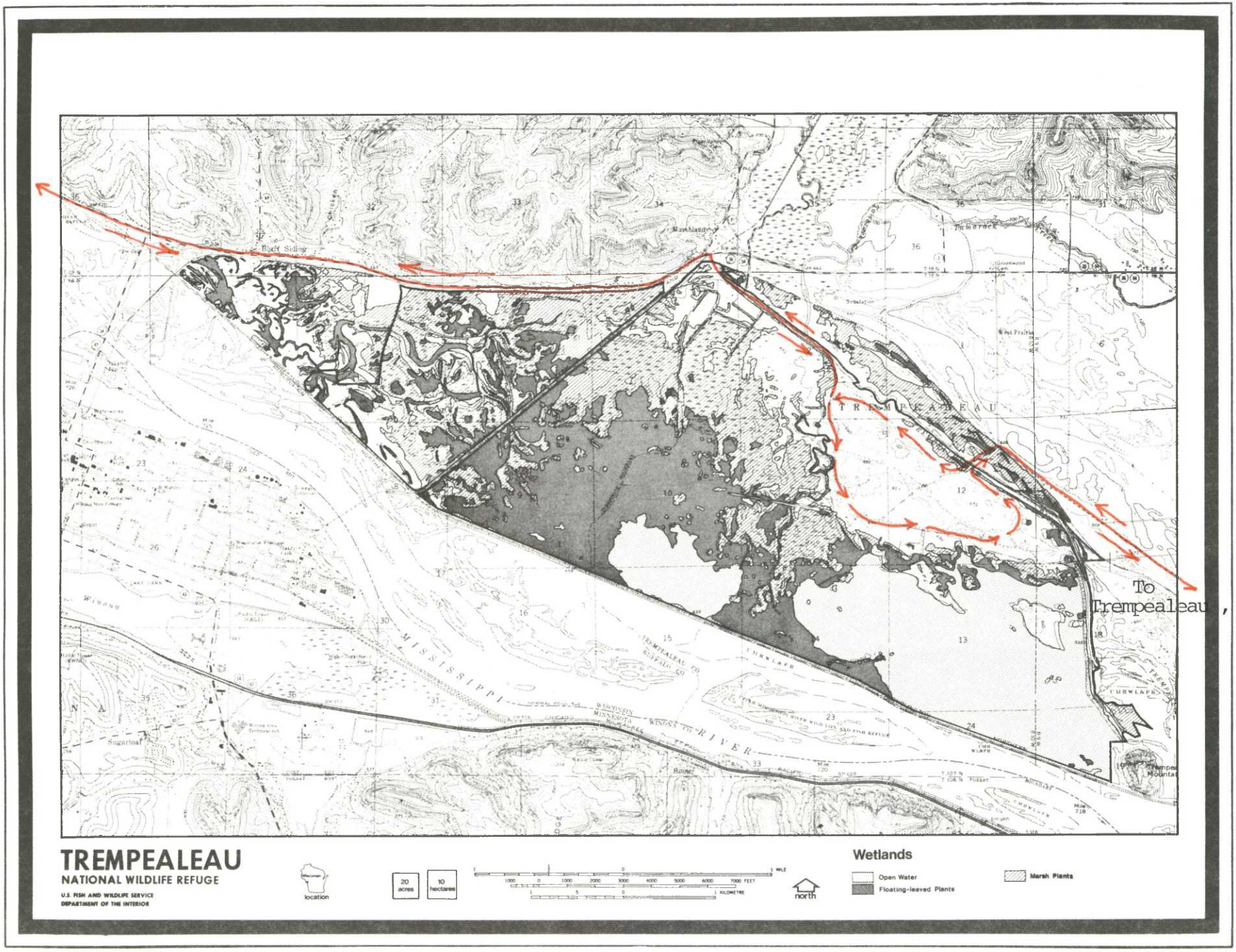
This would permit bikers to link up with the bicycle lane along Highway 35 and continue west as far as Alma, Wisconsin (Map 5). The M.O.U. specifies that bicycles will use refuge roads at their existing level of maintenance; that is, no resurfacing will be performed. It also specifies that under existing regulations, snow-mobiles and other all-terrain vehicles will not be permitted on the refuge.

17. Law Enforcement

Eleven citations were issued during the year. Ten cases involved vehicle trespass and one involved littering. Six of the eleven cases have been settled with fines totalling $250. The remaining five cases are still pending.

Drieslein and Kline requalified with the Service revolver on approved course of fire on April 24 and September 24. Both individuals attended a 40-hour LE refresher training session in La Crosse in April.

Drieslein assisted special agents on a LE detail in the Horicon NWR area during the period October 4-8. Kline provided assistance again during the period December 6-9.



Proposed Bicycle Trail Map 5

I. EQUIPMENT AND FACILITIES

1. New Construction

The major construction project during the year was the information kiosk and new wildlife drive entrance. The details of this project are described in Section H.6.

Several new signs were erected at various locations on the refuge. The refuge sign plan has now been fully implemented except for two major entrance signs which are being fabricated and will be erected next summer.

A quantity of treated lumber was purchased and stock-piled in preparation for the construction of six new gates in 1986 at a cost of $1,292. Metal brackets were fabricated at a local welding shop at a cost of $1,000, and hardware came to an additional $343.

R and R Electric from Arcadia, WI., was hired to assemble and install components for the electric fish weir in the new water control structure. We had fully intended to have this facility installed and operational prior to the spring break-up in 1986 to avoid having to deal with plugged fish screens again. However, as of the end of 1985, two stainless steel components for the electrodes have net been delivered. The structure is now frozen in and it is unlikely that the weir can be completed before the spring thaw. A wooden panel board next to the transformer has been erected with some control components in place. Cost of this facility, including both materials and labor, will be about $1,900.

Electric fish weir panel with a portion of the controls in place.

(9-85, RLD)

2. Rehabilitation

The bank stabilization and rehab work done on Kiep's Island has been described in Section D.4.

Salvage of materials and demolition of the remains of the refuge residence was completed in April. The site was levelled, disked, dragged, and seeded to native grass. Another government quarters bites the dust.

(1-85, RLD)

Mr. and Mrs. Wallace Haeussinger salvaging materials from refuge residence.

Swanson Construction Company of La Crosse, WI., received the award on the overhead door contract for the rear of the three-stall garage at headquarters for their bid of $1,925. This 9' high by 18' wide door with electric opener replaced the old, sliding wooden monstrosity that was a maintenance man's nightmare.

3. Major Maintenance

As required under Wisconsin law, the access bridge received an inspection by the County bridge inspector on January 23. We are told that you can still drive it without holding your breath and closing your eyes.

Although routine in nature, recurring maintenance tasks including snow removal, roadside mowing, and buildings and grounds upkeep consume a significant portion of staff time. Youth programs and volunteers took care of lawn mowing and landscaping during the summer months.

In April, 1985, the water supply line coming from the pumphouse was dug out and the line capped which used to feed the residence and the old lodge.

4. Equipment Utilization and Replacement

No vehicles were replaced this year, however, a new 4x4 pick-up was forecast to replace the Chevrolet 4x4 on hand which is nearing the 50,000 mileage mark.

A new clutch was purchased for the 2440 John Deere tractor.

Serious problems were encountered with the front locking hubs and the four wheel drive mechanism on the Dodge ¾-ton pick-up which is used for snow-plowing. Over $750 were spent on repairs and the vehicle will still not operate in four-wheel drive. The local dealer can't find the problem and plans to have a representative from Chrysler look at the vehicle.

7. Energy Conservation

To the best of our knowledge, there is not much left that can be done to conserve energy in the existing headquarters buildings. Wood is used to heat the office and shop on weekdays during the winter months. An automatic thermostat has been installed which drops the temperature in the office to 55° during non-duty periods, and the ceiling won't hold any more insulation. Electric consumption will increase in 1986 slightly due to the installation of additional lighting in the three-stall garage and the electric fish weir becoming operational.

8. Other

On August 29, the water closet on the office toilet cracked during the night dumping about two inches of water on the office floor. Two days of vaccuming later, a new toilet was installed and it was business as usual.

J. OTHER ITEMS

1. Cooperative Programs

On three occasions during the year, Drieslein conducted refuge tours for new DNR technicians and managers assigned to the west-central district at the request of Area Wildlife Manager, Gene Kohlmeyer.

The refuge participated in the annual FWS mourning dove coo count and a statewide sandhill crane count sponsored by the International Crane Foundation in Baraboo, Wisconsin.

Refuge assisted the FWS Fish Laboratory in La Crosse, WI., collecting approximately 150-200 small fish in late January for lab specimens.

The Dodge 10-passenger van was loaned to the La Crosse Fish Lab for a one-month period in late January. The vehicle was returned in excellent condition.

An official weather station is maintained at refuge headquarters to monitor temperatures and precipitation. Monthly data summaries are sent to the National Weather Service office in La Crosse, WI.

2. Other Economic Uses

Eight turtle trapping permits were issued during the year. Trappers reported harvesting 95 snapping turtles weighing a total of 1800 pounds.

3. Items of Interest

Dreislein and Conservation Warden John Sieger conducted a DNR sponsored boating safety course for 29 local youths in May, 1985. The course consisted of five, two-hour classroom sessions and a half day of practical field testing on the water.

Drieslein presented a program on waterfowl management to 100 youngsters at the annual Greenwing jamboree sponsored by Ducks Unlimited on September 7.

Maintenance Worker Allan Rife received a $400 Special Achievement Award for his work on the Kiep's Island rehabilitation project.

4. Credits

Kline wrote section B; Drieslein wrote the remainder of the report. Medema typed the manuscript, mounted the photographs, and assembled the report.

K. FEEDBACK

Recent procedural changes have caused some confusion in the process of presenting incentive awards. We received a Special Achievement Award packet for Allan Rife which included a certificate of award and a letter signed by the Regional Director on December 19, 1985. Part of the letter read "Enclosed is a Certificate of Award and a check . . .", however, no check was enclosed. As of January 22, 1986, the check has still not arrived. In the meantime, Mr. Rife found out about the award when the additional tax deductions showed up on his payroll slip. This eliminated the element of surprise and spoiled some of the fun aspect of presenting the award and check at the same time. What was wrong with the way cash awards were presented in the past?

Again this year, the Twin Cities Regional Office provided assistance by re-programming funds from other accounts to allow completion of the Kiep's Island rehabilitation project. This timely help prevented further deterioration of the island which was certain to occur during ice break-up next spring.

TREMPEALEAU
NATIONAL WILDLIFE REFUGE

PUBLIC USE INFORMATION

Welcome to the Trempealeau National Wildlife Refuge. The information that follows is designed to make your visit more enjoyable. Refuge staff are available to assist you at headquarters should you need further information. Enjoy your visit.

GENERAL INFORMATION

The Trempealeau National Wildlife Refuge, administered by the U.S. Department of Interior, Fish and Wildlife Service, was established in 1934 to provide habitat for migratory birds, especially waterfowl. The original 700-acre refuge was expanded in 1979 with acquisition of the former Delta Fish and Fur Farm. Trempealeau Refuge now contains more than 5,600 acres of marshes, bottomland hardwoods and upland grasslands and forest.

Management practices are directed toward maintaining and improving conditions for all types of wildlife native to this area.

PERMITTED ACTIVITIES

The refuge is open to the public year round, seven days a week, DAYLIGHT HOURS ONLY. Watch for signs at the refuge turn-off on State Highway 35-54 indicating closed periods when the entrance road is flooded.

The following recreational activities are allowed:

Wildlife Viewing

A five-mile, one-way auto drive offers excellent opportunities for viewing wildlife, particularly during early morning and evening hours. White-tailed deer are usually seen throughout the year.

Hiking

A self-guided nature trail, approximately 1-mile in length, is located about mid-way around the wildlife drive. This trail features interpretive panels high-lighting plants and animals found in the area. Several miles of dikes and service roads closed to public vehicles are also open for hiking. These are posted with signs indicating "Foot Traffic Only".

Fishing

Portions of the main refuge pool are open to public fishing. Certain sections of the pool are seasonally posted to protect sensitive wildlife areas -- watch for "Closed Area" signs. A boat launching site with parking facilities is located near Kiep's Island about 1-mile east of headquarters. Only hand-powered craft and boats equipped with electric motors may be used. The boat fishing season runs from the first Saturday in May to freeze-up, and all current Wisconsin State regulations governing inland waters apply. Bank fishing is permitted at the boat landing area and from the Trempealeau River dike north of Trempealeau Mountain. This dike can also be reached by hiking from a parking area east of headquarters or by boat via the Trempealeau River. Bullheads dominate the catch, however, northern pike and yellow perch are present. Ice fishing is also permitted in season. Contact refuge headquarters for further information on fishing opportunities.

Hunting

Portions of the refuge are open to small game hunting and archery and gun deer hunting by special permit. Maps showing open areas and details on refuge hunting programs are available at headquarters.

Snow-shoeing, Cross-Country Skiing

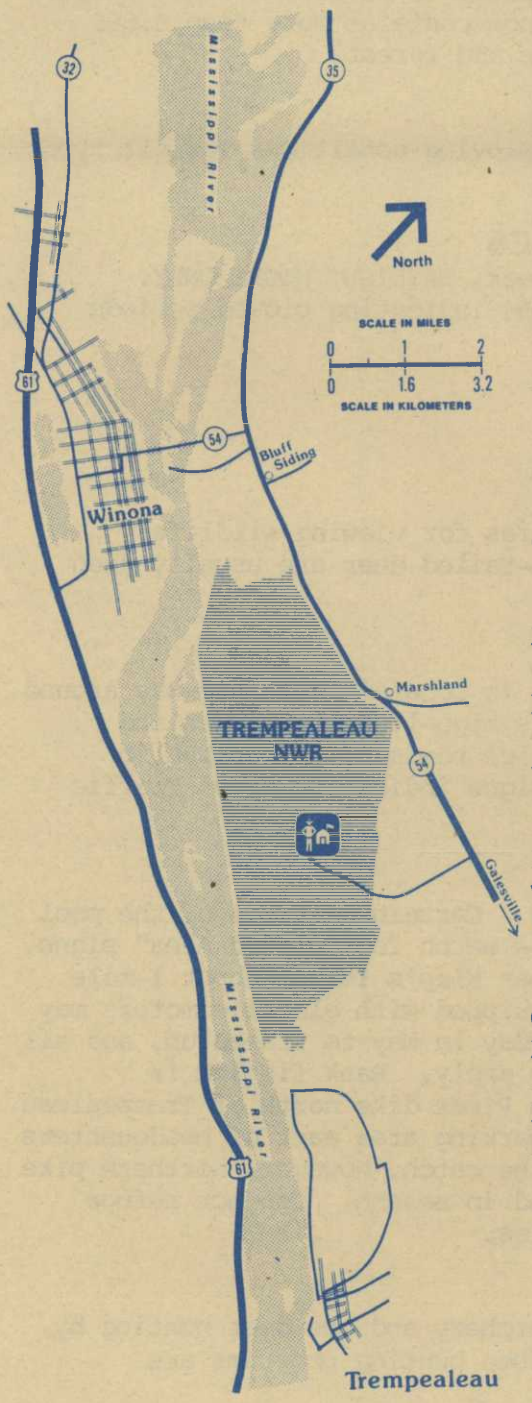
These activities are permitted on the entire refuge in season. There are no groomed ski trails on the refuge, however, several miles of groomed trails are maintained at nearby Perrot State Park.

Bicycling

Bicycling is allowed on the wildlife drive and on all refuge roads closed to public vehicle travel.

Mushroom, Nut and Berry Picking

Collecting of mushrooms and wild fruits for personal use is permitted.



RESTRICTED ACTIVITIES

The following refer to a few of the more commonly asked questions. Further information may be obtained by contacting the refuge headquarters.

Firearms

Firearms are prohibited unless being used in conjunction with an authorized refuge hunt. This also applies to archery equipment and other types of wildlife harvest equipment.

Plants, Animals

No plants, animals, artifacts, or any other feature may be removed from the refuge except as stated under PERMITTED ACTIVITIES above.

Camping

Overnight camping on the refuge is prohibited. Camping facilities are available nearby (Perrot State Park and others).

Vehicle Access

Motorized vehicles licensed for highway travel are permitted on the entrance road, wildlife drive and other roads not posted for foot traffic only. Off-road vehicles, including snowmobiles, trail bikes and all-terrain vehicles are not allowed on any portion of the refuge.

Domestic Animals

Dogs and other pets must be on a leash and under control while on the refuge. Horses are prohibited.

Information, Office Hours

The refuge headquarters, located three miles southwest of Centerville, Wisconsin, is open from 7:30 a.m. to 4:00 p.m., Monday through Friday throughout the year. Visitors may stop for information or call 608-539-2311, or write, Refuge Manager, Trempealeau National Wildlife Refuge, Box 326, Route 1, Trempealeau, Wisconsin 54661.

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

WISCONSIN

Trempealeau

NATIONAL WILDLIFE REFUGE

HUNTING MAP & REGULATIONS

Hunting Regulations

	AREA A	AREA B	AREA C
SMALL GAME			
Ruffed Grouse Pheasant Cottontail Gray & Fox Squirrel	STATE SEASON	CLOSED	CLOSED
BIG GAME			
Deer-Archery (special permit)	Late (December) Season Only	Late (December) Season Only	CLOSED
Deer-Shotgun (Hunter's Choice Permit-61B)	First two days only	First two days only	First two days only

SPECIAL CONDITIONS

- Hunting for the above 5 species is permitted only on the open portions of the refuge as delineated on the map. This area is designated by signs as open to hunting.
- All other species are protected and may *NOT* be killed.
- All State regulations are in effect and will be enforced.
- Only portable tree stands may be used and must not be left overnight.
- Overnight camping and fires are prohibited.
- All vehicle travel is prohibited except on designated roads and parking areas. All motorized vehicles unlicensed for highway travel are prohibited on refuge lands.
- Railroad rights-of-way in and adjacent to the refuge are private property and are not covered under these regulations.
- Report all accidents and injuries to Refuge Headquarters, Route 1, Trempealeau, Wisconsin or phone 608/539-2311.

QUALITY HUNTING DEPENDS ON YOU

PLEASE RESPECT ALL REGULATIONS AND HAVE A GOOD HUNT!

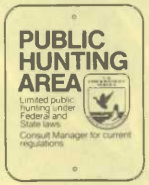
RF32578-7/85

HUNTING MAP

REGULATIONS ON BACK SIDE OF MAP

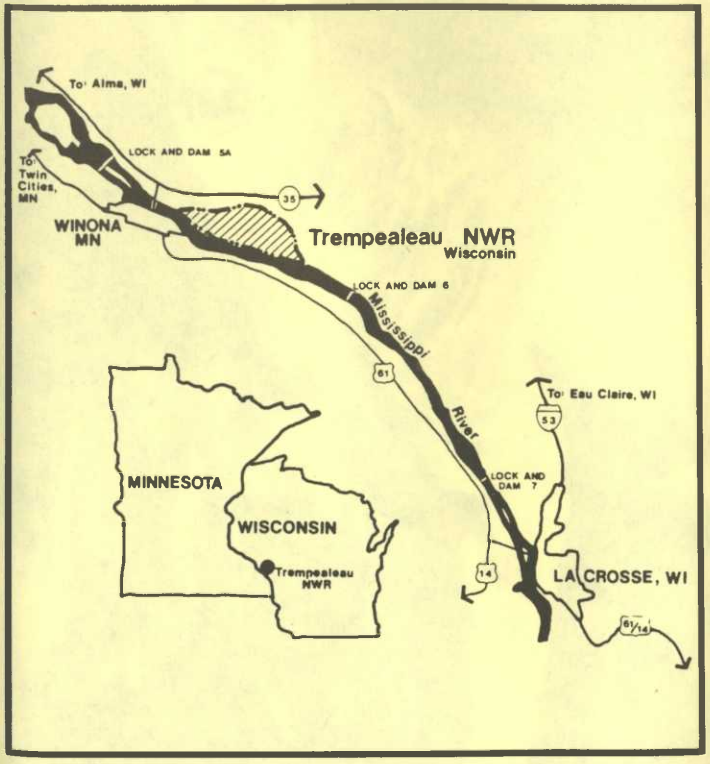
REFUGE SIGNS — KNOW THEIR MEANING

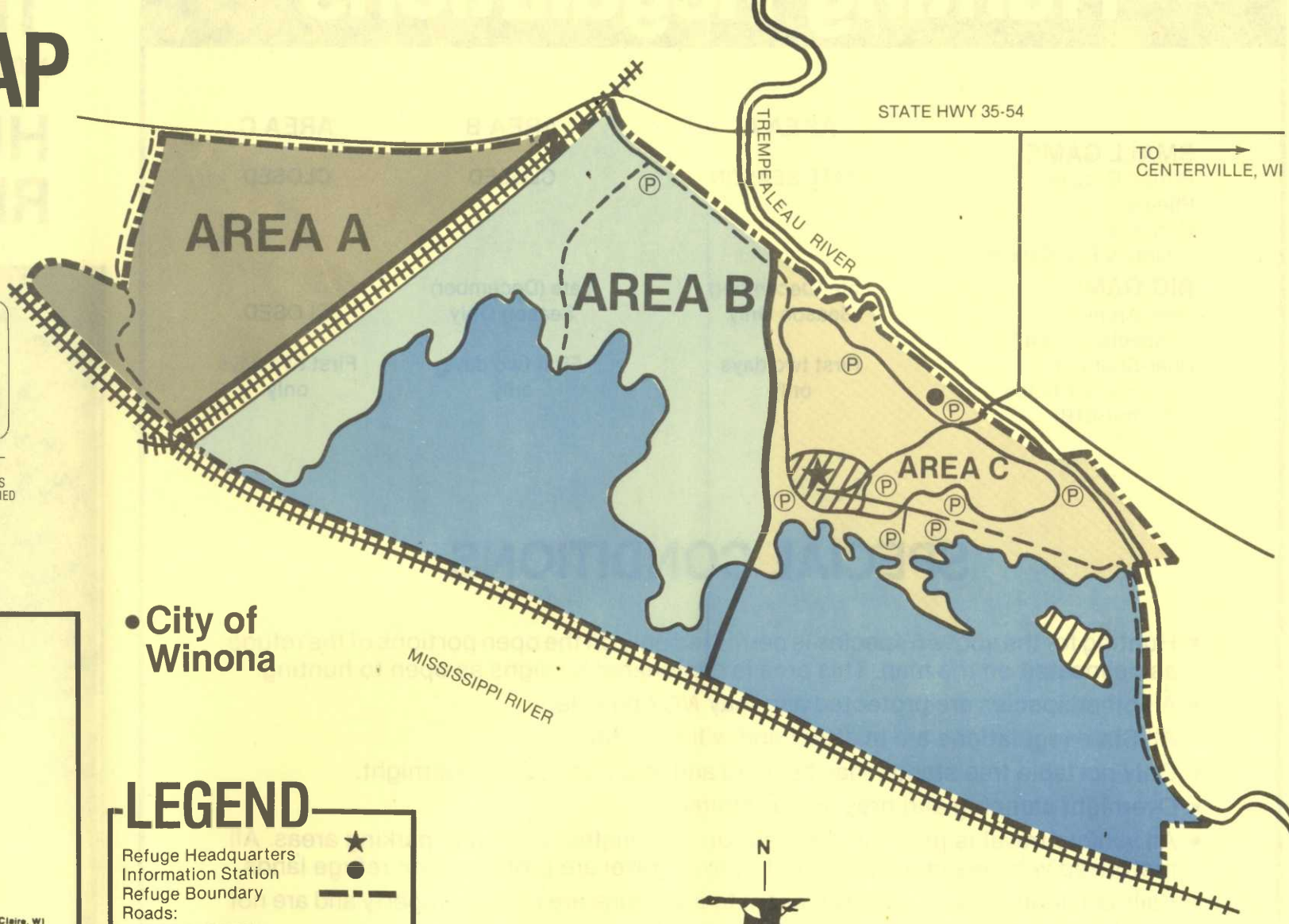
REFUGE BONDARY SIGN



AREA OPEN TO HUNTING AT SPECIFIC TIMES

SANCTUARY AREA— OFF LIMITS TO THE PUBLIC UNLESS OTHERWISE SPECIFIED





• City of Winona

LEGEND

- Refuge Headquarters ★
- Information Station ●
- Refuge Boundary
- Roads:
  - Vehicle Travel
  - No Vehicle Travel
- Parking Areas Ⓟ
- Closed to All Hunting
- Area A:
  - Open Hunting-Small Game
  - Deer by Permit
- Area B:
  - Deer by Permit
- Area C:
  - Deer by Permit
- Impoundments & Lakes
- Railroad Dikes

N

S

SCALE IN MILES

0 1 2

Interesting Birds In The Winona Area

An Unsurpassed Array Of Species

Each year, more than 280 varieties of birds visit the Winona area. Some are uncommon. Some are difficult to observe elsewhere. Some nest only in limited areas such as this one.

Within a radius of 10 miles, the diverse habitats and their location on the Mississippi River's great migration path attract a surprising mosaic of birdlife. Few areas present such a grand selection and intensive concentration of interesting species.

Red-tailed Hawk

Published by The Winona Convention and Visitor's Bureau.
For more information, call (507) 452-2272
or write: 168 West 2nd St., PO Box 870B, Winona, MN 55987.

Consultant and Birding Tours: Bill Drazkowski
Produced by Rob Linden & Associates

Recommended Tours

Directions for each tour begin at the Tourist Information Center on the Huff St. dike across Lake Winona. Distances listed are round-trip, driving mileages: Walking distances (if any) are additional. If reference mileages are stated within a tour, they are measured from the last reference point, not from the beginning of the tour.

Tour #1: Trempealeau Refuge 18 miles

Double-crested Cormorant, Osprey, Lark Sparrow

If you can visit just one area, this should be the one. Take Huff Street to Fourth Street and turn right for one block. Turn left to cross the Mississippi. At Hwy. 35, turn right and drive about 6 miles. The entrance is on the right and is well marked. Within the refuge, follow the wildlife circle drive. Many varieties of sparrows including Lark Sparrows nest in the uplands. Along the forest look for hawks, Ruffed Grouse, cuckoos, owls, Yellow-breasted Chat and bluebirds. In marshes, look for grebes, Double-crested Cormorants, bitterns, geese, ducks, and Osprey. All raise their young here. Watch for the Red-shouldered Hawk and Bald Eagle. Whitetail deer are numerous and often visible. The best times for the refuge are early morning or late afternoon.

Tour #2: Woodlawn 1 mile

Orchard Oriole, Indigo Bunting, Pine Siskin

Take Huff Street across Hwy. 61 to Lake Blvd. Turn right then enter the cemetery on the left. Visitors are welcome during daylight hours. During migration, look for thrushes, kinglets, warblers and sparrows. In spring and summer, Wood Thrushes, vireos, orioles, Rose-breasted Grosbeaks, Indigo Buntings and Pine Siskins may be nesting. Listen for Great Horned Owls and Barred Owls on the wooded hillsides. Look for Red-tailed Hawks above the bluffs.

Tour #3: Agahming 4 miles

Yellow-crowned Night Heron, Prothonotary Warbler

Take Huff Street 1 mile to Fourth Street. Turn right for one block then left to the bridge. Across the main channel, turn right at the Municipal Harbor sign onto Latsch Island. Turn left at the 'Y', continue across the old bridge and park about 300 ft. beyond. This is Agahming, the best early-spring warbler area. During migration, more than 20 species may be seen in a day. Later in the year, look for the Yellow-crowned Night Heron and Prothonotary Warbler. Check for other herons, Great Egrets, geese, ducks and rails. By the road look for cuckoos, woodpeckers (including Pileated), flycatchers (including Great Crested) and the Blue-gray Gnatcatcher. To finish the tour, return to the Interstate Bridge.

Tour #4: Whitewater 66 miles

Red-shouldered Hawk, Golden Eagle, Wild Turkey

Nearly anything may be seen on this tour. Take Hwy. 61 about 20 miles to Weaver. Turn left on Hwy. 74 to Whitewater Management Area. Drive to the Dorer Pools (1 to 3 mi.) where geese, ducks and other waterbirds are found. The Red-tailed and Red-shouldered Hawks both nest here along the river bottom or on the bluffs above. Continue on Hwy. 74 checking for Wild Turkeys. Bank Swallows nest in the sand banks along the road. Turn right on Hwy. 30. In the next two miles, Canada Geese, Mallards and Wood Ducks nest and raise their young in plain sight of the road. The raised wooden boxes are part of an experimental nesting program for Canada Geese. Return to Hwy. 74 and drive to Randall Pool (1.6 mi. from Hwy. 30). This area is of particular interest to waterfowl observers. Continue to Whitewater State Park. Watch the sky and hilltops for Turkey Vultures and eagles (Bald Eagles all year, Golden Eagles in winter). The park provides some of the best woodland birding in the area, including Ruffed Grouse, Whip-poor-will, Pileated Woodpecker and Wood Thrush. During migration many species of warblers pass thru the park and several (including the Blue-winged Warbler) stay to nest. Continue to the Ranger Station (8 mi. from Hwy. 30) for the latest sighting information. To return, continue on Hwy. 74 to St. Charles, turn left on Hwy. 14 to Winona.

Tour #5: Prairie Island 15 miles

Great Egret, American Woodcock, Willow Flycatcher

Take Huff Street north until it becomes River View Drive (1.2 mi.). Check the river area for waterfowl and gulls. At Prairie Island Rd. (1.5 mi.) turn right. The next mile is a fabulous marsh and woodland with the wildlife of the river bottom. Continue to Prairie Island Park (1.4 mi.) where thrushes and warblers are found in the varied habitat. Pine and deciduous trees are home to the Mourning Dove, Great Horned Owl, Barred Owl, woodpeckers, nuthatches, Blue-gray Gnatcatcher and several vireos. To leave the park, continue on the dike road. Green-backed Herons, Mallards, Wood Ducks, Sora Rails, Common Snipe and Black Terns nest here. Rookeries for the Double-crested Cormorant, Great Blue Heron and Great Egret are located across the river, but these birds feed in the water near the dike. Watch for the diving Osprey as it plummets into the water seeking fish. This is one of the most spectacular natural sights. To finish the loop, drive to Wenonah Rd. (3¾ mi.) and turn left. It becomes Theurer Blvd. and intersects with River View Dr. (3.5 mi.). Turn left to return to your origin.

Tour #6: Boller's Lake 8 miles

Black Tern, Yellow-headed Blackbird, Sedge Wren

Take Huff Street to Hwy. 61. Turn right and continue past a small lake on the left. Park near the Minnesota Weigh Station (3.8 mi.). On this end of the lake, Yellow-headed Blackbirds nest in spring. Other birds here include Canada Geese, Mallards, Wood Ducks (look for the man-made duck houses), Sora Rails, and Sedge Wrens. Return on Hwy. 61 for about ½ mile and turn right onto the dike between upper and lower Boller's Lake. Watch for Pied-billed Grebes, Osprey, gulls and Black Terns. Barn Swallows nest under the bridge. Continue across the dike to Goodview Rd. and turn left. Here, Black Terns nest in spring. Great Blue Heron, Green-backed Heron and Great Egret may be fishing in the shallows. To finish your tour, follow Goodview Rd. ½ mile to Hwy. 14. Turn left to return to Hwy. 61.

Tour #7: Lake Winona 3 miles

Common Loon, Virginia Rail, Blue-gray Gnatcatcher

Take Huff Street ⅓ mi. to Sarnia and turn left. Turn left at Vila Street (1 mi.) to enter the Winona Mall. Park near the creek and walk the bike trail toward the lake. In spring, the trees are filled with warblers. The Blue-gray Gnatcatcher and Orchard Oriole may be found here. In the marsh on the right, look for the Virginia Rail and Sora Rail. Barn Swallows nest under the pedestrian bridge as you approach West Lake Winona. Check the Lake for loons, Horned Grebes, gulls, and terns. Later in the year, diving ducks like Scaup, Goldeneye and Bufflehead will be here. Check the sky for Bald Eagles and Osprey. For birding, West Lake Winona is the better area, but the trail circles both the west and east lakes (7 miles) and you may wish to explore the entire lake area before returning to your car.

Tour #8: O.L. Kipp Park 36 miles

Wild Turkey, Whip-poor-will, Henslow's Sparrow

Take Hwy. 61 about 13 miles to County Road 3. Turn right and proceed 3.5 miles to the park entrance on the left. In the State of Minnesota the Henslow's Sparrow is found only in a very restricted habitat and the best place to see it is in Kipp Park. The best time is from the middle of May to the middle of July. Check at the Ranger's Station for recent sightings. Also, look for Bald Eagles, various hawks, Wild Turkeys, owls, Whip-poor-wills, warblers, meadowlarks, and sparrows. To finish your tour, return to Hwy. 61.

Special Tours

Tundra Swan: Huge numbers of these beautiful birds stop at Weaver Bottom during their spring and fall migrations each year.

Peregrine Falcon: A re-introduction effort for these birds is in progress at the Nature Conservancy Sanctuary nearby at Kellogg.

Great Blue Heron and Great Egret: Several rookeries are located in the Winona area. A boat or canoe is needed to reach them.

Eagles: Bald Eagles and Golden Eagles may be seen at various times during the year in and near Winona.

For information about special tours, or for more information about Birding in the Winona area, please call the Winona Convention and Visitors Bureau for the names of contact persons associated with the Hiawatha Valley Audubon Society.

Interesting Birds In The Winona Area

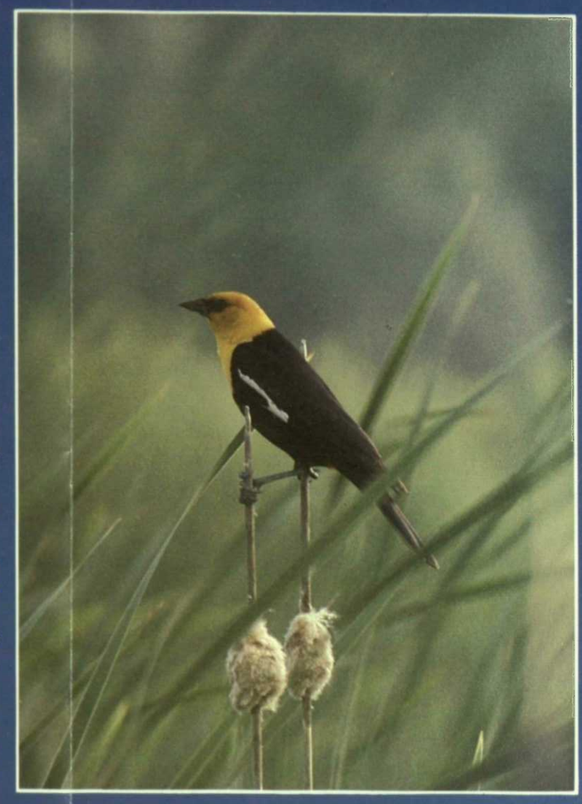
Photographs by Bill Drazkowski

Green-backed Heron

Playing possum if alarmed a Green-backed Heron might look stupid and fuddle-headed. Yet it is an uncanny hunter who's sharp bill rarely misses a passing fish. This heron even seems to pick the best victim for its throat size. Stalking a frog, it approaches stealthily while the frog is underwater, unable to see the predator's approach.

Great Egret

Almost extinct but saved by the Audubon Society, Great Egrets are common again on the Upper Mississippi. Easily observed at a distance as they feed in open backwaters, egrets take flight at the first sign of danger. But their persistence in returning again and again to feed the young made them easy prey for plume hunters in the nineteenth century.

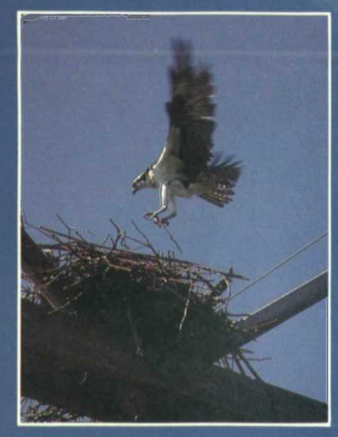


Yellow-headed Blackbird

Although rare to absent in the East, colonies of Yellow-headed Blackbirds nest almost inside the city limits - swooping over cattails and bobbing on reed nests. Because they are such noisy watchdogs, other birds nest nearby.

Henslow's Sparrow

Add the rare Henslow's Sparrow to your lifetime birding list. Found only high above the river in elevated prairies, this reclusive bird hides in the grass or perches on a weed stalk to sing its insect-like, unmusical "ssllick."



Osprey

Its talons adapted perfectly for catching fish, this is among the most dramatic hunting birds. Rising to 200 feet, its keen eyes seek fish in shallow water. Diving to the surface, Osprey strike feet first, often submerging entirely before rising with a fish. Apparently, Osprey mate for life (20 years or more) and return each year to the same nest near the fishing grounds. Several established pairs raise their young within minutes of Winona.

Northern Saw-whet Owl

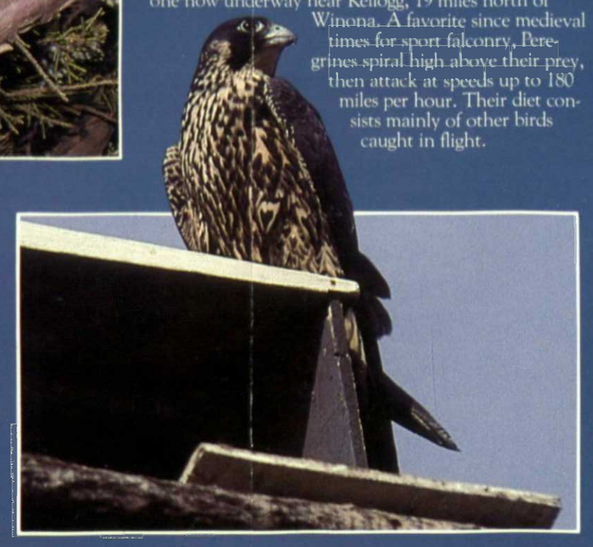
More common than its few sightings indicate, the Northern Saw-whet Owl is hidden by its size and nocturnal habits. Only 7" long, it is the smallest of the eastern owls. Look for the Saw-whet in a deep daytime sleep in a thicket or pine bower where it hides to avoid the Barred Owl. In recent years, Saw-whets have been seen here each winter. Two summer nests have also been located.

Bald Eagle

Proud emblem of America, the Bald Eagle has vanished from most areas. Yet it is often seen on the Mississippi near Winona from September thru May. Solitary birds during the breeding season, eagles group during winter months. Six to twelve may be seen together on the ice near open water or perching in a barren tree. Favoring fish, Bald Eagles also feed on crippled ducks and on muskrat carcasses left by trappers.

Peregrine Falcon

Once endangered by DDT and other poisons, these impressive birds can again be seen in the wild in a few locations, thanks to re-introduction programs like the one now underway near Kellogg, 19 miles north of Winona. A favorite since medieval times for sport falconry, Peregrines spiral high above their prey, then attack at speeds up to 180 miles per hour. Their diet consists mainly of other birds caught in flight.



Wild Turkey

Wily and smart, as many a frustrated hunter will attest, Wild Turkey have been re-introduced to the county and are steadily increasing in number. Listen for mating calls, gobbles and clucks, at dusk and dawn in the early spring.

Tundra Swan

Each spring and fall thousands of these magnificent birds pause at Weaver Bottoms on their migration route. At no other point between their Arctic nesting grounds and winter homes in the Carolinas can these swans be seen in such numbers.

Winona Convention and Visitor's Bureau
168 W. 2nd Street, P.O. Box 870B
Winona, Minnesota 55987

BULK RATE
US. POSTAGE
PAID
WINONA, MN
PERMIT NO. 6

5/85-15M