11-26-95 ORIENTATION

WELCOME TO THE WALNUT CREEK NONBREEDING BIRD MONITORING PROJECT

The purpose of this project is to document changes in occurrence and relative abundance of migrating and wintering birds as a result of prairie and savanna restorations at Walnut Creek National Wildlife Refuge. (Breeding birds are presently being monitored under a different protocol using point counts.) We believe the project will also provide the opportunity for area birders to enjoy Walnut Creek NWR and participate in the acquisition of important data.

We have attempted to keep the methodology as simple as possible and still collect data that is scientifically sound. You can conduct your censuses at your own convenience on areas assigned to you. You are asked to follow a simple protocol and to record your data each time on a standardized form.

Refuge property has been divided into 28 polygons (mostly squares) that are approximately 160 acres; more may be added as the refuge acquires new land. We would like for you to take responsibility for censusing one or two polygons (plots) once during each of the winter months of December, January, and February. After the winter survey is over, we will ask you to help us to identify any problems with the methods and then continue the census into the spring season (March 1 to May 15). New plot assignments will be issued to each observer prior to the spring season.

The data will be collected at the end of each season and entered into a digital database as a permanent record for later analysis. The data accumulated will be valuable to the educational program on the refuge, and help us to evaluate the success of this large restoration project in increasing avian diversity to the state of Iowa. This is not intended to replace the Christmas Bird Count. The refuge survey will be more extensive in time and will cover the entire refuge.

We believe the participants in this project will find this to be a quality way to enjoy birding as a recreation, and at the same time help in the acquisition of scientific data. You will have the opportunity to become intimately acquainted with the refuge and experience the changes that we expect will come with habitat restoration. Thank you for participating in this important project.

Pauline Drobney, Refuge Biologist Ann Johnson, Volunteer Coordinator Erv Klaas, Volunteer Coordinator

- 1. SCHEDULES
- 2. PERMIT I BLANKET ENTRY PERMIT WITH COPY TO FACH RESEARCHER
 - 3. COPY OF PRIVATE LANDOWNER RESPONSIBILITIES TO GACH
 - 4. MAPS FO EACH
 - 5. PROTOCOL

PROTOCOL FOR SURVEY OF NONBREEDING BIRDS AT WALNUT CREEK NWR.

Each observer is provided a packet of materials that includes the following:

- 1. A small scale map showing census plots (numbers in circles). The three, randomly-drawn plots you are asked to census this season are highlighted in yellow. Existing roads and streams are also shown.
- 2. One or more large scale maps (copied from 7.5 min. USGS quad. maps showing plots in more detail including contour lines.
- 3. Standardized forms for recording data.

Nearly all areas presently within the boundaries of property owned by the refuge will be surveyed.

Census plots generally correspond to quarters of numbered township sections. Old section lines and fence rows may still be present to use as landmarks. If these are obscure, find a corner of the plot and drive along one side of the plot (most plots are bordered by a road at least on one side). Measure 0.28 mi on the vehicle's odometer. Most plots are square and are 0.28 mi on a side.

Each plot should be censused in 1 hour.

Walk slowly through the plot in a systemmatic way and try to cover the entire plot, identifying and counting all birds seen or heard.

If you don't finish in one hour, note this on the data sheet and estimate the proportion of the plot that was covered. If you cover the entire plot in less than 1 hour, stop. Covering an area more than once may cause some birds to be counted twice.

If you flush a bird, try to note where it moved to and avoid counting the same bird again.

Counts should be made during the time of the day when optimal bird activity is expected to occur. In the winter, this will usually be mid-morning to mid-afternoon. In the fall and spring, birds are usually most active early to late morning.

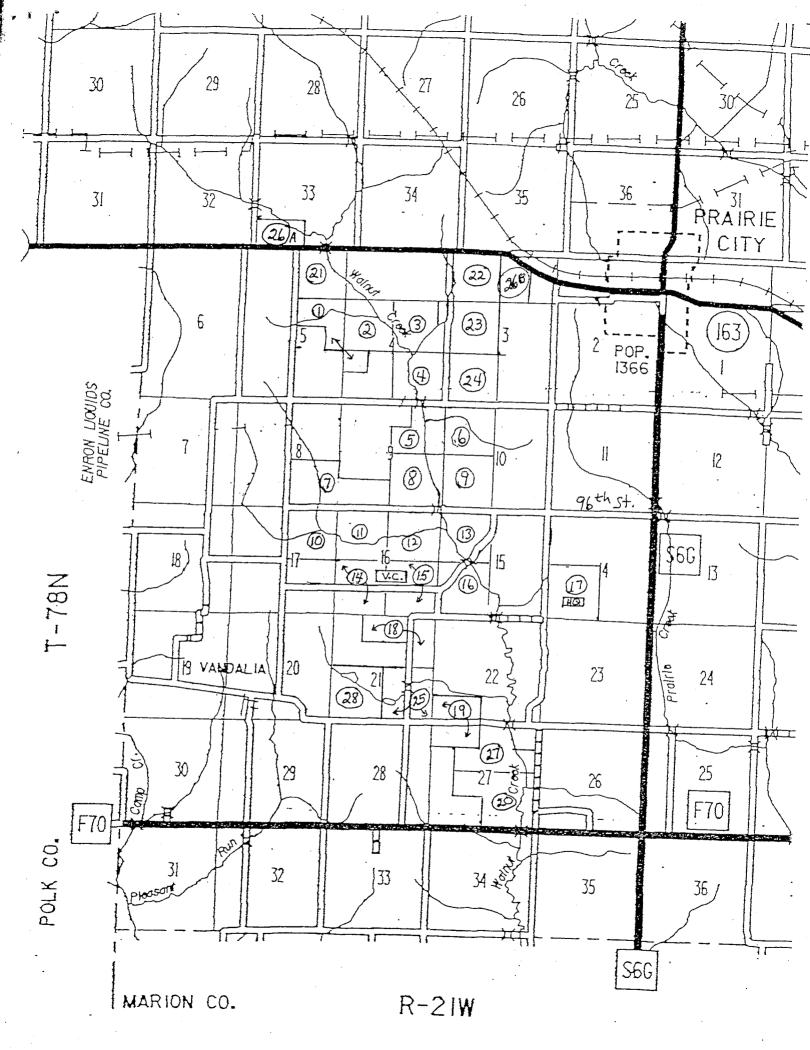
Record the type of habitat in which a bird is first seen. Codes for the major habitat types are on the data forms. If you feel a habitat type is not represented on the form, assign your own code and note this under comments.

Weather limitations: Censuses should not be done if winds are stronger that 20 MPH, or when it is raining or snowing. Censuses can and should be done when snow covers the ground, and over a range of temperatures.

Please record all weather, habitat data, and bird numbers. A checklist of birds will be printed on the data form. It is important to record all weather and habitat data for each count so that data can be entered efficiently into computerized data bases. Information left blank is information lost.

Observe refuge boundary markers and do not trespass on private land without the owner's permission. All plots are on refuge land and it should not be necessary to enter private land.

Fall Season will extend from 1 August to 30 November. Winter Season will extend from 1 December to 28 February. Spring Season will extend from 1 March to 15 May.



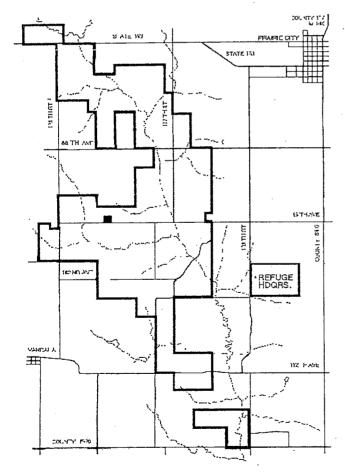
ENTRY PERMIT



U.S. FISH AND WILDLIFE SERVICE

Walnut Creek National Wildlife Refuge P. O. Box 399 - West 109th St. S. Prairie City, IA 50228

Name _	SEE ATT	ICHED SHEE	<u> </u>	
Address			Vehicle Type	<u> </u>
City/State/Zip _			Vehicle License	#
Permittee is authorized to be on the following areas of Walnut Creek National Wildlife Refuge:				
for the purpose of	BIRD	MONTORIL	16-	
from the date of	Nov 26	, 1895	until the date of	FEB 28, 1995



OTHER SPECIAL CONDITIONS:

- OL PROVIDED BY OFFICIAL REPUGE REPRESENTATIVE FOR BIRDING BE OBSERVED
- 2. PERMIT (COPY) WILL BE CARRIED CAR BIRD MONITORING WHILE 3. SCHEDULE MONITORING OF BIRD WILL BE PROVIDED TO REFUGE BIOLOGIST PRIOR TO ANY BIRD MONITORING ACTIVITIES, BIRDERS OBSERVE. 72+15 SCHEDULE. IN SCHEDQUE ARE CHANGES NECESSARY, BIRDER WILL INFORM PERSONNEL PRIOR TO REFUGE

BIRDING EVENT

Permittee is responsible for complying with all Federal, State, and Refuge regulations.

Permittee Signature

Issuing Officer Signature

Title

Permit displayed on request of Refuge Officer