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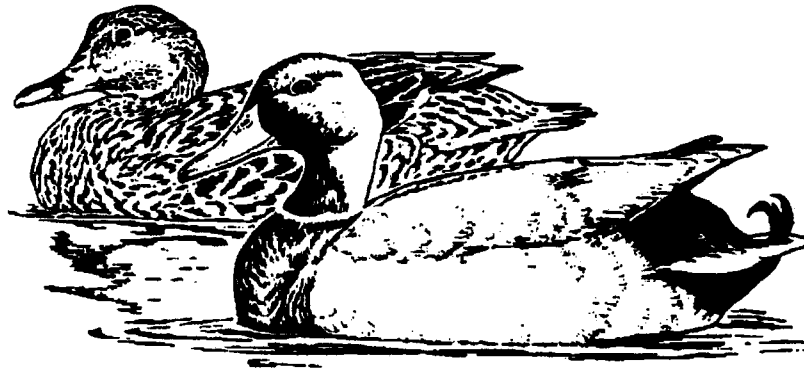
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ILLINOIS NATURAL HISTORY SURVEY

CENTER FOR WILDLIFE ECOLOGY



**1992-1993 Aerial Waterfowl Inventories of Chautauqua National Wildlife
Refuge and Peoria Lake Environmental Management Program Sites**

Annual Report

by

**Stephen P. Havera
and
Michelle M. Georgi**

Illinois Natural History Survey

19 July 1993

The purpose of this project was to aeriaily inventory waterfowl (ducks and geese), bald eagles, double-crested cormorants, and pelicans during fall and spring, 1992-1993 at Upper Peoria Lake and Lake Chautauqua EMP sites. Inventories were conducted from light aircraft flying at low levels. Fall inventories were made on 3 and 10 September; 5, 13, 19, and 26 October; 4, 9, and 16 November; 1, 8, and 16 December; and 5 January. Spring inventories were made on 17 and 23 February; 1, 8, 15, and 29 March; and 6 and 21 April. Species of waterfowl and their respective numbers were recorded during each inventory.

The Upper Peoria Lake EMP site was divided into two inventory areas, the lake segment and the Forested Wetland Management Area (FWMA). There were no waterfowl observed at the FWMA during the fall or spring migrations. We are still uncertain if the FWMA can be accurately inventoried as a result of the difficulty in identifying and enumerating waterfowl in flooded timber. Perhaps once the FWMA is established we can better assess the possibilities of censusing the area.

The inventory data is summarized by site in tabular form displaying the peak (highest number counted for all inventories) population count by species for each compartment at each site and also for the entire site during fall (Sept.-Jan.) and spring (Feb.-Apr.) (Tables 2 and 5). The peak number for the entire site may not represent the sum of the peaks for all the compartments because the peak numbers in the various compartments could have occurred on different flight dates. Additionally, the results of each waterfowl inventory are provided by date for each site (Tables 3, 4, 6, and 7).

Table 1. Common names of waterfowl aerially inventoried and abbreviations used in the report.

Common name		Abbreviation
Dabbling ducks		
Mallard	=	MALLARD
American black duck	=	BLK
Northern pintail	=	PNT
Blue-winged teal	=	BWT
Green-winged teal	=	GWT
American wigeon	=	WIG
Gadwall	=	GAD
Northern shoveler	=	SH
Diving ducks		
Lesser and greater scaup	=	SCAUP
Ring-necked duck	=	RN
Canvasback	=	CNVB
Redhead	=	RH
Ruddy duck	=	RDY
Common goldeneye	=	GLD
Bufflehead	=	BH
Mergansers		
Common merganser	=	CM
Red-breasted merganser	=	RBM
Hooded merganser	=	HM
Geese		
Canada goose	=	CG
Snow goose	=	B&SG
American coot	=	COOT
Bald Eagles		
Adult	=	AD
Immature	=	IMM
Double-crested cormorant	=	CORM
Pelican	=	PEL

UPPER PEORIA LAKE

Table 2. Peak numbers of waterfowl aerially inventoried by the Illinois Natural History Survey at Upper Peoria Lake EMP site, fall and spring, 1992-1993^a.

	Upper Peoria Lake		Forested Wetland Management Area		Total	
	Fall	Spring	Fall	Spring	Fall	Spring
Dabbling ducks						
Mallard	3,000	0	0	0	3,000	0
American black duck	150	0	0	0	150	0
Northern pintail	0	0	0	0	0	0
Blue-winged teal	0	0	0	0	0	0
Green-winged teal	0	0	0	0	0	0
American wigeon	0	0	0	0	0	0
Gadwall	0	0	0	0	0	0
Northern shoveler	0	0	0	0	0	0
All dabbling ducks	3,150	0	0	0	3,150	0
Diving ducks						
Lesser & greater scaup	300	100	0	0	300	100
Ring-necked duck	300	0	0	0	300	0
Canvasback	0	0	0	0	0	0
Redhead	0	0	0	0	0	0
Ruddy duck	0	0	0	0	0	0
Common goldeneye	2,000	0	0	0	2,000	0
Bufflehead	0	0	0	0	0	0
All diving ducks	2,000	100	0	0	2,000	100
Mergansers						
Common merganser	1,000	100	0	0	1,000	100
Red-breasted merganser	0	0	0	0	0	0
Hooded merganser	0	0	0	0	0	0
All mergansers	0	100	0	0	0	100
All ducks	5,310	100	0	0	5,310	100
Geese						
Canada goose	0	300	0	0	0	300
Snow goose	0	0	0	0	0	0
American coot	1,000	0	0	0	1,000	0
Bald eagles						
Adult	1	0	0	0	1	0
Immature	2	0	0	0	2	0
All eagles	3	0	0	0	3	0
Double-crested cormorant	50	0	0	0	50	0
Pelican	0	0	0	0	0	0

^a The peak number for the entire site may not represent the sum of the peaks for all the compartments because the peak numbers in the various compartments could have occurred on different flight dates.

Table 3. Waterfowl aerial inventory data for each individual flight for Upper Peoria Lake EMP site, fall 1992.

	MALLARD	BLK PNT	BNT	GMT	WIG	GAD	SH SCAUP	RN	CNVB RH	RDY	GLD BH	CK RBM HM	DABBLERS	TOTAL DIVERS	TOTAL MERG. DUCKS	CG	B&SG COOT	AD	BALD EAGLE	TOT	CORN PEL
Upper Peoria Lake	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09/03/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09/10/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/05/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
10/13/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
10/19/92	400	20	0	0	0	0	100	0	0	0	0	0	420	100	0	0	0	0	0	0	0
10/26/92	3,000	150	0	0	0	0	0	0	0	0	0	0	3,150	0	520	0	1,000	0	0	0	0
11/04/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,150	0	200	0	0	0	0
11/09/92	400	0	0	0	0	0	0	300	0	0	0	0	400	300	700	0	0	0	0	0	0
11/16/92	0	0	0	0	0	0	0	0	0	0	0	0	0	300	300	0	0	0	0	0	0
12/01/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/08/92	2,200	110	0	0	0	0	0	0	0	2,000	1,000	0	2,310	2,000	1,000	0	0	0	0	1	2
12/16/92	1,600	100	0	0	0	0	0	0	0	100	0	0	1,700	100	1,800	0	0	0	0	0	0
01/05/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Forested Wetland Management Area																					
09/03/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09/10/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/05/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/13/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/19/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/26/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/04/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/09/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/16/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/01/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/08/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/16/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01/05/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Upper Peoria Lake EMP Area Total																					
09/03/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09/10/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10/05/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
10/13/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50
10/19/92	400	20	0	0	0	0	100	0	0	0	0	0	420	100	0	520	0	0	0	0	0
10/26/92	3,000	150	0	0	0	0	0	0	0	0	0	0	3,150	0	3,150	0	1,000	0	0	0	0
11/04/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11/09/92	400	0	0	0	0	0	0	300	0	0	0	0	400	300	700	0	0	0	0	0	0
11/16/92	0	0	0	0	0	0	0	0	0	0	0	0	0	300	300	0	0	0	0	0	0
12/01/92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12/08/92	2,200	110	0	0	0	0	0	0	0	2,000	1,000	0	2,310	2,000	1,000	0	0	0	0	1	2
12/16/92	1,600	100	0	0	0	0	0	0	0	100	0	0	1,700	100	1,800	0	0	0	0	1	0
01/05/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Table 4. Waterfowl aerial inventory data for each individual flight for Upper Peoria Lake EMP site, spring 1993.

	MALLARD	BLK	PNT	BWT	GMT	WIG	GAD	SH	SCAUP	RN	CNVB	RH	RDY	GLD	BH	CM	RBM	HM	DABBLERS	TOTAL	TOTAL	TOTAL	DUCKS	CG	B&SG	COOT	AD	TMM	TOT	CORN	PEL							
Upper Peoria Lake																																						
02/17/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	300	0	0	0	0	0	0	0	0	0	0				
02/23/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
03/01/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0	0	0	50	0	15	0	0	0	0	0	0	0	0	0	0	0			
03/08/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03/15/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03/29/93	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04/06/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04/21/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Forested Wetland Management Area																																						
02/17/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02/23/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03/01/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/08/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/15/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/29/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/06/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Upper Peoria Lake EMP Area Total																																						
02/17/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	100	300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02/23/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/01/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0	0	0	50	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/08/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/15/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/29/93	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/06/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LAKE CHAUTAUQUA

Table 5. Peak numbers of waterfowl aerially inventoried by the Illinois Natural History Survey at Lake Chautauqua EMP site, fall and spring, 1992-1993^a.

	Upper Chautauqua		Lower Chautauqua		Total	
	Fall	Spring	Fall	Spring	Fall	Spring
Dabbling ducks						
Mallard	4,300	50	56,000	700	58,000	700
American black duck	120	0	1,000	0	1,000	0
Northern pintail	400	0	4,000	0	4,000	0
Blue-winged teal	1,000	0	3,100	0	3,900	0
Green-winged teal	5,500	0	4,800	0	7,500	0
American wigeon	200	0	3,500	50	3,500	50
Gadwall	0	0	5,000	30	5,000	30
Northern shoveler	0	0	0	0	0	0
All dabbling ducks	9,825	50	74,800	750	76,840	750
Diving ducks						
Lesser & greater scaup	100	150	300	200	300	250
Ring-necked duck	2,000	225	1,100	500	2,300	500
Canvasback	0	200	125	2,400	125	2,400
Redhead	0	0	0	0	0	0
Ruddy duck	0	0	0	0	0	0
Common goldeneye	1,300	2,550	4,000	200	4,200	2,550
Bufflehead	0	0	50	0	50	0
All diving ducks	2,100	2,775	4,000	3,100	4,200	3,100
Mergansers						
Common merganser	500	800	4,300	750	4,300	875
Red-breasted merganser	0	0	0	0	0	0
Hooded merganser	0	0	900	0	900	0
All mergansers	500	800	5,200	750	5,200	875
All ducks	9,825	3,625	75,750	3,400	78,390	3,625
Geese						
Canada goose	300	500	1,500	25	1,500	525
Snow goose	0	0	500	0	500	0
American coot	1,000	250	4,500	0	5,100	250
Bald eagles						
Adult	14	5	12	4	26	9
Immature	11	3	7	2	18	5
All eagles	25	8	19	6	44	14
Double-crested cormorant	105	40	1,050	150	1,125	150
Pelican	0	0	0	0	0	0

^a The peak number for the entire site may not represent the sum of the peaks for all the compartments because the peak numbers in the various compartments could have occurred on different flight dates.

Table 7. Waterfowl aerial inventory data for each individual flight for Lake Chautauqua EMP site, spring 1993.

	MALLARD	BLK	PNT	BMT	GMT	WIG	GAD	SH	SCAUP	RN	CNVB	RH	RDY	GLD	BH	CH	RBH	HM	DABLERS	DIVERS	TOTAL	TOTAL	CG	B&SG	COOT	BALD	EAGLE	TOT	CORN	PEL			
Upper Lake Chautauqua																																	
02/17/93	50	0	0	0	0	0	0	0	0	225	0	0	0	2,550	0	800	0	0	0	50	2,775	800	3,625	0	0	0	5	3	8	0	0		
02/23/93	0	0	0	0	0	0	0	0	0	0	0	0	0	300	0	50	0	0	0	0	300	50	350	0	0	0	0	0	0	0	0		
03/01/93	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125	0	0	25	0	25	150	500	0	0	1	1	2	30	0	0		
03/08/93	50	0	0	0	0	0	0	0	0	0	0	0	0	50	0	100	0	0	50	50	100	200	20	0	0	1	0	0	0	0	0		
03/15/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	100	100	25	0	0	2	0	0	0	0	0	
03/29/93	0	0	0	0	0	0	0	0	150	0	200	0	0	0	0	0	0	0	0	0	350	0	350	0	0	0	0	0	0	0	0	0	
04/06/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04/21/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250	0	0	0	0	0	40	0	
Lower Lake Chautauqua																																	
02/17/93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	6	0	0		
02/23/93	25	0	0	0	0	0	30	0	200	0	100	0	0	200	0	150	0	0	55	400	150	605	0	0	0	0	0	0	0	0	0	0	
03/01/93	150	0	0	0	0	0	0	0	50	50	100	0	0	0	0	750	0	0	150	200	750	1,100	25	0	0	3	2	5	0	0	0	0	
03/08/93	200	0	0	0	0	0	0	0	0	0	50	0	0	0	0	100	0	0	200	50	100	350	0	0	0	0	0	0	0	0	0	0	0
03/15/93	200	0	0	0	0	0	0	0	200	500	2,400	0	0	0	0	100	0	0	200	3,100	100	3,400	0	0	0	1	0	1	0	0	0	0	0
03/29/93	700	0	0	0	0	50	0	0	100	0	25	0	0	0	0	0	0	0	750	125	0	875	0	0	0	0	0	0	0	20	0	0	0
04/06/93	100	0	0	0	0	0	0	0	150	175	100	0	0	0	0	0	0	0	100	425	0	525	0	0	0	0	0	0	0	150	0	0	0
04/21/93	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	0	20	0	0	
Lake Chautauqua Total																																	
02/17/93	50	0	0	0	0	0	0	0	0	225	0	0	0	2,550	0	800	0	0	50	2,775	800	3,625	0	0	0	9	5	14	0	0	0	0	
02/23/93	25	0	0	0	0	0	30	0	200	0	100	0	0	500	0	200	0	0	55	700	200	955	0	0	0	0	0	0	0	0	0	0	0
03/01/93	175	0	0	0	0	0	0	0	50	50	100	0	0	0	0	875	0	0	175	200	875	1,250	525	0	0	4	3	7	30	0	0	0	
03/08/93	250	0	0	0	0	0	0	0	0	0	50	0	0	50	0	200	0	0	250	100	200	550	20	0	0	1	0	1	0	0	0	0	
03/15/93	200	0	0	0	0	0	0	0	200	500	2,400	0	0	0	0	200	0	0	200	3,100	200	3,500	25	0	0	3	0	3	0	0	0	0	
03/29/93	700	0	0	0	0	50	0	0	250	0	225	0	0	0	0	0	0	0	750	475	0	1,225	0	0	0	0	0	0	0	20	0	0	0
04/06/93	100	0	0	0	0	0	0	0	150	175	100	0	0	0	0	0	0	0	100	425	0	525	0	0	0	0	0	0	0	150	0	0	0
04/21/93	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	20	0	0	0	0	0	0	0	60	0	0	