

## memorandum

DATE: February 6, 1990

REPLY TO  
ATTN OF: Migratory Bird Field Coordinator, Memphis, TN

SUBJECT: Declining Canada Goose Populations at Wheeler NWR, AL

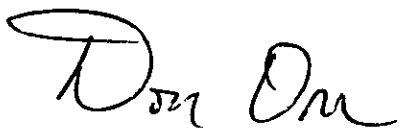
TO: Chief, Wildlife &amp; Habitat Management Division, Refuges &amp; Wildlife, FWS, Atlanta, GA (ARW/WHM)

We have thought for some time now that the migration of Canada geese to SJBW (TVP) wintering refuges prior to mid-December was not closely associated with food availability nor adverse weather conditions farther north. This group of birds has always been considered as rather special; and we have focused management activities and harvest regulation efforts to benefit them.

Manager Tuck Stone has recently provided me with historic population levels by two week time periods for Wheeler NWR. I have prepared a regression graph for the October 1-15, November 1-15 and December 1-15 time periods which is attached. You will notice that there is a highly significant decreasing population trend for each of the time periods. If this trend continues, I suspect that within 20 years we will only see a few hundred geese at Wheeler prior to December 16. In fact, a few hundred geese may be the peak population after mid-December in mild winters. It was also very alarming that the peak population on Wheeler this year was only 9,000. The last time we had a peak that low was during the winter of 1951.

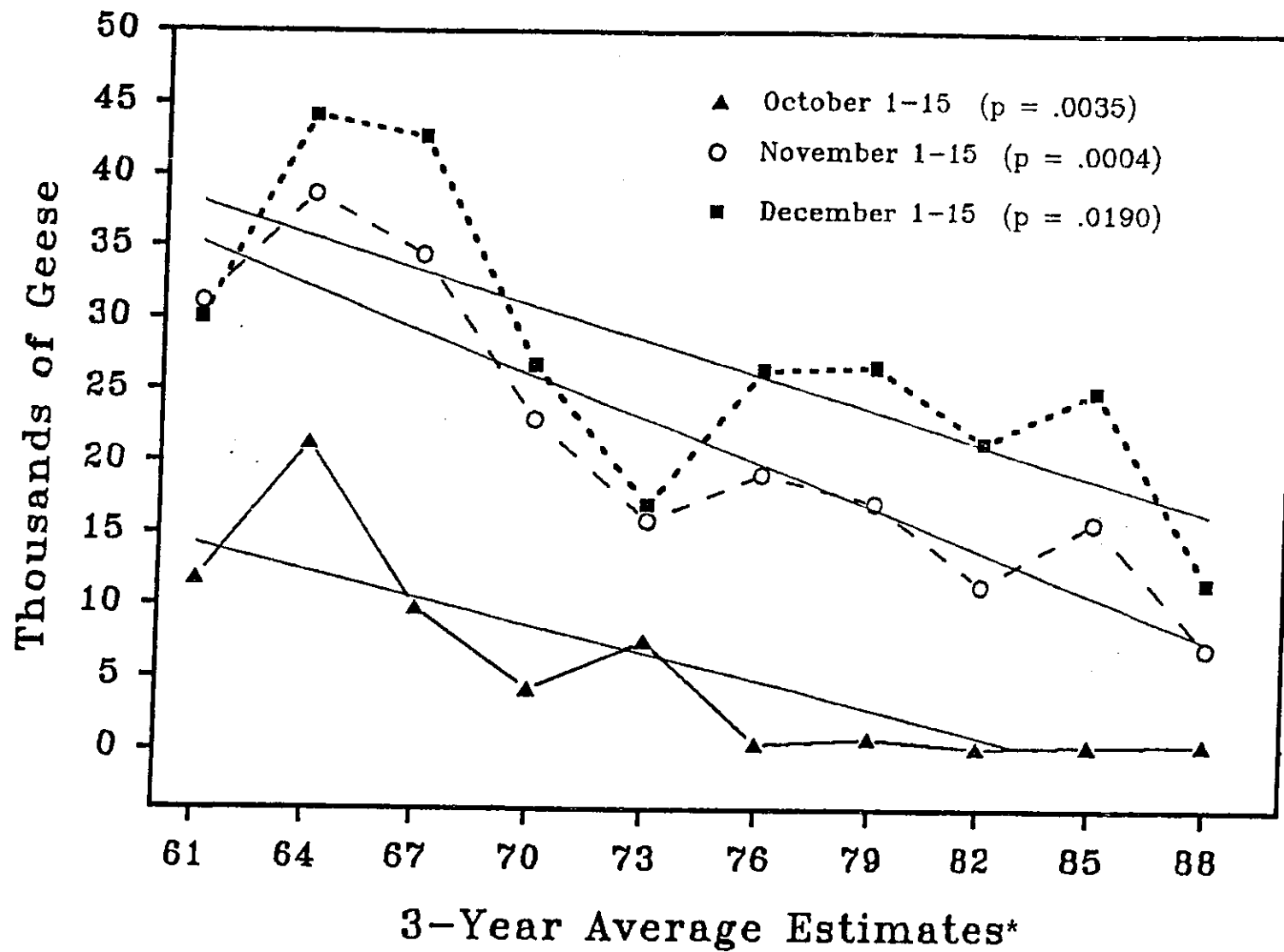
It is my opinion that these data provide substantial evidence that the Wheeler Canada goose population is in serious trouble. There could be at least two factors contributing to this decline: (1) low survival rates, and (2) geese are choosing to winter farther north. We definitely need to give some serious thought as to how we can sort out the problems that are contributing to this population decline. I suggest that we take an in-depth look at survival rates and determine the magnitude of harvest by location and time period for Wheeler geese. If geese are choosing to winter farther north, I certainly hope that it is not associated with an inadequate management program at Wheeler. Just in case however, it is my recommendation that any and all constraints that have been placed upon the refuge management program be immediately removed. I also suggest that a group of goose experts be assembled at Wheeler to observe the current management program and to develop an ideal Canada goose management plan.

cc: Wheeler Refuge Manager  
Associate Manager Bill Grabill  
Ron Freeman



Be Smart, Be Alert, Think Safety First

Figure \_\_\_\_ . 3-Year Average Canada Goose Population Estimates  
By Time Period For Wheeler NWR, AL.



\*Year shown represents middle year of 3-year period (i.e. 61= 1960-1962)

WHEELER NATIONAL WILDLIFE REFUGE  
AERIAL CANADA GOOSE CENSUS  
AND USE DAYS

SEASON	OCT 1-15	OCT 16-31	NOV 1-15	NOV 16-30	DEC 1-15	DEC 16-31	JAN 1-15	JAN 16-31	FEB 1-15	FEB 16-28	GOOSE USE DAYS FOR THE SEASON
47/48	25	325	450				2,300	2,400			254,925
48/49			850		1,700	2,400	4,200		4,500	3,500	295,450
49/50					3,600		5,600				216,400
50/51			2,400				8,800				457,000
51/52		2,500	3,900	4,500 6,000			8,600				550,500
52/53		4,000	7,200	8,500		9,250	11,000	13,350	11,000	7,100	1,225,500
53/54		2,200	9,000	9,500	11,000	10,500	12,000			7,500	1,226,700
54/55	2,500	4,600	10,500	14,800	17,800	21,900	17,175		12,000		1,769,625
55/56	1,700	10,800	12,800		15,000 16,265	17,200	20,000	20,000			1,739,075
56/57	4,750	12,000	15,500	20,500	15,000	19,000	16,000	20,000			1,892,250
57/58	11,000		16,000	22,000		23,000	22,000				1,978,500
58/59	10,000	18,700	21,000	23,000	30,000	30,000	30,000	22,000	17,000		3,096,200
59/60	5,500	14,500	19,885	25,000	26,000	28,000	28,000	12,000			2,437,775
60/61	25,000	36,000	37,500	31,000	30,000	38,000	43,000	40,000	27,000		4,726,500
61/62	2,000	20,000	32,000	34,000	34,000	40,000	42,000	43,000	10,000		3,958,000
62/63	8,500	14,500	23,700	24,500	26,000	38,000	44,000	38,500			3,356,500
63/64	21,000	25,575	41,500	42,600	43,500	58,000	56,000	58,000	20,000		5,634,200
64/65	22,750	27,000	35,000	41,000	46,000	44,000	38,000	20,000			4,197,250
65/66	13,000 27,000	30,000	37,000 42,000	40,000	43,000	45,000	41,000	42,000	31,000	16,000	5,321,000
66/67	5,000 8,500	25,500	36,000 40,000	41,000	47,000	52,000	44,000 36,000	26,000			4,258,500
67/68	10,750	30,000	38,000	45,000	45,000	42,000	40,000 31,000				4,414,250
68/69	11,500	20,000	27,300	35,000	36,000	36,800	36,000		10,000		3,565,800
69/70		7,500 16,000	20,000	20,000	23,500 29,500	29,500	38,000	39,500 29,000			2,878,000
70/71	4,200	16,000 24,000	27,500	35,000	24,000	26,000	34,000	31,500 27,000	32,000 20,000		3,506,500
71/72		17,500	19,000 24,000	30,000	30,000	31,000	31,000	15,000			2,696,000
72/73	11,860	13,000	13,600	11,000	13,000	17,500 27,000	29,000	27,000 20,000	*7,000	*500	2,232,900
73/74	*400	9,000	14,000	15,000	21,000	26,500 29,500	26,650	12,000	*2,000	*200	1,972,550
74/75	10,070	15,000	20,000	22,000		27,000	18,500		*1,500	*50	2,290,700
75/76	*800	9,700	17,050	18,700	27,000	26,000	28,000	24,000	*18,000	*300	2,602,650
76/77	*250	12,500 17,500	26,000	22,500	23,500	33,500 23,500	20,500		*12,000	*400	2,520,850
77/78	*500	14,000	14,500	24,000	29,000	27,000	30,000	23,500	*24,000	*2,500	2,897,000
78/79	*1,000	9,500	13,000	18,000	30,000	28,500	29,500	24,000	*20,000	*7,000	2,762,500
79/80	*1,000	9,000	17,000	19,500	23,000 27,000	27,000	23,500		*9,000	*1,500	2,262,400
80/81	*700	13,300 20,000	21,500		25,000	25,500	27,000		*20,000	*100	2,823,400
81/82	*400	12,500		17,000	18,500	18,000	19,000	19,500	*14,000	*900	2,063,600
82/83	*500	9,800	16,700	19,500	19,800	27,000	28,000	28,000	*27,000	*250	2,712,800
83/84	*75	*5,000	6,000	14,500 19,000	26,000	29,000 38,000		34,000	*17,000	*750	2,702,125
84/85	*500	*10,000	12,500	18,000	22,000		25,000 27,500		*25,000	*3,000	2,569,500
85/86	*300	*7,500	19,000		28,000	28,000	35,000		*25,000	*1,200	3,026,800
86/87	*500	7,000		*16,000		*28,000	31,000		*25,000	*50	2,591,200
87/88	*500	*7,000	9,000		9,500		37,255		17,930	*800	2,090,975
88/89	*500	5,500		*10,000	9,476 28,202		25,000	28,000	4,500	*500	2,039,000
89/90	*500	*4,800	5,100		6,500	45,650	45,000	12,000	375	*100	1,952,725
90/91	*500	*3,200		7,300	6,950	8,000	9,000		5,200		784,450
91/92		735	5,450	3,650	3,200	6,400	7,300	5,300			492,960
92/93		840	930	1,120	1,600	2,900	2,850	2,750	2,200	*500	241,340

geese censused by ground count