

1972 NESTING OF KIRTLAND'S WARBLER
 ARTILLERY RANGE, LOVELLS MANATEMENT AREA,
 PERE CHENEY COLONIES, CRAWFORD COUNTY,
 MICHIGAN
 L. H. WALKINSHAW &

WARREN FAUST, LARRY MASTERS, RONALD HOFFMAN, JERRY BROW, BILL SHAKE

KNOWN OR UNKNOWN	NEST NUMBER	NUMBER EGGS LAID	NUMBER EGGS HATCHED	NUMBER YOUNG FLEDGED	DATE EGGS LAID	DATE EGGS HATCHED IF LOST, HOW	DATE YOUNG FLEDGED IF LOST-HOW
KNOWN	1	5	3	3	6/1-5 K	6/17-18 K	6/27 K
"	2	2	0	0	6/2-3 K	DESERTED	
"	4	5	5	5	6/2-6 K	6/19-20 K	6/28 K
"	6	20 only			6/1 E	DESERTED	
"	7	5	4	3	5/28-6/1 E	6/14-15 K	6/24 K
"	8	1&20	20	0		FAILURE DUE TO COWBIRD	
"	9	5	5	4	5/23-27 E	6/9-10 K	6/18-19 K
"	10	5	4	0	5/26-31 E	6/12-13 K	13-LIN. GR. SQ.
"	11	5	5	0	5/29-6/2 E	6/15-16 K	BLUE JAY?
"	12	5	5	5	5/25-29 E	6/10-11 K	6/21 K
"	13	5	0	0	6/3-7 E	BLUE JAY?	
"	14	4	4	4	6/2-5 E	6/19 K	6/29 K
"	15	5	4	4	5/28-31 E	6/13 K	6/22 K
"	16	5	5	5	6/2-6 E	6/19-20 K	6/29 K
"	17	5	0	0	6/13-17 K	BLUE JAY?	
"	18	4	2	2	5/30-6/2 E	6/16 K	6/26 K
" L	19	5	5	5	5/27-31 E	6/13-14 K	6/23 K
" L	20	5	5	5	5/29-6/2 E	6/15-16 K	6/25 K
TOTAL		76	56	45			

L - LOVELLS; PC-PERE CHENEY AREA; OTHERWISE NESTS FOUND ON ARTILLERY RANGE.
 K - KNOWN; C-COWBIRD; E-ESTIMATED FROM HATCHING OR LAYING DATES, OR OTHER DATA.
 *- PARENT SEEN WITH FLEDGED YOUNG.

1972 KIRTLAND'S WARBLER NESTS
 CRAWFORD COUNTY, MICHIGAN

OUTCOME KNOWN OR UNKNOWN	AREA	NEST NUMBER	EGGS LAID	EGGS HATCHED	YOUNG FLEDGED	DATE EGGS LAID	DATE EGGS HATCHED IF LOST-HOW	DATE YOUNG FLEDGED IF LOST-HOW
KNOWN	AR	22	5	5	5	5/23-28 E	6/9-10 E	6/29 K
"	"	23	5	0	0	6/11-15 E	DESERTED	TOO MANY PEOP
"	"	24	5	5	5	5/29-6/2E	6/15-16 E	6/25 K
"	L	25	5	5	1?	6/10-14 E	6/23 K	GARTER SNAKE 7/1
"	AR	26	5	4	4	6/16-20 E	7/2-3 E	7/13 E*
"	PC	27	5	5	5	6/2-6 E	6/18-19 E	6/29 K
"	L	28	3 +	3	3 (JB)	5/29-6/1E	6/15 E	6/25 K
"	L	29	4	3	3 (RH)	5/30-6/2E	6/16 E	6/26 K
UNK	L	30	3	3	3?(WF)	6/13-17 E	6/30 E	7/9 E
KNOWN	AR	31	4	3	3	6/25-28 E	7/10-11 E	7/21 K ***
"	"	32	4	3	3	7/8-11 E	7/23-24 K	7/31 K **
"	L	33	4	4	4	7/1-4 E	7/16-17 E	7/27 K **
"	L	34	3	3	3	7/9-11 E	7/23-24 E	7/31 K ***
"	L	35	4	4	4 (WF)	7/1-4 E	7/16-17 E	7/27 K **
TOTAL ALL 32 ACTIVE			135	106	87 (4)			
ARTILLERY RANGE			94	66	55			
LOVELLS MAN. AREA			36	35	27 (4?)			
PERE CHENEY AREA			5	5	5			

Nest finders initials given except author. ** - Second successful nest.

*** - Second nesting- after first nest lost. E- Estimated; K- Known.

KIRTLAND'S WARBLER

SUCCESS OF NESTING PAIRS, CRAWFORD COUNTY,

MICHIGAN - L.H.WALKINSHAW

AR - ARTILLERY RANGE, T27N,R2W,SECTS.8,15,16,17.

LOV- LOVELLS MANAGEMENT AREA,T28N,R1W,SECTS.5,6.

PC - PERE CHENEY AREA, T25N,R3W,SECT.12.

STUDIES OF MARKED BIRDS

YEAR	NUMBER OF PAIRS STUDIED	ADDITIONAL SECOND BROODS POSSIBLE	NUMBER OF KNOWN YOUNG FLEDGED PLUS POSSIBLE ONES	NUMBER OF YOUNG KNOWN TO FLEDGE BY EACH PAIR with additional POSSIBILITIES	AVERAGE NUMBER OF YOUNG KNOWN TO FLEDGE PER PAIR DURING YEAR	REGION
<u>REMOVAL OF ONLY COWBIRD EGGS AND/OR YOUNG PROBABLE FOR 1969-1971</u>						
1969	9	0	12	4,3?,3?,2,0,0,0,0,0	1.33	AR
1970	16	7	23	4,3,3,3,3?,2,2?,1,1,1? 0,0,0,0,0,0	1.43	AR
1971	12	4	15	3?,2,2,2,2,2,2,0,0,0,0,0	1.25	AR
TOTAL	37	11	50		1.35	AR
<u>ADULT COWBIRD REMOVAL BEGAN DIVISION OF WILDLIFE SERVICES U.S.FISH AND WILDLIFE SERVICES</u>						
1972	14	10	55	8,5,5,5,5,4,4,4,4,3,3,3, 2,0	3.93	AR
1972	6	3	30	9,7,5,3,3,3	5.00	LOV
1972	1	1	5	5	5.00	PC

1972	21	14	90	9,8,7,5,5,5,5,5,5,4,4,4, 4,3,3,3,3,3,3,2,0	4.28	ALL

During 1970 it was possible that 7 pairs might have reared second broods after they fledged their first; during 1971, 4 pairs might have done so while during 1972 14 pairs could have. Although the 1969-1971 second broods were early enough to be parasitized, it is likely none would have been during 1972. The Lovells and Artillery Range populations (19 and 54 possible pairs) could have reared two broods, during 1972, 3.65 yg.per first brood, 3.4 per second. 511 young...

1972 1972 NESTING SUCCESS OF KIRTLAND'S WARBLER - L. H. WALKINSHAW
AR-ARTILLERY RANGE; L-LOVELLS; PC-PERE CHENEY

UNKNOWN KNOWN	NEST NUMBER	KIRTLAND'S WARBLER			COWBIRD			PREDATION HOW
		NUMBER EGGS LAID	NUMBER HATCHED	NUMBER YOUNG FLEDGED	EGGS LAID	EGGS HATCHED	EGG FLEDGED	
KNOWN AR	98	5	3	3	0	0	0	2 infertile
" "	99	0	0	0	0	0	0	Deserted
" "	100	2	0	0	0	0	0	Deserted
" "	101	5	5	5	0	0	0	
" "	102	0	0	0	0	0	0	Deserted
" "	103	2	0	0	2	0	0	Desert-Cowbird
" "	104	5	4	3	0	0	0	1 infertile
" "	105	1	0	0	2	2	0(2)	Cowbird
" "	106	5	5	4	0	0	0	1 died
" "	107	5	4	0	0	0	0	?Gr.Squirrel
" "	108	5	5	0	0	0	0	?Blue Jay
" "	109	5	5	5	0	0	0	
" "	110	5	0	0	0	0	0	?Blue Jay
" "	111	4	4	4	0	0	0	
" "	112	5	4	4	0	0	0	1 infertile
" "	113	5	5	5	0	0	0	
" "	114	5	0	0	0	0	0	?Blue Jay
" "	115	4	2	2	0	0	0	2 infertile
" "	116	5	5	5	0	0	0	
" "	117	5	5	5	0	0	0	
" AR	118	0	0	0	0	0	0	Des.-Root
" "	119	5	5	5	0	0	0	
" "	120	5	0	0	0	0	0	Desert.-Man
" "	121	5	5	5	0	0	0	
" L	122	5	5	1?	0	0	0	Garter Snake
" AR	123	5	4	4	0	0	0	1 infertile
" PC	124	5	5	5	0	0	0	
" L	125	3 plus	3	3	0	0	0	
" "	126	4	3	3	0	0	0	1 infertile
UNK.	"	127	3	3?	0	0	0	outcome unc.
KNOWN AR	128	4	3	3	0	0	0	1 infertile
" "	129	4	3	3	0	0	0	1 did not hatch
" L	130	4	4	4	0	0	0	2nd brood
" "	131	3	3	3	0	0	0	2nd nesting
" "	132	4	4	4	0	0	0	2nd brood
TOTAL	1972 32	135	106	87 (4)	4	2	0(2)	Nest 128 was second brood
NESTS								
7 AR	1966	4	2	2	9	6(3)	6(3)	
6 "	1967	13	5	5	6	2	0	
1 "	1968	4	0	0	1	0	0	
9 "	1969	24	6(8)	6(8)	10	3(7)	3(7)	
16 "	1970	48	23	17(6)	16	8(5)	0(13)	
13 "	1971	29	16(3)	12(3)	13	4(9)	1(11)	
52 NESTS		122 eggs	52(11)	42(17)	55	23(24)	10(34)	
PER CENT		100%	42.62%	34.42%				69.24%
POSSIBLE			51.64%	48.36%	55	47	44	36 parasitized
32 NESTS 1972		135 eggs	106	87(4)	4	2	0(2)	2 parasitized
ACTUAL		100%	78.51%	64.44%				6.25%
POSSIBLE			"	67.40%				

Eggs per set
1931-1957 (36 nests-146 eggs) 4.05
1966-1971 (52 nests-122 eggs) 2.35
1972 (31 nests 135 eggs) 4.35