1980

Form D-1

Units 1-22

Form D-1 Field Form Unit No. 1

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status						Cover Type														Fate							
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
			No Nests May walk																																	
SG	1	59	6/18/80	220	BWT/CT	9		✓							X														7/22	X						
BM	1	65	6/18/80	190	Teal	7		✓													X								7/22	X						
BM	1	65	6/18/80	191	Teal	3	✓														X								7/22				X			Coyote

Form D-1 Field Form Unit No. 2

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status						Cover Type															Fate							Remarks (No. & expl. on back)
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown	
		No Nests May walk																																		
SB	2	79	6/18/80	218	BWT/CT	6		✓													✓								7/22				X			Coyote

Form D-1 Field Form Unit No. 3

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation: Date	Nest No.	Species	No. Eggs	Nest Status: Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Cover Type: Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Fate: Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
SG	3	105	5/20/80	207	Mallard	Unk					✓										✓								5/22/80			2	✓			Un. Avian
JE	3	103	5/20/80	106	Mallard	11		✓													✓								6/19/80	11						
JE	3	101	5/20/80	107	PINTAIL	9		✓													✓								6/19/80				✓			Coyote
JE	3	91	5/20/80	108	PINTAIL	7		✓													✓								6/19/80	7						
BM	3	97	6/19/80	192	BWT/CT	Unk					✓						✓			✓									6/19/80				✓			Skunk
BM	3	101	6/19/80	194	BWT/CT	9		✓													✓								7/23/80	X						
BM	3	103	6/19/80	195	BWT/CT	7															✓								6/19/80	7						✓
SG	3	91	6/19/80	222	GADWALL	8		✓													✓								7/23/80	7	1					
SG	3	85	6/19/80	223	UNKNOWN	Unk														✓									6/19/80				✓			Un. Mammal
SG	3	107	6/19/80	224	PINTAIL	6		✓												✓									7/23/80	X						
SG	3	107	6/19/80	225	GADWALL	7		✓													✓								7/23/80				X			Magpie

Form D-1 Field Form Unit No. 4

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status						Cover Type															Fate							Remarks (No. & expl. on back)
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown	
BM	4	111	5/19/80	156	Mallard	10		✓													✓								6/19/80				✓			Magpie
BM	4	117	6/20/80	196	BWT/OT	Unk															✓								6/20/80	✓	1					
BM	4	117	6/20/80	197	Mallard	2				✓											✓								7/24/80	X						

Form D-1

Observer: _____

WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA

Field Form

Unit No. 5

Year: 1980

| | | |

Form D-1 Field Form Unit No. 6

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status						Cover Type															Fate							Remarks (No. & expl. on back
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	
MS	6	37	5/19/80	2	Mallard	10		✓							✓														7/23/80	X						
BM	6	41	5/19/80	153	Mallard	7		✓							✓			✓											6/18/80				✓			Magpie
BM	6	41	5/19/80	154	Unknown	Unk									✓								✓						5/19/80				✓			Un. Mammal
JK	6	41	6/18/80	81	BWT/CT	Unk				✓											✓								6/18/80				✓			Skunk

Form D-1 Field Form Unit No. 7

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation: Date	Nest No.	Species	No. Eggs	Nest Status: Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Cover Type: Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Fate: Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
SG	7	53	5/19/80	206	Mallard	5	✓														✓								7/23/80				X			Magpie
SG	7	55	5/19/80	203	Mallard	3	✓														✓								6/18/80			✓				
SG	7	55	5/19/80	205	BWT/CT	10		✓													✓								6/18/80				✓			Un. Avian
JE	7	53	5/19/80	103	BWT/CT	11		✓													✓								6/18/80				✓			Magpie
JE	7	53	5/19/80	104	PINTAIL	6		✓													✓								6/18/80				✓			Coyote
JE	7	47	5/19/80	105	Mallard	6		✓							✓														6/18/80	8						
JE	7	65	5/19/80	102	PINTAIL	3	✓														✓								6/18/80				✓			RAVEN
JK	7	45	5/19/80	53	MALLARD	1					✓										✓								6/19/80				✓			RACCOON
JK	7	55	6/18/80	82	GADWALL	10		✓													✓								7/25/80	X						
JK	7	63	6/18/80	83	Mallard	7					✓										✓								6/18/80				✓			Coyote
JE	7	57	6/18/80	120	PINTAIL	9		✓							✓														7/25/80				X			Coyote
JE	7	57	6/18/80	121	TEAL	6															✓								7/25/80				X			Magpie
JE	7	65	6/18/80	122	Mallard	8		✓													✓								7/25/80	X						

Form D-1 Field Form Unit No. 8

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							Remarks (No. & expl. on back
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	
SG	8	79	5/23/80	212	BWT/OT	11		✓													✓								6/18/80	11						
BM	8	78	6/18/80	188	Mallard	Unk					✓				✓						✓								6/18/80				✓			skunk

Form D-1 Field Form Unit No. 9

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back)
BM	9	87	5/20/80	160	Mallard	7		✓													✓								6/19/80				✓			Raccoon
JK	9	89	5/20/80	55	Mallard	8		✓													✓								6/19/80				✓			Coyote
BM	9	93	5/20/80	161	BWT/CT	10		✓													✓								6/19/80				✓			Coyote
JK	9	99	5/20/80	59	PINTAIL	6	✓										✓				✓								6/19/80	4	2					
JK	9	99	5/20/80	60	BWT/CT	7	✓										✓				✓								6/19/80	6	1					
BM	9	107	5/20/80	170	BWT/CT	9		✓													✓								6/19/80				✓			Coyote
BM	9	97	5/20/80	167	BWT/CT	Unk					✓										✓								5/20/80				✓			Dr. Avian
BM	9	97	5/20/80	169	MALLARD	4				✓											✓								5/20/80			✓				
BM	9	107	5/20/80	171	Unknown	Unk					✓										✓								5/20/80				✓			Unknown
JE	9	91	6/19/80	123	Mallard	Unk															✓								6/19/80	✓						
JE	9	91	6/19/80	124	PINTAIL	9		✓													✓								7/24/80	X						
JE	9	93	6/19/80	127	TEAL	9		✓													✓								7/24/80	X						
JE	9	99	6/19/80	128	Redhead	9		✓													✓								7/24/80	X						
JE	9	99	6/19/80	130	PINTAIL	10		✓													✓								7/24/80	X						
JE	9	99	6/19/80	131	REDHEAD	7	✓														✓								7/24/80				X			Magpie
JE	9	99	6/19/80	132	TEAL	7															✓								7/24/80	X						
JK	9	89	6/19/80	85	MALLARD	7															✓								6/19/80	✓	1					
JK	9	95	6/19/80	86	BWT/CT	Unk											✓				✓					✓			6/19/80				✓			Coyote
JK	9	95	6/19/80	87	Redhead	10		✓													✓								7/24/80	X						
JK	9	95	6/19/80	88	BWT/CT	6?															✓								6/19/80	6						
JK	9	105	6/19/80	90	BWT/CT	Unk															✓								6/19/80	✓						

Form D-1 Field Form Unit No. 10

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status						Cover Type														Fate							
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
JK	10	115	5/21/80	62	Mallard	[illegible]					✓										✓								5/21/80				✓			Coyote
JK	10	115	5/21/80	63	Mallard	Unk					✓										✓								5/21/80				✓			Coyote
JK	10	117	5/21/80	64	BWT/CT	9 BWT 2 Redhead		✓													✓								6/20/80				✓			Unknown
JK	10	109	6/19/80	91	Mallard	9		✓													✓								7/22/80	5	4					
JK	10	109	6/19/80	92	Mallard	8		✓													✓								7/22/80	X						
JK	10	109	6/19/80	93	PINTAIL	6		✓													✓								7/22/80	X						
JK	10	111	6/19/80	95	BWT/CT	8					✓										✓								6/19/80				✓			Magpie
JE	10	113	6/19/80	133	PINTAIL	7	✓														✓								7/22/80				X			Magpie
JE	10	115	6/19/80	134	MALLARD	7		✓													✓								7/22/80	X						

Form D-1 Field Form Unit No. 11

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
			No Nests May Walk																																	
JE	11	141	6/20/80	1~~3~~5	TBAL	7	√								1	~~4~~													7/22/80				X			Un. Mammal

Field Form

Form D-1 Field Form Unit No. 14

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status						Cover Type															Fate							Remarks (No. & expl. on back)
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	
			No Nests May Walk																																
BM	14	35	6/16/80	182	Mallard	9		✓															✓						7/23/80				✓			Skunk

Form D-1 Field Form Unit No. 15

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
SG	15	49	5/22/80	214	BWT/CT	8		✓							✓						✓								6/17/80				✓			Coyote
JK	15	37	6/16/80	78	Mallard	6					✓										✓								6/16/80				✓			Magpie
SG	15	39	6/16/80	217	Shoveller	9		✓													✓								7/26/80				X			Unknown

Form D-1 Field Form Unit No. 16

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
JE	16	57	5/22/80	113	Mallard	4						✓			✓														5/22/80					✓		
JE	16	63	5/22/80	115	Mallard	1	✓														✓								6/17/80				✓			Raven
JE	16	55	6/17/80	118	Mallard	Unk					✓										✓								6/17/80				✓			Un. Avian
JE	16	55	6/17/80	119	Pintail	10		✓													✓								7/23/80				✗			Magpie

Form D-1 Field Form Unit No. 17

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
BM	17	75	5/22/80	173	Unknown	Unk					✓										✓								5/22/80				✓			Unknown
BM	17	77	5/22/80	176	Mallard	Unk					✓										✓								5/22/80				✓			Un. Mammal
BM	17	75	5/22/80	174	Mallard	5		✓													✓								6/17/80				✓			Skunk
BM	17	81	6/17/80	185	Mallard	10		✓													✓								7/26/80	7	3					

Form D-1 Field Form Unit No. 18

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status						Cover Type															Fate							
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
JK	18	95	5/21/80	67	BWT/CT	10		✓													✓								7/23/80				X			Coyote
BM	18	93	6/17/80	186	Mallard	8		✓																✓					7/23/80	3	5					
JK	18	91	6/17/80	79	PINTAIL	Just Start															✓								7/23/80			X				

Form D-1 Field Form Unit No. 19

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							Remarks (No. & expl. on back)
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	
		No	Nests	May	walk																															
JK	19	13	6/16/80	75	BUT/CT	Unk					✓										✓								6/16/80				✓			Coyote

Form D-1 Field Form Unit No. 20

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status						Cover Type															Fate							
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back
JE	20	25	5/21/80	111	Mallard	10		✓													✓								6/16/80				✓			Raccoon
				151	[illegible]						✓																								
		NO	Nests	June	walk																														

Form D-1 Field Form Unit No. 21

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							Remarks (No. & expl. on back
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown	
		No	Nests	May walk																																
JE	21	39	6/16/80	117	Mallard	7		√													√								7/23/80			X				
BM	21	51	6/16/80	181	Bwt/ct	8					√										√								6/16/80				√			Un. Avian

Form D-1 Field Form Unit No. 22

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

	Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							Remarks (No. & expl. on back)
			Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Ex	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown	
Bm	22	55	5/21/80	172	BWT/CT	9		✓													✓								6/16				✓			Magpie
JK	22	71	6/16/80	77	BWT/CT	10					✓										✓								6/16				✓			Magpie

Form D-1 Field Form Unit No. 23

Observer: _____ WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA Year: 1980

Unit No.	Transect No.	First Observation				Nest Status							Cover Type															Fate							Remarks (No. & expl. on back)
		Date	Nest No.	Species	No. Eggs	Laying	Incub.	Covered	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown	
		NO	NESTS	ON																															
		BOTH	MAY & JUNE																																
		WALKS																																	

Form D-4

WPS Duck Nest Transects – Individual Unit Summary

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 1 Recorder: Kauffeld Year: 1980

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Nx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard																						
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	3	2	67		1				1						2							
G-W Teal																						
Ruddy																						
Unknown																						
Total	3	2	67		1				1						2							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 2 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Nx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard																						
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	1	0	0		1										1							
G-W Teal																						
Ruddy																						
Unknown																						
Total	1	0	0		1										1							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 3 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Mx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	2	1	50		1										2							
Pintail	3	2	67		1									1	2							
Gadwall	2	1	50		1										2							
Shoveller																						
Teal B-W & Cinn.	3	2	67		1						1				2							
G-W Teal																						
Ruddy																						
Unknown	1	0	0		1									1								
Total	11	6	55		5						1			2	8							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 4 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	2	1	50		1										2							
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	1	1	100												1							
G-W Teal																						
Ruddy																						
Unknown																						
Total	3	2	67		1										3							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 5 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Nx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard																						
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown																						
Total	0																					
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 6 Recorder: Kauffield Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	2	1	50		1				2													
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	1	0	0		1										1							
G-W Teal																						
Ruddy																						
Unknown	1	0	0		1				1													
Total	4	1	25		3				3						1							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 7 Recorder: Kauffield Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	6	2	33	1	3				1						5							
Pintail	3	0	0		3				1						2							
Gadwall	1	1	100												1							
Shoveller																						
Teal B-W & Cinn.	3	0	0		3										3							
G-W Teal																						
Ruddy																						
Unknown																						
Total	13	3	23	1	9				2						11							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 8 Recorder: Kauffman Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	1	0	0		1										1							
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	1	1	100												1							
G-W Teal																						
Ruddy																						
Unknown																						
Total	2	1	50		1										2							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 9 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	5	2	40	1	2										5							
Pintail	3	3	100												3							
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	9	5	56		4						1				8							
G-W Teal																						
Ruddy																						
Redhead	3	2	67		1										3							
Unknown	1	0	0		1										1							
Total	21	12	57	1	8						1				20							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 10 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	5	3	60		2										5							
Pintail	2	1	50		1										2							
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	2	0	0		2										2							
G-W Teal																						
Ruddy																						
Unknown																						
Total	9	4	44		5										9							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 11 Recorder: Kauffeldt Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Mx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard																						
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	1	0	0		1				1													
G-W Teal																						
Ruddy																						
Unknown																						
Total	1	0	0		1			1														
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 14 Recorder: Kauffield Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	1	0	0		1												1					
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown																						
Total	1	0	0		1												1					
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 15 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Nx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	1	0			1										1							
Pintail																						
Gadwall																						
Shoveller	1	0			1										1							
Teal B-W & Cinn.	1	0			1										1							
G-W Teal																						
Ruddy																						
Unknown																						
Total	3	0	0		3										3							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 16 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	3	0	0		2	1			1						2							
Pintail	1	0	0		1										1							
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown																						
Total	4	0	0		3	1			1						3							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 17 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	3	1	33		2										3							
Pintail																						
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown	1	0	0		1										1							
Total	4	1	25		3										4							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 18 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Mx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	1	1	100															1				
Pintail	1	0	0	1											1							
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	1	0	0		1										1							
G-W Teal																						
Ruddy																						
Unknown																						
Total	3	1	33	1	1										2			1				
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 19 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard																						
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	1	0	0		1										1							
G-W Teal																						
Ruddy																						
Unknown																						
Total	1	0	0		1										1							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 20 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Nx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	1	0	0		1										1							
Pintail																						
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown																						
Total	1	0	0		1										1							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 21 Recorder: Kauffeld Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	1	0	0	1											1							
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	1	0	0		1										1							
G-W Teal																						
Ruddy																						
Unknown																						
Total	2	0	0	1	1										2							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 22 Recorder: Kauffield Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard																						
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.	2	0	0		2										2							
G-W Teal																						
Ruddy																						
Unknown																						
Total	2	0	0		2										2							
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 23 Recorder: Kauffold Year: 80

Transect Coverage in % 50 (All transects=100%, every other transect = 50%,etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covery Type (No. of nests in each primary type)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard																						
Pintail																						
Gadwall																						
Shoveller																						
Teal B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown																						
Total	0																					
Coot																						

*Obtain data from Field Form D-1

Forms D-3 thru D9

D3 – WPS Duck Brood Sample Data

D5-WPS Duck Nesting Transects Refuge Annual Summary

D6 - Calculations For Determination of Corrected Species Composition

D6A - Calculations for Determination of Ducks Produced by Species

D9 – WPS Primary Duck nesting Cover Types Refuge Annual Summary

Form D-3
Observer: _____

WATERFOWL PRODUCTION SURVEY -- DUCK BROOD SAMPLE DATA

Year: _____

Date	Mallard			Pintail			Gadwall			Shoveller			B-W Teal			G-W Teal			Redhead			Ruddy		
	Unit No.	Pond No.	No.duckl. Class IIc & III Br.	Unit No.	Pond No.	No.duckl. Class IIc & III Br.	Unit No.	Pond No.	No.duckl. Class IIc & III Br.	Unit No.	Pond No.	No.duckl. Class IIc & III Br.	Unit No.	Pond No.	No. duckl. Class IIc & III Br.	Unit No.	Pond No.	No.duckl. Class IIc & III Br.	Unit No.	Pond No.	No.duckl. Class IIc & III Br.	Unit No.	Pond No.	No.duckl. Class IIc & III Br.
			8			6			7			8			9			7			6			8
			6			8			7			5			9			8			10			3
			5			7			5			11			7			7			8			8
			5			9			10			6			8						7			7
			6			7			8			5			7						5			4
			7			10			7			7			7						6			
			10			8			3			6			6						5			
			9			7			7			5			6						6			
			9			6						8			6						6			
			10												6						7			
			9												6						4			
			10												3									
			7												6									
			6												7									
			7												8									
			8																					
			7																					
			6																					
Total			135			68			54			61			101			22			70			30
$\bar{x}$			7.5			7.6			6.8			6.8			6.7			7.3			6.4			6.0

Form D-5

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----REFUGE ANNUAL SUMMARY*

Recorder: Kauffield

Year: 80

Transect Coverage in % 50 (All transects 100%, every other transect 50%, etc.)

Species	(1) No. Nests on transect (2) % Refuge total (3) ~~#~~ Hatch	Unit No. 1	2	3	4	5	6	7	8	9	10	11	14	15	16	17	18	19	20	21	22	23	Total
Mallard	(1)			2	2		2	6	1	5	5		1	1	3	3	1		1	1			34
	(2)																						
	(3)			1	1		1	2	0	2	3		0	0	0	1	1		0	0			12-35.3
Pintail	(1)			3				3		3	2				1		1						13
	(2)																						
	(3)			2				0		3	1				0		0						6-46.2
Gadwall	(1)			2				1															3
	(2)																						
	(3)			1				1															2-66.7
Shov.	(1)													1									1
	(2)																						
	(3)													0									0-0.0
B-W & Cinn. Teal	(1)	3	1	3	1		1	3	1	9	2	1		1			1	1		1	2		31
	(2)																						
	(3)	2	0	2	1		0	0	1	5	0	0		0			0	0		0	0		11-35.5
G-W Teal	(1)																						
	(2)																						
	(3)																						
Redhead	(1)									3													3
	(2)																						
	(3)									2													2-66.7
Ruddy	(1)																						
	(2)																						
	(3)																						
____	(1)																						
	(2)																						
	(3)																						
____	(1)																						
	(2)																						
	(3)																						
Unknown	(1)			1			1			1						1							4
	(2)																						
	(3)			0			0			0						0							0-0.0
Total	(1)	3	1	11	3	0	4	13	2	21	9	1	1	3	4	4	3	1	1	2	2	0	89
	(2)																						
	(3)	2	0	6	2		1	3	1	12	4	0	0	0	0	1	1	0	0	0	0		33-37.1
Coot	(1)																						
	(2)																						
	(3)																						

* Obtain data from Summary Form D-4

Form D-6

CALCULATIONS FOR DETERMINATION OF CORRECTED SPECIES COMPOSITION

(1)	Species Composition of Transect Data			Species Composition of Breeding Population				Corrected Sp. Comp. of Nests	
Species	(2) No. Nests From Form D-5)	(3) Sp. Comp. Known Nests in %	(4) Weight (Col. 3 x [redacted] 2	(5) No. Breeding Ducks	(6) Sp. Comp. in %	(7) Weight (Col. 6 x 1)	(8) Weight (Col. 4 + Col. 7)	(9) Sp. Comp. in % (Col. 8 / 3)	(10) Sp.Comp. in Nos. (Col. 9 x total
Mallard	34	40.0	80	1530	25.7	25.7	105.7	35.4	1147
Pintail	13	15.3	30.6	688	11.6	11.6	42.2	14.1	457
Gadwall	3	3.5	7.0	792	13.3	13.3	20.3	6.8	220
Shoveller	1	1.2	2.4	676	11.4	11.4	13.8	4.6	149
BWT/ Cinn.Teal	31	36.5	73	1540	25.9	26.9	98.9	33.2	1076
G.W. Teal				264	4.4	4.4	4.4	1.5	49
Redhead	3	3.5	7.0	280	4.7	4.7	11.7	3.9	126
Ruddy				96	1.6	1.6	1.6	0.5	16
Widgeon				44	0.7	0.7	0.7	Dropped	
Scaup				44	0.7	0.7	0.7		
(Total)	85								
Unknown	4								
TOTAL	89	100%	200%	5954	100%	100%	300%	100%	3240
Coot									

Form D-6a

CALCULATIONS FOR DETERMINATION OF DUCKS PRODUCED BY SPECIES

Species	(10) Sp. Comp. in Nos. (Col. 9 x total	Hatching Success of Nests			Average Class IIc & III Broods			Sp.Comp.of Ducks Produced to Flight Age	
		(11) No. Nests Hatched on Transects (From Form D-5)	(12) Hatching Success in % (Col.11 / Col. 2)	(13) Total Nests Hatched (Col. 10 x Col.12)	(14) No. Broods Recorded (From Form D-3)	(15) No. Ducklings Recorded (From Form D-3)	(16) Average Brood Size (Col.15 / Col.14)	(17) No. Ducks Produced (Cols.13 x 16)	(18) Sp. Comp. in %
Mallard	1147	12	35.3	405	18	135	7.5	3038	35.9
Pintail	457	6	46.2	211	9	68	(7.6) 6.9	1456	17.2
Gadwall	220	2	(66.7) 37.1	82	8	54	(6.8) 6.9	566	6.7
Shoveller	149	0	(0) 37.1	55	9	61	(6.8) 6.9	380	4.5
B.W. Teal	}				?				
Cinn. Teal	1076	11	35.5	382	15	101	6.7	2560	30.2
G.W. Teal	49	—	(-) 37.1	18	3	22	(7.3) 6.9	124	1.5
Redhead	126	2	(66.7) 37.1	47	11	70	6.4	301	3.6
Ruddy	16	—	(-) 37.1	6	5	30	(6.0) 6.9	41	0.5
Unknown									
TOTAL	3240	33	37.1	1206	78	541	6.9	8,466	
Coot									

Form D-9

WATERFOWL PRODUCTION SURVEY

PRIMARY DUCK NESTING COVER TYPES----REFUGE ANNUAL SUMMARY*

Recorder: Kauffeld Year: 80

(1) No. Nests (2) % in Primary Type		Primary Type															
		Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	
Mallard	(1)		4						28		1	1					
	(2)		12						82		3	3					
Pintail	(1)		1					1	11								
	(2)		8					8	85								
Gadwall	(1)								3								
	(2)								100								
Shoveller	(1)								1								
	(2)								100								
B-W & Cinn. Teal	(1)		2		2				27								
	(2)		6		6				87								
G.W. Teal	(1)																
	(2)																
Redhead	(1)								3								
	(2)								100								
Ruddy	(1)																
	(2)																
Unknown	(1)		1					1	2								
	(2)		25					25	50								
	(1)																
	(2)																
Total	(1)		8		2			2	75		1	1					
	(2)		9		2			2	84		1	1					
Coot	(1)																
	(2)																

* Obtain data from Summary Form D-4

Field Notes/Misc.

Report - Characteristic Appearances of Waterfowl Nests Destroyed by Predators

CHARACTERISTIC APPEARANCES OF WATERFOWL NESTS DESTROYED BY PREDATORS

In localized waterfowl production areas, such as wildlife refuges, control of nest predators is generally considered to be a desirable waterfowl management procedure. Therefore, the importance of knowing which predators are destroying nests is apparent.

A search of available literature, personal observations and contacts with refuge personnel have yielded the following characteristics for identifying waterfowl nest predators. Only nest predators common to Colorado and Utah are presented. Some nest predators leave few signs of their destruction or the signs of two or more predators may be similar. In these cases observers may have to record the predator as unknown, depending on which predators are present on your area.

Appearance of Successfully Hatched vs. Destroyed Eggs

The membrane lining the egg remains tightly attached to the shell in eggs destroyed before hatching; whereas, the membrane of hatched eggs readily separates from the shell.

Characteristic Signs Left by Individual Predators

Raccoon: The base of the nest is disturbed with the rim of the nest ripped apart. Occasionally eggs are removed without nest disturbance. Egg shells can usually be found within 30 feet of the nest. Shell fragments are coursely fractured (not crushed). Indentations caused by tooth marks are seldom apparent. Raccoon usually do not consume the egg shell.

Skunk: The nest will be torn almost entirely apart. Usually does not carry eggs away from the nest. Eggs crushed in the mouth and the contents lapped up, leaving shell fragments and membrane clinging together. Shells are frequently mixed with the nest materials. Skunk odor may be detected by smelling the nest materials.

Fox: The nest is usually torn apart at least on one side. The eggs are either eaten, shell and all, or they are carried well away from the nest. If eggs are broken at the nest site they will not appear crushed. A fox may not take all of the eggs in a nest at one time.

Coyote: Similar to fox.

Weasel: The nest is not disturbed. Edges of egg shell will be finely chewed. Many times one end of the egg will be eaten out.

Mink: Similar to weasel.

Badger: The nest bowl will be severely torn up. There may be digging in the vicinity of the nest.

Crow: The rim of the nest may be slightly pulled out on one side. Some egg shells are usually found at the nest site. It is seldom that all eggs will be eaten at the nest site, eggs are frequently carried to one or more perches and eaten. Egg contents will be cleanly eaten. Eggs will usually retain their spherical shape and will have a moderate or large hole in one side; often there is another smaller puncture just below the large opening which is caused by the lower mandible of the bird. The opening is clean-cut and the membrane seldom curls inward. If all eggs are carried away from the nest there will often be small shell chips in the vicinity of the nest.

Raven: Similar to the crow.

Magpie: Similar to the crow or raven, except the second hole in the shell caused by the lower mandible is not present.

California Gull: Will usually peck a hole in the eggs and consume the contents at the nest site (similar to the magpie) or the eggs will be carried to the gull nesting colony or the whole egg may sometimes be consumed at the nest site.

Bull snake: The nest bowl will not be disturbed. The eggs will be swallowed whole. Occasionally the snake can be found in the area of the nest.

Prepared by Lonnie Schroeder
May 1, 1980

CHARACTERISTIC APPEARANCES OF NATURAL NESTS DESTROYED BY PREDATORS

In localized waterfowl production areas, such as wildlife refuges, control of nest predators is generally considered to be a desirable waterfowl management procedure. Therefore, the importance of knowing which predators are destroying nests is apparent.

A search of available literature, personal observations and contacts with refuge personnel have yielded the following characteristics for identifying waterfowl nest predators. Only nest predators common to Colorado and Utah are presented. Some nest predators leave few signs of their destruction or the signs of two or more predators may be similar. In these cases observers may have to record the predator as unknown, depending on which predators are present on your area.

Appearance of Successfully Hatched vs. Destroyed Eggs

The membrane lining the egg remains tightly attached to the shell in eggs destroyed before hatching; whereas, the membrane of hatched eggs readily separates from the shell.

Characteristic Signs Left by Individual Predators

Raccoon: The base of the nest is disturbed with the rim of the nest ripped apart. Occasionally eggs are removed without nest disturbance. Egg shells can usually be found within 30 feet of the nest. Shell fragments are coursely fractured (not crushed). Indentations caused by tooth marks are seldom apparent. Raccoon usually do not consume the egg shell.

Skunk: The nest will be torn almost entirely apart. Usually does not carry eggs away from the nest. Eggs crushed in the mouth and the contents lapped up, leaving shell fragments and membrane clinging together. Shells are frequently mixed with the nest materials. Skunk odor may be detected by smelling the nest materials.

Fox: The nest is usually torn apart at least on one side. The eggs are either eaten, shell and all, or they are carried well away from the nest. If eggs are broken at the nest site they will not appear crushed. A fox may not take all of the eggs in a nest at one time.

Coyote: Similar to fox.

Weasel: The nest is not disturbed. Edges of egg shell will be finely chewed. Many times one end of the egg will be eaten out.

Mink: Similar to weasel.

Badger: The nest bowl will be severely torn up. There may be digging in the vicinity of the nest.

Crow: The rim of the nest may be slightly pulled out on one side. Some egg shells are usually found at the nest site. It is seldom that all eggs will be eaten at the nest site, eggs are frequently carried to one or more perches and eaten. Egg contents will be cleanly eaten. Eggs will usually retain their spherical shape and will have a moderate or large hole in one side; often there is another smaller puncture just below the large opening which is caused by the lower mandible of the bird. The opening is clean-cut and the membrane seldom curls inward. If all eggs are carried away from the nest there will often be small shell chips in the vicinity of the nest.

Raven: Similar to the crow.

Magpie: Similar to the crow or raven, except the second hole in the shell caused by the lower mandible is not present.

California Gull: Will usually peck a hole in the eggs and consume the contents at the nest site (similar to the magpie) or the eggs will be carried to the gull nesting colony or the whole egg may sometimes be consumed at the nest site.

Bull snake: The nest bowl will not be disturbed. The eggs will be swallowed whole. Occasionally the snake can be found in the area of the nest.

Prepared by Lonnie Schroeder
May 1, 1980

Transect Changes - 1980

1) Transect width will be shortened from 24' to 16½ feet. This means that it will not be necessary to weave back and forth while walking. It is not an excuse to hurry through the transect.

2) We will measure, the distance (horizontal) from transect centerline to the center of the nest. Yardsticks will be provided. Measure distance to all nests whether inside or outside ~~not~~ transect.

3) For most of the units, one man will be assigned one unit. This means that each man will carry the aerial photograph with him and will mark on the aerial photograph the nest location.

4) As in past years, we will place a flag 8' to the west of the nest, however, if this spot has extremely high vegetation move the flag over either right or left

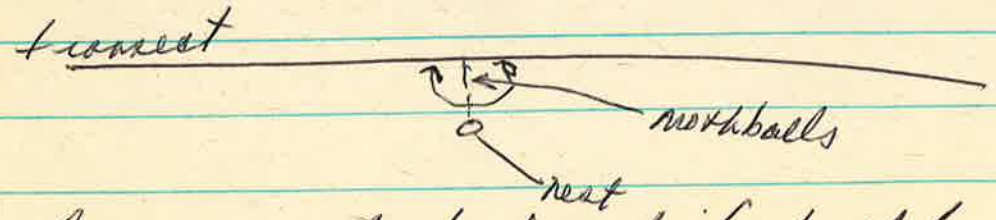
to a more open spot, and record the distance and direction to the nest.

5) Place a flag in the center of any deserted, flooded, or destroyed nest

6) Record on marking flags, # of nest, duck species, incubating or laying, # of eggs, date found.

7) On all destroyed nests, using the handout to the best of your ability attempt to determine what caused the destruction, if you cannot determine say unknown, and record the animal that destroyed it on the form.

8) We will place nestballs as diagramed below, spindle nestballs lightly on twigs



do your best to disturb the nest site as little as possible.

9) Make sure ~~each vegetative type~~ the vegetative type of each nest site is recorded. If greasewood or rabbitbrush is involved, record the understory also.

10) We will estimate the distance by eye to the closest permanent water.

11) We will mark and record the same as ducks any goose nest found.

12) The following species we will record the distance, vegetative type, no. of eggs, hatched, destroyed by what, as we do with duck nests, but we will not mark the site. Also mark on aerial photograph.

1) Hawks, owls,
2) Magpies
3) Mourning dove
4) Pheasant
5) Egrets, herons, ibis

13) Pace the distance (horizontal) to any rabbit (jackrabbit or cottontail) that you flush

14) Record any information on coyote dens, badger dens, skunk, raccoon sightings you may find.

Raw Data/Nest Graphs

May walk

Other Species

No	Species		Distance		Status
#52	S.E. Owl	U7-T51	3'0"	Jba-Cx	active
#54	C. Coon	U7-T45	13'6"	Jba	5/19 Dest - skunk
#68 •	Coot	U18-T107	6'2"	Bullrush	6/17 Dest active
#69 •	M. Dove	U14-T35	9'6"	Sve	active
#70 •	Coot	U17-T89	1'4"	Bullrush	"
#73 •	"	U2-T81	2'	Bullrush	6/18 Hatched "
#155 •		U6-T43	15'	TLA	5/20 Flooded
Unpunched •	M. Dove	U22-T61	1'	Sve-Wx	5/22 Hatched active
#175	C. Coon	U17-T77	70'	Sva	5/20 Unknown (Destroyed)
#177 •	Coot	U17-T81	3'	Tla-Sva	6/17 Dest active
#178 •	"	U17-T81	8'	Sva	6/17 Dest "
#179	C. Coon	U17-T83	6'	Sva	5/20 Hatched

Gare walk — Other Species

Mc Dane

116	–	Active	U21-T37 Sve	?	Active 6/16
94	–	Hatched	U10-T111 Sve-Dbt	7'0"	Hatched 6/19
216	–	Active	U19-T11 Sve-Dbt	?	Active 6/16
226	–	Hatched	U4-T109		Active 6/19
—	–	Active	U14-T53	10'	Active 6/16
74	–	Hatched	U19-T7 Sve	8'8"	Hatched 6/16
	–	Active 2 eggs	U11-135 Sve	2'	

Coot

183	–		U17-T81 Tla-Svo	8'6"	Dbt 6/17 Weasel or mink
184	–	6/17 Active	U17-T81 Sva	3'10"	
221	–	6/18 Active	U1-T61 Jba	0'2"	

Jane walk

Unit 3			
192 - BWT/CT -	0'8"	✓ skunk	
193 - Mallard - active	24'8"		
194 - BWT/CT - active	0'4"	✓	
195 - BWT/CT - Hatched	5'3"	✓	
222 - Gadwall - active	2'7"	✓	
223 - Unknown -	2'5"	✓ Un. Mannal	
224 - PINTAIL - active	1'8"	✓	
225 - Gadwall - active	0'6"	✓	
Unit 4			
196 - BWT/CT - Hatched	3'6"	✓	
197 - Mallard -	6'0"	✓	deserted
Unit 1			
220 - BWT/CT - active	4'4"	✓	
190 - Teal - active	6'1"	✓	
191 - Teal - active	8'4"	✓	
Unit 2			
187 - BWT/CT - active	9'3"		
189 - BWT/CT	29'8"	Magpie	
218 - BWT/CT - active	8'4"	✓	
219 - Gadwall - active	24'11"		
Unit 5			
227 - BWT/CT - active	12'8"		

Line Walk (con't)

Unit 6			
81 - BWT/CT		3'6" ✓	skunk ✓
Unit 7			
82 - Cadwell	- Active	3'6" ✓	
83 - Mallard	-	0' ✓	Coyote
120 - PINTAIL	Active	7 ✓	
121 - Teal	- Active	2 ✓	
122 - Mallard	- Active	3 ✓	
Unit 8			
188 - Mallard		4'2" ✓	skunk
Unit 9			
123 - Mallard	- Hatched	5'8" ✓	
124 - PINTAIL	- Hatched	6' ✓	
125 - Redhead	- Hatched	14'	
126 - PINTAIL	- Active	27'	
127 - Teal	- Active	8'4" ✓	
128 - Redhead	- Active	6'5" ✓	
129 - ~~PINTAIL~~ Cadwell	- Active	33'	
130 - PINTAIL	- "	6' ✓	
131 - Redhead	- "	8'4" ✓	
132 - Teal	- Hatched	3'7" ✓	
84 - Cadwell	- Active	13'8"	
85 - Mallard	- Hatched	8'4" ✓	
86 - BWT/CT	-	2'3" ✓	Coyote

Fence walk

Unit 9 (Cont)

87 - Redhead - active ✓ 2'2"
88 - BWT/CT - Hatched ✓ 5'7"
89 - Mallard - 9'9" Coyote
90 - BWT/CT - Hatched ✓ 3'0"

Unit 10

91 - Mallard - active ✓ 5'4"
92 - " - active ✓ 7'4"
93 - PINTAIL - active ✓ 1'2"
95 - BWT/CT - ✓ 8'4" Magpie
133 - PINTAIL - active ✓ 4'
134 - Mallard - active ✓ 2'5"

Unit 11

135 - Teal - active ✓ 8'

Unit 14

182 - Mallard - active ✓ 4'8"

Unit 15

~~188 Mallard~~ - Mallard - ✓ ~~15'0"~~ Magpie
217 - Shoveler - active ✓ 5'11"

Unit 16

118 - Mallard ✓ 1'6" Dn ar
119 - PINTAIL - active ✓ 3'6"

Unit 17			
185 - Mallard - active	✓	5'5"	
Unit 18			
186 - Mallard - active	✓	3'10"	
79 - Pintail - "	✓	6'0"	
80 - Mallard - "		15'6"	
Unit 19			
75 - BWT/CT	✓	1'2"	Coyote
Unit 20			
180 - Mallard		12'8"	Raven
~~181 - BWT/CT~~		~~2'4"~~	~~Un Avian~~
Unit 21			
76 - Mallard - active		45'	- Incidental Find
177 - Mallard - active	✓	6'	
181 - BWT/CT -	✓	2'4"	Un Avian
Unit 22			
77 - BWT/CT	✓	4'0"	Magpie

Redhead May Nests

Unit 3 -					
106	Mallard	Hatched	4'	✓	
107	Pintail	~~Coyote~~	4'8"	✓	Coyote
208	Shoveler	Hatched	14'		
209	BWT/CT	-	14'		Coyote
108	Pintail	Hatched	6'	✓	
109	Mallard	Hatched	34'		
110	Mallard	Hatched	30'		
Unit 4 -					
156	Mallard	-	8'	✓	Magpie
Unit 6 -					
1	Pintail	Hatched	18'		
* 151	Mallard		12'		
* 2	Mallard		4'	✓	
153	Mallard		0'	✓	Magpie
Unit 7 -					
* 206	Mallard		0'	✓	
203	Mallard		8'	✓	Deserted
204	Mallard	Active	18'		
205	BWT/CT		0'	✓	Un-avian
103	BWT/CT		6'	✓	Magpie
104	Pintail		7'	✓	Coyote
105	Mallard	Hatched	7'	✓	
* 51	BWT/CT		11'4"		
102	Pintail		6'7"	✓	Raven

Unit 7 (Cont)			
202 - BWT/CT		45'	Raven
201 - Mallard		35'	Coyote
Unit 8			
212 - BWT/CT - Hatched	✓	0'	
213 - BWT/CT		40'	Un. Destr.
71 - Mallard - Hatched		16'10"	
72 - Mallard		19'	Coyote
Unit 9			
* 157 - Mallard		135'	
160 - Mallard	✓	4'	Raccoon
55 - Mallard	✓	0'	Coyote
56 - Mallard - Hatched		13'8"	
57 - PINTAIL	✓	10'6"	Raven
58 - Mallard - Hatched		10'2"	
161 - BWT/CT	✓	0'	Coyote
~~164 - BWT/CT~~		~~7'~~	~~Un. Destr~~
59 - PINTAIL - Hatched	✓	7'	
60 - BWT/CT - Hatched	✓	8'1"	
170 - BWT/CT	✓	4'8"	Coyote
Unit 10			
61 - Mallard	✓	50' off	Skunk
64 - BWT/CT	✓	0'	Un. Destr
65 - Mallard		20'4"	Raven

Unit 15				
210 - Mallard - Hatched		25'		
* 211 - BWT/CT		30'		
214 - BWT/CT	✓	0'	Coyote	
112 - PINTAIL		~~12'~~	skunk	
Unit 16				
114 - G.W.Teal		19'		Desert
115 - Mallard	✓	7'4"	Raven	
Unit 17				
174 - Mallard	✓	7'	skunk	~~skunk~~
Unit 18				
66 - BWT/CT - Hatched		9'9"		
* 67 - BWT/CT	✓	7'8"		
Unit 20				
111 - Mallard	✓	8'	Raccoon	
Unit 22				
172 - BWT/CT	✓	0'	Magpie	

Destayed Nest - May Walk

1	101 - Mallard		13'4"	Raven
9	159 - Mallard		23'	Dest. Unk
9	165 - Mallard		13'	Un Avian
15	215 - Mallard		15'	Un Avian
16	113 - Mallard	✓	4'	Flooded
1	53 - Mallard	✓	8'	Raccoon
10	62 - Mallard	✓	5'6"	Coyote
10	63 - Mallard	✓	1'0"	Coyote
3	207 - Mallard	✓	0'	Un Avian
9	167 - BWT/CT	✓	4'	Un Avian
9	169 - Mallard	✓	3'	Deserted
9	171 - Unknown	✓	2'	Dest. Unk
17	173 - Unknown	✓	2'	Dest. Unk
17	176 - Mallard	✓	0'	Dest. Unk Mamm
6	154 - Unknown	✓	0'	Dest Unk Mamm

On Transect – June

Species	Active		Hatched		Destroyed		Des Dem	Total
BWT/CT	~~IIII~~ III	8	~~IIII~~	5	S, S, C, M, C, UA, M	7		20
Mallard	~~IIII~~ III	8	II	2	C, S, M, UA,	4	1	15
Gadwall	III	3		0		0		3
Unknown		0		0	un,	1		1
PINTAIL	~~IIII~~ II	7	I	1				8
Redhead	III	3		0				3
Shoveler	I	1		0				1
								51

Off Transect

Mallard	III	3		0	C, R	2		5
BWT/CT	II	2		0	M,	1		3
Gadwall	II	2		0				2
Redhead		0	I	1				1
PINTAIL	II	2		0				2
								13

May Walk

Incidental FINDS

#157	Mallard	—	Active
#61	"		"
#202	BWT/OT	—	"

66

May Walk

ON Transect

ACTIVE		DESTROYED	DESERTED	FLO
MALLARD - 𝍸 𝍸 𝍸 𝍸	= 12	UA, R, C, C, UM	1	1
PINTAIL - 𝍸	= 5			
BWT/CT - 𝍸 𝍸	= 10	UA,		
	27			
Unknown		UM, UU, UU,		

27 Active
9 Destroyed
1 Deserted
1 Flooded

OFF

ACTIVE		DESTROYED	
Shoveler - 1	1		
Bwt-ct - ~~IIII~~ 1	6		
Mallard - ~~IIII~~ ~~IIII~~ ~~IIII~~	14	U, R, M	3
Pintail - 11	3		
Cwt - 1	1		
	25	Σ	28

May Walk

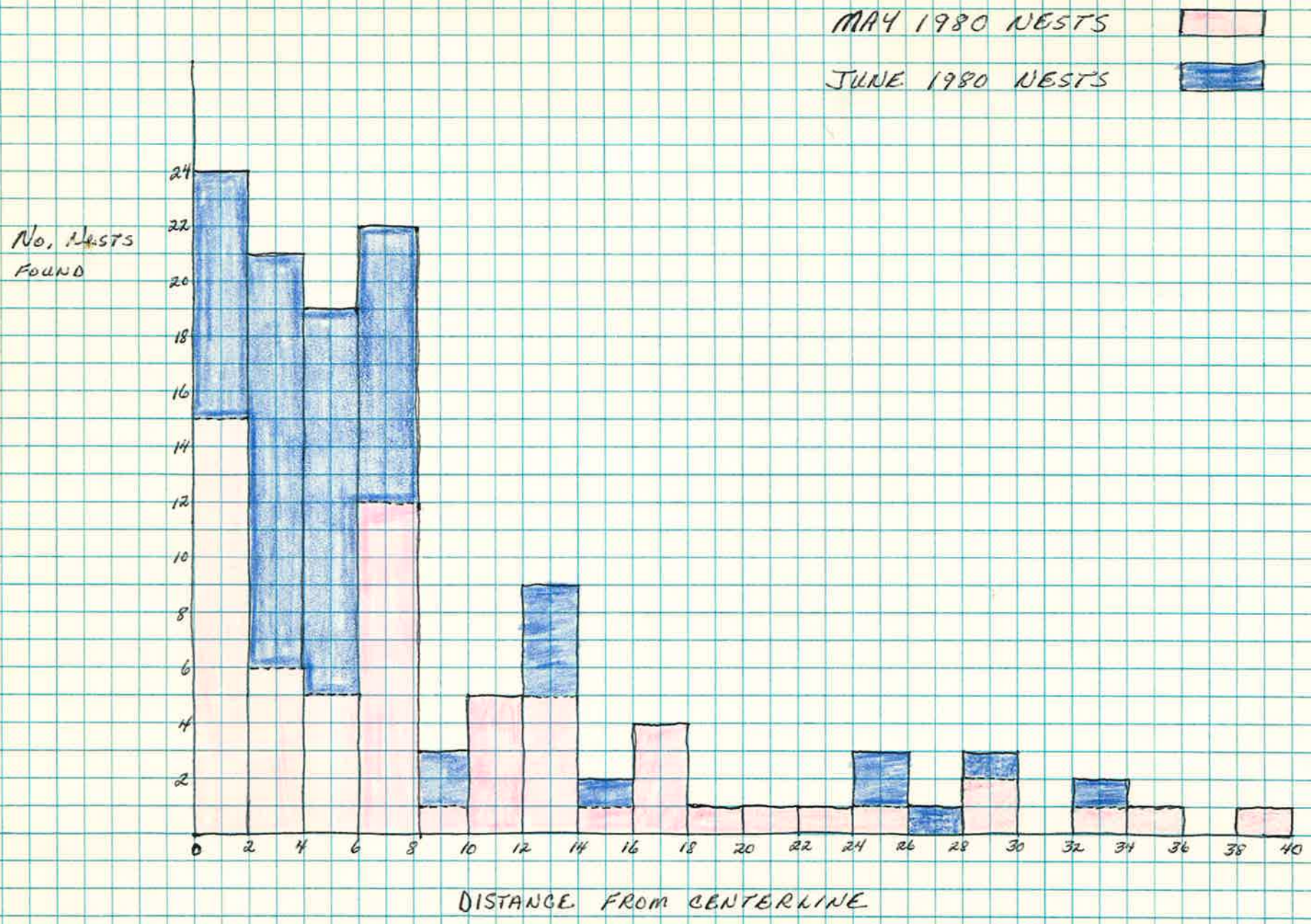
1980

ON

DEST	ACTIVE	
207 ✓	M 106	M 111 ✓
P 154 ✓	P 107	BC 72 ✓
53 ✓	P 108	
167 ✓	M 156	
169 ✓	M 2	
171 ✓	M 153	
62 ✓	M 206	
63 ✓	M 203	
113 ✓	BC 205	
173 ✓	BC 103	
176	P 104	
11	M 105	27
	P 102	
	BC 212	
	M 160	
	M 55	
	BC 161	
	P 59	
	BC 60	
	BC 170	
	BC 64	
	BC 214	
	M 15	
	M 74	
	BC 67	

OFF

DEST	Active	
~~54~~	BC 51	M 210 ✓
M 101 ✓	M 56	BC 211 ✓
M 159 ✓	P 57	M 201 ✓
~~163~~	M 58	BC 213 ✓
M 215 - M	M 61	P 112 ✓
	M 65	
	BC 66	
	~~69~~	
	M 71 ✓	
	M 72 ✓	
	M 109 ✓	
	M 110 ✓	
	GW 114 ✓	
	M 151 ✓	
	~~152~~	
	~~155~~	
	~~154~~	
	M 157 ✓	
	~~159~~	
	M 165 - ✓	
	~~175~~	
	BC 202 ✓	
	M 204 ✓	
	S 208 ✓	
	BC 209 ✓	
	P 1	


MAY 1980 NESTS
JUNE 1980 NESTS
No. NESTS FOUND
24
22
20
18
16
14
12
10
8
6
4
2
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
30
32
34
36
38
40
DISTANCE FROM CENTERLINE

NESTS ON TRANSECT
MAY WALK

Species	Coyote	Skunk	Raccoon	Raven	Magpie	Unk A	Unk M	Unk	Deserted	Flooded	Hatched	~~[illegible]~~	Unknown Fate	
	Destroyed													
Mallard	3	1	3	1	2	1	1		2	1	2	2		19
BWT/CT	3				2	2		1			2	1		11
Unknown							1	2						3
PINTAIL	2			1							2			5
														38
TOTAL	8	1	3	2	4	3	2	3	2	1	6	3		
	Nests OFF Transect												STILL ACTIVE	
Mallard	2	1		2		2		1			5	2	1	14
Shoveler											1			1
BWT/CT	1			1				1			1	2		6
Gadwall											1			1
PINTAIL		1		1							1			3
G W Teal									1					1
	3	2		4		2		2	1		9	4	1	28
TOTAL	11	3	3	6	4	5	2	5	3	1	15	7	1	66

's ON TRANSECT
MAY WALK