

1964

Form D1

Waterfowl Production

Surveys

Units 1-23

WATERFOWL PRODUCTION SURVEY DUCK & C. JF NESTING DATA

Year: 1964

[illegible]

[illegible]

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	N. Hatch.	Desert.	Destr.	Flooded	Unknown	Remarks (No. & expl. on back)	
10	109	5/16	219	Mallard	9		X						X						X																	
10	116	5/16	220	Unknown	-	X													X																	
10	117	5/17	221	Unknown	-									X						X																
10	116	5/19	222	Unknown	4	X		X											X																	
10	110	6/23/64	223	Unknown	9															X																
10	110	6/23/64	223	Unknown	1															X																

Year: 1964

1061

[illegible]

Unit 18
 Field Form

501-460

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)	
18	95	6/23	195	Unknown	7	✓	✓												✓	✓	✓	✓					6/23	✓	7							
18	95	6/23	196	Mallard	14	✓	✓												✓	✓	✓	✓							✓	18	✓					
18	95	6/23	197	"	9	✓	✓												✓	✓	✓	✓							✓	9	✓					
18	93	6/23	198	Pintail (?)	10		✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓		
18	93	6/23	199	Unknown	6														✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	93	6/23	200	Coot	3	✓	✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	93	6/23	200	Shoveller (?)	7	✓	✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	92	6/24	301	Blue-winged Teal	8	✓	✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	92	6/24	302	Unknown (Sk or Teal)	8														✓	✓	✓	✓					6/24	✓	4	✓						
18	91	6/24	303	Mallard	8	✓	✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	91	6/24	304	Godwits	10	✓	✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	91	6/24	305	Mallard	-														✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	91	6/24	306	Blue-winged Teal	8	✓	✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	90	6/24	307	Redhead	8														✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	90	6/24	308	"	7	✓	✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	99	6/24	309	Mallard	-														✓	✓	✓	✓					6/24	✓	6	✓						
18	100	6/24	310	Unknown	3														✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	101	6/24	311	Mallard	-														✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	102	6/25	312	Godwits	9	✓	✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	
18	107	6/25	313	"	7	✓	✓												✓	✓	✓	✓							✓	✓	✓	✓	✓	✓	✓	

Found Rd. Nest - 6/24 94
 Photo
 18 107 6/25 313
 18 102 6/25 312
 18 101 6/24 311
 18 100 6/24 310
 18 99 6/24 309
 18 90 6/24 308
 18 91 6/24 307
 18 91 6/24 306
 18 91 6/24 305
 18 91 6/24 304
 18 92 6/24 303
 18 92 6/24 302
 18 93 6/23 200
 18 93 6/23 199
 18 93 6/23 198
 18 95 6/23 197
 18 95 6/23 196
 18 95 6/23 195

Forms D2 & D3

D2: WPS – Wildlife Trend Data

D3 WPS – Duck Brood Sample Data

Form D-2
Unit No: 8

Field Form
WATERFOWL PRODUCTION SURVEY--WILDLIFE TREND DATA

Obs:

Bullock

Year: 1964

Species	Record Data on Trans. Series:			Total Obs.	Total Nests, Dens, or Houses Obs.	Active Nests, Dens, & Houses on Trans.	Map Symbol	Trans. No.	Date 1st Obs.	No. Eggs	Fate										Cover Type									
	1	2	3								Hatched	No. hatch.	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Flood.
Pheasant	X	X	X	XXXXX	XXXXXX	XXXXXXXXXX		X																						
Snowy Egret		X		XXXXX	XXXXXX	XXXXXXXXXX																								
B.C. Night Her.		X		XXXXX	XXXXXX	XXXXXXXXXX																								
Avocet		X		XXXXX	XXXXXX	XXXXXXXXXX																								
Phalarope		X		XXXXX	XXXXXX	XXXXXXXXXX																								
Short-ear. Owl		X		XXXXX	XXXXXX	XXXXXXXXXX																								
Marsh Hawk		X		XXXXX	XXXXXX	XXXXXXXXXX																								
R.-T. Hawk		X		XXXXX		XXXXXXXXXX																								
G.H. Owl		X		XXXXX		XXXXXXXXXX																								
Maggie	X			XXXXX	' 1	XXXXXXXXXX																								
Blackbird		X		XXXXX	XXXXXX	" 2																								
Muskrat	X			XXXXX	XXXXXX																									
Badger	X			XXXXX	XXXXXX	' 1																								
Skunk	X			XXXXX	XXXXXX																									
Cottontail	X			" 3	XXXXXX																									
Jack Rabbit	X			" 9	XXXXXX																									
Mourn. Dove		X			XXXXXX																									

Thousand #81 Brook of grass 649.
Southwestern Thousand #81 Trees
each should be thousand to five million

Form D-2
Unit No: 18

Field Form
WATERFOWL PRODUCTION SURVEY--WILDLIFE TREND DATA

Obs: P. Johnson
Year: 1964

Species	Record Data on Trans. Series:			Total Obs.	Total Nests, Dens, or Houses Obs.	Active Nests, Dens, & Houses on Trans.	Map Symbol	Trans. No.	Date 1st Obs.	No. Eggs	Date										Cover Type																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
	1	2	3								Hatched	No. hatch.	Desert.	Destr.	Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flood.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
Pheasant	X	X	X	XXXXXX XXXXXX XXXXXX XXXXXX	XXXXXX XXXXXX XXXXXX XXXXXX	XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX XXXXXXXXXX	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

(2 Eggs) → Photo (2) 18 #97 - Unknown bird (not duck) nest Ground on transect (12 Eggs)

(1 egg) (24 eggs, 1 egg) (1 egg) (2 Eggs, 1 egg) (4 Eggs) (1 egg) (2 eggs) (2 eggs)

* (Nest w/ 2 Eggs; dove flushed)
(4 Eggs, 2 Destroyed)

egg. house photo (3)

Form D-3
Observer: G. Gill

WATERFOWL PRODUCTION SURVEY -- DUCK BROOD SAMPLE DATA

Year: 1964

Date	Mallard	Pintail	Gadwall	Shoveller	B-W Teal	G-W Teal	Teal Grouped	Ruddy
	Unit No.	Unit No.	Unit No.	Unit No.	Unit No.	Unit No.	Unit No.	Unit No.
	Pond No.	Pond No.	Pond No.	Pond No.	Pond No.	Pond No.	Pond No.	Pond No.
	No. duckl. Class IIc & III Br.	No. duckl. Class IIc & III Br.	No. duckl. Class IIc & III Br.	No. duckl. Class IIc & III Br.	No. duckl. Class IIc & III Br.	No. duckl. Class IIc & III Br.	No. duckl. Class IIc & III Br.	No. duckl. Class IIc & III Br.
7/20/64	15 P4 7						15 P4 6	
7/21/64	10 P4 2		6 P2 3					
7/23/64	14 P4 3	15 P3 6						
7/27/64	6 P2 6							
7/28/64	3 P3 6		3 P2 4				3 P4 6	
"							14 P4 7	
7/30/64	19 P4 1							
"	19 " 3							
"	14 P3 6							
"	14 P3 3							
7/31/64	23 P3 5		15 P4 12	15 P4 3			23 P4 6	15 P4 2
"	17 P3 9		15 P4 8				" " 3	
"	14 P4 6							
8/3/64	14 P4 3	15 P3 4	15 P3 9				14 P4 9	
"	14 P4 2		14 P4 4					
"	6 P2 3		6 P2 3					
8/4/64	15 P4 5	14 P4 3	6 P2 5				7 P2 8	
8/6/64	23 P4 6		15 P3 5				6 P2 7	
"	23 P4 2							
"	6 P2 2							
"	15 P3 5							
8/8/64	17 P3 3		14 P4 8	15 P3 5			14 P3 8	
"			17 P3 15					

Goats

15 P4

4

15 P4 3

2

Form D-3
Observer: G. Gil

WATERFOWL PRODUCTION SURVEY -- DUCK BROOD SAMPLE DATA

Year: 1964

Date	Mallard			Pintail			Gadwall			Shoveller			B-W Teal			G-W Teal			Tad Group			Coet		
	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.
8/8/64	17	P3	6	17	P3	7	14	P4	5	17	P3	3							15	P3	3	16	P4	3
"				17	P3	3	17	P3	7													17	P3	1
"				17	P3	3	17	P3	10															
"							17	P3	10															
8/10/64	6	P2	3	14	P4	2	15	P4	5										6	P2	3			
"				6	P2	5	14	P4	7															
8/15/64							17	P3	6															
8/18/64	15	P4	8	15	P4	6	14	P3	4															
"							15	P4	10															
"							15	P4	6															
"							15	P4	8															

380
385

Forms D4 – D11

D4 – WPS Duck Nesting Transects Individual Unit Summary

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

D7 – WPS Duck Nesting Transects Habitat Unit Summary by Years

D8 – WPS Waterfowl Production Estimates Refuge Summary by Years

D-9 – WPS Primary Duck Nesting Cover Types Refuge Annual Summary

D10 – WPS Primary Duck Nesting Cover Types Refuge Summary by Years

D11 – WPS Wildlife Trend Data Refuge Summary by Years

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 1Recorder: EspinosaYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Cover 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	2	100%								1				1							
Pintail																						
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown																						
Total	2	2	100%	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 2Recorder: Buller GierentannerYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
		No. Hatched	% Hatched																			
Mallard	1	0	0%		1										1							
Pintail	1	1	100%												1							
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
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. 3Recorder: Espinosa Zahn
GiezentannerYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Cover 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	8	3	37%	2	2	1			1						6	1						3
Pintail																						
Gadwall																						
Shoveller	1	0	0%		1										1							1
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown	3	0	0%		3										1	2						
Total	12	3	25%	2	6	1	-	-	1	-	-	-	-	-	1	9	1	-	-	-	-	4
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 4Recorder: Johnson
GiezentannerYear: 1969Transect Coverage in % 100 (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 tvpe)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	1	0	0%		1				1													1
Pintail																						
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.	1	1	100%						1													1
G-W Teal																						
Ruddy																						
Unknown																						
Total	2	1	50%	-	1	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	2
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 5Recorder: ^{Buller}GiezenannerYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Primary Covery Type (No. of nests in each primary tvpe)														
		No. Hatched	% Hatched					Sx	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	0	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 6Recorder: Ballou EspinosaYear: 1964Transect Coverage in % 100 (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 tvpe)														
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	
Mallard	7	3	43%		4				1						6								
Pintail	2	1	50%		1				1						1								
Gadwall																							
Shoveller																							
Teal																							
B-W & Cinn.																							
G-W Teal																							
Ruddy																							
Unknown	2	1	50%	1											2								
Total	11	5	45%	1	5	-	-	-	2	-	-	-	-	-	9	-	-	-	-	-	-	-	-
Coot																							

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 7Recorder: Nicely DarnellYear: 1964Transect Coverage in % 100 (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 tvpe)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	9	2	22%		7				2						7						1	5
Pintail	2	0	0%		1		1					1			1							1
Gadwall	1	1	100%												1						1	
Shoveller	1	1	100%												1							1
Teal																						
B-W & Cinn.	1	1	100%												1							1
G-W Teal																						
Ruddy																						
Unknown	6	0	0%		5		1					1			5							6
Total	20	5	25%	-	13	-	2	-	2	-	-	2	-	-	16						2	14
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 8Recorder: Buller
GiezenannerYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Cover 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	14	6	43%	1	6		1		1						10			3				6
Pintail	1	1	100%						1													
Gadwall	3	1	33%		2			3														2
Shoveller																						
Teal																						
B-W & Cinn.	2	1	50%		1										2							2
G-W Teal																						
Ruddy																						
Unknown	1	0	0%		1				1													
Total	21	9	43%	1	10	-	1	3	3	-	-	-	-	-	12	-	-	3	-	-	-	10
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 9Recorder: ^{Darnell}NicelyYear: 1964Transect Coverage in % 100 (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	12	4	33%	3	1	1	3	3							9							9
Pintail	5	4	80%		1			1							4				1		3	
Gadwall																						
Shoveller Teal																						
B-W & Cinn.	4	1	25		1		2								4						4	
G-W Teal																						
Ruddy																						
Redhead	1	0	0	1											1							1
Unknown	8	0	0	1	5	1	1	1							7				1		5	
Total	30	9	30	5	8	2	6	5							25				2		22	
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 10Recorder: Ricky EspinosaYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Primary Cover Type (No. of nests in each primary type)									
		No. Hatched	% Hatched												Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded		
Mallard	2	2	100%												2									
Pintail																								
Gadwall																								
Shoveller																								
Teal																								
B-W & Cinn.																								
G-W Teal																								
Ruddy																								
Unknown	4	2	50%		2				1						3							1		
Total	6	4	67%	-	2	-	-	-	1	-	-	-	-	-	5	-	-	-	-	-	-	1		
Coot																								

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 11Recorder: EspinosaYear: 1964Transect Coverage in % 100 (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	5	100									1		5									
Pintail																							
Gadwall																							
Shoveller																							
Teal																							
B-W & Cinn.																							
G-W Teal																							
Ruddy																							
Unknown	5	3	60		2						1				4								
Total	10	8	80	-	2	-	-	-	-	-	1	-	-	-	9	-	-	-	-	-	-	-	-
Coot																							

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 14Recorder: Gill GiesentannerYear: 1964Transect Coverage in % 100 (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 tvpe)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	6	2	33%		4				1						1	4					1	5
Pintail																						
Gadwall	1	0	0%	1											1							1
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Redhead	1	0	0%	1							1											1
Unknown																						
Total	8	2	25%	2	4	-	-	-	1	-	1	-	-	-	1	5	-	-	-	-	1	7
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 15Recorder: King GillYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Cover 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	18 12	12	67%	1	5		1		6					1	11							
Pintail	1	1	100%												1							
Gadwall	1	0	0%				1								1							
Shoveller																						
Teal																						
B-W & Cinn.	1	0	0%		1										1							
G-W Teal																						
Ruddy																						
Unknown	3	1	33%	1		1									2	1						
Total	24	14	58%	1	6	1	2	-	6	-	-	-	-	-	14	-	-	-	-	-	-	-
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 16Recorder: Johnson
EspinosaYear: 1964Transect Coverage in % 100 (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 tvpe)															
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded		
Mallard	3	3	100%						1							2								
Pintail																								
Gadwall																								
Shoveller																								
Teal																								
B-W & Cinn.																								
G-W Teal																								
Ruddy																								
Unknown	2	2	100%													2								
Total	5	5	100%	-	-	-	-	-	1	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
Coot																								

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 17Recorder: King
EspinosaYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Cover 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	11	9	82				1								11						1	3
Pintail	1	1	100%						1													
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown	15	13	87	1			1								15							
Total	27	23	85	1	-	-	2	-	1	-	-	-	-	-	26	-	-	-	-	-	1	3
Coot	1	-	0	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 18Recorder: Johnson
GillYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Cover 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	31	20	65%	5	6				5		1				22	3						9
Pintail	9	5	56%		4				1						7	1						2
Gadwall	3	3	100%						1						2							2
Shoveller	2	2	100%												2							2
Teal																						
B-W & Cinn.	5	4	80%	1											5							5
G-W Teal																						
Ruddy																						
Redhead	3	3	100%						1						2							3
Unknown	9	4	44%	1	1	2	1		2						7							4
Total	62	41	66%	7	11	2	1	-	10	-	1	-	-	-	47	4	-	-	-	-	-	27
Coot	1	1	100%															1				1

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 19Recorder: Darnell NicelyYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Primary Covery Type (No. of nests in each primary tpye)									
		No. Hatched	% Hatched												Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded		
Mallard	3	2	67%		1											3							2	
Pintail																								
Gadwall																								
Shoveller																								
Teal																								
B-W & Cinn.																								
G-W Teal																								
Ruddy																								
Unknown	1	0	0%		1											1							1	
Total	4	2	50%	-	2	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-	-	3	
Coot																								

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 20Recorder: Espinosa
GillYear: 1964Transect Coverage in % 100 (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	3	100%												3								
Pintail																							
Gadwall																							
Shoveller																							
Teal																							
B-W & Cinn.																							
G-W Teal																							
Ruddy																							
Unknown	2	0	0%		2										2								
Total	5	3	60%	-	2	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-
Coot																							

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 21Recorder: Johnson
GiezentannerYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Cover 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							2
Pintail																						
Gadwall	1	0	0%		1										1							1
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown	1	1	100%									1										
Total	5	2	40%	-	3	-	-	-	-	-	-	1	-	-	4	-	-	-	-	-	-	3
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----INDIVIDUAL UNIT SUMMARY*

Unit No. 22Recorder: Espinosa
GillYear: 1964Transect Coverage in % 100 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Cover 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	4	4	100%						1						3							
Pintail																						
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown	1	0	0%	1					1													
Total	5	4	80%	-	1	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	-	-
Coot																						

*Obtain data from Field Form D-1

Unit No. 23

Recorder: King
Grier Tanner

Year: 1964

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

*Obtain data from Field Form D-1

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS-----REFUGE ANNUAL SUMMARY*

Recorder: GillYear: 1964Transect Coverage in % 100 (All transects 100%, every other transect 50%, etc.)

Species		Unit No.																						
(1) No. Nests on transect	(2) % Refugees	(3) % Hatch	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	1	8	1	0	7	9	14	12	2	5	6	18	3	11	31	3	3	3	4	0	143
	(2)		0.77	0.38	3.06	0.38	0.00	2.68	3.36	5.36	4.41	0.77	1.92	2.31	6.78	1.15	4.04	11.88	1.15	1.15	1.15	1.53	0.00	54.8
	(3)		100	0	37	0	0	43	22	43	33	100	100	53	67	100	82	65	67	100	33	100	0	58.0
Pintail	(1)		0	1	0	0	0	2	2	1	5	0	0	0	1	0	1	9	0	0	0	0	0	22
	(2)		0.00	0.38	0.00	0.00	0.00	0.77	0.77	0.38	1.92	0.00	0.00	0.00	0.38	0.00	0.38	3.44	0.00	0.00	0.00	0.00	0.00	8.5
	(3)		0	100	0	0	0	50	0	100	80	0	0	0	100	0	100	56	0	0	0	0	0	63.6
Gadwall	(1)		0	0	0	0	0	0	1	3	0	0	0	1	1	0	0	3	0	0	1	0	0	10
	(2)		0.00	0.00	0.00	0.00	0.00	0.00	0.38	1.15	0.00	0.00	0.00	0.38	0.38	0.00	0.00	1.15	0.00	0.00	0.00	0.00	0.00	3.8
	(3)		0	0	0	0	0	0	100	33	0	0	0	0	0	0	0	100	0	0	0	0	0	50.0
Shov.	(1)		0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4
	(2)		0.00	0.00	0.38	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.00	0.00	1.5
	(3)		0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	100	0	0	0	0	0	75.0
B-W & Cinn.	(1)		0	0	0	1	0	0	1	2	4	0	0	0	1	0	0	5	0	0	0	0	0	14
	(2)		0.00	0.00	0.00	0.38	0.00	0.00	0.38	0.77	1.53	0.00	0.00	0.00	0.38	0.00	0.00	1.92	0.00	0.00	0.00	0.00	0.00	5.4
	(3)		—	—	—	100	—	—	100	50	25	0	0	0	0	0	0	80	—	—	—	—	—	57.1
G-W Teal	(1)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(2)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0
	(3)		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0
Redhead	(1)		0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	3	0	0	0	0	0	5
	(2)		—	—	—	—	—	—	—	—	—	—	—	0.38	—	—	—	1.15	—	—	—	—	—	1.9
	(3)		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	100	—	—	—	—	—	60.0
Ruddy	(1)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(2)		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0
	(3)		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.0
	(1)																							
	(2)																							
	(3)																							
	(1)																							
	(2)																							
	(3)																							
Unknown	(1)		0	0	3	0	0	2	6	1	8	4	5	0	3	2	15	9	1	2	1	1	0	63
	(2)		—	—	1.15	—	—	0.77	2.30	0.38	3.06	1.53	1.92	—	1.15	0.77	5.74	3.45	0.38	0.77	0.38	—	—	24.1
	(3)		—	—	—	—	—	50	—	—	—	50	60	—	33	100	87	44	—	—	100	—	—	42.9
Total	(1)		2	2	12	2	0	11	20	21	30	6	10	8	24	5	27	62	4	5	5	5	0	261
	(2)		0.77	0.77	4.41	0.77	—	4.04	7.66	8.06	11.50	2.31	3.83	3.06	9.20	1.92	10.36	23.75	1.53	1.92	1.92	1.92	—	100.0
	(3)		100	50	25	50	—	45	25	43	30	67	80	25	58	100	85	66	50	60	40	80	—	54.8
Coot	(1)																	1	1					2
	(2)																							100.0
	(3)																		50.00	50.00				50.0

* Obtain data from Summary Form D-4

CALCULATIONS FOR DETERMINATION OF CORRECTED SPECIES COMPOSITION

(1) Species	Species Composition of Transect Data (2)			Species Composition of Breeding Population (5)			(7)		(8)		Corrected Sp. Comp. of Nests	
	No. Nests From Form D-5)	Sp. Comp. Known Nests in %	Weight (Col. 3 x Col. 2)	No. Breeding Ducks	Sp. Comp. in %	Weight (Col. 6 x 1)	(9)		(10)		(11)	
Mallard	143	72.2	144.4	14,025	80.6	80.6	225.0		75.0		3610	
Pintail	22	11.1	22.2	2000	11.5	11.5	33.7		11.2		539	
Gadwall	10	5.1	10.2	400	2.3	2.3	12.5		4.1		197	
Shoveller	4	2.0	4.0	500	2.9	2.9	6.9		2.3		111	
P.W. Teal	14	7.1	14.2	40	0.2	0.2	1.7		0.6		29	
Cinn. Teal				40	0.2	0.2	1.7		0.6		29	
G.W. Teal				300	1.7	1.7	12.9		4.3		207	
Redhead	5	2.5	5.0	60	0.4	0.4	5.4		1.8		86	
Ruddy	0	—	—	30	0.2	0.2	0.2		0.1		5	
(Total)	198											
Unknown	63	—	—	—	—	—						
TOTAL	261	100%	200%	17,395	100%	100%	300%		100%		4813	
Coot	2	100%	200%	500	100%	100%	300%		100%		35	

CALCULATIONS FOR DETERMINATION OF DUCKS PRODUCED BY SPECIES

Species	(10) Sp. Comp. in Nos. (Col. 9 x total	Hatching Success of Nests			Form D-5			Average Class IIc & III Broods			Sp. Comp. of Ducks Produced to Flight	
		(11) No. Nests Hatched on Transects (From Form D-4)	(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	3610	83	58.0	2094	25	109	4.4	9214	71.6			
Pintail	539	14	63.6	343	10	43	4.3	1475	11.5			
Gadwall	197	5	50.0	98	22	154	7.0	686	5.3			
Shoveller	111	3	(75.0) 54.8	61	3	11	5.3	323	2.5			
B.W. Teal	29	8	57.1	17	11	66	6.0	102	0.8			
Cinn. Teal	29		17	11		102	0.8					
G.W. Teal	207		(60.0) 54.8	118			(6.0) 5.3	708	5.5			
Redhead	86	3	54.8	47	0	0	(2.0) 5.3	249	1.9			
Ruddy	5	—	54.8	3	1	2		16	0.1			
							(Total) = 12,875		100.0			
Unknown	—	27	42.9	—	0	0	—					
TOTAL	4813	143	54.8	2637	72	385	5.3	13,976	—			
Coot	35	1	50.0	18	4	11	2.8	50	100%			

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----HABITAT UNIT SUMMARY BY YEARS*

Recorder: G. Gill

Year			Unit No.																						
(1) No. Nests	(2) Corr. No. Nests**	(3) % Hatch	% Cov- erage	1	2	3	4	5	6	7	8	9	10	11	14	15	16	17	18	19	20	21	22	23	Total
1964	(1)		100%	2	2	12	2	0	11	20	21	30	6	10	8	24	5	27	62	4	5	5	5	0	261
	(2)			—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(3)			100	50	25	50	—	45	25	43	30	67	80	25	58	100	85	66	50	60	40	80	—	54.8
	(1)																								
	(2)																								
	(3)																								
	(1)																								
	(2)																								
	(3)																								
	(1)																								
	(2)																								
	(3)																								
	(1)																								
	(2)																								
	(3)																								
	(1)																								
	(2)																								
	(3)																								
	(1)																								
	(2)																								
	(3)																								

* Obtain data from Summary Form D-5

** Adjust figures to represent 100% transect coverage

NET BENEFIT, PRODIGATOR STEP 17

WATERFOWL PRODUCTION ESTIMATES-----REFUG SUMMARY BY YEARS *

Recorder: G. Gill

Year	Mal-lard	Pin-tail	Gad-wall	Shov-eller	B-W Teal	Cinn. Teal	G-W Teal	Red-head	Buddy	Red-head (Total)	Total	Conf. Limits of Data in %	Coot
1964	9214	1475	686	323	102	102	708	249	16	13875	13976	± 2634 ± 907.2	

* Obtain data from Column 17, Summary Form D-6a
Obtain confidence limits from calculation (C) in text

1. Confidence limits for total estimated production (Second Total)
2. Confidence limits for total estimated nests

WATERFOWL PRODUCTION SURVEY

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

Recorder: G. GillYear: 1964

(1) No. Nests	(2) % in Primary Type	Primary Type														
		Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
<u>Mallard</u>	(1)	—	23	4	2	—	—	2	109	4	—	3	—	—	3	45
	(2)	—	16.10	—	1.40	—	—	1.40	76.20	2.80	—	2.10	—	—	6.25	93.75
<u>Pintail</u>	(1)	—	5	—	—	1	—	—	15	1	—	—	—	1	—	6
	(2)	—	22.82	—	—	4.50	—	—	68.20	4.50	—	—	—	14.27	—	85.73
<u>Gadwall</u>	(1)	3	1	—	—	—	—	—	6	—	—	—	—	—	1	6
	(2)	30.00	10.00	—	—	—	—	—	60.00	—	—	—	—	—	14.27	85.73
<u>Shoveller</u>	(1)	—	—	—	—	—	—	—	4	—	—	—	—	—	—	2
	(2)	—	—	—	—	—	—	—	100.00	—	—	—	—	—	—	100.00
<u>B-W & Cinn. Teal</u>	(1)	—	1	—	—	—	—	—	13	—	—	—	—	—	—	15
	(2)	—	7.29	—	—	—	—	—	92.80	—	—	—	—	—	—	100.00
<u>G.W. Teal</u>	(1)															
	(2)															
<u>Redhead</u>	(1)	—	1	—	1	—	—	—	3	—	—	—	—	—	—	5
	(2)	—	20.00	—	20.00	—	—	—	60.00	—	—	—	—	—	—	100.00
<u>Ruddy</u>	(1)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(2)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	(1)															
	(2)															
<u>Unknown</u>	(1)	—	6	—	1	2	—	1	52	1	—	—	—	1	—	17
	(2)	—	9.50	—	1.60	3.10	—	1.60	82.50	1.60	—	—	—	5.56	—	94.44
<u>Total</u>	(1)	3	37	—	4	3	—	3	202	6	—	3	—	2	4	96
	(2)	1.15	14.20	—	1.50	1.15	—	1.15	77.40	2.30	—	1.15	—	6.96	3.92	94.12
<u>Coot</u>	(1)	—	—	—	—	—	—	—	—	—	—	1	1	—	—	2
	(2)	—	—	—	—	—	—	—	—	—	—	50.00	50.00	—	—	100.00

* Obtain data from Summary Form D-4

1 Since all nests were not marked as to ditch, dike or flooded, this year; to get the proper percentage, the number in each category was divided by the total nests marked in these categories ~~for~~ for each species and for the total.

WATERFOWL PRODUCTION STUDY

PRIMARY DUCK NESTING COVER TYPES-----REFUGE SUMMARY BY YEARS*

Recorder: G. Gill

Year		Primary Cover Type														
(1) No. Duck Nests	(2) % in Primary Type	Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
1964	(1)	3	37	-	4	3	-	3	202	6	-	3	-	2	4	96
	(2)	1.15	14.20	-	1.50	1.15	-	1.15	77.40	2.30	-	1.15	-	1.96	3.92	94.12
	(1)															
	(2)															
	(1)															
	(2)															
	(1)															
	(2)															
	(1)															
	(2)															
	(1)															
	(2)															
	(1)															
	(2)															
	(1)															
	(2)															

* Obtain data from Summary Form D-9

1 Since all nests

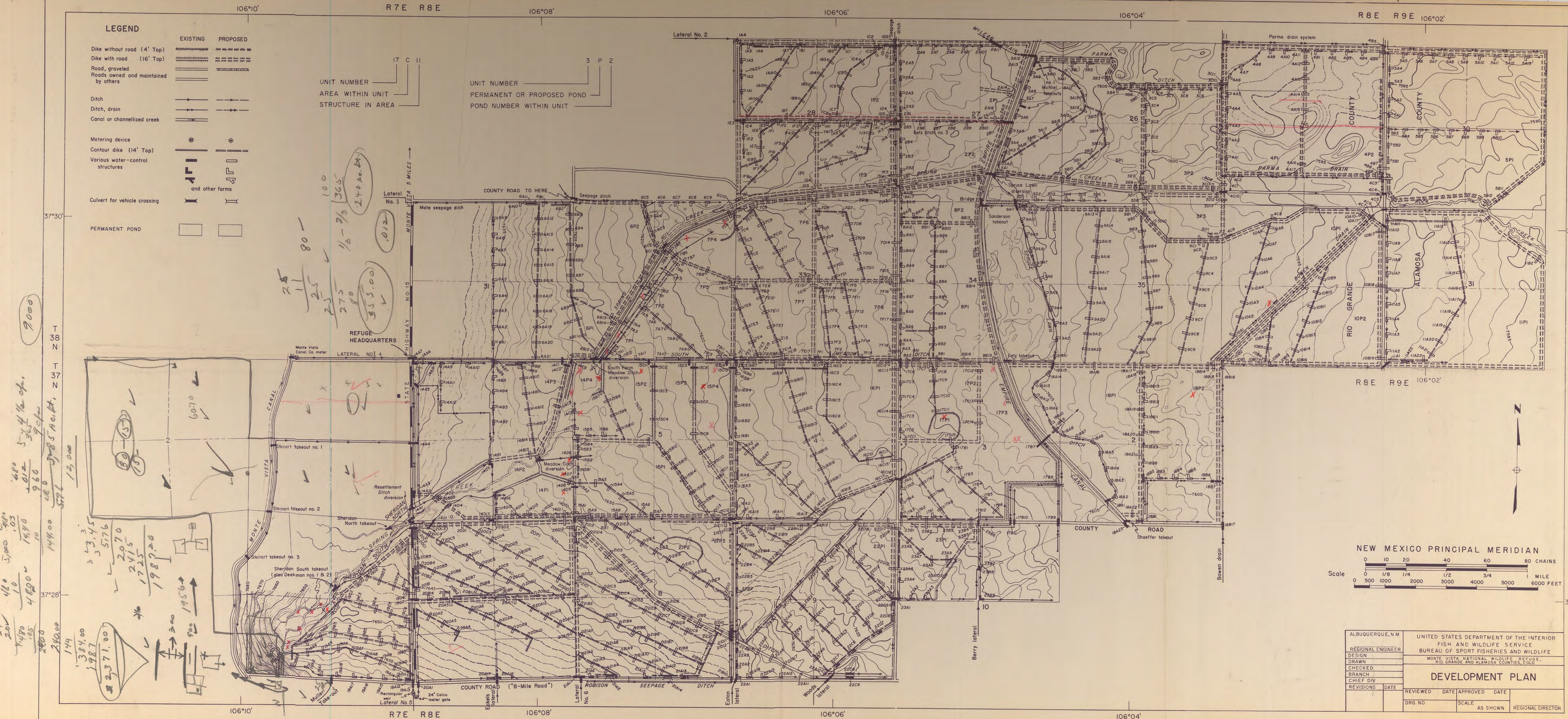
WILDLIFE TREND DATA----REFUGEE SUMMARY BY YEARS*

11/11

Year	(1) No. Found	(2) Corrected No.***	Pheasant		Percent Transect Coverage	No. Nests on Transect	% Hatched	Snowy Egret Act. Nests on Transect	B.C. Night Heron Act. Nests on Transect	Avocet Act. Nests on Transect	Phalarope Act. Nests on Transect	Sh.-eared Owl Act. Nests on Transect	Marsh Hawk Act. Nests on Transect	Red-T. Hawk Total Nests Obs. Great-H. Owl Total Nests Obs.	Magpie Total Nests Obs.	Blackbirds Act. Nests on Transect	Muskrat Act. Dens & House on Transect	Badger Act. Dens on Transect	Skunk Act. Dens on Transect	Cottontail Total Observed	Jack Rabbit Total Observed	Mourning Dove Total Observed	Killdeer Total Nests Obs.		
			No. Nests on Transect																						
1964	(1)		21	52.4	100%	1	1	1	4	1	1	1	1	1	2	26	72	3	14'	5	113	300	63	1	
	(2)		—	—		—	—	—	—	—	—	—	—	XX	XX	XX	—	—	—	XXX	XXX	XXX	XXX	XXX	
	(1)													XX	XX					XXX	XXX	XXX			
	(2)													XX	XX					XXX	XXX	XXX			
	(1)													XX	XX					XXX	XXX	XXX			
	(2)													XX	XX					XXX	XXX	XXX			
	(1)													XX	XX					XXX	XXX	XXX			
	(2)													XX	XX					XXX	XXX	XXX			
	(1)													XX	XX					XXX	XXX	XXX			
	(2)													XX	XX					XXX	XXX	XXX			
	(1)													XX	XX					XXX	XXX	XXX			
	(2)													XX	XX					XXX	XXX	XXX			
	(1)													XX	XX					XXX	XXX	XXX			
	(2)													XX	XX					XXX	XXX	XXX			
	(1)													XX	XX					XXX	XXX	XXX			
	(2)													XX	XX					XXX	XXX	XXX			

* Obtain data from Field Form D-2 ** Adjust figures to represent 100% Transect coverage

Maps

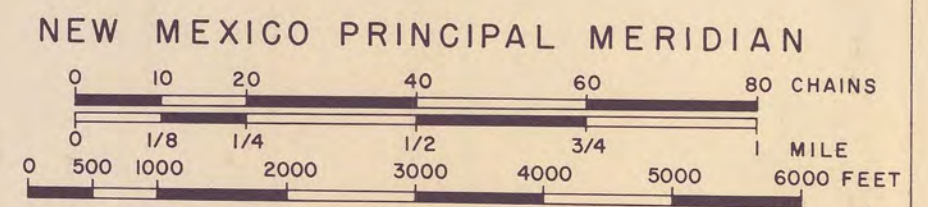


LEGEND

- EXISTING PROPOSED
- Dike without road (4' Top)
- Dike with road (16' Top)
- Road, gravelled
- Roads owned and maintained by others
- Ditch
- Ditch, drain
- Canal or channelized creek
- Metering device
- Contour dike (14' Top)
- Various water-control structures
- Culvert for vehicle crossing
- PERMANENT POND

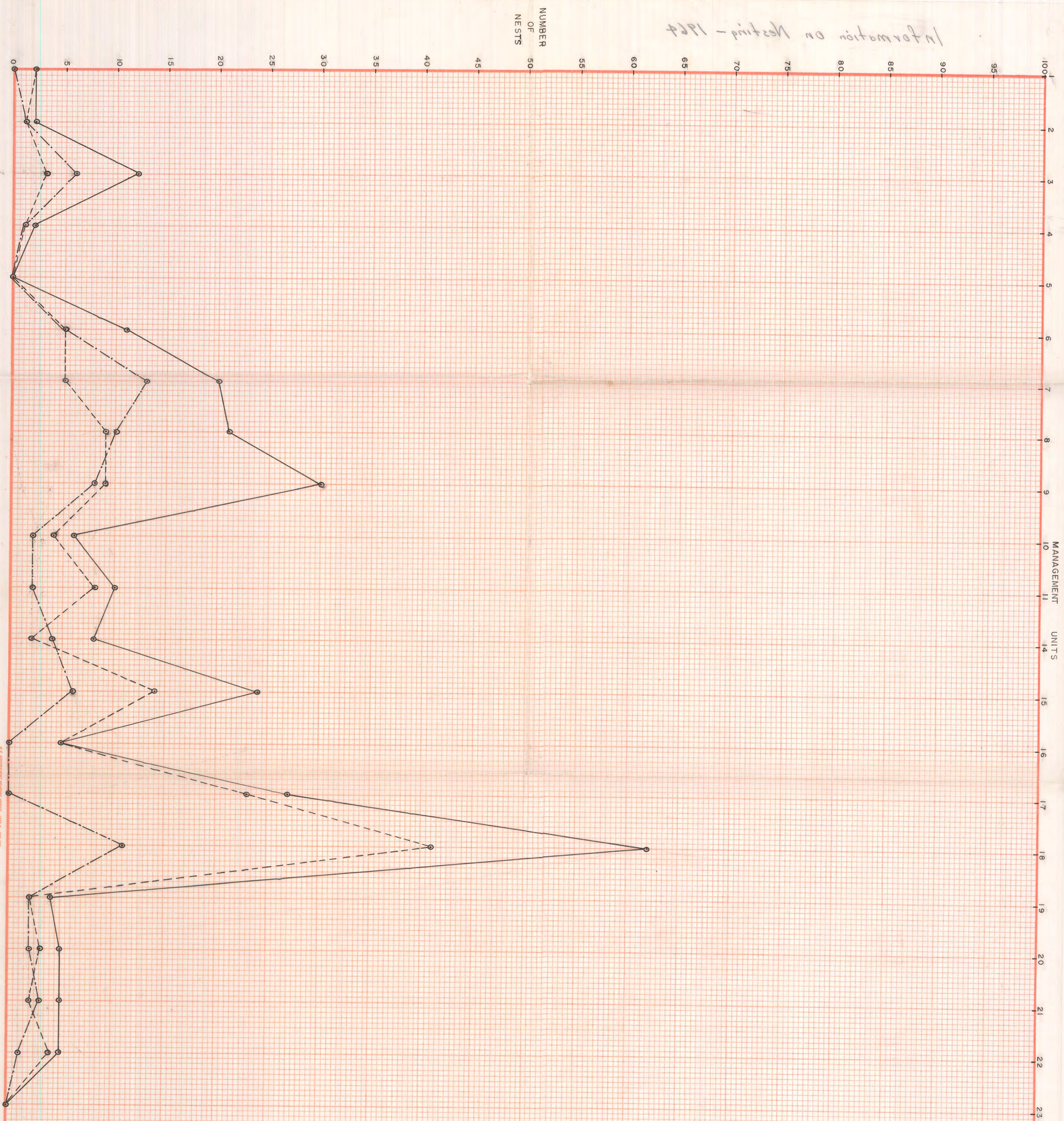
UNIT NUMBER
AREA WITHIN UNIT
STRUCTURE IN AREA

UNIT NUMBER
PERMANENT OR PROPOSED POND
POND NUMBER WITHIN UNIT



ALBUQUERQUE, N.M.	UNITED STATES DEPARTMENT OF THE INTERIOR
REGIONAL ENGINEER	FISH AND WILDLIFE SERVICE
DESIGN	BUREAU OF SPORT FISHERIES AND WILDLIFE
DRAWN	MONTA VISTA NATIONAL WILDLIFE REFUGE,
CHECKED	RIO GRANDE AND ALAMOSA COUNTIES, COLO.
BRANCH	DEVELOPMENT PLAN
CHIEF DIV	
REVISIONS	DATE
REVIEWED	DATE
APPROVED	DATE
DRG. NO.	SCALE
	AS SHOWN
	REGIONAL DIRECTOR

Information on Nesting - 1964



DATE	TOTAL NESTS FOUND	BY UNIT NESTS FOUND	TOTAL NESTS HATCHED	BY UNIT NESTS HATCHED	TOTAL NESTS DESTROYED	BY UNIT NESTS DESTROYED
1964	261	0	143	0	77	0

US FISH & WILDLIFE SERVICE

MONTE VISTA NATIONAL WILDLIFE REFUGE

NESTING SUCCESS

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

Designed by

Drawn

Traced

Checked

Date

12/15/64

Approved by

Signature

Sheet

1

Drawing No.

1

