

1969

Form D1

**Waterfowl Production
Surveys**

Units 1-23

Form D-1
Observer: DARVELL GUSTIN
GARDNER

Field Form
WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA

Unit No. ✓ 1
Year: 1969

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)	
1	69	5/14/69	205	Mallard	9	X	X													X	X						X	6/17/69	X	61						* SEE
1	57	5/14/69	206	Ma	8	X														X	X						X	6/17/69	X	8						*
1	65	5/14	134	Ma	7		X														X						X	6/17/69	X	8						*
1	63	5/14	135	Pintail	8		X																				X	6/17/69	X	7						*
1	59	5/14/69	156	Maillard	4	X														X							X	6/17/69		6						*
1	71	5/14/69	103	Hx	1			X												X							X	6/17/69								*
1	71	5/14/69	104	Ma	2	X														X							X	6/17/69								*
1	54	6/17/69	824	Shoveler	9		X													X							X	6/17/69								*
1	34	6/17/69	130	TX	12															X							X	6/17/69	X	9	X					*
1	67	6/17/69	121	Hx	?															X							X	6/17/69	X	5						*
1	69	6/17/69	122	Ma	8	X														X	X						X	6/17/69	X	6						*
1	65	6/17/69	825	Ma	8															X							X	6/17/69	X	8						

Field Form

Unit No. 12

WATERFOOT PRODUCTION SURVEY DUCK & COOT NESTING DATA

Year: 1969

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	Ost	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No Hatch.	Desert.	Destr.	Flooded	Unknown
2	173	6/17/69	823	no nests	17															X							6/17/69	X						* see back

Test No. 1

Year: 1969

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)
3	107	6/23/69	849	LA	2	X														X							X	7/8/69					2		
3	105	6/23/69	850	TX	✓ 11		X	X											X	X						X	7/8/69	X	11						
3	101	6/23/69	851	MA	✓ 7		X												X	X						X	7/9/69				7				
3	97	6/23/69	852	LA	8			HATCHED											X							D	6/23/69	X	71						

Field Form

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WATERFOIL PRODUCTION SURVEY DUCK & COOT NESTING DATA

1969

DAVEZL

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)		
4	121	5/23/69	111	Ga	5	X													X								X	6/23/69	X	41							
4	115	6/23/69	708	Clx	7																						X	6/23/69	X	61							

MSF Back

Field Form

Unit No. 5 ✓

WATERFOOT PRODUCTION SURVEY DUCK & COOT NESTING DATA

Year: 1969

17 A RIVELL

[illegible]

Form D-1 WALKER

Field Form

Unit No. ✓ 7Observer: DARWELL

WATERFOOT PRODUCTION SURVEY DUCK & COOT NESTING DATA

Year: 1969

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				
7	45	5/13/69	252	✓ GA	9	✓	X																					6/13/69	X	9								* SEE BACK	
7	45	5/13/69	253	✓ Ma	7	✓	X																					6/13/69	X	7									
7	45	5/13/69	254	✓ 1X	9	✓	X																					6/13	X	9									
7	45	5/13/69	255	✓ TX	10	✓	X																					6/13	X	10									
7	45	5/13/69	256	✓ Ma	8	✓	X																					6/13	X	8									
7	53	5/13/69	101	✓ Ma	11	✓	X																					6/16/69	X	11									
7	59	5/13/69	257	✓ 1X	1	✓	X																					6/12/69	X	8									
7	59	5/13/69	258	✓ Ma	8	✓	X																					6/12/69	X	8									
7	63	5/13/69	102	✓ Ma	5	✓																						7/8/69		9									
7	45	6/13/69	116	✓ Ma	9	✓	X																					7/8/69		9									
7	45	6/13/69	117	✓ Ma	18	✓	X																					7/16/69		10									
7	45	6/13	118	✓ 1X	4	✓																						6/13	X	31									
7	71	6/12/69	813	✓ Ma	9	✓	X																					7/8											
7	67	6/12/69	814	✓ Ma	7	✓	X																					7/8	X	7									
7	63	6/12/69	815	✓ 1X	6	✓																						6/13/69	X	6									
7	57	6/12/69	816	✓ Sh	8	✓	X																					7/8											
7	57	6/12/69	817	✓ 1X	7	✓	X																					7/8											
7	57	6/12/69	818	✓ Ga	10	✓	X																					7/8											
7	55	6/16/69	819	✓ TX	10	✓	X																					7/8											
7	55	6/16/69	820	✓ Sh	8	✓	X																					7/8/69											

still nesting

Form D-1 DARVELL
 Observer: GUSTIN
SHROVER

WATERFOOT PRODUCTION SURVEY DUCK & COOT NESTING DATA

Field Form

Unit No. 8
 Year: 1969

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			
8	77	5/14/69	207	PINTAIL	6	X							X														X	6/18/69	X	7							*SEE BACK
8	73	5/14/69	157	MALLARD	7	X														X							X	6/18/69	X	7						*	
8	73	5/14	158	MALL	6	X														X							X	6/18/69	X	2	4				*		
8	75	5/14	159	MALL	10	X														X							X	6/18/69	X	9				*			
8	75	5/14	160	MALL	7	X														X							X	6/18/69	X	6				*			
8	75	6/18/69	123	MALL	7	X														X							X	6/18/69	X	7				*			
8	75	6/18/69	124	MALL	3															X							X	6/18/69	X	6				*			
8	73	6/18/69	125	MALL	3															X							X	6/18/69	X	5				*			
8	79	6/18/69	836	MALL	8															X							X	6/18/69	X	7							
8	79	6/18/69	837	MALL	7															X							X	6/18/69	X	7							
8	73	6/19/69	905	MALL	3															X							X	6/19/69	X	1	2						

Form D-1 WALNEN
Observer: SWTHERS

Field Form
WATERFOOT PRODUCTION SURVEY DUCK & COOT NESTING DATA

Unit No. ✓ 9
Year: 1969

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	
9	107	5/14/69	325	ma ✓	6	X														X								4/19/69	X	6						* SEE BACK
9	95	6/19/69	128	lx	11															X								7/19	X	9					*	
9	95	6/19/69	129	lx	9															X								7/19	X	9					*	
9	99	6/19	130	pe	8															X								7/8/69	X	9					*	
9	99	6/19	131	lx	8															X								7/8/69	X	9					*	
9	99	6/19	132	lx	6															X								6/19/69	X	6					*	
9	89	6/20/69	134	ma ✓	8															X								8/8/69							*	
9	89	6/20/69	135	lx	5															X																
9	93	6/19/69	832	lx	9															X								6/19/69	X	5	4					
9	93	6/19/69	833	lx	8															X																
9	93	6/19/69	834	lx	7															X								6/19/69	X	7						
9	107	6/19/69	835	lx	8															X								7/8/69	X	5	3					
9	91	6/20/69	836	lx	6															X								7/9/69	X	5	1					
9	91	6/20/69	837	ma	6															X								7/9	X	5	1					
9	91	6/20/69	838	ma	7															X								7/9	X	7						
9	91	6/20/69	839	lx	7															X								6/20/69	X	3	4					
9	91	6/20/69	840	lx	9															X								6/20/69	X	8	1					
9	91	6/20/69	841	lx	8															X								6/20/69	X	4	4					
9	91	6/20/69	842	ma	7															X								7/8/69	X	3	4					
9	87	6/20/69	843	ga	8															X								7/9/69	X	7	1					
9	87	6/20/69	844	lx	7															X								6/20/69	X	7						

Form D-1 **GUSTIN GARONE**
Observer: **DARREL**

WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA

Field Form

Unit No. **110**
Year: **1969**

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		
10	109	5/15/69	105	Ma	9	X							X						(X)								X	6/19/69	X	9							*SEE BACK
10	109	5/15	106	Ma	11		X												(X)							X	6/19/69	X	10	1						*	
10	121	5/15/69	107	Ma	3				X										X								X	6/19/69	X	6						*	
10	119	5/15/69	108	Ma	2	X													X							X	6/19/69	X	7						*		
10	119	5/15	109	Ma	9	X													(X)							X	6/19/69	X	6						*		
10	111	5/16/69	110	Ma	6								X						(X)							X	5/16/69	X	6						*		
10	109	6/19/69	135	Ma	6														(X)							D	6/19/69	X	6						*		
10	115	6/21/69	853	Ma	7														(X)							X	6/24/69	X	5	2							
10	131	6/24/69	834	Ma	7														(X)							X	6/24/69	X	7								

Form D-1

Field Form

Unit No. 114Observer: WALKESUTHERS

WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA

Year: 1969

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		
		5/16/69		200 nests																																	
11	135	6/24/69	701	Tx	10	X																					X	7/1/69	X	10							
11	139	6/24/69	702	Muscues	4	X																					X	7/9/69	X	6	1						

Still incubating

Unit No. 14

Year: 1969

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	Ost	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Date	Hatched	No. Hatch.	Desert.	Destr.	Flooded	Unknown
14	27	May 12/68	351	PINTAIL	8	X													X	(S)							D	6/9/69	X	0				* SE-ERAC *
14	37	5/12/69	301	PINTAIL	1	X													X							V	6/9/69						*	
14	23	5/12/69	401	MALLARD	1										X										D	—						*		
14	33	6/9/69	805	UX	3									X					X						D	—			x			*		

SHELDON
SUTHERS
GUSTIN

Field Form

Unit No. ✓ 15
Year: 1969

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)	
15	43	5/12/69	151	PINTAIL ✓	3					X									X								X	—								* S BACK
15	39	5/12	—	COOT	10	X																					X	6/10/69	X						*	
15	39	5/12	352	MAILED ✓	6	X													X							X	6/10/69	B	6					*		
15	51	5/13	302	MA ✓	9	X																				X	6/10/69	X	8	1				*		
15	51	5/13/69	303	MAILED ✓	1					X									X							X	6/10/69							*		
15	51	5/13	304	MA ✓	10	X													X							D	6/10/69							*		
15	51	5/13	305	MA ✓	7	X													X							D	6/10/69	X	7					*		
15	49	5/13	152	MA ✓	9	X													X							X	—							9		
15	39	6/10/69	806	LLX	5							X	X						X							X	—								✓	
15	41	6/10	807	LLX	6														X							X	6/10	X	6							
15	43	6/10	808	MA ✓	4	X													X							D	7/7/69	X	4							
15	47	6/10	809	MA ✓	5	X													X							D	7/7/69	X	4					1		

Unit No. 16

Year: 1969

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)
16	59	5/13/69	306	Ma	7	✓							(X)													D	6/11/69								* SEE BACK
16	61	5/13	307	Ma	10		X								X				(X)							D	6/11/69							*	
16	62	5/13	153	VX	2				X										X							D	—							*	
16	57	5/13	353	Ma	4	X							(X)		X											D	6/11/69	X	5					*	
16	63	5/13	354	P1	7		X											(X)							X	6/11/69			7				*		
16	63	5/13	355	Ma	2	X			X				X						(X)						X	—								*	
16	55	6/11/69	810	Ga	8		X																		D	7/8/69	X	B							
16	65	6/11/69	811	Ux	5				X										(X)						D	—									
16	65	6/11	812	Lx	3				X										(X)						D	—								✓	

Form D-1 SUTHERS

Field Form

Unit No. 117

Observer: WALKER

WATERFOWL PRODUCTION SURVEY DUCK & COOT NESTING DATA

Year: 1969

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		
17	77	5/14	308	TX	✓	4	X																					6/16/69	X	6							* SEE BACK
17	79	5/14	309	MAC	✓	9		X												X							X	6/16/69	X	8	1					*	
17	79	5/14	310	MAC	✓	6	X													X							X	6/16/69	X	4	2					*	
17	79	5/14	311	MAC	✓	10		X												X							X	6/16/69	X	7	3					*	
17	79	5/14/69	312	MAC	✓	7		X												X							X	6/16/69	X	6	1					*	
17	81	5/14	-	COOT		9		X																			X	6/16/69	X	9						*	
17	81	5/14	-	COOT		4	X																				X	6/16/69	X	4					*		
17	73	6/16/69	831	LIX	✓	4	X													X							X	7/9/69									
17	75	6/16/69	835	MAC	✓	8		X												X							X	7/9	X	8					*		
17	79	6/16/69	119	TX	✓	9	X													X							X	7/9		9					*		

Form D-1
Observer: WALKER
SUTHERS

Field Form
WATERFOOT PRODUCTION SURVEY DUCK & COOT NESTING DATA

Unit No. 18
Year: 1969

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	
18	97	5/15/69	326	Mallard	8	X													X								X	6/18/69	X	8						*SEE BACK
18	97	5/15	327	Mna	6														X								X	6/18/69	X	6					*	
18	95	5/15	328	Pintail	8	X													X								X	6/18/69	X	6					*	
18	89	5/15	329	Pi	4	X													X								X	6/18/69	X	8	1					
18	89	5/15	330	Mna	7	X													X								X	6/18/69	X	7						
18	105	5/15/69	270	Pi	7	X													X								X	6/18/69							7	
18	105	5/15/69	271	Mna	5	X												X		X							X	6/18/69	X	4	4					
18	105	5/15	—	Coat	1														X								X	6/18/69	X	6						
18	105	5/15	272	Pi	9	X													X								X	6/18/69	X	9						
18	105	5/15	273	Mna	7	X													X								X	6/18/69	X	7	1				**	
18	103	5/15	274	Wx	1														X								X	6/18/69								
18	102	5/15	275	Mna	9	X													X								X	6/18/69	X	5	4					
18	102	5/15		Wx	2														X								X	—								
18	101	5/15	276	Pi	8	X													X								X	6/18/69	X	8						
18	101	5/15	277	Pi	7	X													X								X	6/18/69	X	7						
18	93	5/15	278	Sh	9	X													X								X	6/18/69	X	8	1					
18	93	5/15	279	Pi	7	X													X								X	6/18/69	X	7						
18	91	5/15	280	Tx	9	X													X								X	6/18/69	X	9						
18	91	5/15/69	281	Mna	4	X													X								X	6/18	X	7						
18	103	5/15		Wx	0														X								X	—								
18	89	6/18/69	126	Wx	?														X								X	6/18/69	X	5						
18	91	6/18/69	127	Wx	?														X								X	6/18/69	X	5	1					
18	95	6/18/69	538	Wx	1	X													X								X	7/7/69	X	9	1					
18	99	6/18/69	829	Wx	3														X								X	6/18/69	X	7	1					

Form D-1

Field Form

Unit No. 18

Observer: _____

WATERFOUL PRODUCTION SURVEY DUCK & COOT NESTING DATA

Year: 1969

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			
18	101	6/18/69	830	✓ TX	✓ 10		X													X								X	7/7/69	X	91							
18	101	6/18/69	831	✓ UX	✓ 6															X								X	6/18/69	X	6							

Forms D3-D4

D3 – WPS Duck Brood Sample Data

D4 – WPS Duck Nesting Transects:
Individual Unit Summaries

Form D-3
Observer: WILSON

DARNELL

WATERFOWL PRODUCTION SURVEY -- DUCK BROOD SAMPLE DATA

Year: 1969

Date	Mallard	Pintail	Gadwall	Shoveller	B-W Teal	G-W Teal	LEDA	ACAD	EVON
	Unit No.	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.	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.	No. duckl. Class IIc & III Br.
8/4	14	12	9	15	6	15	12		
8/4	14	15	15	15	8			15	4
8/4	14	9	15	15	12				4
			15	15					
			15	15					
			15	15					
			15	15					
			15	15					
			15	15					
8/18/69	15	2	14	7					
8/18/69	14	9	14	8					
8/18/69			14	5					
8/30/69	21	26	84	19	5			4	4
				17					
	69	6.2	6.8	7.4	6.7			5.6	4.2

Date	Mallard	Pintail	Gadwall	Shoveller	B-W Teal	G-W Teal	Redhead	Pvorn
7/4/69	3	3	6					
7/4/69		3	6					
7/5/69	3							
7/7/69	15	7	6	18	8	4	9	5
7/7/69	15	6						
7/7/69	15			10	5			
7/9/69	15	7						
7/10/69	15	6						
7/14/69	14	4	5	5				
7/15/69	17	5	15					
7/16/69		18	7	15	7	15	7	18
				15	7	15	7	5
				15	8	10	5	
				17	9			
				17	7			
7/18/69	14	6		15	7	15	6	7
7/23/69			7	21	6			
7/25/69	20	5	15	5				
7/25/69	15	10						
7/25/69	16	8		16	8			
7/25/69	15	5			18	6		
7/31/69					7	5		

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 1Recorder: NortonYear: 1969Transect Coverage in % 50 (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 Covey Type (No. of nests in each primary type)							
		No. Hatched	% Hatched												Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	7	6	85.7		1	1						1			3	3						7
Pintail	1	1	100													1						1
Gadwall																						
Shoveller	1	0	0		1										1							1
Teal																						
B-W & Cinn.	1	1	100												1				1			
G-W Teal																						
Ruddy																						
Unknown	2	1	50		1										2							2
Total	12	9	75		3	1						1			7	4			1			11
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 2Recorder: NortonYear: 1969Transect Coverage in % 5 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Sx	Primary Covey 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	1	1	100													1								1
Total	1	1	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. 3Recorder: NortonYear: 1969Transect Coverage in % 50 (All transects=100%, every other transect = 50%, etc.)

	Total Nests on Transects	Nests		No. Deserted	No. Destroyed	No. Flooded	Unknown	Primary Covey Type (No. of nests in each primary type)														
		No. Hatched	% Hatched					Sx	Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	16	11	69		5										16					1		14
Pintail	1	1	100												1							1
Gadwall																						
Shoveller	1	0	0		1											1						1
Teal																						
B-W & Cinn.	2	1	50		1										2							2
G-W Teal																						
Ruddy																						
Unknown	8	3	38		5				1						6	1						7
Total	28	16	57		12				1						25	2				1		26
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 4Recorder: NortonYear: 1969Transect 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 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																						
Pintail																						
Gadwall	1	1	100											1							1	
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown	1	1	100												1							1
Total	2	2	100											1	1						1	1
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 6Recorder: NortonYear: 1969Transect 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 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		1		1		3													3
Pintail	1	1	100												1							1
Gadwall	3	0	0	1	2										3							3
Shoveller																						
Teal																						
B-W & Cinn.	2	1	50		1										2							2
G-W Teal																						
Ruddy																						
Unknown	1	1	100												1							1
Total	10	4	40	1	4		1		3						7							10
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 7 Recorder: Norton Year: 1969Transect 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 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	9	7	78		2									2	6	1				1	1	3
Pintail																						
Gadwall	2	1	50				1								2							1
Shoveller	2	0	0		2										2							2
Teal																						
B-W & Cinn.	2	2	100												2							1
G-W Teal																						
Ruddy																						
Unknown	4	3	75		1										4							4
Total	19	13	68		5		1							2	16	1				1	1	11
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 8Recorder: NortonYear: 1969Transect 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 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	6	4	64		1	1			1						5								6
Pintail	1	1	100						1														1
Gadwall																							
Shoveller																							
Teal																							
B-W & Cinn.																							
G-W Teal																							
Ruddy																							
Unknown	4	3	75			1									4								4
Total	11	8	72		1	2			2						9								11
Coot																							

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 9Recorder: NortonYear: 1969Transect 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 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	21	12	57	2	5	1	1		3						18					1		20
Pintail	3	1	33		2				1						2							3
Gadwall	2	2	100												2							2
Shoveller	1	1	100												1							1
Teal																						
B-W & Cinn.	4	4	100								1				3							3
G-W Teal																						
Ruddy																						
Unknown	13	8			4		1								12		1			1		12
Total	44	28	64	2	11	1	2		4		1				38		1			1		41
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 10Recorder: NortonYear: 1969Transect 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 tvne)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	5	4	80		1										5					1		4
Pintail																						
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Redhead	1	1	100												1							1
Unknown	3	3	100						1						2							2
Total	9	8	89		1				1						8					1		7
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 11Recorder: NortonYear: 1969Transect 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 tvne)													
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded
Mallard	1	1	100											1								1
Pintail																						
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.	1	1	100											1								1
G-W Teal																						
Ruddy																						
Unknown																						
Total	2	2	100											2								2
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

DUCK NESTING TRANSECTS----INDIVIDUAL UNIT SUMMARY*

Unit No. 14Recorder: NortonYear: 1969Transect 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	2	1	50	1											2								1
Gadwall																							
Shoveller																							
Teal																							
B-W & Cinn.																							
G+W Teal																							
Ruddy																							
Unknown	1	0	0		1										1								
Total	4	1	25	1	2				1						3								1
Coot																							

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 15Recorder: NortonYear: 1969Transect 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 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	7	5	71	1	1				2						5							3
Pintail	1	0	0		1										1							1
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
G+W Teal																						
Ruddy																						
Unknown	3	1	33		1	1			1						2							3
Total	11	6	55	1	3	1			3						8							7
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. 16Recorder: NortonYear: 1969Transect 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	4	1	25		3				2						2							2
Pintail	1	0	0	1										1								1
Gadwall	1	1	100						1													
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown	3	0	0	1	2										3							
Total	9	2	22	2	5				3					1	5							3
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 17Recorder: NortonYear: 1969Transect 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 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	6	6	100											6								6
Pintail																						
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.	2	1	50	1										2								2
G-W Teal																						
Ruddy																						
Unknown	1	0	0				1							1								1
Total	9	7	78	1			1							9								9
Coot	2	2	100															2				2

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 18Recorder: NortonYear: 1969Transect 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 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	7	87	1					2						6							6
Pintail	7	6	86			1						1		1	5							7
Gadwall																						
Shoveller	1	1	100												1							1
Teal																						
B-W & Cinn.	2	2	100												2							1
G-W Teal																						
Ruddy																						
Unknown	7	4	1	2											7							7
Total	25	16	64	2	2	1			2			1		1	21							22
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: NortonYear: 1969Transect 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 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	2	50		2				1						3							2
Pintail	1	1	100												1							1
Gadwall	1	1	100												1							1
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown																						
Total	6	4	66		2				1						5							4
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 21Recorder: NortonYear: 1969Transect Coverage in % (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	4	0	0		1		3								3	1						2
Pintail																						
Gadwall																						
Shoveller																						
Teal																						
B-W & Cinn.																						
G-W Teal																						
Ruddy																						
Unknown	3	0	0		2	1								3								3
Total	7	0	0		3	4								6	1							5
Coot																						

*Obtain data from Field Form D-1

Form D-4

WATERFOWL PRODUCTION SURVEY

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

Unit No. 22Recorder: NortonYear: 1969Transect 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 tvpe)														
		No. Hatched	% Hatched						Sve	Crx	Dst	Gx	Mof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	
Mallard	5	4	80		1				1						4								3
Pintail																							
Gadwall	1	1	100								1												
Shoveller																							
Teal																							
B-W & Cinn.																							
G-W Teal																							
Ruddy																							
Unknown	3	0	0		3						1				2								2
Total	9	5	56		4				1		2				6								5
Coot																							

*Obtain data from Field Form D-1

Forms D5-D10

D5 – 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

D9 – WPS Primary Duck Nesting Cover Types: Refuge Annual Summary

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

CALCULATIONS FOR DETERMINATION OF CORRECTED SPECIES COMPOSITION

(1) Species	Species Composition of Transect Data (2)			Species Composition of Breeding Population (5)			(8)	Corrected Sp. Comp. of Nests	
	No. Nests From Form D-5	Sp. Comp. Known Nests in %	Weight (Col. 3 x 2 2)	No. Breeding Ducks	Sp. Comp. Known Nests in %	Weight (Col. 6 x 1)		Sp. Comp. in % (Col. 8) $\frac{\quad}{3}$	Sp. Comp. in Nos. (Col. 9 x total)
Mallard	107	66.56	133.12	15,500	66.52	66.52	199.64	66.54	3672
Pintail	19	11.56	23.12	1,500	6.44	6.44	29.56	9.85	544
Gadwall	11	7.50	15.00	2,000	8.59	8.59	23.59	7.87	434
Shoveller	6	3.75	7.50	800	3.43	3.43	10.93	3.65	201
B.W. Teal	178	11.12	23.22	250	1.07	1.07	3.29	1.10	61
Cinn. Teal	16	10.00	20.00	1,000	4.29	4.29	13.18	4.39	242
G.W. Teal			8.59	1,000	4.29	4.29	13.18	4.39	242
Redhead	1	.63	1.26	900	3.86	3.86	5.12	1.71	95
Ruddy				300	1.29	1.29	1.29	.43	24
Pallate				50	.22	.22	.22	.07	4
(Total)	160								
Unknown	58								
TOTAL	218	100%	200%	23,300	100%	100%	300%	100%	5,519
Coot	4	100%	200%	2,500	100%	100%	300%	100%	2,500

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	(18) Sp. Comp. in %
		(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)		
Mallard	3672	71	66.36	2437	15	103	6.9	16,815	66.58	
Pintail	544	13	68.44	372	9	56	6.2	2,306	9.14	
Gadwall	434	7	63.64	276	15	102	6.8	1,877	7.43	
Shoveller	201	2	62.38	125	12	29	7.4	925	3.66	
B.W. Teal	61	(1.44)	90.99	49			6.6	323	1.23	
Cinn. Teal	242	(5.78)	81.29	197	3	20	6.6	1300	5.15	
G.W. Teal	242	(5.78)	81.29	197			6.6	1300	5.15	
Redhead	95	1	62.38	59	7	39	5.6	330	1.31	
Ruddy	24		62.38	15	2	9	4.5	68	.30	
Baldpate	4		62.38	2	0	0	6.6	13	.05	
Unknown		29	50.00	-						
TOTAL	5519	136	62.38	3443	63	418	6.6	25257	100%	
Coot	101	4	100.00	101						

WATERFOWL PRODUCTION SURVEY

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

Recorder: Norton

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)		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	62	80	25	58	100	85	66	50	60	40	80	-	54.8	
1965(1)		6	1	10	2	2	11	13	16	38	5	12	3	13	2	25	35	3	2	6	6	1	312	
(2)																								
(3)		67	0	70	0	50	36	38	44	48	0	58	33	54	50	64	76	66	100	83	66	0	55.7	
1966(1)		5	2	17	2	0	23	9	4	54	13	4	10	17	11	20	38	4	5	12	8	1	259	
(2)																								
(3)		60	100	88	0	0	48	67	100	98	54	75	80	82	64	55	71	75	28	68	38	100	77.0	
1967(1)		1	2	27	1	1	16	23	14	46	14	10	2	14	4	27	46	5	4	5	1	0	263	
(2)																								
(3)		0	100	66	0	100	31	70	57	24	50	50	50	57	75	70	65	80	25	20	0	0	61.9	
1968(1)		9	5	34	9	0	23	24	21	59	9	5	3	31	10	20	39	7	0	6	6	1	311	
(2)																								
(3)		44	20	62	33	0	57	63	57	58	33	0	67	52	40	50	59	43	0	83	67	0	54.02	
1969(1)		12	1	28	2	0	10	19	11	44	9	2	4	11	9	9	25	6	0	7	9	0	218	
(2)																								
(3)		75	100	57	100	0	40	68	73	64	81	100	25	55	22	78	64	66	0	0	56	0	62.38	
(1)																								
(2)																								
(3)																								
(1)																								
(2)																								
(3)																								
(1)																								
(2)																								
(3)																								

* Obtain data from Summary Form D-5

** Adjust figures to represent 100% transect coverage

WATERFOUL PRODUCTION SURVEY

WATERFOUL PRODUCTION ESTIMATES---REFUG 3 SUMMARY BY YEARS*

Recorder: N. O. Foster

1969

Year	Neal-lard	Pin-tail	Gad-wall	Shov-eller	B-W Teal	Cinn. Teal	G-W Teal	Red-head	Budy	Bld-Pate	King-neck	*** Total	Conf. Limits of Data in %	Coot
1964	9214	1475	686	323	102	102	708	249	16	-	-	12875	20.46	
1965	10,400	1200	1100	400	150	1000	150	450	120	20	20	15,010	-	
1966	16,718	2,110	786	686	72	1396	350	513	237	20	-	22,888	16.29	
1967	12,685	1811	1434	634	534	1768	534	649	72	12	-	20,133	18.00	
1968	12,567	1731	1783	857	339	1252	394	194	66	33	-	19,216	17.6	
1969	16,815	2306	1877	925	323	1300	1300	330	68	13	-	25,257	19.7	

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

** Confidence limits for total estimated production

*** Confidence limits for total estimated nests

WATERFOWL PRODUCTION SURVEY

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

Recorder: NortonYear: 1969

(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> ¹⁰⁷	(1)		16			1		2	83	5				4	1	82
	(2)		15.0			.9		1.8	72.6	4.7				3.7	.9	76.6
<u>Pintail</u> ¹⁹	(1)		2			1		2	13	1						18
	(2)		10.5			5.3		10.5	68.4	5.3						94.7
<u>Gadwall</u> ¹¹	(1)		1		1			1	8						1	7
	(2)		9.1		9.1			9.1	22.7						9.1	63.6
<u>Shoveller</u> ⁶	(1)							5	1							6
	(2)							83.4	16.6							100
<u>B-W & Cinn.</u> ¹⁶	(1)				1			15						1		12
<u>Teal</u>	(2)				6.2			93.8						6.2		75.0
<u>G.W. Teal</u>	(1)															
	(2)															
<u>Redhead</u> ¹	(1)							1								1
	(2)							100								100
<u>Ruddy</u>	(1)															
	(2)															
<u>Unknown</u> ⁵⁸	(1)		3		1			53		1			1			50
	(2)		5.2		1.7			91.4		1.7			1.7			86.2
	(1)															
	(2)															
<u>Total</u> ²¹⁸	(1)		22		3	2		5	178	7	1		6	2		176
	(2)		10.1		1.4	.9		2.3	81.6	3.2	.5		2.7	.9		80.7
<u>Coot</u> ⁴	(1)							1				3				
	(2)							25				75				

* Obtain data from Summary Form D-4

WATERFOWL PRODUCTION STUDY

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

Recorder: Norton

1969

(1) No. Duck Nests (2) % in Primary Type	Year Primary Cover Type															
	Sx	Sve	Crz	Dst	Gx	Hof	Wx	Jba	Cx	Ex	Tla	Sva	Dike	Ditch	Flooded	Dry
1964 (1)	3	37		4	3		3	203	6		2		2	4	96	
(2)	1.15	4.20		1.5	1.15		1.15	774	2.3		1.96		1.96	3.92	36.78	
1965 (1)																
(2)																
1966 (1)		21	2	2	12		3	212	5	1		1	5		107	
(2)		8.1	.8	.8	4.6		1.2	819	1.9	.4		.4	1.9		41.3	
1967 (1)		23	3		4		1	225	2		2	3			102	
(2)		8.7	1.5		1.5		.4	856	.9		.8	1.1			33.8	
1968 (1)	3	61	0	5	4	0	6	225	6	0	0	1	1	0	10	
(2)	1.0	19.6	0	1.6	1.3	0	1.9	723	1.9	0	0	0.4	0.4	0	3.2	
1969 (1)		22		3	2		5	178	7	1			6	2	176	34
(2)		10.1		1.4	.9		2.3	816	3.2	.5			2.7	.9	807	157
(1)																
(2)																
(1)																
(2)																
(1)																
(2)																
(1)																
(2)																

* Obtain data from Summary Form D-9