TABLE D-1. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SWIFTSURE BANK REGION, SWIFTSURE BANK SUBREGION (0101), 1978

Family	Area		Period			
			Spring*	Summer	Fall	Winter* 1978/79
Loons	Offshore	D=			<0.1	
		PT=			52	
		BOI=			0.91	
Albatrosses	Offshore	D=			<0.1	
		PT=			26	
		BOI=			0.28	
Shearwaters	Offshore	D=			7.0	
		PT=			5,900	
		BOI=			38	
Storm-Petrels	Offshore	D=			2.6	
		PT=			2,000	
		BOI=			19	
Ducks and Geese	Offshore	D=			<0.1	
		PT=			26	
		BOI=			0.22	
Sandpipers and other shore-birds	Offshore	D=			<0.1	
		PT=			52	
		BOI=			0.24	
Phalaropes	Offshore	D=			0.4	
		PT=			340	
		BOI=			2.2	
Jaegers	Offshore	D=			0.2	
		PT=			160	
		BOI=			0.14	

SECTION II

Region 2. Strait of Juan de Fuca-Outer region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations or appropriate species.

TABLE D-2. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, STRAIT OF JUAN DE FUCA (OUTER) SUBREGION (0201), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Offshore	D=				<0.1
		PT=				110
		BOI=				2.4
Grebes	Offshore	D=				0.1
		PT=				180
		BOI=				3.4
Shearwaters	Offshore	D=			0.2	
		PT=			380	
		BOI=			2.5	
Storm-Petrels	Offshore	D=			<0.1	<0.1
		PT=			110	74
		BOI=			0.97	0.63
Cormorants	Offshore	D=	0.1		0.3	0.1
		PT=	270		640	150
		BOI=	6.2		11	3.4
Ducks and Geese	Offshore	D=	0.3			
		PT=	640			
		BOI=	9.9			
Phalaropes	Offshore	D=			4.4	<0.1
		PT=			8,200	150
		BOI=			55	0.38
Gulls and Terns	Offshore	D=	0.7		7.3	2.5
		PT=	1,400		14,000	4,700
		BOI=	22		210	200
Alcids	Offshore	D=	0.9		57.0	18.6
		PT=	1,600		110,000	35,000
		BOI=	63		3,500	1,100

TABLE D-2 (continued).

Family	Area		Period Spring	Summer*	Fall	Winter 1978/79
Summary	Offshore	D=	2.1		69.5	21.4
		PT=	3,900		130,000	40,000
		BOI=	100		3,700	1,300

*No data are available

TABLE D-3. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, VANCOUVER ISLAND SUBREGION (0202), 1978

Family	Area		Period Spring	Summer*	Fall	Winter* 1978/79
Loons	Nearshore	D=	0.7		2.0	
		PT=	40		100	
		BOI=	0.54		1.9	
Grebes	Nearshore	D=	0.2		13.2	
		PT=	9.0		680	
		BOI=	0.15		17	
Cormorants	Nearshore	D=	49.8		0.9	
		PT=	2,600		46	
		BOI=	59		0.80	
Herons	Nearshore	D=			0.7	
		PT=			37	
		BOI=			0.19	
Ducks and Geese	Nearshore	D=	2.6		25.0	
		PT=	140		1,300	
		BOI=	2.8		24	
Eagles and Hawks	Nearshore	D=			0.4	
		PT=			18	
		BOI=			0.13	
Gulls and Terns	Nearshore	D=	32.3		210.7	
		PT=	1,700		11,000	
		BOI=	28		190	
Alcids	Nearshore	D=			2.3	
		PT=			120	
		BOI=			4.0	
Summary	Nearshore	D=	85.6		255.2	
		PT=	4,400		13,000	
		BOI=	90		230	

*No data are available

TABLE D-4. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CAPE FLATTERY SUBREGION (0203), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=	0.2		0.2	2.0
		PT=	1		1	11
		BOI=	0.01		0.02	0.20
Grebes	Nearshore	D=	3.7		0.4	1.8
		PT=	20		2	10
		BOI=	0.57		0.06	0.18
Cormorants	Nearshore	D=	81.9		75.7	43.9
		PT=	440		410	240
		BOI=	10		9.3	5.2
Herons	Nearshore	D=				0.2
		PT=				1
		BOI=				<0.01
Ducks and Geese	Nearshore	D=	11.4		1.8	5.7
		PT=	60		10	31
		BOI=	1.4		0.24	0.60
Eagles and Hawks	Nearshore	D=				<0.1
		PT=				5
		BOI=				0.03
Oystercatchers	Nearshore	D=	0.3		0.4	0.2
		PT=	2.0		2	1
		BOI=	0.04		0.05	0.02
Phalaropes	Nearshore	D=	12.9			
		PT=	70			
		BOI=	0.46			
Gulls and Terns	Nearshore	D=	583.0		1,521.8	325.9
		PT=	3,100		8,200	1,600
		BOI=	58		150	28

TABLE D-4 (continued).

Family	Area		Period Spring	Summer*	Fall	Winter 1978/79
Alcids	Nearshore	D=	43.8		44.3	59.1
		PT=	240		240	320
		BOI=	7.8		7.7	10
Summary	Nearshore	D=	737.1		1,646.9	440.5
		PT=	4,000		8,900	2,400
		BOI=	78		160	45

*No data are available

TABLE D-5. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, NEAH BAY SUBREGION (0204), 1978

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	1.1	0.2	0.6	1.6
		PT=	5	1	3	7
		BOI=	0.08	0.01	0.05	0.12
Grebes	Nearshore	D=	16.2		18.3	13.1
		PT=	70		82	59
		BOI=	1.5		1.4	1.2
Cormorants	Nearshore	D=	1.6	2.2	8.9	5.4
		PT=	7	10	40	24
		BOI=	0.16	0.18	0.87	0.52
Herons	Nearshore	D=	0.1	0.2	0.2	0.1
		PT=	1	1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Ducks and Geese	Nearshore	D=	70.5	3.1	49.3	82.8
		PT=	320	14	220	370
		BOI=	5.5	0.24	4.6	5.7
Eagles and Hawks	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Rails	Nearshore	D=	2.5		0.8	3.6
		PT=	10		4	16
		BOI=	0.03		0.01	0.05
Oystercatchers	Nearshore	D=	0.1			
		PT=	1			
		BOI=	0.01			
Plovers	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01

TABLE D-5 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Sandpipers and other shore-birds	Nearshore	D=	12.9		12.8	2.4
		PT=	60		58	11
		BOI=	0.40		0.36	0.09
Gulls and Terns	Nearshore	D=	13.3	48.9	178.2	34.9
		PT=	60	220	800	160
		BOI=	1.1	4.2	12	2.8
Alcids	Nearshore	D=	2.1		1.3	0.1
		PT=	9		6	<1
		BOI=	0.48		0.28	0.02
Summary	Nearshore	D=	120.5	54.7	270.5	144.1
		PT=	540	250	1,200	650
		BOI=	9.2	4.6	20	11

TABLE D-6. SEASONAL PROJE
BY FAMILY FOR THE STRAIT
TO CLALLAM

Family	Area	
Loons	Nearshore	D=
		PT=
		BOI=
Grebes	Nearshore	D=
		PT=
		BOI=
Cormorants	Nearshore	D=
		PT=
		BOI=
Herons	Nearshore	D=
		PT=
		BOI=
Ducks and Geese	Nearshore	D=
		PT=
		BOI=
Eagles and Hawks	Nearshore	D=
		PT=
		BOI=
Oystercatchers	Nearshore	D=
		PT=
		BOI=
Sandpipers and other shore-birds	Nearshore	D=
		PT=
		BOI=
Phalaropes	Nearshore	D=
		PT=
		BOI=

TABLE D-6. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, NEAH BAY TO CLALLAM BAY SUBREGION (0205), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=	0.6		0.6	3.2
		PT=	8		7	41
		BOI=	0.13		0.12	0.76
Grebes	Nearshore	D=	0.6		1.6	29.7
		PT=	8		21	380
		BOI=	0.12		0.46	8.1
Cormorants	Nearshore	D=	16.8		31.4	33.4
		PT=	220		400	430
		BOI=	4.9		8.9	8.5
Herons	Nearshore	D=	0.1		0.2	0.2
		PT=	2		2	2
		BOI=	0.01		0.01	0.01
Ducks and Geese	Nearshore	D=	22.5		53.4	94.0
		PT=	290		690	1,200
		BOI=	6.2		17	20
Eagles and Hawks	Nearshore	D=	<0.1		<0.1	0.4
		PT=	<1.0		1	5
		BOI=	<0.01		<0.01	0.04
Oystercatchers	Nearshore	D=				<0.1
		PT=				1
		BOI=				0.02
Sandpipers and other shore-birds	Nearshore	D=			0.6	3.2
		PT=			8	42
		BOI=			0.04	0.17
Phalaropes	Nearshore	D=			<0.1	
		PT=			1	
		BOI=			<0.01	

TABLE D-6 (continued).

Family	Area		Period Spring	Summer*	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	40.6		229.0	88.2
		PT=	520		3,000	1,100
		BOI=	9.9		43	19
Alcids	Nearshore	D=	4.9		53.0	0.2
		PT=	60		680	3
		BOI=	1.8		21	0.11
Summary	Nearshore	D=	86.1		370.8	259.2
		PT=	1,100		4,800	3,300
		BOI=	23		90	56

*No data are available

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TABLE D-7. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CLALLAM BAY SUBREGION (0206), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	1.7	0.3	0.4	1.6
		PT=	4	1	1	5
		BOI=	0.06	0.02	0.03	0.09
Grebes	Nearshore	D=	5.6		6.6	13.0
		PT=	20		21	42
		BOI=	0.42		0.44	0.92
Cormorants	Nearshore	D=	3.1	4.4	5.8	8.6
		PT=	10	14	19	27
		BOI=	0.18	0.30	0.35	0.55
Herons	Nearshore	D=				0.2
		PT=				<1
		BOI=				<0.01
Ducks and Geese	Nearshore	D=	31.2	5.3	19.8	32.4
		PT=	100	17	63	100
		BOI=	2.0	0.38	1.5	2.0
Eagles and Hawks	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Plovers	Nearshore	D=		0.3	0.4	0.2
		PT=		1	1	<1
		BOI=		<0.01	<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=				0.5
		PT=				2
		BOI=				0.02
Phalaropes	Nearshore	D=			1.3	
		PT=			4	
		BOI=			0.03	

TABLE D-7 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	10.7	14.7	159.7	10.4
		PT=	30	47	510	33
		BOI=	0.56	0.89	5.1	0.60
Alcids	Nearshore	D=	0.1	5.0	<0.1	0.7
		PT=	1	16	<1	2
		BOI=	0.01	0.74	0.01	0.09
Summary	Nearshore	D=	52.0	30.0	194.1	68.3
		PT=	170	96	620	220
		BOI=	3.2	2.3	7.4	4.2

TABLE D-8. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CLALLAM BAY TO CRESCENT BAY SUBREGION (0207), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	2.5	1.0	1.0	2.8
		PT=	50	21	22	58
		BOI=	0.88	0.31	0.35	1.0
Grebes	Nearshore	D=	8.0		4.9	15.8
		PT=	170		100	330
		BOI=	3.6		2.2	6.9
Cormorants	Nearshore	D=	5.7	6.0	10.8	19.3
		PT=	120	120	230	400
		BOI=	2.6	2.8	4.9	7.8
Herons	Nearshore	D=	0.3	1.0	0.2	0.1
		PT=	7	21	4	2
		BOI=	0.04	0.10	0.02	0.01
Ducks and Geese	Nearshore	D=	118.6	3.5	20.1	121.2
		PT=	2,500	73	420	2,500
		BOI=	65	1.5	9.0	34
Eagles and Hawks	Nearshore	D=	<0.1			0.2
		PT=	2			5
		BOI=	<0.01			0.04
Oystercatchers	Nearshore	D=				0.1
		PT=				2
		BOI=				0.05
Plovers	Nearshore	D=			0.2	0.2
		PT=			5	4
		BOI=			0.01	0.01
Sandpipers and other shore-birds	Nearshore	D=	0.4		5.8	1.5
		PT=	8		120	31
		BOI=	0.04		0.58	0.24

TABLE D-8 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	22.3	20.0	154.4	84.5
		PT=	460	420	3,200	1,800
		BOI=	8.1	7.9	36	26
Alcids	Nearshore	D=	0.9	4.0	2.0	0.5
		PT=	20	83	41	10
		BOI=	0.70	4.2	1.4	0.43
Summary	Nearshore	D=	158.7	35.5	200.1	258.2
		PT=	3,300	740	4,200	5,400
		BOI=	81	17	54	78

TABLE D-9. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CRESCENT BAY SUBREGION (0208), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=	3.0		2.7	3.2
		PT=	3		3	4
		BOI=	0.06		0.05	0.06
Grebes	Nearshore	D=	4.0		2.7	27.5
		PT=	4		3	30
		BOI=	0.09		0.05	0.71
Cormorants	Nearshore	D=	11.5		9.4	19.7
		PT=	10		10	22
		BOI=	0.26		0.23	0.44
Herons	Nearshore	D=	0.5		0.5	0.4
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Ducks and Geese	Nearshore	D=	67.2		10.8	97.4
		PT=	70		12	100
		BOI=	1.4		0.24	1.8
Eagles and Hawks	Nearshore	D=			0.2	<0.1
		PT=			<1	<1
		BOI=			<0.01	<0.01
Oystercatchers	Nearshore	D=	1.2		1.1	12.1
		PT=	1		1	13
		BOI=	0.03		0.03	0.29
Plovers	Nearshore	D=	0.8		3.1	1.1
		PT=	1		3	1
		BOI=	<0.01		<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	4.5		8.0	12.5
		PT=	5		9	14
		BOI=	0.03		0.04	0.16

TABLE D-9 (continued).

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	95.8		141.9	35.1
		PT=	110		160	39
		BOI=	1.9		1.9	0.69
Alcids	Nearshore	D=	28.0		1.4	3.2
		PT=	30		2	4
		BOI=	1.5		0.06	0.13
Summary	Nearshore	D=	217.0		181.9	212.5
		PT=	240		200	230
		BOI=	5.2		2.6	4.3

*No data are available

TABLE D-10. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CRESCENT BAY TO EDIZ HOOK REGION (0209), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=	4.6		1.0	4.8
		PT=	40		9	43
		BOI=	0.79		0.14	0.78
Grebes	Nearshore	D=	8.7		6.8	15.1
		PT=	80		62	140
		BOI=	1.5		1.5	2.4
Cormorants	Nearshore	D=	7.4		6.7	25.2
		PT=	70		61	230
		BOI=	1.5		1.4	4.7
Herons	Nearshore	D=	0.3		0.5	0.7
		PT=	3		5	6
		BOI=	0.01		0.02	0.03
Ducks and Geese	Nearshore	D=	220.6		9.9	207.7
		PT=	2,000		89	1,900
		BOI=	21		2.0	24
Eagles and Hawks	Nearshore	D=				
		PT=				0.2
		BOI=				2
						0.01
Plovers	Nearshore	D=	0.9			
		PT=	8			
		BOI=	0.03			
Sandpipers and other shore-birds	Nearshore	D=	12.7			
		PT=	110			
		BOI=	0.6			
Gulls and Terns	Nearshore	D=	279.1		357.3	633.3
		PT=	2,500		3,200	5,700
		BOI=	44		51	100

*No data are available

TABLE D-10 (continued).

Family	Area		Period Spring	Summer*	Fall	Winter 1978/79
Alcids	Nearshore	D=	4.1		23.6	1.0
		PT=	40		210	9
		BOI=	1.4		7.0	0.36
Summary	Nearshore	D=	538.6		408.5	890.3
		PT=	4,800		3,700	8,000
		BOI=	70		63	130

*No data are available

Region 3. Strait of Juan de Fuca-Inner region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observation of appropriate species.

TABLE D-11. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, STRAIT OF JUAN DE FUCA (INNER) SUBREGION (0301), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Offshore	D=	0.1	<0.1	<0.1	0.2
		PT=	130	18	8	320
		BOI=	2.2	0.27	0.12	6.5
Grebes	Offshore	D=	0.2	<0.1	<0.1	0.1
		PT=	310	90	15	210
		BOI=	5.2	2.7	0.47	4.7
Shearwaters	Offshore	D=		<0.1	<0.1	
		PT=		36	62	
		BOI=		0.24	0.40	
Storm-Petrel	Offshore	D=		<0.1	<0.1	
		PT=		90	39	
		BOI=		0.77	0.39	
Cormorants	Offshore	D=	0.2	<0.1	<0.1	1.2
		PT=	330	126	208	2,000
		BOI=	7.5	2.8	4.3	40
Ducks and Geese	Offshore	D=	0.2		<0.1	1.3
		PT=	260		15	2,100
		BOI=	6.5		0.40	32
Oystercatchers	Offshore	D=	<0.1			<0.1
		PT=	10			7
		BOI=	0.21			0.15
Phalaropes	Offshore	D=			0.19	<0.1
		PT=			320	7
		BOI=			2.1	<0.01
Gulls and Terns	Offshore	D=	2.6	1.0	9.4	16.2
		PT=	4,300	1,700	15,000	26,000
		BOI=	60	29	240	380

TABLE D-11 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Alcids	Offshore	D=	5.2	1.2	9.2	8.3
		PT=	8,500	2,000	15,000	1,400
		BOI=	390	90	490	440
Summary	Offshore	D=	8.4	2.5	19.0	27.3
		PT=	14,000	4,100	31,000	45,000
		BOI=	390	130	740	900

TABLE D-12. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, EDIZ HOOK SUBREGION (0302), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.4		0.8	1.1
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Grebes	Nearshore	D=	5.5		3.2	5.7
		PT=	2		1	2
		BOI=	0.04		0.02	0.04
Cormorants	Nearshore	D=	2.50	2.2	2.4	3.5
		PT=	1	<1	1	1
		BOI=	0.02	0.02	0.02	0.03
Herons	Nearshore	D=	<0.1		<0.1	0.4
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Ducks and Geese	Nearshore	D=	10.9		6.8	14.6
		PT=	4		3	6
		BOI=	0.09		0.06	0.10
Eagles and Hawks	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Oystercatchers	Nearshore	D=		<0.1		
		PT=		<1		
		BOI=		<0.01		
Plovers	Nearshore	D=			<0.1	0.2
		PT=			1	<1
		BOI=			<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	<0.1	0.2	0.4	0.5
		PT=	<1	<1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01

TABLE 3-12 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Phalacrocoracidae	Nearshore	Do			4.6	
		PTo			2	
		BOIo			0.01	
Gulls and Terns	Nearshore	Do	8.4	5.7	41.3	13.7
		PTo	3	2	17	5
		BOIo	0.06	0.04	0.24	0.10
Alcids	Nearshore	Do	6.2	3.3	16.9	1.3
		PTo	2	1	7	<1
		BOIo	0.11	0.06	0.29	0.02
Summary	Nearshore	Do	34.1	11.4	76.6	41.7
		PTo	10	5	31	17
		BOIo	0.32	0.12	0.65	0.30

TABLE D-13. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, PORT ANGELES SUBREGION (0303), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.4	<0.1	0.4	0.8
		PT=	5	<1	4	9
		BOI=	0.07	<0.01	0.07	0.14
Grebes	Nearshore	D=	11.1		6.9	41.5
		PT=	120		72	430
		BOI=	2.9		1.3	11
Cormorants	Nearshore	D=	8.4	10.7	13.0	10.0
		PT=	90	110	140	100
		BOI=	2.0	2.5	3.0	2.2
Herons	Nearshore	D=	<0.1		0.8	1.7
		PT=	<1		9	18
		BOI=	<0.01		0.04	0.09
Ducks and Geese	Nearshore	D=	18.6	0.7	44.1	70.0
		PT=	190	7	460	730
		BOI=	4.3	0.15	5.9	13
Rails	Nearshore	D=	<0.1		<0.1	0.2
		PT=	1		<1	2
		BOI=	<0.01		<0.01	<0.01
Oystercatchers	Nearshore	D=	0.1	0.2		
		PT=	1	2		
		BOI=	0.03	0.04		
Plovers	Nearshore	D=	0.8	<0.1	1.2	1.9
		PT=	8	<1	12	20
		BOI=	0.04	<0.01	0.06	0.10
Sandpipers and other shore-birds	Nearshore	D=	6.0		8.1	10.9
		PT=	60		84	110
		BOI=	0.40		0.54	0.65

TABLE D-13 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	17.0	16.5	194.9	62.2
		PT=	180	170	2,000	640
		BOI=	3.3	3.0	29	10
Alcids	Nearshore	D=	2.8	2.0	0.8	4.0
		PT=	30	21	9	41
		BOI=	1.4	0.99	0.35	1.6
Summary	Nearshore	D=	65.3	30.2	270.3	203.3
		PT=	680	310	2,800	2,100
		BOI=	14.4	6.8	40	39

TABLE D-14. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, VOICE OF AMERICA SUBREGION (0304), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	1.7	0.8	1.6	1.5
		PT=	40	20	39	37
		BOI=	0.78	0.45	0.72	0.71
Grebes	Nearshore	D=	4.6		16.0	12.2
		PT=	110		380	290
		BOI=	2.1		6.7	7.0
Cormorants	Nearshore	D=	3.5	2.5	6.1	6.0
		PT=	80	59	150	140
		BOI=	1.9	1.4	3.3	3.2
Herons	Nearshore	D=			<0.1	0.1
		PT=			2	3
		BOI=			<0.01	0.01
Ducks and Geese	Nearshore	D=	28.7	68.4	38.9	63.4
		PT=	690	1,600	930	1,500
		BOI=	13	36	20	25
Eagles and Hawks	Nearshore	D=	0.1			<0.1
		PT=	3			<1
		BOI=	0.02			<0.01
Plovers	Nearshore	D=	<0.1		0.1	
		PT=	1		2	
		BOI=	<0.01		<0.01	
Sandpipers and other shore-birds	Nearshore	D=			0.1	
		PT=			3	
		BOI=			<0.02	

TABLE D-14 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	61.7	43.4	118.1	56.5
		PT=	1,500	1,000	2,800	1,400
		BOI=	25	16	42	15
Alcids	Nearshore	D=	27.9	15.2	16.8	1.6
		PT=	670	370	400	38
		BOI=	33	17	19	1.4
Summary	Nearshore	D=	128.2	130.4	198.3	141.9
		PT=	3,100	3,100	4,800	3,400
		BOI=	76	71	91	52

TABLE D-15. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DUNGENESS SPIT SUBREGION (0305), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=	4.3		5.1	14.6
		PT=	20		20	58
		BOI=	0.34		0.34	1.2
Grebes	Nearshore	D=	14.2		14.2	15.0
		PT=	60		57	60
		BOI=	0.84		0.75	1.1
Cormorants	Nearshore	D=	7.7		16.3	7.4
		PT=	30		65	30
		BOI=	0.67		1.4	0.65
Herons	Nearshore	D=	0.3		59.8	0.2
		PT=	<1		240	<1
		BOI=	<0.01		1.2	<0.01
Ducks and Geese	Nearshore	D=	84.0		53.7	792.2
		PT=	340		210	3,200
		BOI=	6.9		4.2	20
Eagles and Hawks	Nearshore	D=				0.2
		PT=				<1
		BOI=				<0.01
Oystercatchers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Plovers	Nearshore	D=			173.2	6.9
		PT=			690	28
		BOI=			3.5	0.14
Sandpipers and other shore-birds	Nearshore	D=	0.6		63.7	94.4
		PT=	3		250	380
		BOI=	0.01		1.4	1.9

TABLE D-15 (continued).

Family	Area		Period Spring	Summer*	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	31.6		620.0	101.1
		PT=	130		480	400
		BOI=	2.4		38	6.3
Alcids	Nearshore	D=	18.4		59.7	7.4
		PT=	70		240	30
		BOI=	3.4		10	1.1
Summary	Nearshore	D=	161.0		1,067.3	1,046.0
		PT=	640		4,300	4,200
		BOI=	14		61	32

*No data are available

TABLE D-16. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DUNGENESS BAY/HARBOR SUBREGION (0306), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	2.5	<0.1	1.9	4.2
		PT=	30	1	23	51
		BOI=	0.57	0.02	0.36	1.0
Grebes	Nearshore	D=	19.1	<0.1	5.9	6.2
		PT=	230	1	70	74
		BOI=	5.7	0.03	0.99	1.6
Shearwaters	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Cormorants	Nearshore	D=	4.2	7.8	15.7	6.2
		PT=	50	94	190	75
		BOI=	1.1	2.1	3.9	1.7
Herons	Nearshore	D=	0.2	<0.1	2.3	0.2
		PT=	2	1	28	3
		BOI=	0.01	<0.01	0.14	0.01
Ducks and Geese	Nearshore	D=	279.4	14.1	164.8	406.5
		PT=	3,400	170	2,000	4,900
		BOI=	86	2.8	25	60
Eagles and Hawks	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Rails	Nearshore	D=	0.8			<0.1
		PT=	9			<1
		BOI=	0.03			<0.01
Oystercatchers	Nearshore	D=	0.1		0.2	
		PT=	2		2	
		BOI=	0.03		0.04	

TABLE D-16 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Plovers	Nearshore	D=	12.9		20.6	28.4
		PT=	160		250	340
		BOI=	0.79		1	1.7
Sandpipers and other shore-birds	Nearshore	D=	98.8	0.6	66.0	51.3
		PT=	1,200	6	790	620
		BOI=	6.1	0.03	4	3.2
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	82.6	91.2	280.2	56.8
		PT=	990	1,100	3,400	680
		BOI=	15	18	47	9.5
Alcids	Nearshore	D=	11.4	5.9	5.7	0.2
		PT=	140	70	68	2
		BOI=	4.6	2.4	2.6	0.07
Summary	Nearshore	D=	512.0	119.8	563.5	565.0
		PT=	6,100	1,400	6,800	6,800
		BOI=	120	25	85	78

TABLE D-17. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, JAMESTOWN SUBREGION (0307), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=	1.5		2.3	2.7
		PT=	30		49	58
		BOI=	0.49		0.78	0.96
Grebes	Nearshore	D=	3.7		11.1	33.1
		PT=	80		240	710
		BOI=	1.3		3.9	19
Cormorants	Nearshore	D=	4.1		3.9	5.3
		PT=	90		83	110
		BOI=	1.9		1.8	2.6
Herons	Nearshore	D=			3.1	
		PT=			67	
		BOI=			0.34	
Ducks and Geese	Nearshore	D=	473.8		1,463.3	894.3
		PT=	10,000		31,000	19,000
		BOI=	250		230	210
Eagles and Hawks	Nearshore	D=				0.2
		PT=				4
		BOI=				0.03
Rails	Nearshore	D=				0.3
		PT=				7
		BOI=				0.02
Plovers	Nearshore	D=	5.9		15.5	0.5
		PT=	130		330	11
		BOI=	0.64		1.7	0.06
Sandpipers and other shore-birds	Nearshore	D=	72.0		22.2	14.8
		PT=	1,500		470	320
		BOI=	7.9		2.1	1.7

TABLE D-17 (continued).

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	224.1		352.3	60.6
		PT=	4,800		7,500	1,300
		BOI=	79		100	21
Alcids	Nearshore	D=	4.2		6.6	2.6
		PT=	90		140	56
		BOI=	3.2		5.0	1.9
Summary	Nearshore	D=	789.4		1,887.4	1,014.6
		PT=	17,000		40,000	2,200
		BOI=	350		350	260

*No data are available

TABLE D-31. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, GUEMES CHANNEL SUBREGION (0502), 1978

Family	Area		Period			
			Spring	Summer*	Fall*	Winter 1978/79
Loons	Nearshore	D=	2.9			
		PT=	30			
		BOI=	0.44			
Grebes	Nearshore	D=	12.9			36.9
		PT=	130			380
		BOI=	2.3			9.2
Cormorants	Nearshore	D=	11.4			15.4
		PT=	120			160
		BOI=	2.6			3.3
Herons	Nearshore	D=	2.9			
		PT=	30			
		BOI=	0.15			
Ducks and Geese	Nearshore	D=	27.1			21.5
		PT=	280			220
		BOI=	3.8			3.2
Gulls and Terns	Nearshore	D=	10.0			76.2
		PT=	100			780
		BOI=	1.7			9.9
Alcids	Nearshore	D=	8.5			31.5
		PT=	350			320
		BOI=	13			16
Summary	Nearshore	D=	101.4			181.5
		PT=	1,000			1,900
		BOI=	24			42

*No data are available

TABLE D-32. SEASONA
IMPORTANCE BY FAMIL
REGION, FIDAL

Family	Area	
Loons	Nearshore	D=
		PT=
		BOI=
Grebes	Nearshore	D=
		PT=
		BOI=
Cormorants	Nearshore	D=
		PT=
		BOI=
Herons	Nearshore	D=
		PT=
		BOI=
Ducks and Geese	Nearshore	D=
		PT=
		BOI=
Eagles and Hawks	Nearshore	D=
		PT=
		BOI=
Rails	Nearshore	D=
		PT=
		BOI=
Plovers	Nearshore	D=
		PT=
		BOI=

TABLE D-32. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, FIDALGO BAY SUBREGION (0503), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	1.5		0.2	1.4
		PT=	20		2	17
		BOI=	0.33		0.03	0.31
Grebes	Nearshore	D=	8.1		20.0	63.5
		PT=	90		230	730
		BOI=	2.2		6.1	21
Cormorants	Nearshore	D=	5.4	12.5	16.8	9.2
		PT=	60	140	190	110
		BOI=	1.0	2.1	3.1	1.5
Herons	Nearshore	D=	1.0	2.0	2.5	0.4
		PT=	10	23	29	5
		BOI=	0.06	0.12	0.15	0.03
Ducks and Geese	Nearshore	D=	152.3	6.0	28.5	193.1
		PT=	1,800	69	330	2,200
		BOI=	45	1.8	4.6	22
Eagles and Hawks	Nearshore	D=	<0.1	0.2		<0.1
		PT=	1	2		<1
		BOI=	<0.01	0.01		<0.01
Rails	Nearshore	D=	0.4			<0.1
		PT=	4			1
		BOI=	0.01			<0.01
Plovers	Nearshore	D=	0.3	0.2	1.4	<0.1
		PT=	3	2	16	<1
		BOI=	<0.01	<0.01	0.05	<0.01

TABLE D-32 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Sandpipers and other shore-birds	Nearshore	D=	0.1		3.1	67.7
		PT=	2		36	780
		BOI=	<0.01		0.18	4.1
Gulls and Terns	Nearshore	D=	4.7	11.9	34.4	18.0
		PT=	50	140	400	210
		BOI=	1.0	2.6	4.7	3.0
Alcids	Nearshore	D=	<0.1	0.4	0.1	<0.1
		PT=	1	5	<1	<1
		BOI=	0.02	0.2	<0.04	0.04
Summary	Nearshore	D=	173.8	33.2	107.1	353.7
		PT=	2,000	380	1,200	4,100
		BOI=	49	6.8	19	52

TABLE D-33. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, PADILLA BAY SUBREGION (0504), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.5	0.2	0.2	0.3
		PT=	30	13	12	18
		BOI=	0.41	0.19	0.18	0.30
	Offshore	D=	3.8		4.0	6.0
		PT=	100		100	150
		BOI=	1.8		1.8	2.7
	Sum	D=	1.6		1.3	2.1
		PT=	130		110	170
		BOI=	2.2		1.9	3.0
Grebes	Nearshore	D=	1.8	0.4	5.1	22.0
		PT=	100	23	280	1,200
		BOI=	2.3	0.67	7.7	36
	Offshore	D=	11.6		61.2	93.0
		PT=	290		1,500	2,300
		BOI=	7.7		34	62
	Sum	D=	4.8		22.5	43.7
		PT=	390		1,800	3,500
		BOI=	10		42	98
Cormorants	Nearshore	D=	1.2	0.7	3.1	1.5
		PT=	70	38	170	85
		BOI=	1.2	0.74	2.6	1.3
	Offshore	D=	1.8			9.8
		PT=	40			240
		BOI=	0.97			4.6
	Sum	D=	1.6			4.0
		PT=	110			320
		BOI=	2.2			5.9
Herons	Nearshore	D=	1.9	0.5	1.4	0.3
		PT=	100	27	80	17
		BOI=	0.52	0.13	0.40	0.09

TABLE D-33 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Herons	Offshore	D=	0.7		9.2	
		PT=	20		230	
		BOI=	0.08		1.2	
	Sum	D=	1.3		3.9	
		PT=	120		310	
		BOI=	0.60		1.6	
Ducks and Geese	Nearshore	D=	259.4	25.6	142.3	285.8
		PT=	14,000	1,400	7,800	16,000
		BOI=	430	26	66	280
	Offshore	D=	1,182.4		551.6	2,656.8
		PT=	30,000		14,000	66,000
		BOI=	590		250	1,000
	Sum	D=	550.0		275.0	1,025.0
		PT=	44,000		22,000	82,000
		BOI=	1,000		320	1,300
Eagles and Hawks	Nearshore	D=	0.1	<0.1	<0.1	<0.1
		PT=	5	1	<1	4
		BOI=	0.04	<0.01	<0.01	0.03
Rails	Nearshore	D=	<0.1			
		PT=	1			
		BOI=	<0.01			
Plovers	Nearshore	D=	<0.1		0.5	0.4
		PT=	4		27	20
		BOI=	0.01		0.12	0.10
Sandpipers and other shore-birds	Nearshore	D=	8.2		12.3	64.8
		PT=	450		680	3,600
		BOI=	2.4		3.4	19

TABLE D-33 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	29.0	16.8	26.4	14.6
		PT=	1,600	930	1,400	800
		BOI=	30	17	22	14
	Offshore	D=	30.4		383.2	74.2
		PT=	800		9,600	1,900
		BOI=	13		110	30
	Sum	D=	30.4		137.5	33.8
		PT=	2,400		11,000	2,700
		BOI=	44		310	44
Alcids	Nearshore	D=	0.3	1.3	<0.1	<0.1
		PT=	10	70	4	<1
		BOI=	0.61	3.0	0.15	0.03
	Offshore	D=			3.2	13.5
		PT=			80	340
		BOI=			4.4	15
	Sum	D=			0.1	0.1
		PT=			84	340
		BOI=			4.5	15
Summary	Nearshore	D=	290.9	45.5	191.4	345.5
		PT=	16,000	2,500	11,000	19,000
		BOI=	460	48	100	350
	Offshore	D=	1,240.0		1,019.2	2,864.2
		PT=	31,000		25,000	72,000
		BOI=	620		400	1,200
	Sum	D=	587.5		450.0	1,137.5
		PT=	47,000		36,000	91,000
		BOI-	1,100		510	1,400

TABLE D-34. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGES REGION, SAMISH BAY SUBREGION (U505), 1978

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	1.7	0.2	1.0	1.5
		PT=	50	6	29	43
		BOI=	0.84	0.09	0.55	0.88
	Offshore	D=	7.6		3.5	9.5
		PT=	270		130	350
		BOI=	5.2		2.8	7.5
	Sum	D=	4.8		2.4	5.9
		PT=	320		160	390
		BOI=	6.0		3.3	8.4
Grebes	Nearshore	D=	56.2		50.5	78.2
		PT=	1,600		1,500	2,300
		BOI=	49		42	67
	Offshore	D=	122.2		159.1	94.6
		PT=	4,300		5,900	3,500
		BOI=	130		180	91
	Sum	D=	83.2		112.1	87.9
		PT=	5,900		7,400	5,800
		BOI=	180		220	160
Cormorants	Nearshore	D=	1.0		2.7	2.3
		PT=	30		79	66
		BOI=	0.45		1.3	1.0
	Offshore	D=	0.3		2.3	5.1
		PT=	10		85	190
		BOI=	0.32		1.9	4.1
	Sum	D=	0.6		2.4	3.9
		PT=	40		160	260
		BOI=	0.77		3.2	5.1
Herons	Nearshore	D=	2.0	20.3	5.1	0.7
		PT=	60	590	150	21
		BOI=	0.30	3.0	0.75	0.11

TABLE D-34 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Herons	Offshore	D=	0.3			
		PT=	10			
		BOI=	0.32			
	Sum	D=	1.1			
		PT=	70			
		BOI=	0.06			
Ducks and Geese	Nearshore	D=	41.2		335.0	527.7
		PT=	1,200		9,700	15,000
		BOI=	340		100	160
	Offshore	D=	459.6		49.8	810.8
		PT=	16,000		1,800	30,000
		BOI=	330		43	390
	Sum	D=	257.6		181.8	681.8
		PT=	17,000		12,000	45,000
		BOI=	670		150	550
Eagles and Hawks	Nearshore	D=				
		PT=				<0.1
		BOI=				1
						0.01
Rails	Nearshore	D=	<0.1			
		PT=	<1			
		BOI=	<0.01			
Plovers	Nearshore	D=	4.6	0.3	4.2	3.1
		PT=	130	8	120	90
		BOI=	0.66	0.02	0.61	0.46
Sandpipers and other shore-birds	Nearshore	D=	233.0		131.6	68.8
		PT=	6,800		3,800	2,000
		BOI=	36		17	11

TABLE D-34 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	40.1	16.4	50.9	15.9
		PT=	1,200	480	1,500	460
		BOI=	19	9.0	20	6.9
	Offshore	D=	24.5		7.2	62.2
		PT=	870		270	2,300
		BOI=	15		3.3	31
	Sum	D=	31.8		25.8	42.4
		PT=	2,100		1,700	2,800
		BOI=	34		23	38
Alcids	Nearshore	D=	<0.1	1.3	0.5	
		PT=	2	37	14	
		BOI=	0.08	1.3	0.61	
	Offshore	D=	0.8		1.2	13.0
		PT=	30		46	480
		BOI=	1.4		2.3	21
	Sum	D=	0.2		0.5	
		PT=	30		59	
		BOI=	1.4		2.9	
Summary	Nearshore	D=	379.3	38.4	581.9	698.2
		PT=	11,000	1,100	17,000	20,000
		BOI=	440	13	190	250
	Offshore	D=	567.4		224.0	995.1
		PT=	21,000		8,300	37,000
		BOI=	480		230	540
	Sum	D=	500.0		378.8	863.6
		PT=	33,000		25,000	57,000
		BOI=	930		420	790

TABLE D-35. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, BELLINGHAM BAY SUBREGION (0506), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.8	1.0	<0.1	0.9
		PT=	30	36	2	32
		BOI=	0.57	0.55	0.03	0.63
	Offshore	D=	3.7		3.1	8.0
		PT=	450		370	970
		BOI=	9.9		8.0	21
	Sum	D=	3.0		2.3	6.3
		PT=	480		370	1,000
		BOI=	10		8.1	22
Grebes	Nearshore	D=	18.0	2.9	30.1	30.6
		PT=	650	100	1,100	1,100
		BOI=	19	3.2	32	32
	Offshore	D=	43.8	0.7	52.7	216.2
		PT=	5,300	81	6,400	26,000
		BOI=	160	1.4	190	790
	Sum	D=	38.0	1.2	47.5	170.9
		PT=	6,000	190	7,500	27,000
		BOI=	180	4.5	220	820
Cormorants	Nearshore	D=	2.1	1.9	2.0	6.7
		PT=	80	68	72	240
		BOI=	1.5	1.4	1.4	4.8
	Offshore	D=	1.6	0.7	0.4	3.6
		PT=	200	81	51	430
		BOI=	4.3	1.9	1.1	9.0
	Sum	D=	1.8	0.9	0.8	3.9
		PT=	280	150	120	670
		BOI=	5.8	3.3	2.5	14
Herons	Nearshore	D=	0.7	0.6	0.9	0.4
		PT=	30	23	32	14
		BOI=	0.13	0.11	0.16	0.07

TABLE D-35 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=	33.5	6.0	9.9	74.8
		PT=	1,300	210	360	2,700
		BOI=	22	4.6	5.0	31
	Offshore	D=	4.0			14.8
		PT=	490			1,800
		BOI=	9.4			31
	Sum	D=	11.4			28.5
		PT=	1,800			4,500
		BOI=	31			61
Eagles and Hawks	Nearshore	D=	0.2	0.2	<0.1	0.2
		PT=	8	9	2	6
		BOI=	0.06	0.06	0.01	0.04
	Offshore	D=				<0.1
		PT=				7
		BOI=				0.05
	Sum	D=				0.2
		PT=				13
		BOI=				0.09
Rails	Nearshore	D=	<0.1		<0.1	0.1
		PT=	1		<1	3
		BOI=	<0.01		<0.01	0.01
Oystercatchers	Nearshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
Plovers	Nearshore	D=	<0.1			
		PT=	3		<0.1	<0.1
		BOI=	<0.01		3	<1
					0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	10.8			
		PT=	390		7.6	5.9
		BOI=	2.2		270	210
					1.4	1.3

TABLE D-35 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	26.9	35.7	27.1	22.3
		PT=	970	1,300	980	800
		BOI=	15	22	14	12
	Offshore	D=	13.9	2.7	19.5	36.0
		PT=	1,700	330	2,400	4,400
		BOI=	21	6.2	37	61
	Sum	D=	17.1	10.1	21.5	32.9
		PT=	2,700	1,600	3,400	5,200
		BOI=	37	29	52	73
Alcids	Nearshore	D=	0.8	4.6	0.6	2.0
		PT=	30	160	22	73
		BOI=	1.0	5.7	0.84	3.8
	Offshore	D=	0.2		38.9	42.3
		PT=	25		4,700	5,200
		BOI=	0.98		160	190
	Sum	D=	0.3		30.4	32.9
		PT=	50		4,800	5,200
		BOI=	2.0		160	190
Summary	Nearshore	D=	97.2	52.9	78.4	143.8
		PT=	3,500	1,900	2,800	5,200
		BOI=	62	38	56	85
	Offshore	D=	67.2	4.0	115.5	324.0
		PT=	8,200	490	14,000	40,000
		BOI=	200	9.4	400	1,100
	Sum	D=	75.2	45.1	107.6	284.8
		PT=	12,000	2,400	17,000	45,000
		BOI=	266	47	460	1,200

TABLE D-36. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, HALES PASSAGE SUBREGION (0507), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	2.9	0.9	0.3	2.8
		PT=	50	14	4	46
		BOI=	0.94	0.29	0.06	0.90
Grebes	Nearshore	D=	5.2		3.3	9.2
		PT=	80		54	150
		BOI=	2.1		1.4	3.5
Cormorants	Nearshore	D=	1.0	0.2	0.3	1.9
		PT=	20	3	5	30
		BOI=	0.28	0.05	0.08	0.57
Herons	Nearshore	D=	<0.1	0.4	0.5	<0.1
		PT=	<1	6	8	<1
		BOI=	<0.01	0.03	0.04	<0.01
Ducks and Geese	Nearshore	D=	19.0	0.9	1.2	26.4
		PT=	300	14	19	420
		BOI=	6.2	0.40	0.40	7.5
Eagles and Hawks	Nearshore	D=	<0.1		<0.1	0.1
		PT=	<1		<1	2
		BOI=	<0.01		<0.01	0.01
Sandpipers and other shore-birds	Nearshore	D=				5.0
		PT=				80
		BOI=				0.42
Jaegers	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Gulls and Terns	Nearshore	D=	96.4	12.2	18.1	10.5
		PT=	1,600	200	290	170
		BOI=	20	3.5	4.1	2.5

TABLE D-36 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Alcids	Nearshore	D=	1.4	3.9	2.5	3.3
		PT=	20	63	41	53
		BOI=	0.93	3.1	1.8	2.1
Summary	Nearshore	D=	126.2	18.4	26.2	60.2
		PT=	2,000	300	420	970
		BOI=	30	7.4	7.9	17

SECTION VI

Region 6. Eastern Georgia Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE D-37. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, LUMMI BAY SUBREGION (0601), 1978

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.6	0.1	<0.1	1.5
		PT=	10	2	1	26
		BOI=	0.18	0.04	0.02	0.50
	Offshore	D=	226.0		0.6	6.9
		PT=	1,800		5	56
		BOI=	36		0.11	1.1
	Sum	D=	72.0		0.2	3.2
		PT=	1,800		6	81
		BOI=	37		0.13	1.6
Grebes	Nearshore	D=	2.3		9.8	2.8
		PT=	46		170	47
		BOI=	0.77		4.1	0.91
	Offshore	D=	6.2		15.2	8.3
		PT=	50		120	67
		BOI=	1.4		2.8	1.6
	Sum	D=	3.6		11.6	4.4
		PT=	90		290	110
		BOI=	2.2		6.9	2.5
Cormorants	Nearshore	D=	1.1		2.0	2.5
		PT=	20		34	42
		BOI=	0.33		0.63	0.80
	Offshore	D=	0.7		3.6	4.7
		PT=	6		28	38
		BOI=	0.14		0.42	0.54
	Sum	D=	1.2		2.4	3.2
		PT=	30		62	80
		BOI=	0.47		1.0	1.3
Herons	Nearshore	D=	2.9	2.0	5.0	0.6
		PT=	50	34	84	11
		BOI=	0.27	0.17	0.43	0.05

TABLE D-37 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Herons	Offshore	D=	2.5		9.0	
		PT=	20		72	
		BOI=	0.12		0.36	
	Sum	D=	2.8		6.4	
		PT=	70		160	
		BOI=	0.39		0.79	
Ducks and Geese	Nearshore	D=	1,107.9	0.8	104.8	568.8
		PT=	19,000	14	1,800	9,700
		BOI=	460	0.24	20	90
	Offshore	D=	590.7		34.8	161.9
		PT=	4,700		280	1,300
		BOI=	110		6.5	20
	Sum	D=	960.1		84.0	440.0
		PT=	24,000		2,100	11,000
		BOI=	570		27	110
Eagles and Hawks	Nearshore	D=				<0.1
		PT=				1
		BOI=				<0.01
Plovers	Nearshore	D=	3.5		1.7	0.6
		PT=	60		28	10
		BOI=	0.30		0.11	0.05
Sandpipers and other shorebirds	Nearshore	D=	1,306.2		63.5	261.2
		PT=	22,000		1,100	4,400
		BOI=	76		4.2	23
Gulls and Terns	Nearshore	D=	28.6	10.7	46.6	17.4
		PT=	490	180	790	300
		BOI=	7.9	3.3	9.6	5.1
	Offshore	D=	101.8		58.4	21.4
		PT=	800		470	170
		BOI=	14		7.5	2.8
	Sum	D=	52.0		52.0	18.8
		PT=	1,300		1,300	470
		BOI=	22		17	0.24

TABLE D-37 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Alcids	Offshore	D=	3.7		15.8	0.6
		PT=	30		130	4
		BOI=	0.97		4.7	0.24
Summary	Nearshore	D=	2,346.4	11.7	233.4	855.4
		PT=	42,000	230	4,000	15,000
		BOI=	550	3.8	40	120
	Offshore	D=	925.0		137.7	204.2
		PT=	7,400		1,100	1,600
		BOI=	160		22	26
	Sum	D=	1,960.0		204.0	640.0
		PT=	49,000		5,100	16,000
		BOI=	710		62	150

TABLE D-38. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, CHERRY POINT SUBREGION (0602), 1978

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	51.7	0.4	0.3	1.5
		PT=	780	5	5	21
		BOI=	15	0.08	0.08	0.39
Grebes	Nearshore	D=	6.1	0.5	2.6	5.4
		PT=	90	7	37	76
		BOI=	2.6	0.22	1.0	1.7
Cormorants	Nearshore	D=	0.2	0.6	3.4	3.0
		PT=	3	8	48	42
		BOI=	0.07	0.15	0.99	0.87
Herons	Nearshore	D=	<0.1	0.1	<0.1	<0.1
		PT=	<1	1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Ducks and Geese	Nearshore	D=	1,534.7	18.4	7.7	78.0
		PT=	22,000	260	110	1,100
		BOI=	550	6.5	2.5	21
Plovers	Nearshore	D=	<0.1	0.1	<0.1	<0.1
		PT=	<1	1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Sandpipers and other shorebirds	Nearshore	D=	<0.1	<0.1	0.4	4.8
		PT=	<1	<1	6	68
		BOI=	<0.01	<0.01	0.03	0.37
Gulls and Terns	Nearshore	D=	91.8	10.7	17.5	24.5
		PT=	1,300	150	250	350
		BOI=	16	2.8	3.5	5.4
Alcids	Nearshore	D=	0.5	0.7	3.5	0.4
		PT=	6	9	50	6
		BOI=	0.32	0.37	2.1	0.25
Summary	Nearshore	D=	1,695.7	31.5	35.9	117.8
		PT=	24,000	440	510	1,700
		BOI=	580	10	10	30

TABLE D-39. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, BIRCH BAY SUBREGION (0603), 1978

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.8	0.5	2.6	2.9
		PT=	7	4	24	26
		BOI=	0.11	0.07	0.39	0.50
	Offshore	D=	3.1		2.5	2.5
		PT=	30		25	25
		BOI=	0.55		0.42	0.48
	Sum	D=	2.1		2.6	2.7
		PT=	40		49	51
		BOI	0.66		0.80	0.98
Grebes	Nearshore	D=	19.8	11.2	55.5	13.5
		PT=	180	100	500	120
		BOI=	5.0	3.0	14	3.4
	Offshore	D=	13.8		3.0	9.0
		PT=	140		30	90
		BOI=	3.9		0.54	2.2
	Sum	D=	16.8		27.9	11.1
		PT=	320		530	210
		BOI=	8.9		15	5.5
Cormorants	Nearshore	D=	0.6	0.2	3.9	0.6
		PT=	5	2	35	5
		BOI=	0.84	0.02	0.61	0.09
	Offshore	D=	5.6		2.5	6.0
		PT=	60		25	60
		BOI=	1.2		0.57	1.2
	Sum	D=	3.7		3.2	3.4
		PT=	70		60	65
		BOI=	2.1		1.2	1.3
Herons	Nearshore	D=	1.2	2.1	1.6	0.5
		PT=	10	19	14	4
		BOI=	0.05	0.10	0.07	0.02

TABLE D-39 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=	591.1		267.5	318.6
		PT=	5,300		2,400	2,900
		BOI=	130		33	45
	Offshore	D=	185.4		30.5	151.5
		PT=	1,900		300	1,500
		BOI=	42		7.6	35
	Sum	D=	378.9		142.1	231.6
		PT=	7,200		2,700	4,400
		BOI=	170		41	80
Eagles and Hawks	Nearshore	D=		0.1		
		PT=		<1		
		BOI=		<0.01		
Plovers	Nearshore	D=	<0.1	0.2	1.2	0.1
		PT=	<1	2	11	1
		BOI=	<0.01	<0.01	.03	<0.01
Sandpipers and other shorebirds	Nearshore	D=	2.6		5.8	6.4
		PT=	20		52	57
		BOI=	0.11		0.25	0.30
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	144.2	30.3	49.8	37.2
		PT=	1,300	270	450	330
		BOI=	16	4.5	6.1	5.1
	Offshore	D=	58.2		17.5	38.5
		PT=	590		180	380
		BOI=	7.0		2.6	4.2
	Sum	D=	100.5		32.6	37.9
		PT=	1,900		620	720
		BOI=	24		8.7	0.7
Alcids	Nearshore	D=	0.1	0.1	0.4	0.2
		PT=	1	<1	4	2
		BOI=	0.05	0.05	0.18	0.10

TABLE D-39 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Alcids	Offshore	D=	1.5		13.5	2.0
		PT=	20		140	20
		BOI=	0.63		5.4	0.67
	Sum	D=	<0.1		0.9	0.3
		PT=	20		140	22
		BOI=	0.68		5.6	0.77
Summary	Nearshore	D=	755.6	44.7	388.4	379.8
		PT=	6,800	400	3,500	3,400
		BOI=	150	7.8	56	55
	Offshore	D=	270.0		71.0	210.5
		PT=	2,700		700	2,100
		BOI=	56		17	43
	Sum	D=	500.0		221.1	289.5
		PT=	9,500		4,200	5,500
		BOI=	210		73	98

TABLE D-40. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, SEMIAHMOO SPIT SUBREGION (0604), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.9	1.2	2.2	4.8
		PT=	9	12	21	46
		BOI=	0.15	0.18	0.31	0.80
Grebes	Nearshore	D=	3.1	1.9	515.6	49.3
		PT=	30	18	4,900	470
		BOI=	0.66	0.54	150	12
Cormorants	Nearshore	D=	1.8	1.2	11.4	6.7
		PT=	20	12	110	64
		BOI=	0.38	0.27	2.2	1.2
Herons	Nearshore	D=	0.9	6.9	7.4	0.1
		PT=	8	65	71	1
		BOI=	0.04	0.33	0.36	<0.01
Ducks and Geese	Nearshore	D=	914.3	36.2	234.7	755.7
		PT=	8,700	340	2,200	7,200
		BOI=	190	4.7	52	140
Sandpipers and other shorebirds	Nearshore	D=			0.7	438.8
		PT=			7	4,200
		BOI=			0.04	22
Gulls and Terns	Nearshore	D=	226.2	26.2	79.3	55.4
		PT=	2,100	250	750	530
		BOI=	26	3.9	12	8.3
Alcids	Nearshore	D=		0.6	1.0	0.5
		PT=		6	10	5
		BOI=		0.19	0.52	0.20
Summary	Nearshore	D=	1,147.4	74.4	853.7	1,318.7
		PT=	11,000	710	8,100	13,000
		BOI=	220	10	210	190

TABLE D-41. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, DRAYTON HARBOR SUBREGION (0605), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	2.3	1.2	3.3	10.1
		PT=	30	15	43	130
		BOI=	0.46	0.22	0.66	2.7
Grebes	Nearshore	D=	27.9	1.1	27.7	15.4
		PT=	360	14	350	200
		BOI=	8.8	0.42	9.4	4.8
Cormorants	Nearshore	D=	3.8	4.0	6.0	8.0
		PT=	50	51	78	100
		BOI=	0.81	0.79	1.3	1.9
Herons	Nearshore	D=	3.0	8.7	6.8	0.2
		PT=	40	110	87	3
		BOI=	0.19	0.56	0.44	0.02
Ducks and Geese	Nearshore	D=	143.0	13.5	367.4	635.2
		PT=	1,800	170	4,700	8,100
		BOI=	41	2.5	46	100
Eagles and Hawks	Nearshore	D=		<0.1		<0.1
		PT=		<1		<1
		BOI=		<0.01		<0.01
Rails	Nearshore	D=	0.6	<0.1	0.1	0.3
		PT=	8	<1	2	3.6
		BOI=	0.02	<0.01	<0.01	0.01
Plovers	Nearshore	D=	0.5	1.1	2.2	<0.1
		PT=	5	14	28	<1
		BOI=	0.02	0.04	0.09	<0.01
Sandpipers and other shorebirds	Nearshore	D=	133.5		26.1	120.7
		PT=	1,700		330	1,500
		BOI=	9.4		1.9	8.2
Gulls and Terns	Nearshore	D=	40.3	56.0	92.4	66.4
		PT=	520	720	1,200	850
		BOI=	7.0	12	13	12

TABLE D-41 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Alcids	Nearshore	D=	0.5			0.2
		PT=	6			3
		BOI=	0.29			0.13
Summary	Nearshore	D=	355.4	85.6	532.1	856.7
		PT=	4,500	1,100	6,800	11,000
		BOI=	68	16	73	130

TABLE D-42. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, BOUNDARY BAY SUBREGION (0606), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=				6.7
		PT=				500
		BOI=				7.5
	Offshore	D=	15.9		0.9	32.8
		PT=	1,300		72	2,700
		BOI=	26		1.1	60
	Sum	D=				20.4
		PT=				3,200
		BOI=				67
Grebes	Offshore	D=	51.2		38.1	113.8
		PT=	4,200		3,100	9,300
		BOI=	100		92	270
Cormorants	Nearshore	D=				3.3
		PT=				250
		BOI=				3.5
	Offshore	D=				2.8
		PT=				230
		BOI=				4.9
	Sum	D=				3.1
		PT=				480
		BOI=				8.4
Ducks and Geese	Nearshore	D=				300
		PT=				22,000
		BOI=				340
	Offshore	D=	134.1		42.8	300.8
		PT=	11,000		3,500	25,000
		BOI=	120		86	420
	Sum	D=				300.8
		PT=				47,000
		BOI=				760

TABLE D-42 (continued).

Family	Area		Period Spring	Summer*	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=				173.3
		PT=				13,000
		BOI=				240
	Offshore	D=	25.6		15.6	79.3
		PT=	2,100		1,300	6,500
		BOI=	38		20	100
	Sum	D=				127.4
		PT=				20,000
		BOI=				340
Alcids	Offshore	D=	0.4		10.9	79.5
		PT=	53		900	6,500
		BOI=	2.9		36	210
Summary	Nearshore	D=				486.7
		PT=				36,000
		BOI=				580
	Offshore	D=	231.7		118.1	615.5
		PT=	19,000		9,700	50,000
		BOI=	290		230	1,100
	Sum	D=				554.1
		PT=				87,000
		BOI=				1,700

*No data are available

TABLE D-43. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, SAN JUAN ISLANDS NORTHERN TIER SUBREGION (0607), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.2		8.2	14.3
		PT=	1		41	72
		BOI=	0.02		0.82	1.4
	Offshore	D=	28.9			
		PT=	850			
		BOI=	17			
	Sum	D=	24.7			
		PT=	850			
		BOI=	17			
Grebes	Nearshore	D=	2.0		11.9	7.3
		PT=	10		60	36
		BOI=	0.26		1.1	0.84
Cormorants	Nearshore	D=	6.2	7.9	32.6	21.7
		PT=	30	40	160	110
		BOI=	0.66	0.90	3.6	2.5
	Offshore	D=	1.1			
		PT=	30			
		BOI=	0.75			
	Sum	D=	1.8			
		PT=	60			
		BOI=	1.4			
Herons	Nearshore	D=		0.2	0.6	<0.01
		PT=		<1	3	<1
		BOI=		<0.01	0.01	<0.01
Ducks and Geese	Nearshore	D=	19.6	2.9	2.3	63.0
		PT=	100	14	12	310
		BOI=	1.8	0.26	0.28	6.4
Eagles and Hawks	Nearshore	D=	0.9	0.6	0.5	2.2
		PT=	4	3	2	11
		BOI=	0.03	0.02	0.02	0.08

TABLE D-43 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter 1978/79
Oystercatchers	Nearshore	D=	0.5			0.6
		PT=	2			3
		BOI=	0.05			0.06
Sandpipers and other shorebirds	Nearshore	D=	4.9		1.5	1.9
		PT=	20		7	9
		BOI=	0.12		0.09	0.11
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	108.8	44	260.9	128.1
		PT=	540	220	1,300	640
		BOI=	8.2	4.2	18	9.0
	Offshore	D=	80.0	1.4	5.0	181.7
		PT=	2,400	42	150	5,300
		BOI=	31	0.80	2.3	53
	Sum	D=	87.2	7.6	43.6	174.4
		PT=	3,000	260	1,500	6,000
		BOI=	39	5.0	21	62
Alcids	Nearshore	D=	7.2	19.8	59.3	33.4
		PT=	40	99	300	170
		BOI=	1.2	3.6	9.6	6.1
	Offshore	D=	6.7		25.0	225.8
		PT=	200		740	6,600
		BOI=	6.4		24	220
	Sum	D=	7.1		29.1	197.7
		PT=	240		1,000	6,800
		BOI=	7.6		34	230
Summary	Nearshore	D=	151.7	75.7	388.2	274.0
		PT=	760	380	1,900	1,400
		BOI=	12	9.0	34	27
	Offshore	D=	116.7	1.4	30.0	408.3
		PT=	3,400	42	880	12,000
		BOI=	55	0.79	26	280

TABLE D-43 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Summary	Sum	D=	122.0	12.2	81.4	377.9
		PT=	4,200	420	2,800	13,000
		BOI=	68	9.8	60	30

TABLE D-44. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, GEORGIA STRAIT OPEN WATERS SUBREGION (0608), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Offshore	D=	17.2		1.6	3.3
		PT=	5,000		460	950
		BOI=	100		9.2	20
Grebes	Offshore	D=	2.8		0.7	5.8
		PT=	660		200	1,700
		BOI=	20		4.1	49
Cormorants	Offshore	D=	1.0		1.5	1.2
		PT=	290		420	340
		BOI=	6.4		8.8	7.8
Ducks and Geese	Offshore	D=	8.7		1.0	19.6
		PT=	2,500		290	5,600
		BOI=	51		6.6	94
Gulls and Terns	Offshore	D=	7.4		44.3	23.4
		PT=	2,100		13,000	6,700
		BOI=	36		170	100
Alcids	Offshore	D=	7.0		40.1	34.4
		PT=	2,000		12,000	9,900
		BOI=	67		380	310
Summary	Offshore	D=	45		90.9	88.2
		PT=	13,000		26,000	25,000
		BOI=	280		570	590

*No data are available

SECTION VII

Region 7. Western Georgia Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE D-45. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE WESTERN GEORGIA STRAIT REGION, POINT ROBERTS SUBREGION (0701), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	5.1		3.0	4.0
		PT=	80		48	65
		BOI=	1.6		0.86	1.3
Grebes	Nearshore	D=	31.4	1.6	11.9	24.0
		PT=	510	26	190	390
		BOI=	15	0.79	5.0	9.9
Cormorants	Nearshore	D=	5.4	0.4	2.1	8.4
		PT=	90	7	34	140
		BOI=	1.9	0.15	0.62	2.7
Herons	Nearshore	D=		0.4	0.3	0.1
		PT=		7	5	2
		BOI=		0.03	0.03	0.01
Ducks and Geese	Nearshore	D=	320.4	5.2	28.8	245.8
		PT=	5,200	85	470	4,000
		BOI=	120	2.0	9.4	64
Eagles and Hawks	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Plovers	Nearshore	D=	0.2	0.4	0.3	<0.1
		PT=	4	7	4	<1
		BOI=	0.01	0.02	0.01	<0.01
Sandpipers and other shorebirds	Nearshore	D=	7.3		0.3	0.2
		PT=	120		5	4
		BOI=	0.71		0.03	0.02
Jaegers	Nearshore	D=			0.2	
		PT=			3	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	70.4	31.6	91.5	74.8
		PT=	1,100	520	1,500	1,200
		BOI=	19	9.8	21	20

TABLE D-45 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Alcids	Nearshore	D=	48.3	4.8	3.2	18.8
		PT	790	78	52	310
		BOI=	26	4.0	1.9	11
Summary	Nearshore	D=	489.1	44.4	142.2	377.9
		PT=	8,000	720	2,300	6,200
		BOI=	180	16	39	110

TABLE D-46. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE WESTERN GEORGIA STRAIT REGION, TSAWWASSEN BAY SUBREGION (0702), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	4.4		0.8	2.4
		PT=	27		2	14
		BOI=	0.40		0.03	0.22
Grebes	Nearshore	D=	2.7		53.3	20.7
		PT=	16		120	130
		BOI=	0.28		2.8	2.2
Cormorants	Nearshore	D=	3.0	9.2	7.5	11.3
		PT=	18	56	17	69
		BOI=	0.41	1.3	0.39	1.4
Herons	Nearshore	D=	0.9			0.4
		PT=	6			3
		BOI=	0.03			0.01
Ducks and Geese	Nearshore	D=	1,677.0	5.4	46.7	299.2
		PT=	10,000	33	110	1,800
		BOI=	220	0.84	2.6	0.24
Sandpipers and other shorebirds	Nearshore	D=			3.3	0.8
		PT=			8	5
		BOI=			0.01	0.06
Gulls and Terns	Nearshore	D=	442.9	218.5	1,159.2	123.6
		PT=	2,700	1,500	2,700	750
		BOI=	32	25	39	9.7
Summary	Nearshore	D=	2,130.6	233.1	476.6	458.4
		PT=	13,000	1,400	2,900	2,800
		BOI=	260	27	44	37

TABLE D-47. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE WESTERN GEORGIA STRAIT REGION, GEORGIA STRAIT OPEN WATERS SUBREGION (0703), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Offshore	D=	0.7		<0.1	0.1
		PT=	250		22	52
		BOI=	5.2		0.45	0.99
Grebes	Offshore	D=	2.0		0.4	0.3
		PT=	740		150	120
		BOI=	22		4.5	3.1
Cormorants	Offshore	D=	0.3		<0.1	0.2
		PT=	120		11	58
		BOI=	1.8		0.23	1.3
Ducks and Geese	Offshore	D=	0.6	<0.1	0.2	4.4
		PT=	210	21	70	1,600
		BOI=	5.4	0.54	1.7	26
Eagles and Hawks	Offshore	D=				<0.1
		PT=				3
		BOI=				0.02
Sandpipers and other shorebirds		D=				
		PT=			<0.1	
		BOI=			14	
					0.02	
Gulls and Terns	Offshore	D=	3.6	1.1	2.1	4.2
		PT=	1,300	400	750	1,500
		BOI=	20	7.7	8.1	21
Alcids	Offshore	D=	0.7		0.1	2.3
		PT=	260		42	800
		BOI=	8.3		1.5	29
Summary	Offshore	D=	8.0	1.2	2.9	11.5
		PT=	2,900	440	1,100	4,200
		BOI=	63	8.3	16	82

SECTION VIII

Region 8. Haro Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE D-48. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE HARO STRAIT REGION, NORTHERN SUBREGION (0801), 1979

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Loons	*Nearshore*	D=	3.9		7.4	7.4
		PT=	40		71	71
		BOI=	0.72		1.4	1.4
	Offshore	D=				2.8
		PT=				930
		BOI=				19
	Sum	D=				3.0
		PT=				1,000
		BOI=				20
Grebes	Nearshore	D=	2.6		11.3	21.4
		PT=	20		110	210
		BOI=	0.52		2.5	4.1
	Offshore	D=		1.8	6.2	
		PT=		580	2,100	
		BOI=		18	62	
	Sum	D=			6.5	
		PT=			2,200	
		BOI=			65	
Cormorants	Nearshore	D=	7.3	83.3	43.7	25.2
		PT=	70	800	420	240
		BOI=	1.4	18	9.0	5.4
	Offshore	D=		1.2	1.2	1.1
		PT=		390	410	360
		BOI=		8.8	9.4	8.2
	Sum	D=		3.5	2.5	1.8
		PT=		1,200	830	600
		BOI=		27	18	14
Herons	Nearshore	D=	0.1		0.2	0.3
		PT=	1		2	3
		BOI=	<0.01		<0.01	0.01

TABLE D-48 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=	42.0		25.3	170.9
		PT=	400		240	1,600
		BOI=	6.4		5.9	21
	Offshore	D=	1.7			0.4
		PT=	550			140
		BOI=	13			2.6
	Sum	D=	2.8			5.3
		PT=	950			1,800
		BOI=	19			24
Eagles and Hawks	Nearshore	D=	0.7		<0.1	2.6
		PT=	6		<1	25
		BOI=	0.05		<0.01	0.18
Oystercatchers	Nearshore	D=			0.02	<0.1
		PT=			2	<1
		BOI=			0.04	0.02
Sandpipers and other shorebirds	Nearshore	D=	0.2		<0.1	5.3
		PT=	2		<1	51
			<0.01		<0.01	0.55
Gulls and Terns	Nearshore	D=	118.6	135.4	237.6	79.4
		PT=	1,100	1,300	2,300	760
		BOI=	21	25	30	13
	Offshore	D=	1.7	3.5	61.3	20.9
		PT=	550	1,100	20,000	6,900
		BOI=	10	22	190	110
	Sum	D=	5.0	7.1	65.0	22.4
		PT=	1,700	2,400	22,000	7,600
		BOI=	32	47	220	130
Alcids	Nearshore	D=	2.1	30.0	36.2	6.4
		PT=	20	290	350	61
		BOI=	0.87	10	11	2.4
	Offshore	D=		0.6		2.6
		PT=		190		860
		BOI=		6.7		30

TABLE D-48 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978-79
Alcids	Sum	D=		1.4		2.7
		PT=		480		920
		BOI=		17		32
Summary	Nearshore	D=	179.7	179.6	367.1	312.5
		PT=	1,700	1,700	3,500	3,000
		BOI=	31	53	60	48
	Offshore	D=	3.3	7.1	68.7	28.3
		PT=	1,100	2,300	23,000	9,300
		BOI=	23	55	260	170
	Sum	D=	8.3	11.8	76.8	35.4
		PT=	2,800	4,000	26,000	12,000
		BOI=	55	110	320	220

TABLE D-49. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE HARO STRAIT REGION, SOUTHERN SUBREGION (0802), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.2		7.2	7.2
		PT=	<1		36	36
		BOI=	0.02		0.72	0.72
	Offshore	D=	<0.1		0.3	2.3
		PT=	7		60	510
		BOI=	0.15		1.2	10
	Sum	D=	<0.1		0.4	2.4
		PT=	7		96	540
		BOI=	0.17		1.9	11
Grebes	Nearshore	D=	4.1		2.7	3.9
		PT=	20		13	19
		BOI=	0.59		0.34	0.39
	Offshore	D=	0.5		<0.1	0.5
		PT=	100		20	100
		BOI=	3.0		0.60	3.0
	Sum	D=	0.5		0.1	0.5
		PT=	120		33	120
		BOI=	3.6		0.94	3.4
Cormorants	Nearshore	D=	1.1		4.0	2.5
		PT=	6		20	13
		BOI=	0.12		0.40	0.24
	Offshore	D=	0.7	0.6	1.2	1.0
		PT=	150	130	270	210
		BOI=	2.3	1.8	5.2	4.5
	Sum	D=	0.8		1.3	1.0
		PT=	160		290	230
		BOI=	2.4		5.6	4.8
Herons	Nearshore	D=			0.3	0.4
		PT=			2	2
		BOI=			<0.01	0.01

TABLE D-49 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=	6.0		1.9	23.2
		PT=	30		9	120
		BOI=	0.44		0.17	1.6
	Offshore	D=	0.8		<0.1	1.2
		PT=	160		10	270
		BOI=	5.4		0.13	5.4
	Sum	D=	0.8		0.1	1.7
		PT=	190		19	380
		BOI=	5.8		0.30	7.0
Eagles and Hawks	Nearshore	D=	<0.1		0.2	<0.1
		PT=	<1		1	4
		BOI=	<0.01		<0.01	0.03
Oystercatchers	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Sandpipers and other shorebirds	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	38.2		234.0	57.7
		PT=	190		1,200	290
		BOI=	2.4		15	4.4
	Offshore	D=	2.1	0.3	1.6	4.4
		PT=	460	64	350	360
		BOI=	6.3	1.2	5.3	14
	Sum	D=	2.9		6.7	5.3
		PT=	650		1,500	1,200
		BOI=	8.7		20	19
Alcids	Nearshore	D=	1.0		41.6	4.8
		PT=	5		210	24
		BOI=	0.17		6.8	0.89
	Offshore	D=	0.8	0.4	1.2	2.5
		PT=	170	95	250	540
		BOI=	6.0	4.6	9.5	18

TABLE D-49 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Alcids	Sum	D=	0.8		2.0	2.5
		PT=	180		460	570
		BOI=	6.2		16	18
Summary	Nearshore	D=	50.7		292.4	102.3
		PT=	250		1,500	510
		BOI=	3.8		23	8.2
	Offshore	D=	4.8	1.3	4.5	11.9
		PT=	1,100	290	990	2,600
		BOI=	23	7.5	22	55
	Sum	D=	6.2		11.1	13.8
		PT=	1,400		2,500	3,100
		BOI=	27		45	63

SECTION IX

Region 9. Rosario Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE D-50. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ROSARIO STRAIT REGION, SOUTHERN SUBREGION (0901), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.2		1.5	1.9
		PT=	2		16	21
		BOI=	0.04		0.31	0.44
	Offshore	D=	0.4		<0.1	5.5
		PT=	40		7	620
		BOI=	0.83		0.12	13
	Sum	D=	0.3		0.4	5.2
		PT=	40		23	640
		BOI=	0.86		0.43	13
Grebes	Nearshore	D=	2.9		35.7	9.4
		PT=	30		380	100
		BOI=	0.73		11	1.9
	Offshore	D=	0.2		0.1	0.2
		PT=	20		15	17
		BOI=	0.43		0.39	0.40
	Sum	D=	0.4		3.2	1.0
		PT=	50		400	120
		BOI=	1.2		11	2.3
Storm-Petrels	Offshore	D=				
		PT=			<1	
		BOI=			11	
					0.09	
Cormorants	Nearshore	D=	8.2	8.8	51.1	27.7
		PT=	90	95	550	300
		BOI=	1.8	2.2	12	6.3
	Offshore	D=	0.6	1.7	4.0	7.2
		PT=	60	190	440	810
		BOI=	1.3	2.9	8.0	17
	Sum	D=	1.2	2.4	8.9	8.9
		PT=	150	290	1,100	1,100
		BOI=	3.1	5.0	20	23

TABLE D-50 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Herons	Nearshore	D=			0.2	<0.1
		PT=			3	<1
		BOI=			0.01	<0.01
Ducks and Geese	Nearshore	D=	4.0	0.7	24.0	22.9
		PT=	40	8	260	250
		BOI=	0.95	0.19	4.3	4.2
	Offshore	D=	1.8		0.4	0.8
		PT=	200		40	92
		BOI=	3.0		0.95	1.8
	Sum	D=	1.9		2.4	2.8
		PT=	240		300	340
		BOI=	4.0		5.2	6.0
Eagles and Hawks	Nearshore	D=	<0.1		<0.1	0.4
		PT=	<1		<1	4
		BOI=	<0.01		<0.01	0.03
Oystercatchers	Nearshore	D=	<0.1		0.3	<0.1
		PT=	<1		3	<1
		BOI=	0.02		0.07	0.02
Plovers	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Sandpipers and other shore-birds	Nearshore	D=	0.2		1.5	1.6
		PT=	2		16	17
		BOI=	<0.01		0.19	0.17
Phalaropes	Nearshore	D=	0.3			
		PT=	30			
		BOI=	0.21			
	Offshore	D=			0.2	
		PT=			23	
		BOI=			0.15	

TABLE D-50 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Jaegers	Nearshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
	Offshore	D=				
		PT=			<0.1	
		BOI=			3	
					<0.01	
	Sum	D=				
		PT=			<0.1	
		BOI=			3	
					<0.01	
Gulls and Terns	Nearshore	D=	72.8	68.4	170.0	53.8
		PT=	790	740	1,800	580
		BOI=	14	14	29	10
	Offshore	D=	2.2	1.2	29.6	16.5
		PT=	250	130	3,300	1,900
		BOI=	4.2	2.4	43	23
	Sum	D=	8.1	7.1	42.2	19.5
		PT=	1,000	870	5,200	2,400
		BOI=	18	16	73	33
Alcids	Nearshore	D=	6.7	25.8	80.1	85
		PT=	70	280	860	920
		BOI=	3.2	14.1	30	30
	Offshore	D=	1.6	<0.1	24.5	55.0
		PT=	180	6	2,700	6,200
		BOI=	7.4	0.22	92	200
	Sum	D=	2.0	2.4	29.2	57.6
		PT=	250	290	3,600	7,100
		BOI=	11	14	120	230
Summary	Nearshore	D=	95.4	103.7	366.3	207.5
		PT=	1,000	1,100	4,000	2,200
		BOI=	21	30	87	54

TABLE D-50 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Summary	Offshore	D=	7.1	3.0	59.2	85.2
		PT=	800	340	6,700	9,600
		BOI=	17	5.6	150	250
	Sum	D=	14.6	12.2	89.3	97.4
		PT=	1,800	1,500	11,000	12,000
		BOI=	38	36	230	310

TABLE D-51. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ROSARIO STRAIT REGION, CENTRAL SUBREGION (0902), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=	2.2		0.8	2.3
		PT=	8		3	9
		BOI=	0.16		0.06	0.19
	Offshore	D=			2.6	5.1
		PT=			210	410
		BOI=			4.2	8.4
	Sum	D=			2.5	5.1
		PT=			210	420
		BOI=			4.2	8.5
Grebes	Nearshore	D=	0.3		7.8	28.8
		PT=	1		29	110
		BOI=	0.02		0.77	2.9
	Offshore	D=	1.0		18.3	8.6
		PT=	80		1,400	680
		BOI=	2.4		43	19
	Sum	D=	1.0		18.1	9.5
		PT=	80		1,500	790
		BOI=	2.4		44	22
Cormorants	Nearshore	D=	2.5		19.9	9.8
		PT=	10		74	36
		BOI=	0.21		1.4	0.78
	Offshore	D=	1.3		2.6	2.0
		PT=	110		210	160
		BOI=	2.4		4.7	3.6
	Sum	D=	1.4		3.4	2.4
		PT=	120		280	200
		BOI=	2.6		6.2	4.4
Herons	Nearshore	D=			0.2	0.3
		PT=			<1	1
		BOI=			<0.01	<0.01

TABLE D-51 (continued).

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=	8.4		7.0	14.9
		PT=	30		26	55
		BOI=	0.42		0.41	0.82
	Offshore	D=	2.3		6.5	3.4
		PT=	190		520	270
		BOI=	4.4		9.9	4.3
	Sum	D=	2.6		6.5	4.0
		PT=	220		540	330
		BOI=	4.9		10	5.1
Eagles and Hawks	Nearshore	D=	1.3		0.2	1.7
		PT=	5		<1	6
		BOI=	0.04		<0.01	0.05
Oystercatchers	Nearshore	D=				1.5
		PT=				6
		BOI=				0.12
Plovers	Nearshore	D=				2.2
		PT=				8
		BOI=				0.04
Sandpipers and other shorebirds	Nearshore	D=	1.4		1.0	4.1
		PT=	4		4	15
		BOI=	0.05		0.03	0.08
Jaegers	Nearshore	D=			0.6	
		PT=			2	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	99.8		439.6	290.1
		PT=	370		1,600	1,100
		BOI=	6.6		19	12
	Offshore	D=	5.3		113.9	43.4
		PT=	420		9,000	3,400
		BOI=	8.0		110	49
	Sum	D=	9.5		132.4	54.2
		PT=	790		11,000	4,500
		BOI=	15		130	62

TABLE D-51 (continued).

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978,79
Alcids	Nearshore	D=	1.0		91.2	4.0
		PT=	4		340	15
		BOI=	0.15		12	0.68
	Offshore	D=	2.0		72.2	48.0
		PT=	160		5,700	3,800
		BOI=	6.6		180	130
	Sum	D=	1.9		73.4	45.7
		PT=	160		6,100	3,800
		BOI=	6.8		200	130
Summary	Nearshore	D=	117.1		572.0	365.7
		PT=	430		2,100	1,400
		BOI=	7.7		34	18
	Offshore	D=	12.0		216.5	112.3
		PT=	950		17,000	8,900
		BOI=	24		360	210
	Sum	D=	16.8		228.6	120.3
		PT=	1,400		19,000	10,000
		BOI=	32		390	230

*No data are available

TABLE D-52. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ROSARIO STRAIT REGION, NORTHERN SUBREGION (0903), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	1.7	0.2	0.3	3.0
		PT=	6	<1	1	10
		BOI=	0.10	0.02	0.02	0.20
	Offshore	D=	18.5	0.3	0.7	0.6
		PT=	1,700	29	64	54
		BOI=	33	0.58	1.3	1.1
	Sum	D=	18.4	0.3	0.4	2.0
		PT=	1,700	29	65	64
		BOI=	33	0.59	1.3	1.3
Grebes	Nearshore	D=	1.2		14.1	40.5
		PT=	4		46	130
		BOI=	0.09		1.3	3.6
	Offshore	D=	3.8		3.4	2.1
		PT=	330		300	190
		BOI=	10		9.1	5.3
	Sum	D=	3.6		3.8	3.5
		PT=	330		350	320
		BOI=	10		10	8.9
Cormorants	Nearshore	D=	6.0	5.1	4.1	6.1
		PT=	20	17	14	20
		BOI=	0.45	0.39	0.27	0.41
	Offshore	D=	0.4			2.6
		PT=	40			230
		BOI=	0.85			4.2
	Sum	D=	0.7			4.6
		PT=	60			250
		BOI=	1.3			4.6
Herons	Nearsnore	D=			0.5	0.2
		PT=			2	<1
		BOI=			<0.01	<0.01

TABLE D-52 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=	221.8	1.5	1.2	40.4
		PT=	730	5	4	130
		BOI=	13	0.09	0.10	1.9
	Offshore	D=	27.3		0.2	1.7
		PT=	2,400		16	150
		BOI=	59		0.41	1.9
	Sum	D=	33.6		0.9	3.1
		PT=	3,100		20	290
		BOI=	73		0.50	3.8
Eagles and Hawks	Nearshore	D=	0.6	0.7	<0.1	2.2
		PT=	2	2	<1	7
		BOI=	0.01	0.02	<0.01	0.05
Plovers	Nearshore	D=			0.5	
		PT=			2	
		BOI=			<0.01	
Sandpipers and other shorebirds	Nearshore	D=			<0.1	2.7
		PT=			<1	9
		BOI=			<0.01	0.10
Jaegers	Offshore	D=			0.2	
		PT=			16	
		BOI=			0.03	
Gulls and Terns	Nearshore	D=	221.5	114.4	218.8	145.2
		PT=	730	380	720	480
		BOI=	11	7.1	9.4	6.4
	Offshore	D=	24.0	3.9	47.0	9.8
		PT=	2,100	340	4,200	870
		BOI=	24	6.5	58	14
	Sum	D=	30.4	7.8	53.1	15.2
		PT=	2,800	720	4,900	1,400
		BOI=	35	14	68	20
Alcids	Nearshore	D=	2.0	6.8	16.2	4.8
		PT=	7	23	54	16
		BOI=	0.3	1.1	1.8	0.60

TABLE D-52 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Alcids	Offshore	D=	0.4		84.8	34.2
		PT=	40		7,500	3,000
		BOI=	1.3		250	99
	Sum	D=	0.5		82.4	32.5
		PT=	50		7,600	3,000
		BOI=	1.6		250	99
Summary	Nearshore	D=	455.3	128.8	259.6	251.4
		PT=	1,500	420	860	830
		BOI=	26	8.7	13	13
	Offshore	D=	74.4	4.2	137.9	51.3
		PT=	6,600	370	12,000	4,600
		BOI=	130	7.1	320	120
	Sum	D=	87.8	8.7	141.0	58.6
		PT=	8,100	800	13,000	5,400
		BOI=	150	16	330	140

SECTION X

Region 10. San Juan Islands - Northern Waters region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE C-53. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS - NORTHERN WATERS REGION, PRESIDENT CHANNEL SUBREGION (1001), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=	6.3		24.4	6.2
		PT=	20		78	20
		BOI=	0.36		1.6	0.40
	Offshore	D=	0.1		0.2	1.0
		PT=	10		20	100
		BOI=	0.27		0.40	2.1
	Sum	D=	0.3		0.9	1.1
		PT=	30		98	120
		BOI=	0.63		2.0	2.5
Grebes	Nearshore	D=	3.2		2.8	18.0
		PT=	10		9	58
		BOI=	0.27		0.24	1.3
	Offshore	D=	2.7		1.0	3.5
		PT=	270		100	350
		BOI=	7.9		3.0	10
	Sum	D=	2.9		1.9	4.0
		PT=	280		110	410
		BOI=	8.2		3.3	12
Cormorants	Nearshore	D=	2.5		7.9	2.8
		PT=	8		25	9
		BOI=	0.18		0.51	0.19
	Offshore	D=			0.6	1.4
		PT=			60	140
		BOI=			1.4	3.3
	Sum	D=			0.8	1.4
		PT=			86	150
		BOI=			1.9	3.5
Herons	Nearshore	D=	0.1		0.2	0.2
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01

TABLE D-53 (continued).

Family	Area		Period: Spring	Summer*	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=	9.4		6.3	68.6
		PT=	30		20	220
		BOI=	0.59		0.51	2.9
	Offshore	D=	1.1		1.7	0.4
		PT=	110		170	41
		BOI=	1.5		4.3	0.63
	Sum	D=	1.4		1.8	2.5
		PT=	140		190	260
		BOI=	2.1		4.8	3.5
Eagles and Hawks	Nearshore	D=	0.4			0.5
		PT=	1			2
		BOI=	<0.01			0.01
Sandpipers and other shorebirds	Nearshore	D=			1.1	1.2
		PT=			3	4
		BOI=			0.04	0.04
Gulls and Terns	Nearshore	D=	133.6		152.5	102.8
		PT=	430		490	330
		BOI=	8.1		6.8	4.9
	Offshore	D=	4.2		11.3	17.5
		PT=	420		1,100	1,800
		BOI=	7.5		17	23
	Sum	D=	3.2		103.6	20.3
		PT=	850		1,600	2,100
		BOI=	16		23	28
Alcids	Nearshore	D=	1.0		9.9	14.7
		PT=	3		32	47
		BOI=	0.11		1.5	2.3
	Offshore	D=	0.4		6.0	10.9
		PT=	40		600	1,100
		BOI=	1.7		26	37
	Sum	D=	0.7		6.1	10.6
		PT=	40		630	1,100
		BOI=	1.8		27	39

TABLE D-53 (continued)

Family	Area		Period Spring	Summer*	Fall	Winter 1978/79
Summary	Nearshore	D=	157.2		209.9	219.6
		PT=	500		670	700
		BOI=	9.6		11	12
	Offshore	D=	8.6		21.2	35.0
		PT=	860		2,100	3,500
		BOI=	19		51	76
	Sum	D=	13.5		27.0	40.5
		PT=	1,400		2,800	4,200
		BOI=	29		62	88

*No data are available

TABLE D-54. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS - NORTHERN WATERS REGION, NORTHERN AREAS SUBREGION (1002), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=			0.2	0.7
		PT=			<1	1
		BOI=			<0.01	0.03
	Offshore	D=				7.6
		PT=				360
		BOI=				7.4
	Sum	D=				7.4
		PT=				370
		BOI=				7.4
Grebes	Nearshore	D=			0.7	3.4
		PT=			1	7
		BOI=			0.04	0.15
	Offshore	D=			1.9	15.2
		PT=			90	730
		BOI=			2.7	21
	Sum	D=			1.8	14.8
		PT=			91	740
		BOI=			2.8	21
Cormorants	Nearshore	D=	1.4		7.8	5.1
		PT=	3		16	10
		BOI=	0.07		0.23	0.23
	Offshore	D=	0.8			1.6
		PT=	40			77
		BOI=	0.91			1.7
	Sum	D=	0.8			1.7
		PT=	40			87
		BOI=	0.98			1.9
Herons	Nearshore	D=				
		PT=			0.2	0.4
		BOI=			<1	<1
					<0.01	<0.01

TABLE D-54 (continued).

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=	2.9		3.8	7.2
		PT=	6		8	14
		BOI=	0.11		0.07	0.17
	Offshore	D=	5.0			10.4
		PT=	240			500
		BOI=	2.0			5.7
	Sum	D=	5.0			10.2
		PT=	250			510
		BOI=	2.1			5.8
Eagles and Hawks	Nearshore	D=	1.4		0.2	0.9
		PT=	3		<1	2
		BOI=	0.02		<0.01	0.01
Sandpipers and other shorebirds	Nearshore	D=				
		PT=			0.2	
		BOI=			<1	
					<0.01	
Gulls and Terns	Nearshore	D=	8.6		120.6	39.1
		PT=	17		240	78
		BOI=	0.29		2.6	1.2
	Offshore	D=	32.5		33.1	60.0
		PT=	1,600		1,600	2,900
		BOI=	26		22	32
	Sum	D=	32.0		36.0	60.0
		PT=	1,600		1,800	3,000
		BOI=	26		25	33
Alcids	Nearshore	D=	1.4		4.1	6.2
		PT=	3		8	12
		BOI=	0.16		0.45	0.55
	Offshore	D=			6.3	33.6
		PT=			300	1,600
		BOI=			9.7	54
	Sum	D=			6.2	32.0
		PT=			310	1,600
		BOI=			10	55

TABLE D-54 (continued)

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Summary	Nearshore	D=	15.7		138.7	64.4
		PT=	30		280	130
		BOI=	0.64		3.4	2.3
	Offshore	D=	39.2		43.8	131.2
		PT=	1,900		2,100	6,300
		BOI=	29		35	120
	Sum	D=	39.0		48.0	128.0
		PT=	1,900		2,400	6,400
		BOI=	30		38	120

*No data are available

SECTION XI

Region II. San Juan Islands Interior Channels and Passages region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE D-55. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS - INTERIOR CHANNELS AND PASSAGES REGION, SPEIDEN CHANNEL SUBREGION (1101), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	26.2		1.2	43.0
		PT=	30		1	47
		BOI=	0.58		0.03	0.95
	Offshore	D=	<0.1		0.4	15.6
		PT=	1		5	200
		BOI=	0.01		0.10	3.9
	Sum	D=	2.2		0.5	17.5
		PT=	30		7	240
		BOI=	0.59		0.13	4.9
Grebes	Nearshore	D=	16.2		87.5	
		PT=	20		96	
		BOI=	0.54		2.7	
	Offshore	D=	0.7		0.9	2.0
		PT=	9		12	26
		BOI=	0.22		0.32	0.74
	Sum	D=	2.2		8.0	
		PT=	30		110	
		BOI=	0.76		3.0	
Cormorants	Nearshore	D=	10.0		103.8	64.0
		PT=	10		110	70
		BOI=	0.25		2.5	1.4
	Offshore	D=	1.6	0.6	1.0	8.8
		PT=	20	8	13	110
		BOI=	0.35	0.16	0.27	2.5
	Sum	D=	2.2		9.5	13.1
		PT=	30		130	180
		BOI=	0.60		2.8	3.9
Ducks and Geese	Nearshore	D=				2.0
		PT=				2
		BOI=				0.04

TABLE D-55 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Ducks and Geese	Offshore	D=	0.3	0.5	0.5	2.9
		PT=	4	7	7	37
		BOI=	0.06	0.17	0.13	0.48
	Sum	D=				2.9
		PT=				39
		BOI=				0.52
Eagles and Hawks	Nearshore	D=	1.2			4.0
		PT=	1			4
		BOI=	0.01			0.03
Phalaropes	Offshore	D=				
		PT=			0.5	
		BOI=			6	
					0.04	
Jaegers	Offshore	D=				
		PT=			0.1	
		BOI=			1	
					<0.01	
Gulls and Terns	Nearshore	D=	9.1		238.8	95.0
		PT=	10		260	100
		BOI=	0.26		1.9	1.7
	Offshore	D=	1.5	0.6	81.4	41.7
		PT=	20	8	1,000	530
		BOI=	0.33	0.15	9.4	5.7
	Sum	D=	2.2		94.9	46.0
		PT=	30		1,300	630
		BOI=	0.59		11	7.3
Alcids	Nearshore	D=				
		PT=			6.2	16.0
		BOI=			7	18
					0.37	0.71
	Offshore	D=	5.0	<0.1	3.3	13.1
		PT=	60	1	41	170
		BOI=	2.4	0.04	1.8	6.2
	Sum	D=				
		PT=			3.5	13.2
		BOI=			48	180
					2.2	7.0

TABLE D-55 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Summary	Nearshore	D=	66.2		438.8	224.0
		PT=	70		480	250
		BOI=	1.6		7.5	4.8
	Offshore	D=	8.9	1.9	88.6	84.5
		PT=	110	24	1,100	1,100
		BOI=	3.4	0.52	12	20
	Sum	D=	13.1		116.8	94.9
		PT=	180		1,600	1,300
		BOI=	5.0		20	24

TABLE D-56. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS - INTERIOR PASSAGES AND CHANNELS REGION. NORTHERN SAN JUAN CHANNEL SUBREGION (1102), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=				0.2
		PT=	*			<1
		BOI=				0.01
	Offshore	D=	<0.1		1.5	1.0
		PT=	1		51	32
		BOI=	0.01		1.0	0.66
	Sum	D=				0.9
		PT=				33
		BOI=				0.67
Grebes	Nearshore	D=				
		PT=	*		0.1	0.4
		BOI=			<1	1
					<0.01	0.02
	Offshore	D=	<0.1			0.6
		PT=	2			21
		BOI=	0.05			0.57
	Sum	D=				0.6
		PT=				22
		BOI=				0.59
Cormorants	Nearshore	D=				
		PT=	*		0.1	1.0
		BOI=			<1	3
					<0.01	0.06
	Offshore	D=	0.2	<0.1	0.3	1.0
		PT=	7	1	10	34
		BOI=	0.14	0.02	0.15	0.71
	Sum	D=				
		PT=			0.3	1.0
		BOI=			10	37
					0.16	0.78

TABLE D-56 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=				
		PT=	*			9.9
		BOI=				29
						0.33
	Offshore	D=	<0.1		0.3	1.6
		PT=	1		10	55
		BOI=	0.01		0.27	0.76
	Sum	D=				
		PT=				2.3
		BOI=				84
						1.1
Eagles and Hawks	Nearshore	D=				
		PT=	*			0.3
		BOI=				<1
						<0.01
Phalaropes	Nearshore	D=				
		PT=	*		0.1	
		BOI=			<1	
					<0.01	
	Offshore	D=				
		PT=			<0.1	
		BOI=			3	
					0.02	
	Sum	D=				
		PT=			<0.1	
		BOI=			3	
					0.02	
Jaegers	Offshore	D=				
		PT=			<0.1	
		BOI=			2	
					<0.01	
Gulls and Terns	Nearshore	D=				
		PT=	*		11.6	28.3
		BOI=			34	82
					0.32	0.86
	Offshore	D=	1.3	<0.1	8.7	6.0
		PT=	40	3	290	200
		BOI=	0.78	0.05	2.9	2.7
	Sum	D=				
		PT=			8.9	7.8
		BOI=			320	280
					3.2	3.6

TABLE D-56 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Alcids	Nearshore	D=			0.4	1.8
		PT=	*		1	5
		BOI=			0.05	0.25
	Offshore	D=	0.8		0.4	11.6
		PT=	30		13	390
		BOI=	1.1		0.59	13
	Sum	D=				
		PT=			0.4	10.4
		BOI=			15	390
					0.64	14
Summary	Nearshore	D=				
		PT=	*		12.3	42.0
		BOI=			36	120
					0.38	1.5
	Offshore	D=	2.7	0.3	11.4	22.0
		PT=	90	9	380	730
		BOI=	2.1	0.14	5.0	19
	Sum	D=				
		PT=			11.5	24.5
		BOI=			410	850
					5.4	20

*No data are available

TABLE D-57. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS - INTERIOR CHANNELS AND PASSAGES REGION, SOUTHERN SAN JUAN CHANNEL SUBREGION (1103), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	2.1		0.2	4.5
		PT=	10		10	22
		BOI=	0.22		0.20	0.45
	Offshore	D=	<0.1		0.5	4.6
		PT=	3		23	200
		BOI=	0.07		0.47	4.1
	Sum	D=	0.2		0.7	4.5
		PT=	10		33	220
		BOI=	0.29		0.67	4.5
Grebes	Nearshore	D=	29.3		1.9	6.5
		PT=	150		9	33
		BOI=	2.8		0.20	0.57
	Offshore	D=	0.1		<0.1	0.9
		PT=	5		4	40
		BOI=	0.16		0.12	0.83
	Sum	D=	3.3		0.3	1.5
		PT=	160		13	73
		BOI=	3.0		0.31	1.4
Shearwaters	Offshore	D=				
		PT=			<0.1	
		BOI=			2	
					0.01	
Storm-Petrels	Nearshore	D=				
		PT=			0.5	
		BOI=			2	
					0.02	
Cormorants	Nearshore	D=	78.6		206.7	33.3
		PT=	400		1,000	170
		BOI=	8.2		23	3.3
	Offshore	D=			19.5	57.3
		PT=			850	2,500
		BOI=			19	57

TABLE D-57 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Cormorants	Sum	D=			39.2	55.7
		PT=			1,900	2,700
		BOI=			43	60
Herons	Nearshore	D=	0.7		0.2	4.5
		PT=	4		<1	22
		BOI=	0.02		<0.01	0.11
Ducks and Geese	Nearshore	D=	45.0		6.7	14.5
		PT=	230		34	72
		BOI=	4.9		0.56	1.1
	Offshore	D=			0.2	2.8
		PT=			8	120
		BOI=			0.17	1.7
	Sum	D=			0.8	3.9
		PT=			41	190
		BOI=			0.72	2.8
Eagles and Hawks	Nearshore	D=				0.2
		PT=				1
		BOI=				<0.01
Oystercatchers	Nearshore	D=	2.9		0.3	6.3
		PT=	10		2	32
		BOI=	0.32		0.03	0.70
Sandpipers and other shorebirds	Nearshore	D=	12.1			
		PT=	60			
		BOI=	0.71			
Jaegers	Offshore	D=			0.2	
		PT=			8	
		BOI=			0.01	
Gulls and Terns	Nearshore	D=	87.9		241.7	57.6
		PT=	440		1,200	290
		BOI=	8.3		18	4.5
	Offshore	D=	1.5	200.1	25.3	9.5
		PT=	70	8,700	1,100	410
		BOI=	1.1	370	14	5.7

TABLE D-57 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Gulls and Terns	Sum	D=	10.5		48.5	14.4
		PT=	510		2,300	700
		BOI=	9.4		33	10
Alcids	Nearshore	D=	22.1		9.8	32.4
		PT=	110		49	160
		BOI=	3.6		2.0	5.4
	Offshore	D=	0.5	91.8	6.6	19.1
		PT=	20	4,000	290	830
		BOI=	0.98	200	13	29
	Sum	D=	2.7		70.1	20.4
		PT=	130		340	990
		BOI=	4.6		15	34
Summary	Nearshore	D=	280.7		470.2	159.8
		PT=	1,400		2,400	800
		BOI=	29		45	16
	Offshore	D=	2.3	292.0	52.5	94.5
		PT=	100	13,000	2,300	4,100
		BOI=	2.3	370	47	98
	Sum	D=	30.9		94.8	101.0
		PT=	1,500		4,600	4,900
		BOI=	31		92	110

TABLE D-58. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, WASP PASS SUBREGION (1104), 1978

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=	1.0		0.3	2.0
		PT=	2		<1	5
		BOI=	0.04		0.01	0.10
Grebes	Nearshore	D=	6.1		1.0	20.0
		PT=	20		2	50
		BOI=	0.29		0.06	1.2
Cormorants	Nearshore	D=	3.6		2.7	7.8
		PT=	9		7	19
		BOI=	0.20		0.13	0.40
Herons	Nearshore	D=			0.2	<0.1
		PT=			<1	<1
		BOI=			<0.01	<0.01
Ducks and Geese	Nearshore	D=	3.4		1.5	18.8
		PT=	8		4	47
		BOI=	0.15		0.08	0.62
Eagles and Hawks	Nearshore	D=			<0.1	0.4
		PT=			<1	1
		BOI=			<0.01	<0.01
Oystercatchers	Nearshore	D=	<0.1			
		PT=	<1			
		BOI=	<0.01			
Phalaropes	Nearshore	D=			0.8	
		PT=			2	
		BOI=			0.01	
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	

TABLE D-58 (continued).

Family	Area		Period			
			Spring	Summer*	Fall	Winter 1978/79
Gulls and Terns	Nearshore	D=	9.0		18.5	21.6
		PT=	20		46	54
		BOI=	0.40		0.53	0.68
Alcids	Nearshore	D=	9.8		2.4	12.6
		PT=	20		6	31
		BOI=	1.0		0.23	1.3
Summary	Nearshore	D=	37.3		27.5	83.4
		PT=	100		69	210
		BOI=	2.1		1.1	4.4

*No data are available

TABLE D-59. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, UPRIGHT CHANNEL SUBREGION (1105), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Offshore	D=			0.5	2.0
		PT=			5	17
		BOI=			0.09	0.37
Grebes	Offshore	D=	0.7		1.5	2.1
		PT=	7		13	19
		BOI=	0.14		0.38	0.39
Cormorants	Offshore	D=	3.4		1.3	4.8
		PT=	30		12	42
		BOI=	1.0		0.26	0.95
Ducks and Geese	Offshore	D=			1.4	2.5
		PT=			12	22
		BOI=			0.19	0.28
Eagles and Hawks	Offshore	D=	0.1			
		PT=	1			
		BOI=	0.01			
Jaegers	Offshore	D=			0.1	
		PT=			1	
		BOI=			<0.01	
Gulls and Terns	Offshore	D=	2.1	39.2	30.0	18.4
		PT=	20	340	260	160
		BOI=	0.30	6.5	3.7	2.5
Alcids	Offshore	D=	1.0	13.0	3.7	6.4
		PT=	9	110	33	57
		BOI=	0.40	5.7	1.4	2.0
Summary	Offshore	D=	7.5	52.2	38.6	36.2
		PT=	70	460	340	320
		BOI=	1.9	12	6.0	6.5

TABLE D-60. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, HARNEY CHANNEL SUBREGION (1106), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=				0.9
		PT=				2
		BOI=				0.04
	Offshore	D=	1.3		1.0	3.4
		PT=	40		30	100
		BOI=	0.81		0.60	2.2
	Sum	D=				3.3
		PT=				110
		BOI=				2.2
Grebes	Nearshore	D=	1.2			8.1
		PT=	3			18
		BOI=	0.05			0.43
	Offshore	D=	2.3		1.0	27.2
		PT=	70		29	840
		BOI=	1.7		0.85	25
	Sum	D=	2.2			23.2
		PT=	70			850
		BOI=	1.8			25
Cormorants	Nearshore	D=	0.6		0.2	3.4
		PT=	1		<1	7
		BOI=	0.03		<0.01	0.16
	Offshore	D=	1.1	2.6	2.6	2.5
		PT=	30	79	81	76
		BOI=	0.71	1.8	1.7	1.6
	Sum	D=	1.0		2.5	2.7
		PT=	30		82	84
		BOI=	0.74		1.7	1.8
Herons	Nearshore	D=				0.6
		PT=				1
		BOI=				<0.01

TABLE D-60 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter 1978/79
Ducks and Geese	Nearshore	D=	0.42		0.5	15.5
		PT=	1		1	34
		BOI=	0.01		0.02	0.45
	Offshore	D=	1.6		1.3	26.1
		PT=	50		39	800
		BOI=	1.1		0.69	17
	Sum	D=	1.5		1.2	23.9
		PT=	50		40	840
		BOI=	1.2		0.71	17
Eagles and Hawks	Nearshore	D=			0.2	0.2
		PT=			<1	<1
		BOI=			<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	0.2			
		PT=	5			
		BOI=	0.02			
Phalaropes	Offshore	D=			<0.1	
		PT=			3	
		BOI=			0.02	
Gulls and Terns	Nearshore	D=	2.9		21.0	15.0
		PT=	6		46	33
		BOI=	0.12		0.56	0.49
	Offshore	D=	3.7	4.8	6.4	6.1
		PT=	110	150	200	190
		BOI=	2.1	2.8	2.4	2.5
	Sum	D=	3.6		7.3	6.7
		PT=	120		240	220
		BOI=	2.3		3.0	3.0

TABLE D-60 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Alcids	Nearshore	D=	3.1		0.2	1.4
		PT=	7		<1	3
		BOI=	0.25		0.02	0.12
	Offshore	D=	1.8	0.2	4.8	4.2
		PT=	50	5	150	130
		BOI=	2.1	0.27	5.1	4.7
	Sum	D=	1.9		4.6	3.6
		PT=	60		150	130
		BOI=	2.4		5.1	4.8
Summary	Nearshore	D=	8.2		22.2	45.1
		PT=	20		49	99
		BOI=	0.46		0.62	1.7
	Offshore	D=	12.0	7.6	17.2	69.7
		PT=	370	230	530	2,100
		BOI=	8.7	4.8	11	53
	Sum	D=	11.9		17.4	64.6
		PT=	390		580	2,200
		BOI=	9.1		12	54

TABLE D-61. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, OBSTRUCTION PASS SUBREGION (1107), 1978

Family	Area		Period			
			Spring*	Summer*	Fall*	Winter 1978/79
Loons	Nearshore	D=				
		PT=				1.1
		BOI=				3
Grebes	Nearshore	D=				0.06
		PT=				2.2
		BOI=				6
Cormorants	Nearshore	D=				0.09
		PT=				20.0
		BOI=				50
Ducks and Geese	Nearshore	D=				1.1
		PT=				23.3
		BOI=				58
Gulls and Terns	Nearshore	D=				0.65
		PT=				226.7
		BOI=				570
Alcids	Nearshore	D=				6.8
		PT=				17.8
		BOI=				44
Summary	Nearshore	D=				1.5
		PT=				291.1
		BOI=				730
						10.2

*No data are available

TABLE D-62. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR ISLANDS AND CHANNELS REGION, THATCHER PASS SUBREGION (1108), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	<0.1			0.4
		PT=	<1			2
		BOI=	<0.01			0.06
Grebes	Nearshore	D=	0.1		0.8	1.9
		PT=	1		4	10
		BOI=	0.01		0.13	0.29
Cormorants	Nearshore	D=	1.6	0.1	0.5	3.8
		PT=	7	1	2	20
		BOI=	0.14	0.02	0.05	0.35
Herons	Nearshore	D=			0.1	0.1
		PT=			1	<1
		BOI=			<0.01	<0.01
Ducks and Geese	Nearshore	D=	0.4		0.2	7.7
		PT=	2		1	40
		BOI=	0.01		0.01	0.70
Eagles and Hawks	Nearshore	D=	<0.1		<0.1	0.4
		PT=	<1		<1	2
		BOI=	<0.01		<0.01	0.01
Phalaropes	Nearshore	D=			0.6	
		PT=			3	
		BOI=			0.02	
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	3.2	1.9	43.0	9.8
		PT=	15	10	230	50
		BOI=	0.28	0.02	2.2	0.75

TABLE D-62 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Alcids	Nearshore	D=	2.3	1.4	3.4	6.3
		PT=	11	7	18	30
		BOI=	0.41	0.26	0.72	1.4
Summary	Nearshore	D=	7.6	3.4	48.9	29.7
		PT=	36	18	260	160
		BOI=	0.85	0.46	3.2	3.5

SECTION XII

Region 12. San Juan Islands-Interior Bays region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE D-63. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, MOSQUITO/ROCHE COMPLEX SUBREGION (1201), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter '978/'79
Loons	Nearshore	D=	1.3		7.6	4.9
		PT=	13		77	50
		BOI=	0.24		1.5	0.86
Grebes	Nearshore	D=	9.9		35.0	16.7
		PT=	100		360	170
		BOI=	2.0		8.9	2.8
Cormorants	Nearshore	D=	4.4	7.1	35.3	4.9
		PT=	45	72	360	50
		BOI=	0.88	1.4	7.4	1.1
Herons	Nearshore	D=	0.2		2.0	1.0
		PT=	2		20	10
		BOI=	0.01		0.10	0.06
Ducks and Geese	Nearshore	D=	93.5		198.8	392.2
		PT=	950		2,000	4,000
		BOI=	15		42	53
Eagles and Hawks	Nearshore	D=				
		PT=				0.2
		BOI=				2
						0.02
Sandpipers and others shore-birds	Nearshore	D=				
		PT=			1.1	
		BOI=			11	
					0.03	
Gulls and Terns	Nearshore	D=	13.2		104.3	5.9
		PT=	130		1,100	60
		BOI=	2.2		14	0.73

TABLE D-63 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Alcids	Nearshore	D=	2.2	3.5	7.0	0.8
		PT=	23	36	71	8
		BOI=	0.80	1.3	1.0	0.28
Summary	Nearshore	D=	124.7	10.6	386.5	421.6
		PT=	1,300	110	3,900	4,300
		BOI=	21	2.7	74	59

TABLE I: 54. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, FRIDAY HARBOR SUBREGION (1202), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	0.3			0.3
		PT=	<1			<1
		BOI=	<0.01			<0.01
Grebes	Nearshore	D=	1.9		2.3	23.8
		PT=	3		4	36
		BOI=	0.05		0.08	0.67
Cormorants	Nearshore	D=	1.4		0.1	2.9
		PT=	2		<1	4
		BOI=	0.04		<0.01	0.09
Ducks and Geese	Nearshore	D=	0.5		0.1	87.0
		PT=	1		<1	130
		BOI=	0.01		<0.01	1.7
Eagles and Hawks	Nearshore	D=				0.2
		PT=				<1
		BOI=				<0.01
Sandpipers and other shore-birds	Nearshore	D=			1.2	
		PT=			2	
		BOI=			<0.01	
Jaegers	Nearshore	D=			0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	7.7	3.3	104.5	211.8
		PT=	10	5	160	320
		BOI=	0.21	0.09	1.5	3.5

TABLE D-64 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Alcids	Nearshore	D=	0.5		8.4	20.4
		PT=	1		13	31
		BOI=	0.02		0.64	1.5
Summary	Nearshore	D=	12.2	3.3	116.8	346.4
		PT=	20	5	180	520
		BOI=	0.35	0.09	2.2	7.5

TABLE D-65. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, GRIFFIN BAY SUBREGION (1203), 1978

Family	Area		Period			
			Spring	Summer*	Fall*	Winter 1978/79
Loons	Nearshore	D=	2.6			1.1
		PT=	20			8
		BOI=	0.26			0.13
	Offshore	D=				0.5
		PT=				4
		BOI=				0.09
	Sum	D=				0.8
		PT=				12
		BOI=				0.22
Grebes	Nearshore	D=	1.2			52.0
		PT=	9			390
		BOI=	0.26			9.1
	Offshore	D=				8.2
		PT=				62
		BOI=				1.7
	Sum	D=				31.9
		PT=				450
		BOI=				11
Cormorants	Nearshore	D=	26.7			36.0
		PT=	200			270
		BOI=	4.2			5.7
	Offshore	D=	2.7			7.1
		PT=	20			53
		BOI=	0.47			1.1
	Sum	D=	14.7			22.7
		PT=	220			320
		BOI=	4.7			6.8
Herons	Nearshore	D=	1.2			
		PT=	9			
		BOI=	0.04			

TABLE D-65 (continued).

Family	Area		Period Spring	Summer*	Fall*	Winter 1978/79
Ducks and Geese	Nearshore	D=	52.0			619.5
		PT=	390			4,700
		BOI=	6.9			74
	Offshore	D=	0.4			32.9
		PT=	3			250
		BOI=	0.09			5.0
	Sum	D=	26.0			333.3
		PT=	390			5,000
		BOI=	7.0			79
Eagles and Hawks	Nearshore	D=	1.2			1.5
		PT=	9			10
		BOI=	0.06			0.08
Gulls and Terns	Nearshore	D=	20.0			64.0
		PT=	150			480
		BOI=	2.7			7.1
	Offshore	D=	6.7			30.0
		PT=	50			220
		BOI=	1.0			2.8
	Sum	D=	13.3			48.4
		PT=	200			700
		BOI=	3.7			9.9
Alcids	Nearshore	D=	9.3			4.0
		PT=	70			30
		BOI=	3.3			0.99
	Offshore	D=	0.4			14.7
		PT=	3			110
		BOI=	0.11			3.8
	Sum	D=	4.7			9.3
		PT=	70			140
		BOI=	3.4			4.8

TABLE D-65 (continued).

Family	Area		Period Spring	Summer*	Fall*	Winter 1978/79
Summary	Nearshore	D=	112.0			786.7
		PT=	840			5,900
		BOI=	18			97
	Offshore	D=	10.9			93.5
		PT=	80			700
		BOI=	1.7			14
	Sum	D=	61.3			440.0
		PT=	920			6,600
		BOI=	19			110

*No data are available

TABLE D-66. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION. FISHERMAN BAY SUBREGION (1205), 1978

Family	Area		Period			
			Spring*	Summer*	Fall*	Winter 1978/79
Loons	Nearshore	D=				0.7
		PT=				1
		BOI=				0.02
Grebes	Nearshore	D=				14.7
		PT=				28
		BOI=				0.45
Cormorants	Nearshore	D=				6.7
		PT=				13
		BOI=				0.21
Herons	Nearshore	D=				2.0
		PT=				4
		BOI=				0.02
Ducks and Geese	Nearshore	D=				388.7
		PT=				740
		BOI=				9.8
Gulls and Terns	Nearshore	D=				62.7
		PT=				120
		BOI=				1.8
Alcids	Nearshore	D=				0.7
		PT=				1
		BOI=				0.04
Summary	Nearshore	D=				476.0
		PT=				900
		BOI=				12

*No data are available

TABLE D-67. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, SWIFT'S/SHOAL BAYS SUBREGION (1206), 1978

Family	Area		Period			
			Spring*	Summer*	Fall*	Winter 1978/79
Loons	Nearshore	D=				0.3
		PT=				2
		BOI=				0.02
Grebes	Nearshore	D=				3.4
		PT=				16
		BOI=				0.26
Cormorants	Nearshore	D=				0.8
		PT=				4
		BOI=				0.08
Herons	Nearshore	D=				0.7
		PT=				3
		BOI=				0.02
Ducks and Geese	Nearshore	D=				88.0
		PT=				400
		BOI=				6.6
Plovers	Nearshore	D=				0.2
		PT=				<1
		BOI=				<0.01
Sandpipers and other shore-birds	Nearshore	D=				3.4
		PT=				16
		BOI=				0.08
Gulls and Terns	Nearshore	D=				19.7
		PT=				90
		BOI=				1.5
Summary	Nearshore	D=				116.4
		PT=				540
		BOI=				8.6

*No data are available

TABLE D-68. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, DEER HARBOR SUBREGION (1207), 1978

Family	Area		Period			
			Spring*	Summer*	Fall*	Winter 1978/79
Loons	Nearshore	D=				
		PT=				1.0
		BOI=				2
						0.03
Grebes	Nearshore	D=				
		PT=				3.0
		BOI=				6
						0.10
Cormorants	Nearshore	D=				
		PT=				3.0
		BOI=				6
						0.08
Ducks and Geese	Nearshore	D=				
		PT=				39.0
		BOI=				78
						1.0
Plovers	Nearshore	D=				
		PT=				1.0
		BOI=				2
						<0.01
Sandpipers and other shore-birds	Nearshore	D=				
		PT=				1.0
		BOI=				2
						<0.01
Gulls and Terns	Nearshore	D=				
		PT=				18.0
		BOI=				36
						0.07
Alcids	Nearshore	D=				
		PT=				1.0
		BOI=				2
						0.07

TABLE D-68 (continued).

Family	Area		Period Spring*	Summer*	Fall*	Winter 1978/79
Summary	Nearshore	D=				67.0
		PI=				134
		BOI=				1.8

*No data are available

TABLE D-69. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, WEST SOUND SUBREGION (1208), 1978

Family	Area		Period			
			Spring*	Summer*	Fall*	Winter 1978/79
Loons	Nearshore	D=				
		PT=				0.7
		BOI=				6
						0.11
Grebes	Nearshore	D=				
		PT=				50.0
		BOI=				460
						13
Cormorants	Nearshore	D=				
		PT=				2.8
		BOI=				25
						0.43
Ducks and Geese	Nearshore	D=				
		PT=				30.2
		BOI=				280
						5.3
Gulls and Terns	Nearshore	D=				
		PT=				1.4
		BOI=				13
						0.19
Alcids	Nearshore	D=				
		PT=				23.3
		BOI=				210
						6.8
Summary	Nearshore	D=				
		PT=				108.4
		BOI=				1,000
						26

*No data are available

TABLE D-70. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, EAST SOUND SUBREGION (1209), 1978

Family	Area		Period			
			Spring*	Summer*	Fall*	Winter 1978/79
Loons	Nearshore	D=				0.2
		PT=				1
		BOI=				0.01
	Offshore	D=				0.3
		PT=				7
		BOI=				0.12
	Sum	D=				0.3
		PT=				8
		BOI=				0.13
Grebes	Nearshore	D=				2.2
		PT=				7
		BOI=				0.12
	Offshore	D=				129.5
		PT=				3,400
		BOI=				100
	Sum	D=				114.9
		PT=				3,400
		BOI=				100
Cormorants	Nearshore	D=				1.4
		PT=				4
		BOI=				0.12
	Offshore	D=				0.9
		PT=				24
		BOI=				0.54
	Sum	D=				1.1
		PT=				28
		BOI=				0.66
Herons	Nearshore	D=				0.1
		PT=				<1
		BOI=				<0.01

TABLE D-70 (continued).

Family	Area		Period			
			Spring*	Summer*	Fall*	Winter 1978/79
Ducks and Geese	Nearshore	D=				14.8
		PT=				50
		BOI=				0.74
	Offshore	D=				6.3
		PT=				170
		BOI=				3.6
	Sum	D=				7.4
		PT=				220
		BOI=				4.3
Eagles and Hawks	Nearshore	D=				0.3
		PT=				1
		BOI=				0.01
Gulls and Terns	Nearshore	D=				2.0
		PT=				6
		BOI=				0.12
	Offshore	D=				0.7
		PT=				19
		BOI=				0.32
	Sum	D=				0.8
		PT=				25
		BOI=				0.44
Alcids	Nearshore	D=				0.4
		PT=				1
		BOI=				0.06
	Offshore	D=				0.4
		PT=				12
		BOI=				0.61
	Sum	D=				0.4
		PT=				13
		BOI=				0.67

TABLE D-70 (continued).

Family	Area		Period			
			Spring*	Summer*	Fall*	Winter 1978/79
Summary	Nearshore	D=				
		PT=				21.5
		BOI=				67
						1.2
	Offshore	D=				
		PT=				138.1
		BOI=				3,700
						110
	Sum	D=				
		PT=				128.4
		BOI=				3,800
						110

*No data are available

TABLE D-71. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, LOPEZ SOUND SUBREGION (1210), 1978

Family	Area		Period			
			Spring*	Summer*	Fall	Winter 1978/79
Loons	Nearshore	D=			1.4	7.6
		PT=			34	180
		BOI=			0.55	4.1
Grebes	Nearshore	D=			77.1	94.8
		PT=			1,800	2,300
		BOI=			44	57
Cormorants	Nearshore	D=			30.2	7.5
		PT=			720	180
		BOI=			15	3.8
Herons	Nearshore	D=			0.9	0.1
		PT=			22	3
		BOI=			0.11	0.01
Ducks and Geese	Nearshore	D=			163.1	190
		PT=			3,900	4,600
		BOI=			92	64
Eagles and Hawks	Nearshore	D=				0.2
		PT=				6
		BOI=				0.04
Gulls and Terns	Nearshore	D=			25.6	28.5
		PT=			610	680
		BOI=			8.4	12
Alcids	Nearshore	D=			6.8	5.5
		PT=			160	130
		BOI=			5.7	5.0
Summary	Nearshore	D=			305.4	336.4
		PT=			7,300	8,000
		BOI=			165	150

*No data are available

SECTION XIII

Region 13. Canadian Waters region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE D-72. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE CANADIAN WATERS REGION, ACTIVE PASS SUBREGION (1301), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Nearshore	D=	232.7		3.6	75.4
		PT=	2,400		38	790
		BOI=	49		0.77	16
Grebes	Nearshore	D=	1.5		0.4	0.7
		PT=	20		5	7
		BOI=	0.45		0.14	0.20
Cormorants	Nearshore	D=	342.6		20.2	106.4
		PT=	3,600		210	1,200
		BOI=	74		4.3	23
Herons	Nearshore	D=		0.4	<0.1	<0.1
		PT=		4	<1	<1
		BOI=		0.02	<0.01	<0.01
Ducks and Geese	Nearshore	D=	1.3	0.3	0.6	14.5
		PT=	10	3	7	150
		BOI=	0.3	0.07	0.15	1.9
Eagles and Hawks	Nearshore	D=	0.2	0.4	<0.1	0.6
		PT=	3	4	<1	9
		BOI=	0.02	0.03	<0.01	0.05
Gulls and Terns	Nearshore	D=	92.6	10.3	64.0	92.9
		PT=	970	110	670	980
		BOI=	10	2.0	7.4	13
Alcids	Nearshore	D=	3.9	1.0	0.4	13.2
		PT=	40	10	4	140
		BOI=	1.4	0.33	0.15	4.5
Summary	Nearshore	D=	674.8	12.4	89.3	304.0
		PT=	7,100	130	940	3,200
		BOI=	140	2.5	13	59

TABLE D-73. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE CANADIAN WATERS REGION, CANADIAN GULF ISLANDS SUBREGION (1302), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Offshore	D=	0.5		0.4	1.6
		PT=	70		60	220
		BOI=	1.5		1.2	4.6
Grebes	Offshore	D=	0.7		0.2	0.5
		PT=	100		25	68
		BOI=	2.7		0.65	1.7
Cormorants	Offshore	D=	1.4	0.5	3.0	5.5
		PT=	200	67	420	780
		BOI=	4.3	1.4	9.0	16
Herons	Offshore	D=				<0.1
		PT=				1
		BOI=				<0.01
Ducks and Geese	Offshore	D=	0.3	0.1	<0.1	1.2
		PT=	40	15	11	170
		BOI=	0.86	0.28	0.21	3.4
Eagles and Hawks	Offshore	D=	<0.1	<0.1	<0.1	0.3
		PT=	7	7	1	38
		BOI=	0.05	0.05	<0.01	0.27
Phalaropes	Offshore	D=			<0.1	
		PT=			1	
		BOI=			<0.01	
Jaegers	Offshore	D=			<0.1	
		PT=			1	
		BOI=			<0.01	
Gulls and Terns	Offshore	D=	14.4	1.8	7.0	18.5
		PT=	2,100	250	1,000	2,600
		BOI=	23	4.8	14	35

TABLE D-73 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Alcids	Offshore	D=	0.7	0.2	1.5	2.4
		PT=	100	22	210	340
		BOI=	3.7	0.92	7.0	11
Summary	Offshore	D=	18.1	2.6	12.1	29.9
		PT=	2,600	360	1,700	4,300
		BOI=	36	7.4	32	72

TABLE D-74. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE CANADIAN WATERS REGION, SIDNEY APPROACH SUBREGION (1303), 1978

Family	Area		Period			
			Spring	Summer	Fall	Winter 1978/79
Loons	Offshore	D=	0.3		0.4	8.9
		PT=	40		44	1,000
		BOI=	0.64		0.87	21
Grebes	Offshore	D=	0.7		0.2	5.8
		PT=	90		27	690
		BOI=	1.4		0.52	15
Cormorants	Offshore	D=	3.6	1.9	3.9	12.2
		PT=	420	220	460	1,400
		BOI=	7.6	4.2	9.8	32
Herons	Offshore	D=			0.2	
		PT=			23	
		BOI=			0.12	
Ducks and Geese	Offshore	D=	6.2	<0.1	3.5	37.1
		PT=	730	6	410	4,400
		BOI=	21	0.16	7.0	76
Oystercatches	Offshore	D=		0.1	<0.1	<0.1
		PT=		13	2	2
		BOI=		0.28	0.05	0.04
Sandpipers and other shore-birds	Offshore	D=				<0.1
		PT=				10
		BOI=				0.12
Gulls and Terns	Offshore	D=	5.4	48.7	16.0	9.2
		PT=	630	5,700	1,900	1,100
		BOI=	10	110	27	17

TABLE D-74 (continued).

Family	Area		Period Spring	Summer	Fall	Winter 1978/79
Alcids	Offshore	D=	3.4	4.2	2.8	13.7
		PT=	410	490	320	1,600
		BOI=	14	23	12	54
Summary	Offshore	D=	19.7	55.0	27.0	87.1
		PT=	2,300	6,500	3,200	10,000
		BOI=	55	140	57	210

APPENDIX E

REGIONAL AND SUBREGIONAL SUMMARIES OF BIRD FAMILY DENSITIES, PROJECTED TOTALS, AND BIRD OIL INDICES, 1979

Seasonal monthly groupings for 1979 are as follows: Spring--April and May; Summer--June; and Fall--July, August, September, and October.

SECTION I

Region 1. Swiftsure Bank region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-1. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SWIFTSURE BANK REGION, SWIFTSURE BANK SUBREGION (0101), 1979

Family	Area		Period		
			Spring*	Summer*	Fall
Shearwaters	Offshore	D=			52.7
		PT=			44,000
		BOI=			290
Storm-Petrels	Offshore	D=			0.2
		PT=			140
		BOI=			1.2
Phalaropes	Offshore	D=			2.8
		PT=			2,400
		BOI=			15
Jaegers	Offshore	D=			0.2
		PT=			140
		BOI=			0.16
Gulls and Terns	Offshore	D=			159.2
		PT=			130,000
		BOI=			1,200
Alcids	Offshore	D=			160.8
		PT=			140,000
		BOI=			1,900
Summary	Offshore	D=			375.8
		PT=			320,000
		BOI=			3,300

*No data are available

Region 2. Strait of Juan de Fuca-Outer region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-2. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, STRAIT OF JUAN DE FUCA (OUTER) SUBREGION (0201), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Offshore	D=	1.0		
		PT=	2,000		
		BOI=	40		
Shearwaters	Offshore	D=			0.2
		PT=			280
		BOI=			1.8
Cormorants	Offshore	D=	0.1		0.1
		PT=	220		210
		BOI=	4.5		4.7
Ducks and Geese	Offshore	D=	0.4		
		PT=	660		
		BOI=	14		
Phalaropes	Offshore	D=	0.4		2.3
		PT=	740		4,400
		BOI=	4.9		29
Gulls and Terns	Offshore	D=	1.2	0.6	9.9
		PT=	2,300	1,000	19,000
		BOI=	42	18	260
Alcids	Offshore	D=	1.2	0.6	62.6
		PT=	1,100	1,200	120,000
		BOI=	54	38	3,800
Summary	Offshore	D=	4.4	1.2	75.2
		PT=	8,200	2,400	142,000
		BOI=	200	56	4,100

TABLE E-3. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, VANCOUVER ISLAND SUBREGION (0202), 1979

No data are available.

TABLE E-4. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CAPE FLATTERY SUBREGION (0203), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.4		0.4
		PT=	2		2
		BOI=	0.04		0.04
Grebes	Nearshore	D=	13.2		
		PT=	71		
		BOI=	1.2		
Cormorants	Nearshore	D=	51.8	24.6	56.1
		PT=	280	130	300
		BOI=	6.2	3.0	6.8
Ducks and Geese	Nearshore	D=	6.4		
		PT=	35		
		BOI=	0.48		
Eagles and Hawks	Nearshore	D=	0.4		
		PT=	2		
		BOI=	0.01		
Oystercatchers	Nearshore	D=	1.4		2.5
		PT=	8		14
		BOI=	0.17		0.30
Sandpipers and other shore-birds	Nearshore	D=	2.1		
		PT=	12		
		BOI=	0.12		
Phalaropes	Nearshore	D=	95.7		
		PT=	520		
		BOI=	3.4		
Gulls and Terns	Nearshore	D=	1,074.3	34.6	1,047.8
		PT=	5,800	190	5,700
		BOI=	110	3.5	100

TABLE E-4 (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Nearshore	D=	70.4		43.6
		PT=	380		240
		BOI=	12		9.2
Summary	Nearshore	D=	1,318.6	60.9	1,150.7
		PT=	7,100	330	6,200
		BOI=	130	6.9	120

TABLE E-5. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, NEAH BAY SUBREGION (0204), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.8	0.2	1.7
		PT=	4	1	5
		BOI=	0.05	0.01	0.09
Grebes	Nearshore	D=	2.2	0.2	22.2
		PT=	10	1	100
		BOI=	0.25	0.02	2.0
Cormorants	Nearshore	D=	3.2	1.1	6.3
		PT=	14	5	28
		BOI=	0.32	0.11	0.60
Herons	Nearshore	D=	0.2	0.2	0.7
		PT=	1	1	3
		BOI=	<0.01	<0.01	0.02
Ducks and Geese	Nearshore	D=	35.1	0.7	32.1
		PT=	160	3	140
		BOI=	2.5	0.05	2.9
Eagles and Hawks	Nearshore	D=	0.2	0.4	0.5
		PT	<1	2	2
		BOI=	<0.01	0.01	<0.01
Plovers	Nearshore	D=	0.3		1.0
		PT=	1		5
		BOI=	<0.01		0.02
Sandpipers and other shore-birds	Nearshore	D=	22.8	0.9	30.9
		PT=	100	4	140
		BOI=	0.57	0.02	0.80
Gulls and Terns	Nearshore	D=	21.6	27.3	524.9
		PT=	97	120	2,400
		BOI=	1.7	1.7	31

TABLE E-5 (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Nearshore	D=	0.9	0.9	4.0
		PT=	4	4	18
		BOI=	0.16	0.14	0.70
Summary	Nearshore	D=	87.3	32.2	624.7
		PT=	390	140	2,800
		BOI=	5.6	2.1	38

TABLE E-6. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, NEAH BAY TO CLALLAM BAY SUBREGION (0205), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.0	1.3	1.0
		PT=	12	17	12
		BOI=	0.19	0.25	0.19
Grebes	Nearshore	D=	11.7		7.1
		PT=	150		92
		BOI=	3.9		1.4
Cormorants	Nearshore	D=	37.9	4.5	59.4
		PT=	490	58	770
		BOI=	11	1.3	17
Herons	Nearshore	D=			0.3
		PT=			4
		BOI=			0.02
Ducks and Geese	Nearshore	D=	47.9	13.6	31.0
		PT=	620	170	400
		BOI=	10	3.8	8.6
Eagles and Hawks	Nearshore	D=	1.4	1.0	
		PT=	17	12	
		BOI=	0.12	0.09	
Oystercatchers	Nearshore	D=			0.3
		PT=			4
		BOI=			0.09
Sandpipers and other shore-birds	Nearshore	D=			5.2
		PT=			67
		BOI=			0.56
Gulls and Terns	Nearshore	D=	133.1	116.4	825.2
		PT=	1,700	1,500	11,000
		BOI=	32	28	140

TABLE E-6 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Nearshore	D=	1.5	2.9	5.3
		PT=	20	37	69
		BOI=	0.69	1.8	2.9
Summary	Nearshore	D=	241.0	140.3	937.3
		PT=	3,100	1,800	12,000
		BOI=	57	36	170

TABLE E-7. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CLALLAM BAY SUBREGION (0206), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.6		0.6
		PT=	2		2
		BOI=	0.03		0.03
Grebes	Nearshore	D=	6.3		3.4
		PT=	20		11
		BOI=	0.43		0.28
Cormorants	Nearshore	D=	4.6	2.9	2.8
		PT=	15	9	9
		BOI=	0.30	0.19	0.18
Herons	Nearshore	D=		0.2	0.3
		PT=		<1	1
		BOI=		<0.01	<0.01
Ducks and Geese	Nearshore	D=	21.5	4.1	17.3
		PT=	69	13	55
		BOI=	1.2	0.30	1.3
Eagles and Hawks	Nearshore	D=	0.2		<0.1
		PT=	<1		<1
		BOI=	<0.01		<0.01
Oystercatchers	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.01		
Plovers	Nearshore	D=			0.1
		PT=			<1
		BOI=			<0.01
Sandpipers and other shore-birds	Nearshore	D=			0.3
		PT=			<1
		BOI=			<0.01

TABLE E-7 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Phalaropes	Nearshore	D=	1.0		
		PT=	3		
		BOI=	0.02		
Gulls and Terns	Nearshore	D=	31.4	35.4	208.0
		PT=	100	110	670
		BOI=	1.5	1.6	8.9
Alcids	Nearshore	D=	3.6	9.8	2.8
		PT=	12	32	9
		BOI=	0.55	1.7	0.36
Summary	Nearshore	D=	69.6	52.5	237.3
		PT=	220	170	760
		BOI=	4.1	3.8	11

TABLE E-8. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CLALLAM BAY TO CRESCENT BAY SUBREGION (0207), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.6	0.7	2.0
		PT=	34	14	41
		BOI=	0.56	0.23	0.65
Grebes	Nearshore	D=	5.4		7.6
		PT=	110		160
		BOI=	2.4		3.2
Cormorants	Nearshore	D=	11.8	1.6	3.5
		PT=	240	32	73
		BOI=	5.0	0.74	1.4
Herons	Nearshore	D=	0.2	0.7	1.9
		PT=	3	14	40
		BOI=	0.01	0.07	0.20
Ducks and Geese	Nearshore	D=	45.1	2.3	26.1
		PT=	940	49	540
		BOI=	15	0.89	12
Eagles and Hawks	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Plovers	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Sandpipers and other shore-birds	Nearshore	D=	0.8		11.4
		PT=	17		240
		BOI=	0.11		1.0
Gulls and Terns	Nearshore	D=	29.4	27.7	550.6
		PT=	610	580	11,000
		BOI=	11	8.8	130

TABLE E-8 (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Nearshore	D=	6.4	4.9	27.6
		PT=	130	100	570
		BOI=	5.0	3.6	28
Summary	Nearshore	D=	101.5	37.8	632.3
		PT=	2,100	790	13,000
		BOI=	39	14	180

TABLE E-9. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CRESCENT BAY SUBREGION (0208), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	2.5	1.2	3.3
		PT=	3	1	4
		BOI=	0.04	0.02	0.07
Grebes	Nearshore	D=	4.4		16.3
		PT=	5		18
		BOI=	0.10		0.31
Cormorants	Nearshore	D=	11.5	1.7	9.4
		PT=	13	2	10
		BOI=	0.27	0.04	0.23
Herons	Nearshore	D=			0.9
		PT=			1
		BOI=			<0.01
Ducks and Geese	Nearshore	D=	28.3	4.6	42.7
		PT=	31	5	47
		BOI=	0.58	0.12	1.1
Eagles and Hawks	Nearshore	D=	0.6	0.4	
		PT=	<1	<1	
		BOI=	<0.01	<0.01	
Oystercatchers	Nearshore	D=	4.6	3.3	1.6
		PT=	5	4	2
		BOI=	0.11	0.08	0.04
Plovers	Nearshore	D=	3.3	1.7	1.1
		PT=	4	2	1
		BOI=	0.02	<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	22.3	4.2	11.2
		PT=	25	5	12
		BOI=	0.20	0.02	0.07

TABLE E-9 (continued).

Family	Area		Period Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	58.8	8.3	318.4
		PT=	65	9	350
		BOI=	1.2	0.16	3.9
Alcids	Nearshore	D=	9.2	15.8	23.6
		PT=	10	17	26
		BOI=	0.44	0.68	0.95
Summary	Nearshore	D=	145.6	41.7	431.1
		PT=	160	46	470
		BOI=	3.0	1.1	6.7

TABLE E-10. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CRESCENT BAY TO EDIZ HOOK SUBREGION (0209), 1979

Family	Area		Period Spring	Summer	Fall
Loons	Nearshore	D=	2.7	0.4	1.6
		PT=	25	4	14
		BOI=	0.46	0.06	0.22
Grebes	Nearshore	D=	8.4		5.9
		PT=	76		53
		BOI=	1.7		0.84
Cormorants	Nearshore	D=	17.0	8.6	48.4
		PT=	150	78	440
		BOI=	3.2	1.8	10
Herons	Nearshore	D=	1.6	3.6	0.9
		PT=	14	33	8
		BOI=	0.07	0.16	0.04
Ducks and Geese	Nearshore	D=	78.9	10.4	9.8
		PT=	710	94	88
		BOI=	8.9	2.1	1.9
Sandpipers and other shore-birds	Nearshore	D=			3.6
		PT=			33
		BOI=			0.03
Gulls and Terns	Nearshore	D=	169.8	19.1	650.9
		PT=	1,500	170	5,900
		BOI=	28	3.3	84
Alcids	Nearshore	D=	5.4	15.0	1.4
		PT=	49	135	12
		BOI=	1.7	5.0	0.52
Summary	Nearshore	D=	288.4	57.7	726.6
		PT=	2,600	520	6,500
		BOI=	44	12	97

SECTION III

Region 3. Strait of Juan de Fuca-inner region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-11. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, STRAIT OF JUAN DE FUCA (INNER) SUBREGION (0301), 1979

Family	Area		Period Spring	Summer	Fall
Loons	Offshore	D=	1.9		0.1
		PT=	3,100		190
		BOI=	63		3.7
Grebes	Offshore	D=	0.1		
		PT=	150		
		BOI=	4.0		
Cormorants	Offshore	D=	1.5	0.1	0.4
		PT=	2,400	210	620
		BOI=	51	4.8	13
Ducks and Geese	Offshore	D=	1.1	0.1	0.1
		PT=	1,800	210	210
		BOI=	100	5.0	3.3
Phalaropes	Offshore	D=			0.8
		PT=			1,300
		BOI=			8.5
Jaegers	Offshore	D=			<0.1
		PT=			23
		BOI=			0.04
Gulls and Terns	Offshore	D=	7.7	10.4	26.6
		PT=	1,200	17,000	43,000
		BOI=	170	290	650
Alcids	Offshore	D=	1.7	3.2	21.6
		PT=	2,800	5,300	35,000
		BOI=	120	250	1,200
Summary	Offshore	D=	14.9	13.9	49.1
		PT=	24,000	23,000	80,000
		BOI=	510	550	1,900

TABLE E-12. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, EDIZ HOOK SUBREGION (0302), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.8		0.4
		PT=	<1		<1
		BOI=	<0.01		<0.01
Grebes	Nearshore	D=	2.6		2.7
		PT=	1		1
		BOI=	0.02		0.02
Cormorants	Nearshore	D=	3.0	1.5	7.6
		PT=	1	<1	3
		BOI=	0.03	0.01	0.07
Herons	Nearshore	D=			0.1
		PT=			<1
		BOI=			<0.01
Ducks and Geese	Nearshore	D=	7.4		8.8
		PT=	3		4
		BOI=	0.07		0.09
Plovers	Nearshore	D=	0.2		<0.1
		PT=	<1		<1
		BOI=	<0.01		<0.01
Sandpipers and other shore-birds	Nearshore	D=	<0.1		1.2
		PT=	<1		<1
		BOI=	<0.01		<0.01
Phalaropes	Nearshore	D=			9.0
		PT=			4
		BOI=			0.02
Gulls and Terns	Nearshore	D=	10.3	52.0	101.9
		PT=	4	21	41
		BOI=	0.07	0.39	0.53

TABLE E-12. (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Nearshore	D=	4.0	15.5	70.1
		PT=	2	6	28
		BOI=	0.07	0.31	1.2
Summary	Nearshore	D=	28.3	69.0	201.9
		PT=	11	28	81
		BOI=	0.26	0.71	1.9

TABLE E-13. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, PORT ANGELES SUBREGION (0303), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.0		0.3
		PT=	10		3
		BOI=	0.19		0.04
Grebes	Nearshore	D=	12.0	0.1	5.7
		PT=	120	1	59
		BOI=	3.0	0.04	1.4
Cormorants	Nearshore	D=	9.1	9.0	10.0
		PT=	95	93	100
		BOI=	2.1	2.1	2.4
Herons	Nearshore	D=	<0.1		1.3
		PT=	<1		14
		BOI=	<0.01		0.07
Ducks and Geese	Nearshore	D=	22.8	1.0	5.0
		PT=	240	11	52
		BOI=	5.6	0.20	1.0
Rails	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.01		
Plovers	Nearshore	D=	1.2		1.8
		PT=	12		19
		BOI=	0.06		0.10
Sandpipers and other shore-birds	Nearshore	D=	3.8		5.1
		PT=	40		53
		BOI=	0.32		0.37
Jaegers	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01

TABLE E-13 (continued).

Family	Area		Period Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	19.1	27.4	228.1
		PT=	200	280	2,400
		BOI=	3.7	5.4	30
Alcids	Nearshore	D=	1.9	0.3	8.2
		PT=	20	3	86
		BOI=	0.86	0.11	3.5
Summary	Nearshore	D=	71.1	37.8	265.7
		PT=	740	390	2,800
		BOI=	16	7.8	39

TABLE E-14. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, VOICE OF AMERICA SUBREGION (0304), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.2	0.6	1.7
		PT=	28	15	40
		BOI=	0.52	0.25	0.74
Grebes	Nearshore	D=	3.0	0.2	26.0
		PT=	71	4	620
		BOI=	1.4	0.12	12
Cormorants	Nearshore	D=	4.8	2.6	3.4
		PT=	120	63	81
		BOI=	2.6	1.4	1.8
Herons	Nearshore	D=			
		PT=		<0.1	<0.1
		BOI=		2	2
				<0.01	0.01
Ducks and Geese	Nearshore	D=	21.7	1.0	22.1
		PT=	520	25	530
		BOI=	11	0.61	12
Eagles and Hawks	Nearshore	D=	0.1		<0.1
		PT=	2		<1
		BOI=	0.02		<0.01
Plovers	Nearshore	D=			
		PT=		0.2	
		BOI=		6	
				0.02	
Sandpipers and other shore-birds	Nearshore	D=			
		PT=			1.1
		BOI=			25
					0.10
Phalaropes	Nearshore	D=			
		PT=			0.2
		BOI=			4
					0.03

TABLE E-14 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Jaegers	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Gulls and Terns	Nearshore	D=	23.6	101.5	135.4
		PT=	570	2,400	3,200
		BOI=	9.6	40	49
Alcids	Nearshore	D=	10.7	37.6	23.8
		PT=	260	900	570
		BOI=	12	43	26
Summary	Nearshore	D=	65.4	144.6	214.8
		PT=	1,600	3,500	5,100
		BOI=	37	85	100

TABLE E-15. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DUNGENESS SPIT SUBREGION (0305), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	10.0		0.8
		PT=	40		3
		BOI=	0.82		0.05
Grebes	Nearshore	D=	9.8		2.6
		PT=	39		10
		BOI=	0.68		0.16
Cormorants	Nearshore	D=	16.5	1.0	2.8
		PT=	66	4	11
		BOI=	1.5	0.09	0.23
Herons	Nearshore	D=	0.4		
		PT=	2		
		BOI=	<0.01		
Ducks and Geese	Nearshore	D=	62.7	1.0	20.2
		PT=	250	4	81
		BOI=	5.2	0.08	2
Eagles and Hawks	Nearshore	D=	0.4		
		PT=	2		
		BOI=	0.01		
Plovers	Nearshore	D=			0.4
		PT=			2
		BOI=			<0.01
Sandpipers and other shore-birds	Nearshore	D=	6.7		4.7
		PT=	27		19
		BOI=	0.12		0.08
Gulls and Terns	Nearshore	D=	35.2	258.0	542.6
		PT=	140	1,000	2,200
		BOI=	2.6	18	32

TABLE E-15 (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Nearshore	D=	11.5	17.0	29.6
		PT=	46	68	120
		BOI=	2.0	3.3	4.2
Summary	Nearshore	D=	153.8	277.0	604.3
		PT=	620	1,100	2,400
		BOI=	13	22	39

TABLE E-16. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DUNGENESS BAY/HARBOR SUBREGION (0306), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.3	<0.1	0.7
		PT=	16	<1	8
		BOI=	0.28	<0.01	0.14
Grebes	Nearshore	D=	12.7		3.5
		PT=	152		42
		BOI=	3.0		0.90
Cormorants	Nearshore	D=	6.9	4.1	7.8
		PT=	82	49	94
		BOI=	1.9	1.1	2.1
Herons	Nearshore	D=	<0.1	0.7	1.5
		PT=	<1	8	18
		BOI=	<0.01	0.04	0.09
Ducks and Geese	Nearshore	D=	317.7	3.4	146.1
		PT=	3,800	41	1,800
		BOI=	100	0.34	17
Eagles and Hawks	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.01		
Oystercatchers	Nearshore	D=	<0.1		<0.1
		PT=	<1		<1
		BOI=	0.02		0.01
Plovers	Nearshore	D=	25.0	4.5	9.2
		PT=	300	54	110
		BOI=	1.5	0.27	0.56
Sandpipers and other shore-birds	Nearshore	D=	100.0	10.4	26.2
		PT=	1,200	120	310
		BOI=	5.6	1.3	1.5

TABLE E-16 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Phalaropes	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Gulls and Terns	Nearshore	D=	106.9	181.2	276.5
		PT=	1,300	2,200	3,300
		BOI=	17	35	48
Alcids	Nearshore	D=	0.9	3.5	1.4
		PT=	11	42	17
		BOI=	0.49	1.7	0.70
Summary	Nearshore	D=	571.8	208.0	474.3
		PT=	6,900	2,500	5,700
		BOI=	130	40	70

TABLE E-17. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, JAMESTOWN SUBREGION (0307), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	2.1		2.5
		PT=	45		53
		BOI=	0.76		0.86
Grebes	Nearshore	D=	3.1		23.4
		PT=	67		500
		BOI=	1.2		8.3
Cormorants	Nearshore	D=	6.8	0.3	2.8
		PT=	140	7	59
		BOI=	3.3	0.17	1.3
Herons	Nearshore	D=		4.5	4.5
		PT=		96	97
		BOI=		0.48	0.49
Ducks and Geese	Nearshore	D=	431.2		224.6
		PT=	9,200		4,800
		BOI=	220		62
Plovers	Nearshore	D=	1.3	1.4	0.4
		PT=	29	30	8
		BOI=	0.15	0.09	0.03
Sandpipers and other shore-birds	Nearshore	D=	6.1	24.5	7.2
		PT=	130	520	150
		BOI=	0.58	6.1	0.68
Gulls and Terns	Nearshore	D=	183.9	490.7	275.7
		PT=	3,900	10,500	5,900
		BOI=	66	190	88
Alcids	Nearshore	D=	9.2	4.1	20.8
		PT=	200	89	440
		BOI=	8.2	3.1	19

TABLE E-17 (continued).

Family	Area		Period Spring	Summer	Fall
Summary	Nearshore	D=	649.0	525.9	563.0
		PT=	14,000	11,000	12,000
		BOI=	300	200	180

TABLE E-18. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, SEQUIM BAY SUBREGION (0308), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.4	1.4	1.1
		PT=	17	17	13
		BOI=	0.29	0.25	0.21
	Offshore	D=	2.5		1.7
		PT=	5		3
		BOI=	0.09		0.06
	Sum	D=	1.6		1.1
		PT=	22		16
		BOI=	0.38		0.27
Grebes	Nearshore	D=	4.7		25.0
		PT=	55		290
		BOI=	1.4		7.4
	Offshore	D=	8.3		42.5
		PT=	17		85
		BOI=	0.32		2.2
	Sum	D=	5.2		27.5
		PT=	72		380
		BOI=	1.7		9.6
Cormorants	Nearshore	D=	1.0		0.5
		PT=	12		6
		BOI=	0.24		0.14
	Offshore	D=			0.8
		PT=			2
		BOI=			0.04
	Sum	D=			0.5
		PT=			8
		BOI=			0.18
Herons	Nearshore	D=	0.2		0.9
		PT=	2		11
		BOI=	0.01		0.05

TABLE E-18 (continued).

Family	Area		Period Spring	Summer	Fall
Herons	Offshore	D=			2.5
		PT=			5
		BOI=			0.02
	Sum	D=			0.9
		PT=			16
		BOI=			0.06
Ducks and Geese	Nearshore	D=	84.0		29.0
		PT=	990		340
		BOI=	19		5.9
	Offshore	D=	203.3		19.2
		PT=	410		38
		BOI=	5.8		0.97
	Sum	D=	101.4		27.5
		PT=	1,400		380
		BOI=	25		6.9
Rails	Nearshore	D=			0.4
		PT=			5
		BOI=			0.01
Oystercatchers	Nearshore	D=	0.1		<0.1
		PT=	1		<1
		BOI=	0.03		0.02
Plovers	Nearshore	D=	7.9		0.7
		PT=	93		8
		BOI=	0.47		0.03
Sandpipers and other shore-birds	Nearshore	D=	84.2		17.9
		PT=	990		210
		BOI=	5.6		1.2

TABLE E-18 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	15.2		65.6
		PT=	180		770
		BOI=	3.3		11
	Offshore	D=	10.0	1.7	13.3
		PT=	20	3	27
		BOI=	0.36	0.06	0.37
	Sum	D=	14.5		64.6
		PT=	200		800
		BOI=	3.6		11
Alcids	Nearshore	D=	8.4	1.4	5.7
		PT=	99	17	67
		BOI=	3.7	0.58	2.4
	Offshore	D=			15.0
		PT=			30
		BOI=			1.1
	Sum	D=			5.9
		PT=			97
		BOI=			3.5
Summary	Nearshore	D=	207.3	2.9	147.2
		PT=	2,400	34	1,700
		BOI=	34	0.83	28
	Offshore	D=	230.8	1.7	99.2
		PT=	460	3	200
		BOI=	6.6	0.06	4.8
	Sum	D=	208.2	2.7	137.7
		PT=	2,900	37	1,900
		BOI=	40	0.90	33

TABLE E-19. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, MILLER PENINSULA SUBREGION (0309), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.6	1.0	2.0
		PT=	7	5	10
		BOI=	0.11	0.10	0.20
Grebes	Nearshore	D=	6.0		7.3
		PT=	29		35
		BOI=	0.51		0.56
Cormorants	Nearshore	D=	11.3		2.4
		PT=	54		12
		BOI=	1.2		0.27
Herons	Nearshore	D=			0.9
		PT=			4
		BOI=			0.02
Ducks and Geese	Nearshore	D=	46.2		4.7
		PT=	220		22
		BOI=	3.5		0.41
Eagles and Hawks	Nearshore	D=	0.2		
		PT=	1		
		BOI=	<0.01		
Oystercatchers	Nearshore	D=			0.2
		PT=			1
		BOI=			0.02
Sandpipers and other shore-birds	Nearshore	D=			5.8
		PT=			28
		BOI=			0.16
Gulls and Terns	Nearshore	D=	15.8	243.0	161.6
		PT=	76	1,200	780
		BOI=	1.4	22	11

TABLE E-19 (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Nearshore	D=	39.6	46.0	32.7
		PT=	190	220	160
		BOI=	7.4	8.7	5.7
Summary	Nearshore	D=	124.9	290.0	217.8
		PT=	600	1,400	1,000
		BOI=	14	31	19

TABLE E-20. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, PROTECTION ISLAND SUBREGION (0310), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.1		0.7
		PT=	4		2
		BOI=	0.06		0.03
Grebes	Nearshore	D=	3.0		8.4
		PT=	7		26
		BOI=	0.17		0.42
Cormorants	Nearshore	D=	17.8	7.8	224.6
		PT=	55	24	700
		BOI=	1.2	0.55	16
Herons	Nearshore	D=			0.2
		PT=			<1
		BOI=			<0.01
Ducks and Geese	Nearshore	D=	89.3		43.2
		PT=	280		130
		BOI=	7.1		2.5
Eagles and Hawks	Nearshore	D=	0.7		
		PT=	2		
		BOI=	0.02		
Oystercatchers	Nearshore	D=	3.9		0.7
		PT=	12		2
		BOI=	0.26		0.05
Gulls and Terns	Nearshore	D=	904.6	2,488.9	1,330.9
		PT=	2,800	7,700	4,100
		BOI=	53	150	77
Alcids	Nearshore	D=	310.1	182.2	358.0
		PT=	970	560	1,100
		BOI=	22	19	38

TABLE E-20 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Summary	Nearshore	D=	1,300.0	2,680.0	1,967.5
		PT=	4,100	8,300	6,100
		BOI=	95	170	130

TABLE E-21. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DISCOVERY BAY SUBREGION (0311), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	2.3		7.8
		PT=	30		100
		BOI=	0.53		1.6
	Offshore	D=	0.4		0.7
		PT=	9		16
		BOI=	0.17		0.32
	Sum	D=	1.3		3.4
		PT=	39		120
		BOI=	0.71		1.9
Grebes	Nearshore	D=	23.4		41.9
		PT=	300		550
		BOI=	9.1		9.8
	Offshore	D=	5.4		0.3
		PT=	130		8
		BOI=	3.9		0.13
	Sum	D=	12.6		15.8
		PT=	440		550
		BOI=	13		9.9
Cormorants	Nearshore	D=	3.3		0.3
		PT=	43		4
		BOI=	0.89		0.08
	Offshore	D=	0.1	0.7	
		PT=	3	16	
		BOI=	0.07	0.37	
	Sum	D=	1.3		
		PT=	46		
		BOI=	0.96		
Herons	Nearshore	D=		2.8	1.4
		PT=		36	18
		BOI=		0.18	0.09

TABLE E-21 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Nearshore	D=	399.5	2.8	33.3
		PT=	5,200	36	430
		BOI=	120	0.86	9.0
	Offshore	D=	10.2		
		PT=	250		
		BOI=	5.2		
	Sum	D=	155.2		
		PT=	5,400		
		BOI=	120		
Sandpipers and other shore-birds	Nearshore	D=			3.6
		PT=			47
		BOI=			0.27
Phalaropes	Offshore	D=			0.3
		PT=			8
		BOI=			0.05
Gulls and Terns	Nearshore	D=	49.9	21.7	103.9
		PT=	650	280	1,400
		BOI=	12	5.3	21
	Offshore	D=	1.7	7.3	20.7
		PT=	42	180	500
		BOI=	0.77	3.3	7.8
	Sum	D=	19.8	13.2	51.7
		PT=	690	460	1,800
		BOI=	13	8.7	28
Alcids	Nearshore	D=	7.6	3.3	8.1
		PT=	99	43	100
		BOI=	3.6	1.6	3.6
	Offshore	D=	2.7		47.0
		PT=	65		1,100
		BOI=	2.9		38

TABLE E-21 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Sum	D=	4.6		34.5
		PT=	160		1,200
		BOI=	6.5		41
Summary	Nearshore	D=	486.2	31.1	202.2
		PT=	6,300	400	2,600
		BOI=	140	8.0	45
	Offshore	D=	20.6	8.0	69.7
		PT=	500	190	1,700
		BOI=	13	3.7	46
	Sum	D=	195.4	17.2	123.6
		PT=	6,800	600	4,300
		BOI=	160	12	91

TABLE E-22. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, QUIMPER PENINSULA SUBREGION (0312), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	2.3		3.5
		PT=	25		37
		BOI=	0.37		0.57
Grebes	Nearshore	D=	21.2		20.4
		PT=	230		220
		BOI=	4.4		3.5
Cormorants	Nearshore	D=	23.9	30.8	17.3
		PT=	260	330	190
		BOI=	5.8	7.5	4.1
Herons	Nearshore	D=		0.8	0.8
		PT=		8	8
		BOI=		0.04	0.04
Ducks and Geese	Nearshore	D=	76.5	22.3	13.5
		PT=	820	240	140
		BOI=	19	4.6	3.6
Sandpipers and other shore-birds	Nearshore	D=	57.7		0.4
		PT=	620		4
		BOI=	3.1		0.01
Gulls and Terns	Nearshore	D=	57.7	240.0	639.6
		PT=	620	2,600	6,800
		BOI=	11	45	99
Alcids	Nearshore	D=	1.2	46.2	4.2
		PT=	12	490	45
		BOI=	0.59	24	1.4
Summary	Nearshore	D=	245.0	340.8	701.2
		PT=	2,600	3,600	7,500
		BOI=	44	81	110

TABLE E-23. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, WHIDBEY ISLAND SUBREGION (0313), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.2		2.2
		PT=	5		47
		BOI=	0.09		0.90
Grebes	Nearshore	D=	3.1	0.7	3.8
		PT=	65	14	80
		BOI=	1.2	0.42	2.0
Cormorants	Nearshore	D=	1.2	0.7	1.5
		PT=	24	14	31
		BOI=	0.56	0.32	0.68
Herons	Nearshore	D=	<0.1		<0.1
		PT=	2		2
		BOI=	<0.01		<0.01
Ducks and Geese	Nearshore	D=	15.3	8.2	32.7
		PT=	320	170	690
		BOI=	6.3	4.2	16
Eagles and Hawks	Nearshore	D=	<0.1		
		PT=	2		
		BOI=	0.01		
Oystercatchers	Nearshore	D=			<0.1
		PT=			<1
		BOI=			0.02
Plovers	Nearshore	D=		0.2	<0.1
		PT=		4	<1
		BOI=		0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	1.2	0.2	3.0
		PT=	26	4	62
		BOI=	0.13	<0.01	0.33

TABLE E-23 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	3.9	9.5	140.6
		PT=	82	200	3,000
		BOI=	1.5	3.8	43
Alcids	Nearshore	D=	2.0	6.7	96.9
		PT=	42	140	2,000
		BOI=	1.7	6.6	71
Summary	Nearshore	D=	27.2	26.0	280.9
		PT=	570	550	5,900
		BOI=	11	15	130

TABLE E-24. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, SMITH ISLAND SUBREGION (0314), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	5.0	3.3	8.3
		PT=	2	1	2
		BOI=	0.02	0.02	0.04
Grebes	Nearshore	D=	18.3	3.3	15.0
		PT=	6	1	4
		BOI=	0.11	0.02	0.07
Cormorants	Nearshore	D=	41.7	116.7	260.0
		PT=	12	35	78
		BOI=	0.27	0.80	1.8
Ducks and Geese	Nearshore	D=	308.3	16.7	318.3
		PT=	92	5	96
		BOI=	2.0	0.04	2.0
Oystercatchers	Nearshore	D=			1.7
		PT=			<1
		BOI=			0.01
Plovers	Nearshore	D=	5.0		
		PT=	2		
		BOI=	<0.01		
Sandpipers and other shore-birds	Nearshore	D=			396.7
		PT=			120
		BOI=			0.75
Gulls and Terns	Nearshore	D=	800.0	2,340.0	3,270.0
		PT=	240	700	980
		BOI=	4.4	13	17
Alcids	Nearshore	D=	28.3	163.3	65.0
		PT=	8	49	20
		BOI=	0.40	2.1	0.68

TABLE E-24 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Summary	Nearshore	D=	1,210.0	2,643.3	4,453.3
		PT=	360	790	1,300
		BOI=	7.2	16	23

TABLE E-25. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DECEPTION PASS SUBREGION (0315), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	6.7	0.2	0.2
		PT=	38	1	1
		BOI=	0.86	0.02	0.02
Grebes	Nearshore	D=	8.3		5.8
		PT=	46		33
		BOI=	1.2		0.88
Cormorants	Nearshore	D=	6.4	1.8	3.5
		PT=	36	10	20
		BOI=	0.91	0.20	0.39
Herons	Nearshore	D=			0.1
		PT=			<1
		BOI=			<0.01
Ducks and Geese	Nearshore	D=	5.8		6.1
		PT=	32		34
		BOI=	0.74		0.77
Eagles and Hawks	Nearshore	D=	0.2		
		PT=	1		
		BOI=	<0.01		
Oystercatchers	Nearshore	D=	0.3		0.2
		PT=	2		1
		BOI=	0.03		0.02
Sandpipers and other shore-birds	Nearshore	D=	<0.1		0.2
		PT=	<1		1
		BOI=	<0.01		0.01
Gulls and Terns	Nearshore	D=	10.1	20.0	71.4
		PT=	56	110	400
		BOI=	1.0	2.1	5.5

TABLE E-25 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Nearshore	D=	6.3	3.4	29.0
		PT=	36	19	160
		BOI=	1.3	0.78	5.7
Summary	Nearshore	D=	44.2	25.4	116.5
		PT=	250	140	650
		BOI=	5.9	3.1	13

TABLE E-26. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, LOPEZ ISLAND SUBREGION (0316), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.4	0.5	0.6
		PT=	3	4	6
		BOI=	0.05	0.06	0.09
Grebes	Nearshore	D=	9.9		4.6
		PT=	88		41
		BOI=	1.7		0.70
Cormorants	Nearshore	D=	36.2	60.2	207.1
		PT=	320	540	1,800
		BOI=	7.1	11	39
Herons	Nearshore	D=	0.1	0.2	0.8
		PT=	1	2	7
		BOI=	<0.01	0.01	0.03
Ducks and Geese	Nearshore	D=	14.6	2.0	
		PT=	130	18	
		BOI=	2.4	0.38	
Eagles and Hawks	Nearshore	D=	0.5		
		PT=	5		
		BOI=	0.03		
Oystercatchers	Nearshore	D=	0.4	0.1	0.1
		PT=	3	1	1
		BOI=	0.07	0.02	0.03
Plovers	Nearshore	D=	0.2	0.2	
		PT=	2	2	
		BOI=	<0.01	<0.01	
Sandpipers and other shore-birds	Nearshore	D=	0.4		0.7
		PT=	3		6
		BOI=	0.04		0.07

TABLE E-26 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	370.0	437.8	373.9
		PT=	3,300	3,900	3,300
		BOI=	62	74	57
Alcids	Nearshore	D=	18.9	28.6	70.1
		PT=	170	250	620
		BOI=	7.4	10	21
Summary	Nearshore	D=	451.6	529.9	658.1
		PT=	4,000	4,700	5,900
		BOI=	81	95	120

TABLE E-27. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, SAN JUAN ISLAND (SOUTH SHORE) SUBREGION (0317), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.2	0.1	1.0
		PT=	<1	<1	4
		BOI=	0.01	<0.01	0.07
Grebes	Nearshore	D=	8.5		2.6
		PT=	30		9
		BOI=	0.73		0.17
Cormorants	Nearshore	D=	18.8	2.0	11.4
		PT=	66	7	40
		BOI=	1.5	0.14	0.84
Herons	Nearshore	D=			0.8
		PT=			3
		BOI=			0.01
Ducks and Geese	Nearshore	D=	11.7	0.3	13.1
		PT=	41	1	46
		BOI=	0.87	0.02	1.0
Eagles and Hawks	Nearshore	D=	0.4	0.7	1.1
		PT=	1	2	4
		BOI=	0.01	0.02	0.03
Oystercatchers	Nearshore	D=	0.4		<0.1
		PT=	1		<1
		BOI=	0.03		<0.01
Plovers	Nearshore	D=	5.0	1.2	6.6
		PT=	18	4	23
		BOI=	0.09	0.02	0.11
Sandpipers and other shore-birds	Nearshore	D=	45.4	0.1	28.1
		PT=	160	<1	98
		BOI=	0.89	<0.01	0.55

TABLE E-27 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	22.9	42.0	192.1
		PT=	80	150	670
		BOI=	1.3	2.6	7.9
Alcids	Nearshore	D=	1.9	1.5	109.0
		PT=	7	5	380
		BOI=	0.30	0.27	15
Summary	Nearshore	D=	115.4	48.2	366.8
		PT=	400	170	1,300
		BOI=	5.7	3.0	25

TABLE E-28. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, VICTORIA, VANCOUVER ISLAND SUBREGION (0318), 1979

*No data are available

SECTION IV

Region 4. Admiralty Inlet region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-29. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ADMIRALTY INLET REGION, ADMIRALTY INLET SUBREGION (0401), 1979.

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.4		0.2
		PT=	6		2
		BOI=	0.11		0.04
	Offshore	D=	2		0.1
		PT=	120		5
		BOI=	2.3		0.08
	Sum	D=	1.7		0.1
		PT=	130		7
		BOI=	2.4		0.12
Grebes	Nearshore	D=	1.7		1.6
		PT=	27		26
		BOI=	0.51		0.60
	Offshore	D=	1.0		0.1
		PT=	60		8
		BOI=	1.0		0.13
	Sum	D=	1.2		0.5
		PT=	90		34
		BOI=	1.5		0.73
Cormorants	Nearshore	D=	4.1	0.6	0.6
		PT=	63	10	9
		BOI=	1.3	0.23	0.19
	Offshore	D=	1.5	1.4	0.5
		PT=	90	86	29
		BOI=	1.8	2.0	0.63
	Sum	D=	2.1	1.3	0.5
		PT=	150	96	38
		BOI=	3.1	2.2	0.82
Ducks and Geese	Nearshore	D=	9.5	0.5	1.5
		PT=	150	8	23
		BOI=	2.9	0.19	0.54

TABLE E-29 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Offshore	D=	0.4	0.1	0.4
		PT=	21	1	22
		BOI=	0.52	0.03	0.53
	Sum	D=	2.3	0.1	0.6
		PT=	170	9	45
		BOI=	3.4	0.22	1.1
Plovers	Nearshore	D=			
		PT=			0.1
		BOI=			2
					<0.01
Sandpipers and other shore-birds	Nearshore	D=			
		PT=			1.6
		BOI=			24
					0.14
Phalaropes	Offshore	D=			
		PT=			0.3
		BOI=			15
					0.10
Jaegers	Nearshore	D=			
		PT=			<0.1
		BOI=			<1
					<0.01
	Offshore	D=			
		PT=			<0.1
		BOI=			1
					<0.01
	Sum	D=			
		PT=			<0.1
		BOI=			1
					<0.01
Gulls and Terns	Nearshore	D=	14.0	26.6	47.7
		PT=	220	410	740
		BOI=	4.0	6.5	11
	Offshore	D=	28.6	18.0	43.9
		PT=	1,700	1,100	2,600
		BOI=	22	20	41

TABLE E-29 (continued).

Family	Area		Period Spring	Summer	Fall
Gulls and Terns	Sum	D=	25.5	19.9	44.3
		PT=	1,900	1,500	3,300
		BOI=	26	27	52
Alcids	Nearshore	D=	15.8	10.1	16.4
		PT=	240	160	250
		BOI=	12	7.5	12
	Offshore	D=	38.7	100	43
		PT=	2,300	5,900	2,500
		BOI=	110	300	120
	Sum	D=	33.6	80.8	37.6
		PT=	2,500	6,100	2,800
		BOI=	120	310	132
Summary	Nearshore	D=	46.2	37.9	69.7
		PT=	720	590	1,100
		BOI=	21	14	25
	Offshore	D=	72.0	119.5	88.3
		PT=	4,200	7,000	5,200
		BOI=	140	320	160
	Sum	D=	65.9	100.7	84.6
		PT=	4,900	7,600	6,300
		BOI=	160	330	190

*Based on transects used in 1978 supplemented with data from Edmonds-Port Townsend ferry in 1979. (Subregion area recalculated as 74.4 km^2).

SECTION V

Region 5. Anacortes to Hales Passage region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-30. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, BELLINGHAM CHANNEL SUBREGION (0501), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.7	0.2	0.1
		PT=	3	1	<1
		BOI=	0.07	0.01	0.01
	Offshore	D=	3.4		
		PT=	240		
		BOI=	5.5		
	Sum	D=	3.2		
		PT=	240		
		BOI=	5.6		
Grebes	Nearshore	D=	14.0		17.5
		PT=	66		82
		BOI=	1.6		2.4
	Offshore	D=	3.1		4.6
		PT=	220		310
		BOI=	5.8		9.5
	Sum	D=	3.7		5.4
		PT=	280		400
		BOI=	7.4		12
Cormorants	Nearshore	D=	4.7	6.9	3.3
		PT=	22	32	16
		BOI=	0.49	0.58	0.27
	Offshore	D=	0.8	2.2	
		PT=	54	150	
		BOI=	1.2	3.4	
	Sum	D=	1.0	2.4	
		PT=	76	180	
		BOI=	1.7	4.0	
Herons	Nearshore	D=	0.2		0.5
		PT=	1		3
		BOI=	<0.01		0.01

TABLE E-30 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Nearshore	D=	37.8	0.2	5.6
		PT=	180	1	26
		BOI=	2.6	<0.01	0.59
	Offshore	D=	3.6	7.9	
		PT=	250	550	
		BOI=	5.2	13	
	Sum	D=	5.8	7.4	
		PT=	430	550	
		BOI=	7.8	13	
Eagles and Hawks	Nearshore	D=	0.6	0.4	0.5
		PT=	3	2	3
		BOI=	0.02	0.01	0.02
Oystercatchers	Nearshore	D=			
		PT=			0.3
		BOI=			1
					0.03
Gulls and Terns	Nearshore	D=	116.1	115.2	185.7
		PT=	550	540	870
		BOI=	9.9	10	12
	Offshore	D=	4.5	4.7	16.8
		PT=	310	330	1,200
		BOI=	5.3	6.2	14
	Sum	D=	11.6	11.8	27.1
		PT=	860	870	2,000
		BOI=	15	16	26
Alcids	Nearshore	D=	0.8	6.2	23.9
		PT=	4	29	110
		BOI=	0.18	1.0	5.6
	Offshore	D=	6.7	0.7	8.2
		PT=	460	51	570
		BOI=	16	2.0	21

TABLE E-30 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Sum	D=	6.4	1.1	9.2
		PT=	470	80	680
		BOI=	17	3.0	27
Summary	Nearshore	D=	176.4	129.2	237.7
		PT=	830	610	1,100
		BOI=	15	12	21
	Offshore	D=	22.6	15.6	29.6
		PT=	1,600	1,100	2,000
		BOI=	39	25	44
	Sum	D=	32.5	23.0	41.9
		PT=	2,400	1,700	3,100
		BOI=	54	37	65

TABLE E-31. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, GUEMES CHANNEL SUBREGION (0502), 1979

Family	Area		Period		
			Spring	Summer	Fall
Cormorants	Nearshore	D=	5.0	2.1	3.3
		PT=	51	21	34
		BOI=	1.2	0.33	0.62
Ducks and Geese	Nearshore	D=	0.8		1.7
		PT=	8		17
		BOI=	0.20		0.40
Gulls and Terns	Nearshore	D=	6.7	11.2	21.7
		PT=	68	110	220
		BOI=	1.3	2.1	2.1
Alcids	Nearshore	D=	25.0	14.6	1.7
		PT=	260	150	17
		BOI=	9.6	7.6	0.59
Summary	Nearshore	D=	37.5	27.9	28.3
		PT=	380	280	290
		BOI=	12	10	3.7

TABLE E-32. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, FIDALGO BAY SUBREGION (0503), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.4		0.2
		PT=	4		2
		BOI=	0.08		0.04
Grebes	Nearshore	D=	8.0		6.0
		PT=	92		69
		BOI=	2.4		1.9
Cormorants	Nearshore	D=	3.7	8.0	12.9
		PT=	42	92	150
		BOI=	0.67	1.3	2.1
Herons	Nearshore	D=	0.9	1.2	1.8
		PT=	10	14	20
		BOI=	0.05	0.07	0.10
Ducks and Geese	Nearshore	D=	84.7	0.8	23.7
		PT=	970	9	270
		BOI=	19	0.18	4.0
Eagles and Hawks	Nearshore	D=	<0.1	0.1	
		PT=	<1	1	
		BOI=	<0.01	<0.01	
Rails	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Plovers	Nearshore	D=	0.4	0.4	0.2
		PT=	4	4	2
		BOI=	0.01	0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=		31.9	
		PT=		370	
		BOI=		1.9	

TABLE E-32 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	17.8	15.3	22.8
		PT=	200	180	260
		BOI=	3.5	3.3	3.6
Alcids	Nearshore	D=	0.2	0.4	0.1
		PT=	2	5	1
		BOI=	0.07	0.25	0.05
Summary	Nearshore	D=	116.1	26.2	99.5
		PT=	1,300	300	1,100
		BOI=	26	5.2	14

TABLE E-33. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, PADILLA BAY SUBREGION (0504), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.6	<0.1	0.2
		PT=	34	3	11
		BOI=	0.63	0.05	0.18
	Offshore	D=	1.7	1.1	1.8
		PT=	42	28	45
		BOI=	0.72	0.42	0.67
	Sum	D=	0.9	0.4	0.7
		PT=	75	31	56
		BOI=	1.4	0.47	0.84
Grebes	Nearshore	D=	5.0	0.3	5.7
		PT=	280	17	320
		BOI=	7.9	0.50	8.3
	Offshore	D=	4.2	0.6	83.9
		PT=	100	14	2,100
		BOI=	1.7	0.42	34
	Sum	D=		0.4	30.0
		PT=		31	2,400
		BOI=		0.92	42
Cormorants	Nearshore	D=	1.8	1.8	2.4
		PT=	100	100	130
		BOI=	1.5	1.5	2.0
Herons	Nearshore	D=	1.3	5.3	3.1
		PT=	70	290	170
		BOI=	0.35	1.5	0.87
	Offshore	D=		2.2	8.9
		PT=		56	220
		BOI=		0.28	1.1
	Sum	D=		4.4	5.0
		PT=		350	400
		BOI=		1.7	2.0

TABLE E-33 (continued).

Family	Area		Period: Spring	Summer	Fall
Ducks and Geese	Nearshore	D=	244.5	14.1	83.7
		PT=	13,000	780	4,600
		BOI=	400	16	65
	Offshore	D=	801.7	1.7	168.2
		PT=	20,000	42	4,200
		BOI=	500	0.65	89
	Sum	D=	412.5	10.2	110.0
		PT=	33,000	820	8,800
		BOI=	900	16.5	150
Eagles and Hawks	Nearshore	D=	<0.1	<0.1	<0.1
		PT=	2	<1	1
		BOI=	0.01	<0.01	<0.01
Plovers	Nearshore	D=	0.4		0.7
		PT=	24		39
		BOI=	0.12		0.20
Sandpipers and other shore-birds	Nearshore	D=	112.1	1.3	8.4
		PT=	6,200	74	460
		BOI=	29	0.42	2.4
Gulls and Terns	Nearshore	D=	27.4	28.8	45.6
		PT=	1,500	1,600	2,500
		BOI=	28	30	36
	Offshore	D=	17.2	78.3	55.7
		PT=	430	2,000	1,400
		BOI=	8.1	37	25
	Sum	D=	23.8	43.8	48.8
		PT=	1,900	3,500	3,900
		BOI=	36	67	61
Alcids	Nearshore	D=	0.2	0.9	0.2
		PT=	13	49	13
		BOI=	0.59	2.3	0.54

TABLE E-33 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Offshore	D=			
		PT=			0.4
		BOI=			9
					0.31
	Sum	D=			
		PT=			0.2
		BOI=			22
					0.85
Summary	Nearshore	D=	393.5	52.7	150.5
		PT=	22,000	2,900	8,300
		BOI=	460	52	120
	Offshore	D=	825.0	83.9	319.6
		PT=	21,000	2,100	8,000
		BOI=	510	39	150
	Sum	D=	525.0	62.5	200.0
		PT=	42,000	5,000	16,000
		BOI=	980	90	270

TABLE E-34. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, SAMISH BAY SUBREGION (0505), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.7	<0.1	0.3
		PT=	21	2	10
		BOI=	0.33	0.04	0.14
	Offshore	D=	83.2	0.3	2.4
		PT=	3,100	10	90
		BOI=	70	0.15	1.8
	Sum	D=	47.0	0.2	1.5
		PT=	3,100	12	100
		BOI=	70	0.19	2.0
Grebes	Nearshore	D=	26.1		32.7
		PT=	760		950
		BOI=	23		28
	Offshore	D=	62.3	13.5	12.5
		PT=	2,300	500	450
		BOI=	64	15	11
	Sum	D=	47.0		21.2
		PT=	3,100		1,400
		BOI=	87		39
Cormorants	Nearshore	D=	1.4	0.9	1.4
		PT=	41	25	40
		BOI=	0.64	0.58	0.60
	Offshore	D=	1.8		
		PT=	67		
		BOI=	1.5		
	Sum	D=	1.7		
		PT=	110		
		BOI=	2.1		
Herons	Nearshore	D=	1.5	6.5	5.3
		PT=	43	190	150
		BOI=	0.22	0.95	0.77

TABLE E-34 (continued).

Family	Area		Period: Spring	Summer	Fall
Herons	Offshore	D=	3.2		
		PT=	120		
		BOI=	0.59		
	Sum	D=	2.4		
		PT=	160		
		BOI=	0.81		
Ducks and Geese	Nearshore	D=	221.5	18.2	98.0
		PT=	6,400	530	2,800
		BOI=	110	11	34
	Offshore	D=	605.5	16.2	21.5
		PT=	22,000	600	790
		BOI=	520	14	20
	Sum	D=	424.2	16.7	54.5
		PT=	28,000	1,100	3,600
		BOI=	630	25	54
Eagles and Hawks	Nearshore	D=	<0.1	<0.1	<0.1
		PT=	1	1	<1
		BOI=	<0.01	<0.01	<0.01
Plovers	Nearshore	D=	2.6		1.3
		PT=	77		37
		BOI=	0.39		0.18
Sandpipers and other shore-birds	Nearshore	D=	37.5		13.8
		PT=	1,100		400
		BOI=	5.7		1.9
Gulls and Terns	Nearshore	D=	14.5	33.5	26.6
		PT=	420	970	770
		BOI=	7.1	15	10
	Offshore	D=	13.0	0.1	15.6
		PT=	480	10	580
		BOI=	8.8	0.19	8.4

TABLE E-34 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Gulls and Terns	Sum	D=	13.6	14.8	21.2
		PT=	900	980	1,400
		BOI=	16	15	18
Alcids	Nearshore	D=	0.3	3.1	<0.1
		PT=	8	91	2
		BOI=	0.44	4.9	0.05
	Offshore	D=	1.1		1.2
		PT=	42		44
		BOI=	2.3		2.4
	Sum	D=	0.8		0.7
		PT=	50		46
		BOI=	2.7		2.5
Summary	Nearshore	D=	306.2	62.3	179.5
		PT=	8,900	1,800	5,200
		BOI=	140	33	75
	Offshore	D=	774.6	30.3	55.6
		PT=	29,000	1,100	2,100
		BOI=	660	29	45
	Sum	D=	575.8	43.9	110.6
		PT=	38,000	2,900	7,300
		BOI=	800	62	120

TABLE E-35. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, BELLINGHAM BAY SUBREGION (0506), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.0	0.6	0.1
		PT=	34	21	4
		BOI=	0.65	0.31	0.06
	Offshore	D=	10.9		
		PT=	1,300		
		BOI=	30		
	Sum	D=	2.1		
		PT=	1,400		
		BOI=	31		
Grebes	Nearshore	D=	67.4	17.7	18.4
		PT=	2,400	640	660
		BOI=	72	19	19
	Offshore	D=	134.1	2.2	0.1
		PT=	16,000	270	12
		BOI=	490	8.0	0.38
	Sum	D=	120.3	5.7	4.3
		PT=	19,000	900	680
		BOI=	560	27	20
Cormorants	Nearshore	D=	4.2	1.1	1.5
		PT=	150	41	53
		BOI=	2.8	0.73	0.92
	Offshore	D=	1.6		
		PT=	190		
		BOI=	4.3		
	Sum	D=	2.2		
		PT=	340		
		BOI=	7.1		
Herons	Nearshore	D=	0.5	0.8	1.6
		PT=	16	28	56
		BOI=	0.08	0.14	0.28

TABLE E-35 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Herons	Offshore	D=			
		PT=		0.2	
		BOI=		22	
				0.11	
	Sum	D=			
		PT=		0.3	
		BOI=		50	
				0.25	
Ducks and Geese	Nearshore	D=	24.4	9.2	11.3
		PT=	880	330	410
		BOI=	13	5.8	5.0
	Offshore	D=	8.0		
		PT=	980		
		BOI=	21		
	Sum	D=	12.0		
		PT=	1,900		
		BOI=	34		
Eagles and Hawks	Nearshore	D=	0.3	<0.1	<0.1
		PT=	11	1	3
		BOI=	0.08	<0.01	0.02
Rails	Nearshore	D=	<0.1		
		PT=	2		
		BOI=	<0.01		
Plovers	Nearshore	D=	<0.1	0.1	0.5
		PT=	2	5	17
		BOI=	<0.01	0.02	0.05
Sandpipers and other shore-birds	Nearshore	D=	8.1	<0.1	0.9
		PT=	290	1	31
		BOI=	1.1	<0.01	0.17
Jaegers	Nearshore	D=	<0.1		
		PT=	1		
		BOI=	<0.01		

TABLE E-35 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	30.3	37.9	44.6
		PT=	1,100	1,300	1,600
		BOI=	17	22	22
	Offshore	D=	18.6	17.3	10.1
		PT=	2,300	2,110	1,200
		BOI=	33	34	14
	Sum	D=	21.5	22.2	17.7
		PT=	3,400	3,500	2,800
		BOI=	50	56	37
Alcids	Nearshore	D=	0.5	0.5	0.3
		PT=	19	17	10
		BOI=	0.86	0.91	0.35
	Offshore	D=	3.2	0.4	2.4
		PT=	390	44	300
		BOI=	13	1.4	9.6
	Sum	D=	2.6	0.4	2.0
		PT=	410	62	310
		BOI=	14	2.3	10
Summary	Nearshore	D=	136.9	67.9	79.1
		PT=	4,900	2,400	2,800
		BOI=	110	49	49
	Offshore	D=	177.3	20.0	12.9
		PT=	22,000	2,400	1,600
		BOI=	590	44	24
	Sum	D=	170.9	31.0	27.8
		PT=	27,000	4,900	4,400
		BOI=	700	93	73

TABLE E-36. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, HALES PASSAGE SUBREGION (0507), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	9.5		1.2
		PT=	150		20
		BOI=	3.0		0.31
Grebes	Nearshore	D=	4.1	0.4	4.8
		PT=	66	6	77
		BOI=	1.5	0.17	2.2
Cormorants	Nearshore	D=	1.6	0.1	0.4
		PT=	27	2	7
		BOI=	0.47	0.03	0.12
Herons	Nearshore	D=			0.2
		PT=			4
		BOI=			0.02
Ducks and Geese	Nearshore	D=	213.0	8.7	12.3
		PT=	3,400	140	200
		BOI=	80	3.3	5.1
Eagles and Hawks	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.01		
Plovers	Nearshore	D=		0.2	0.1
		PT=		4	2
		BOI=		0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=			0.5
		PT=			8
		BOI=			0.04
Gulls and Terns	Nearshore	D=	26.0	21.4	17.7
		PT=	420	340	280
		BOI=	6.8	4.7	4.5

TABLE E-36 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Nearshore	D=	4.2	34.9	7.0
		PT=	68	560	110
		BOI=	2.6	30	5.4
Summary	Nearshore	D=	258.5	65.8	44.2
		PT=	4,200	1,100	710
		BOI=	95	38	18

SECTION VI

Region 6. Eastern Georgia Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-37. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, LUMMI BAY SUBREGION (0601), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.6	0.2	0.2
		PT=	27	3	4
		BOI=	0.42	0.05	0.06
	Offshore	D=	21.0		3.9
		PT=	170		31
		BOI=	3.4		0.47
	Sum	D=	8.0		1.4
		PT=	200		35
		BOI=	3.8		0.52
Grebes	Nearshore	D=	1.7	1.1	4.3
		PT=	29	9	73
		BOI=	0.58	0.27	1.4
	Offshore	D=	7.5		3.9
		PT=	60		31
		BOI=	1.7		0.50
	Sum	D=	3.6		4.0
		PT=	89		100
		BOI=	2.3		1.9
Cormorants	Nearshore	D=	6.2	7.9	6.7
		PT=	100	130	110
		BOI=	1.5	1.9	1.6
	Offshore	D=	4.4	4.4	4.4
		PT=	36	36	36
		BOI=	0.74	0.65	0.57
	Sum	D=	5.6	6.8	6.0
		PT=	140	170	150
		BOI=	2.2	2.5	2.2
Herons	Nearshore	D=	4.2	3.3	8.2
		PT=	72	56	140
		BOI=	0.36	0.28	0.70

TABLE E-37 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Herons	Offshore	D=	0.6	5.6	10.0
		PT=	4	44	80
		BOI=	0.02	0.22	0.40
	Sum	D=	3.1	4.0	8.8
		PT=	77	100	220
		BOI=	0.39	0.51	1.1
Ducks and Geese	Nearshore	D=	420.0	36.8	189.8
		PT=	7,200	630	3,200
		BOI=	150	9.3	39
	Offshore	D=	250.0	3.3	31.1
		PT=	2,000	27	250
		BOI=	38	0.69	5.2
	Sum	D=	368.0	26.0	140.0
		PT=	9,200	650	3,500
		BOI=	190	10	44
Eagles and Hawks	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.01		
Plovers	Nearshore	D=	7.2	0.1	0.6
		PT=	120	2	11
		BOI=	0.62	<0.01	0.04
Sandpipers and other shore-birds	Nearshore	D=	500.0		76.2
		PT=	8,500		1,300
		BOI=	40		4.4
Gulls and Terns	Nearshore	D=	56.0	64.8	115.8
		PT=	950	1,100	2,000
		BOI=	16	19	27
	Offshore	D=	21.1	31.1	119.4
		PT=	170	250	1,000
		BOI=	2.7	4.7	12

TABLE E-37 (continued).

Family	Area		Period Spring	Summer	Fall
Gulls and Terns	Sum	D=	44.0	56.0	116.0
		PT=	1,100	1,400	2,900
		BOI=	18	24	39
Alcids	Nearshore	D=			
		PT=			<0.1
		BOI=			1
					0.07
	Offshore	D=			
		PT=			27.2
		BOI=			220
					11
	Sum	D=			
		PT=			1.2
		BOI=			220
					11
Summary	Nearshore	D=	1,000.0	113.1	401.9
		PT=	17,000	1,900	6,800
		BOI=	210	31	74
	Offshore	D=	300.0	45.6	200.0
		PT=	2,400	360	1,600
		BOI=	46	6.5	30
	Sum	D=	760.0	92.0	336.0
		PT=	19,000	2,300	8,400
		BOI=	260	38	100

TABLE E-38. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, CHERRY POINT SUBREGION (0602), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	39.2	12.7	0.9
		PT=	550	180	12
		BOI=	11	3.6	0.21
Grebes	Nearshore	D=	17.1	2.0	4.9
		PT=	240	29	70
		BOI=	7.0	0.84	1.8
Cormorants	Nearshore	D=	3.0	1.2	3.0
		PT=	43	17	43
		BOI=	0.95	0.39	0.9
Herons	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Ducks and Geese	Nearshore	D=	762.4	11.0	15.4
		PT=	11,000	150	220
		BOI=	270	3.2	5.2
Eagles and Hawks	Nearshore	D=	<0.1		
		PT=	1		
		BOI=	<0.01		
Plovers	Nearshore	D=	<0.1		<0.1
		PT=	<1		1
		BOI=	<0.01		<0.01
Sandpipers and other shore-birds	Nearshore	D=	0.4		0.2
		PT=	6		3
		BOI=	0.02		0.03
Jaegers	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01

TABLE E-38 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	200.0	18.7	14.8
		PT=	2,800	260	210
		BOI=	34	4.8	3.0
Alcids	Nearshore	D=	1.4	4.0	2.0
		PT=	20	57	28
		BOI=	0.98	2.9	1.3
Summary	Nearshore	D=	1,023.5	49.7	41.4
		PT=	14,000	700	580
		BOI=	320	16	12

TABLE E-39. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, BIRCH BAY SUBREGION (0603), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.7	1.0	4.6
		PT=	15	9	42
		BOI=	0.24	0.15	0.85
	Offshore	D=	1.5		3.0
		PT=	15		30
		BOI=	0.31		0.45
	Sum	D=	1.6		3.8
		PT=	30		72
		BOI=	0.55		1.3
Grebes	Nearshore	D=	15.6	0.3	46.3
		PT=	140	3	420
		BOI=	3.9	0.02	12
	Offshore	D=	4.0		
		PT=	40		
		BOI=	1.2		
	Sum	D=	9.5		
		PT=	180		
		BOI=	5.1		
Cormorants	Nearshore	D=	1.9	1.0	1.2
		PT=	17	9	11
		BOI=	0.32	0.19	0.18
	Offshore	D=	10.5		1.0
		PT=	100		10
		BOI=	1.5		0.23
	Sum	D=	6.3		1.1
		PT=	120		21
		BOI=	1.8		0.41
Herons	Nearshore	D=	0.1	6.6	4.8
		PT=	1	59	43
		BOI=	<0.01	0.30	0.22

TABLE E-39 (continued).

Ducks and Geese	Nearshore	D=	303.0	7.9	200.0
		PT=	2,700	71	1,800
		BOI=	61	1.5	28
	Offshore	D=	37.5		10.0
		PT=	380		100
		BOI=	9.2		2.5
	Sum	D=	163.2		100.0
		PT=	3,100		1,900
		BOI=	70		30
Rails	Nearshore	D=			
		PT=			1.1
		BOI=			10
					0.03
Plovers	Nearshore	D=	<0.1		
		PT=	<1		0.3
		BOI=	<0.01		3
					<0.01
Sandpipers and other shore-birds	Nearshore	D=	238.6		
		PT=	2,100		3.6
		BOI=	12		33
					0.12
Gulls and Terns	Nearshore	D=	38.6	96.1	112.5
		PT=	350	870	1,000
		BOI=	5.0	12	13
	Offshore	D=	8.5	26.0	14.0
		PT=	85	260	140
		BOI=	1.3	3.7	1.6
	Sum	D=	22.6	57.9	63.2
		PT=	430	1,100	1,200
		BOI=	6.3	15	15
Alcids	Nearshore	D=	0.1	2.4	0.4
		PT=	1	22	4
		BOI=	0.07	0.78	0.12
	Offshore	D=	0.5	2.0	21.0
		PT=	5	20	210
		BOI=	0.17	0.69	9.3

TABLE E-39 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Sum	D=	0.3	2.2	11.0
		PT=	6	42	210
		BOI=	0.24	1.5	9.4
Summary	Nearshore	D=	599.7	115.3	375.1
		PT=	5,400	1,000	3,400
		BOI=	83	15	55
	Offshore	D=	63.5	30.0	53.0
		PT=	640	300	530
		BOI=	14	4.4	14
	Sum	D=	315.8	68.4	205.3
		PT=	6,000	1,300	3,900
		BOI=	97	19	69

TABLE E-40. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, SEMIAHMOO SPIT SUBREGION (0604), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	4.8	0.4	4.2
		PT=	45	4	40
		BOI=	0.85	0.07	0.64
Grebes	Nearshore	D=	6.7		169.3
		PT=	63		1,600
		BOI=	1.5		47
Cormorants	Nearshore	D=	4.5	2.4	3.2
		PT=	43	23	30
		BOI=	0.93	0.45	0.52
Herons	Nearshore	D=	2.2	12.7	2.7
		PT=	21	120	26
		BOI=	0.11	0.61	0.13
Ducks and Geese	Nearshore	D=	646.6	178.2	298.0
		PT=	6,100	1,700	2,800
		BOI=	150	33	62
Eagles and Hawks	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.01		
Plovers	Nearshore	D=	0.1		<0.1
		PT=	1		<1
		BOI=	<0.01		<0.01
Sandpipers and other shore-birds	Nearshore	D=	0.3		1.4
		PT=	3		13
		BOI=	0.02		0.08
Gulls and Terns	Nearshore	D=	193.8	329.1	96.4
		PT=	1,800	3,100	920
		BOI=	21	56	14

TABLE E-40 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Nearshore	D=	2.2	0.4	0.5
		PT=	21	4	5
		BOI=	1.1	0.21	0.25
Summary	Nearshore	D=	861.7	523.5	578.8
		PT=	8,200	5,000	5,500
		BOI=	170	90	130

TABLE E-41. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, DRAYTON HARBOR SUBREGION (0605), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	3.0	0.5	4.7
		PT=	38	6	60
		BOI=	0.59	0.10	0.91
Grebes	Nearshore	D=	21.4	0.3	22.9
		PT=	270	4	290
		BOI=	7.7	0.10	7.1
Cormorants	Nearshore	D=	3.8	4.4	6.4
		PT=	49	57	82
		BOI=	0.76	0.82	1.3
Herons	Nearshore	D=	2.3	11.6	7.2
		PT=	29	149	93
		BOI=	0.15	0.75	0.47
Ducks and Geese	Nearshore	D=	255.7	13.1	256.2
		PT=	3,300	168	3,300
		BOI=	65	3.2	39
Eagles and Hawks	Nearshore	D=	<0.1	<0.1	<0.1
		PT=	<1	<1	<1
		BOI=	<0.01	<0.01	<0.01
Rails	Nearshore	D=	0.2		<0.1
		PT=	3		<1
		BOI=	<0.01		<0.01
Plovers	Nearshore	D=	0.2	2.7	3.1
		PT=	3	34	40
		BOI=	<0.01	0.11	0.14
Sandpipers and other shore-birds	Nearshore	D=	229.9	7.9	52.4
		PT=	2,900	100	670
		BOI=	16	0.58	3.3

TABLE E-41 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Jaegers	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.01		
Gulls and Terns	Nearshore	D=	104.2	110.2	139.4
		PT=	1,300	1,400	1,800
		BOI=	18	23	22
Alcids	Nearshore	D=	0.4	<0.1	<0.1
		PT=	5	<1	<1
		BOI=	0.28	0.02	0.01
Summary	Nearshore	D=	621.2	150.9	495.2
		PT=	8,000	1,900	6,300
		BOI=	110	28	75

TABLE E-42. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, BOUNDARY BAY SUBREGION (0606), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	2.5		10.0
		PT=	190		750
		BOI=	3.8		11
	Offshore	D=	7.7	1.0	7.9
		PT=	630	86	650
		BOI=	14	1.5	13
	Sum	D=	5.2		8.9
		PT=	820		1,400
		BOI=	18		24
Grebes	Nearshore	D=	6.7		25.0
		PT=	500		1,900
		BOI=	9.1		29
	Offshore	D=	77.9	2.6	7.6
		PT=	6,400	220	630
		BOI=	180	6.5	13
	Sum	D=	43.9		15.9
		PT=	6,900		2,500
		BOI=	190		42
Cormorants	Nearshore	D=	0.7	3.3	1.7
		PT=	50	250	120
		BOI=	1.1	5.7	1.7
	Offshore	D=	0.4		
		PT=	35		
		BOI=	0.79		
	Sum	D=	0.5		
		PT=	85		
		BOI=	1.9		
Herons	Nearshore	D=	2.5		6.7
		PT=	190		500
		BOI=	0.95		2.5

TABLE E-42 (continued).

Family	Area		Period Spring	Summer	Fall
Ducks and Geese	Nearshore	D=	461.7	60.0	11.7
		PT=	35,000	4,500	880
		BOI=	530	110	21
	Offshore	D=	81.3	1.0	205.3
		PT=	6,700	86	17,000
		BOI=	120	2.2	410
	Sum	D=	261.1	29.3	114.6
		PT=	41,000	4,600	18,000
		BOI=	650	110	430
Eagles and Hawks	Nearshore	D=	0.8		
		PT=	62		
		BOI=	0.45		
Sandpipers and other shore-birds	Nearshore	D=	41.7		
		PT=	3,100		
		BOI=	20		
Gulls and Terns	Nearshore	D=	173.3	190.0	371.7
		PT=	13,000	14,000	28,000
		BOI=	210	190	400
	Offshore	D=	109.0	31.6	10.3
		PT=	8,900	2,600	840
		BOI=	92	40	13
	Sum	D=	140.1	108.3	184.7
		PT=	22,000	17,000	29,000
		BOI=	300	230	410
Alcids	Nearshore	D=	1.7	13.3	5.0
		PT=	120	1,000	380
		BOI=	6.8	54	13
	Offshore	D=	4.9	1.6	4.2
		PT=	410	130	350
		BOI=	20	5.2	17

TABLE E-42 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Sum	D=	3.4	7.0	4.6
		PT=	530	1,100	720
		BOI=	27	60	29
Summary	Nearshore	D=	705.8	270.0	438.3
		PT=	53,000	20,000	33,000
		BOI=	780	360	480
	Offshore	D=	282.5	38.4	235.5
		PT=	23,000	3,200	19,000
		BOI=	430	55	460
	Sum	D=	484.1	146.5	331.2
		PT=	76,000	23,000	52,000
		BOI=	1,200	410	940

TABLE E-43. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, SAN JUAN ISLANDS NORTHERN TIER SUBREGION (0607), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.3		0.2
		PT=	6		1
		BOI=	0.12		0.01
	Offshore	D=	2.5		
		PT=	74		
		BOI=	1.5		
	Sum	D=	2.3		
		PT=	80		
		BOI=	1.6		
Grebes	Nearshore	D=	3.5		0.4
		PT=	18		2
		BOI=	0.51		0.06
Cormorants	Nearshore	D=	2.4	3.7	9.1
		PT=	12	19	45
		BOI=	0.27	0.42	0.92
	Offshore	D=	1.7		
		PT=	49		
		BOI=	1.1		
	Sum	D=	1.7		
		PT=	61		
		BOI=	1.4		
Herons	Nearshore	D=			0.4
		PT=			2
		BOI=			<0.01
Ducks and Geese	Nearshore	D=	8.8	2.2	0.9
		PT=	44	11	5
		BOI=	0.72	0.21	0.10
Eagles and Hawks	Nearshore	D=	1.0	1.1	0.2
		PT=	5	6	1
		BOI=	0.04	0.04	<0.01

TABLE E-43 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Oystercatchers	Nearshore	D=			0.2
		PT=			1
		BOI=			0.02
Sandpipers and other shore-birds	Nearshore	D=	6.1		0.2
		PT=	31		1
		BOI=	0.29		<0.01
Gulls and Terns	Nearshore	D=	320.3	42.6	260.0
		PT=	1,600	210	1,300
		BOI=	22	4.0	19
	Offshore	D=	282.5		38.3
		PT=	8,300		1,100
		BOI=	120		11
	Sum	D=	287.8		69.8
		PT=	9,900		2,400
		BOI=	140		30
Alcids	Nearshore	D=	33.2	23.0	37.8
		PT=	170	110	190
		BOI=	5.8	4.0	6.5
	Offshore	D=	14.2		8.3
		PT=	420		240
		PT=	15		8.4
	Sum	D=	16.9		12.5
		PT=	580		430
		BOI=	20		15
Summary	Nearshore	D=	378.2	72.6	309.4
		PT=	1,900	360	1,500
		BOI=	29	8.7	27
	Offshore	D=	304.2		46.7
		PT=	9,000		1,400
		BOI=	140		20

TABLE E-43 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Summary	Sum	D=	319.8		84.3
		PT=	11,000		2,900
		BOI=	170		46

TABLE E-44. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, GEORGIA STRAIT OPEN WATERS SUBREGION (0608), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Offshore	D=	6.4		0.3
		PT=	1,800		88
		BOI=	38		1.8
Grebes	Offshore	D=	7.1		2.6
		PT=	2,000		760
		BOI=	60		23
Cormorants	Offshore	D=	0.7	0.2	0.1
		PT=	190	59	29
		BOI=	4.4	1.3	0.41
Ducks and Geese	Offshore	D=	2.1		
		PT=	600		
		BOI=	13		
Gulls and Terns	Offshore	D=	105.3	10.0	31.4
		PT=	30,000	2,900	9,100
		BOI=	350	52	135
Alcids	Offshore	D=	35.3	1.6	46.2
		PT=	10,000	470	13,300
		BOI=	350	15	430
Summary	Offshore	D=	158.3	11.8	81.2
		PT=	46,000	3,400	23,000
		BOI=	820	68	590

SECTION VII

Region 7. Western Georgia Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-45. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE WESTERN GEORGIA STRAIT REGION, POINT ROBERTS SUBREGION (0701), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	29.2	4.6	1.2
		PT=	480	75	19
		BOI=	9.6	1.3	0.32
Grebes	Nearshore	D=	6.9	0.2	25.5
		PT=	110	3	420
		BOI=	3.0	0.08	13
Cormorants	Nearshore	D=	5.8	4.6	6.8
		PT=	95	75	110
		BOI=	2.1	1.3	2.0
Herons	Nearshore	D=		0.7	0.7
		PT=		11	12
		BOI=		0.05	0.06
Ducks and Geese	Nearshore	D=	230.9	3.0	17.3
		PT=	3,800	48	280
		BOI=	90	0.77	6.1
Eagles and Hawks	Nearshore	D=		0.2	<0.1
		PT=		3	1
		BOI=		0.02	<0.01
Oystercatchers	Nearshore	D=		0.5	
		PT=		8	
		BOI=		0.18	
Plovers	Nearshore	D=	0.2	0.3	
		PT=	3	5	
		BOI=	<0.01	0.02	
Sandpipers and other shore-birds	Nearshore	D=	2.5		0.5
		PT=	40		8
		BOI=	0.16		0.04

TABLE E-45 (continued).

Family	Area		Period Spring	Summer	Fall
Jaegers	Nearshore	D=			0.7
		PT=			12
		BOI=			0.02
Gulls and Terns	Nearshore	D=	92.7	92.8	148.7
		PT=	1,500	1,500	2,400
		BOI=	22	28	31
Alcids	Nearshore	D=	33.7	17.0	3.1
		PT=	550	280	51
		BOI=	18	14	2.0
Summary	Nearshore	D=	402.4	123.8	204.7
		PT=	6,600	2,000	3,300
		BOI=	140	45	54

TABLE E-46. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE WESTERN GEORGIA STRAIT REGION, TSAWWASSEN BAY SUBREGION (0702), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.0	0.2	0.9
		PT=	6	1	5
		BOI=	0.11	0.02	0.08
Grebes	Nearshore	D=	0.8		13.5
		PT=	5		83
		BOI=	0.43		2.2
Cormorants	Nearshore	D=	6.1	6.5	2.0
		PT=	40	39	12
		BOI=	0.86	0.63	0.24
Herons	Nearshore	D=	0.2		0.2
		PT=	1		1
		BOI=	<0.01		<0.01
Ducks and Geese	Nearshore	D=	223.5	1.5	111.0
		PT=	1,400	9	680
		BOI=	32	0.16	13
Sandpipers and other shore-birds	Nearshore	D=			0.3
		PT=			2
		BOI=			0.01
Gulls and Terns	Nearshore	D=	130.0	57.1	71.0
		PT=	790	350	430
		BOI=	14	6.6	6.6
Alcids	Nearshore	D=		0.2	0.1
		PT=		1	1
		BOI=		0.07	0.04
Summary	Nearshore	D=	361.8	65.4	199.0
		PT=	2,200	400	1,200
		BOI=	47	7.4	22

TABLE E-47. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE WESTERN GEORGIA STRAIT REGION, GEORGIA STRAIT OPEN WATERS SUBREGION (0703), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Offshore	D=	1.8		<0.1
		PT=	640		13
		BOI=	13		0.24
Grebes	Offshore	D=	2.8		<0.1
		PT=	1,000		13
		BOI=	30		0.38
Cormorants	Offshore	D=	0.2	<0.1	0.2
		PT=	80	10	73
		BOI=	1.2	0.14	1.5
Ducks and Geese	Offshore	D=	0.2		0.3
		PT=	80		110
		BOI=	13		2.2
Phalaropes	Offshore	D=			<0.1
		PT=			10
		BOI=			0.07
Jaegers	Offshore	D=			<0.1
		PT=			3
		BOI=			<0.01
Gulls and Terns	Offshore	D=	2.8	0.8	1.4
		PT=	1,000	300	520
		BOI=	13	5.4	6.5
Alcids	Offshore	D=	3.2	0.1	0.2
		PT=	1,200	20	74
		BOI=	39	0.64	2.8
Summary	Offshore	D=	13.2	0.9	2.2
		PT=	4,800	330	810
		BOI=	110	6.2	14

SECTION VIII

Region 8. Haro Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-48. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE HARO STRAIT REGION, NORTHERN SUBREGION (0801), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.7	0.3	0.7
		PT=	16	3	7
		BOI=	0.31	0.04	0.10
	Offshore	D=			
		PT=			0.2
		BOI=			78
					1.5
	Sum	D=			
		PT=			0.3
		BOI=			85
					1.6
Grebes	Nearshore	D=	1.1		
		PT=	11		4.6
		BOI=	0.32		45
					0.72
Cormorants	Nearshore	D=	3.3	8.2	84.3
		PT=	32	78	810
		BOI=	0.73	1.8	17
	Offshore	D=			
		PT=		0.5	0.5
		BOI=		160	160
				3.4	3.6
	Sum	D=			
		PT=		0.7	2.9
		BOI=		240	970
				5.1	20
Herons	Nearshore	D=			
		PT=			0.9
		BOI=			9
					0.04
Ducks and Geese	Nearshore	D=	126.7	11.0	2.3
		PT=	1,200	110	22
		BOI=	19	2.0	0.56
Eagles and Hawks	Nearshore	D=	0.6		
		PT=	5		
		BOI=	0.04		

TABLE E-48 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Oystercatchers	Nearshore	D=			
		PT=			0.4
		BOI=			3
					0.08
Plovers	Nearshore	D=			
		PT=			0.4
		BOI=			3
					0.01
Sandpipers and other shore-birds	Nearshore	D=			
		PT=			0.7
		BOI=			7
					0.06
Gulls and Terns	Nearshore	D=	240.6	117.4	479.1
		PT=	2,300	1,100	4,600
		BOI=	44	21	59
	Offshore	D=	7.1	2.9	17.9
		PT=	2,400	940	5,900
		BOI=	41	18	59
	Sum	D=	13.9	6.2	29.5
		PT=	4,700	2,100	10,000
		BOI=	85	39	120
Alcids	Nearshore	D=	0.6	34.5	99.3
		PT=	5	330	950
		BOI=	0.17	16	31
	Offshore	D=	0.5		24.3
		PT=	160		8,000
		BOI=	5.1		260
	Sum	D=	0.5		26.3
		PT=	160		8,900
		BOI=	5.2		300
Summary	Nearshore	D=	375.0	172.4	675.4
		PT=	3,600	1,700	6,500
		BOI=	64	41	110

TABLE E-48 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Summary	Offshore	D=	7.6	3.3	42.9
		PT=	2,500	1,100	14,000
		BOI=	46	21	330
	Sum	D=	18.0	8.3	62.0
		PT=	6,100	2,800	21,000
		BOI=	110	62	440

TABLE E-49. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE HARO STRAIT REGION, SOUTHERN SUBREGION (0802), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.0		0.6
		PT=	5		3
		BOI=	0.10		0.06
	Offshore	D=	<0.1		<0.1
		PT=	7		4
		BOI=	0.11		0.08
	Sum	D=	0.1		<0.1
		PT=	12		7
		BOI=	0.21		0.14
Grebes	Nearshore	D=	0.6		2.0
		PT=	3		10
		BOI=	0.09		0.30
	Offshore	D=			<0.1
		PT=			8
		BOI=			0.13
	Sum	D=			0.1
		PT=			18
		BOI=			0.43
Cormorants	Nearshore	D=	0.7	0.6	1.9
		PT=	4	3	9
		BOI=	0.07	0.06	0.19
	Offshore	D=	0.6	1.4	1.1
		PT=	130	290	240
		BOI=	2.6	4.2	3.4
	Sum	D=	0.6	1.3	1.1
		PT=	130	300	250
		BOI=	2.7	4.3	3.6
Herons	Nearshore	D=			0.3
		PT=			1
		BOI=			<0.01

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Nearshore	D=			
		PT=			0.1
		BOI=			<1
					0.02
Eagles and Hawks	Nearshore	D=	0.4	0.2	0.2
		PT=	2	<1	1
		BOI=	0.01	<0.01	<0.01
Plovers	Nearshore	D=			
		PT=			<0.1
		BOI=			<1
					<0.01
Phalaropes	Nearshore	D=			
		PT=			0.4
		BOI=			2
					0.01
	Offshore	D=			
		PT=			<0.1
		BOI=			12
					0.08
	Sum	D=			
		PT=			0.1
		BOI=			14
					0.09
Jaegers	Offshore	D=			
		PT=			<0.1
		BOI=			4
					<0.01
Gulls and Terns	Nearshore	D=	9.1	3.1	119.8
		PT=	46	15	600
		BOI=	0.81	0.29	6.7
	Offshore	D=	3.3	0.5	2.8
		PT=	720	110	610
		BOI=	12	2.0	11
	Sum	D=	3.4	0.6	5.3
		PT=	770	130	1,200
		BOI=	13	2.3	17

TABLE E-49 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Nearshore	D=	0.1	0.4	4.0
		PT=	<1	2	20
		BOI=	0.03	0.08	0.74
	Offshore	D=	0.5	0.3	0.7
		PT=	110	56	150
		BOI=	4.3	2.0	5.9
	Sum	D=	0.5	0.3	0.8
		PT=	110	58	170
		BOI=	4.3	2.1	6.6
Summary	Nearshore	D=	12.0	4.2	129.6
		PT=	60	21	650
		BOI=	1.1	0.43	8.0
	Offshore	D=	4.5	2.1	4.8
		PT=	990	460	1,000
		BOI=	19	8.2	20
	Sum	D=	4.5	2.1	7.6
		PT=	1,000	480	1,700
		BOI=	21	8.6	28

SECTION IX

Region 9. Rosario Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-50. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ROSARIO STRAIT REGION, SOUTHERN SUBREGION (0901), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.8	0.2	<0.1
		PT=	9	2	<1
		BOI=	0.18	0.03	0.01
	Offshore	D=	0.2		<0.1
		PT=	16		1
		BOI=	0.32		0.02
	Sum	D=	0.2		<0.1
		PT=	25		2
		BOI=	0.50		0.03
Grebes	Nearshore	D=	3.0		2.1
		PT=	33		23
		BOI=	0.59		0.52
	Offshore	D=	<0.1		<0.1
		PT=	9		1
		BOI=	0.28		0.01
	Sum	D=	0.3		0.2
		PT=	42		24
		BOI=	0.87		0.53
Cormorants	Nearshore	D=	26.6	50.0	11.4
		PT=	290	530	120
		BOI=	5.4	8.5	2.3
	Offshore	D=	0.6	0.2	0.7
		PT=	62	25	82
		BOI=	1.4	0.54	1.4
	Sum	D=	2.8	4.5	1.7
		PT=	350	550	210
		BOI=	6.8	9.1	3.8
Herons	Nearshore	D=		<0.1	0.1
		PT=		<1	1
		BOI=		<0.01	<0.01

TABLE E-50 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Nearshore	D=	4.0		0.5
		PT=	43		5
		BOI=	0.83		0.10
	Offshore	D=	0.3		<0.1
		PT=	33		4
		BOI=	0.81		0.06
	Sum	D=	0.6		0.1
		PT=	76		9
		BOI=	1.6		0.16
Eagles and Hawks	Nearshore	D=	0.2	0.2	<0.1
		PT=	2	2	<1
		BOI=	0.01	0.01	<0.01
Oystercatchers	Nearshore	D=	2.2	0.2	<0.1
		PT=	23	3	<1
		BOI=	0.52	0.06	0.01
Sandpipers and other shore-birds	Nearshore	D=	0.3		0.1
		PT=	3		1
		BOI=	0.03		0.02
Phalaropes	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
	Offshore	D=			0.5
		PT=			52
		BOI=			0.35
	Sum	D=			0.3
		PT			52
		BOI=			0.35
Jaegers	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01

TABLE E-50 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Jaegers	Offshore	D=			<0.1
		PT=			2
		BOI=			<0.01
	Sum	D=			<0.1
		PT=			2
		BOI=			<0.01
Gulls and Terns	Nearshore	D=	94.2	129.1	34.7
		PT=	1,000	1,400	370
		BOI=	19	26	5.2
	Offshore	D=	3.1	1.6	6.4
		PT=	340	190	710
		BOI=	5.0	3.5	11
	Sum	D=	11.4	13.0	8.9
		PT=	1,400	1,600	1,100
		BOI=	24	30	17
Alcids	Nearshore	D=	12.8	10.4	15.5
		PT=	140	110	170
		BOI=	6.2	4.9	6.1
	Offshore	D=	1.1	1.4	11.4
		PT=	120	160	1,300
		BOI=	4.8	7.9	42
	Sum	D=	2.1	2.2	11.4
		PT=	260	270	1,400
		BOI=	11	13	48
Summary	Nearshore	D=	144.0	189.3	64.7
		PT=	1,600	2,000	700
		BOI=	32	40	14
	Offshore	D=	5.2	3.3	19.0
		PT=	590	370	2,100
		BOI=	13	12	55
	Sum	D=	17.0	19.5	22.7
		PT=	2,100	2,400	2,800
		BOI=	45	52	69

TABLE E-51. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ROSARIO STRAIT REGION, CENTRAL SUBREGION (0902), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.9	0.4	0.1
		PT=	3	1	<1
		BOI=	0.07	0.02	<0.01
Grebes	Nearshore	D=	5.9		2.3
		PT=	22		8
		BOI=	0.37		0.21
	Offshore	D=	0.7		4.8
		PT=	57		380
		BOI=	1.7		12
	Sum	D=	0.9		4.7
		PT=	78		390
		BOI=	2.1		12
Cormorants	Nearshore	D=	6.9	9.2	7.8
		PT=	25	34	29
		BOI=	0.58	0.74	0.54
	Offshore	D=	0.5		
		PT=	38		
		BOI=	0.87		
	Sum	D=	0.8		
		PT=	63		
		BOI=	1.4		
Herons	Nearshore	D=			
		PT=		0.2	0.7
		BOI=		<1	3
				<0.01	0.01
Ducks and Geese	Nearshore	D=	9.4	8.0	0.2
		PT=	35	30	<1
		BOI=	0.60	0.55	0.01
	Offshore	D=	0.5		
		PT=	38		
		BOI=	0.97		

TABLE E-51 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Sum	D=	0.9		
		PT=	73		
		BOI=	1.6		
Eagles and Hawks	Nearshore	D=	0.4	1.0	0.1
		PT=	2	4	<1
		BOI=	0.01	0.03	<0.01
Oystercatchers	Nearshore	D=	0.1	0.2	1.4
		PT=	<1	<1	5
		BOI=	0.01	0.02	0.11
Sandpipers and other shore-birds	Nearshore	D=			2.6
		PT=			10
		BOI=			0.11
Phalaropes	Nearshore	D=			33.4
		PT=			120
		BOI=			0.82
	Offshore	D=			0.7
		PT=			59
		BOI=			0.39
	Sum	D=			26.5
		PT=			180
		BOI=			1.2
Gulls and Terns	Nearshore	D=	234.1	172.0	399.6
		PT=	870	640	1,500
		BOI=	16	12	18
	Offshore	D=	4.5	0.3	17.8
		PT=	360	25	1,400
		BOI=	6.6	0.47	14
	Sum	D=	14.4	7.9	34.9
		PT=	1,200	660	2,900
		BOI=	23	12	31

TABLE E-51 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Nearshore	D=	2.3	8.6	35.6
		PT=	8	32	130
		BOI=	0.33	1.1	5.2
	Offshore	D=	2.4		36.7
		PT=	190		2,900
		BOI=	7.4		94
	Sum	D=	2.4		36.1
		PT=	200		3,000
		BOI=	7.8		99
Summary	Nearshore	D=	261.3	199.8	485.0
		PT=	1,000	740	1,800
		BOI=	18	15	25
	Offshore	D=	8.8	0.3	60.0
		PT=	700	25	4,800
		BOI=	18	0.47	120
	Sum	D=	20.5	9.1	79.4
		PT=	1,700	760	6,600
		BOI=	36	15	140

TABLE E-52. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ROSARIO STRAIT REGION, NORTHERN SUBREGION (0903), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.7	1.2	
		PT=	6	4	
		BOI=	0.11	0.07	
	Offshore	D=	63.8		
		PT=	5,700		
		BOI=	110		
	Sum	D=	61.8		
		PT=	5,700		
		BOI=	110		
Grebes	Nearshore	D=	8.9		0.5
		PT=	29		2
		BOI=	0.50		0.03
	Offshore	D=	10.5		1.9
		PT=	930		170
		BOI=	28		5.1
	Sum	D=	10.4		1.8
		PT=	960		170
		BOI=	28		5.1
Cormorants	Nearshore	D=	1.5	0.3	0.8
		PT=	5	1	3
		BOI=	0.11	0.02	0.05
	Offshore	D=	0.2		0.2
		PT=	22		17
		BOI=	0.51		0.34
	Sum	D=	0.3		0.2
		PT=	27		19
		BOI=	0.62		0.39
Herons	Offshore	D=	0.5		
		PT=	44		
		BOI=	0.2[illegible]		

TABLE E-52 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Nearshore	D=	26.0	0.6	
		PT=	86	2	
		BOI=	1.4	0.04	
	Offshore	D=	6.0		
		PT=	530		
		BOI=	9.4		
	Sum	D=	67.2		
		PT=	620		
		BOI=	11		
Eagles and Hawks	Nearshore	D=	0.6	0.9	0.3
		PT=	2	3	1
		BOI=	0.01	0.02	<0.01
Sandpipers and other shore-birds	Nearshore	D=	0.4		3.1
		PT=	1		10
		BOI=	0.01		0.11
Gulls and Terns	Nearshore	D=	124.3	140.6	67.7
		PT=	410	460	220
		BOI=	7.7	8.8	3.8
	Offshore	D=	38.9	7.5	15.1
		PT=	3,500	670	1,300
		BOI=	34	13	17
	Sum	D=	42.3	11.9	17.4
		PT=	3,900	1,100	1,600
		BOI=	42	22	20
Alcids	Nearshore	D=	1.1	1.2	19.4
		PT=	4	4	64
		BOI=	0.16	0.14	3.1
	Offshore	D=	7.6	1.9	13.8
		PT=	700	170	1,200
		BOI=	23	5.8	48

TABLE E-52 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Sum	D=	7.6	1.8	14.1
		PT=	700	170	1,300
		BOI=	23	5.9	52
Summary	Nearshore	D=	166.8	145.0	91.7
		PT=	550	480	300
		BOI=	10	9.1	7.1
	Offshore	D=	96.0	9.4	31.3
		PT=	8,500	830	2,800
		BOI=	150	18	71
	Sum	D=	98.7	14.1	33.6
		PT=	9,100	1,300	3,100
		BOI=	160	27	78

SECTION X

Region 10. San Juan Islands-Northern Waters region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-53: SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-NORTHERN WATERS REGION, PRESIDENT CHANNEL SUBREGION (1001), 1979

Family	Area		Period: Spring	Summer	Fall
Loons	Nearshore	D=	2.2		
		PT=	7		
		BOI=	0.14		
	Offshore	D=	2.4		0.2
		PT=	240		20
		BOI=	4.9		0.40
	Sum	D=	2.4		
		PT=	250		
		BOI=	5.0		
Grebes	Nearshore	D=	8.8		
		PT=	28		
		BOI=	0.59		
	Offshore	D=			0.2
		PT=			20
		BOI=			0.61
Cormorants	Nearshore	D=		6.3	34.4
		PT=		20	110
		BOI=		0.39	1.6
	Offshore	D=			1.6
		PT=			160
		BOI=			3.5
	Sum	D=			2.6
		PT=			270
		BOI=			5.1
Ducks and Geese	Nearshore	D=	67.0	0.8	0.2
		PT=	210	3	<1
		BOI=	3.7	0.05	0.01
Eagles and Hawks	Nearshore	D=	1.3		
		PT=	4		
		BOI=	0.03		

TABLE E-53 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Sandpipers and other shore-birds	Nearshore	D=			4.4
		PT=			14
		BOI=			0.15
Phalaropes	Nearshore	D=			1.3
		PT=			4
		BOI=			0.03
	Offshore	D=			1.8
		PT=			180
		BOI=			1.2
	Sum	D=			1.7
		PT=			180
		BOI=			1.2
Gulls and Terns	Nearshore	D=	176.5	343.8	184.1
		PT=	560	1,100	590
		BOI=	11	21	9.4
	Offshore	D=	1.6	2.0	14.6
		PT=	160	200	1,500
		BOI=	2.4	3.4	22
	Sum	D=	7.0	12.5	20.3
		PT=	730	1,300	2,100
		BOI=	13	24	32
Alcids	Nearshore	D=	1.7	6.3	16.5
		PT=	6	20	53
		BOI=	0.18	1.6	2.0
	Offshore	D=	0.4		28.2
		PT=	40		2,800
		BOI=	1.3		110
	Sum	D=	0.4		28.0
		PT=	46		2,900
		BOI=	1.5		110

TABLE E-53 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Summary	Nearshore	D=	257.8	369.2	241.3
		PT=	820	1,200	770
		BOI=	15	23	13
	Offshore	D=	4.4	2.0	46.6
		PT=	440	200	4,700
		BOI=	8.6	3.4	140
	Sum	D=	12.5	13.5	52.1
		PT=	1,300	1,400	5,400
		BOI=	24	26	150

TABLE E-54. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-NORTHERN WATERS REGION, NORTHERN AREAS SUBREGION (1002), 1979

Family	Area		Period		
			Spring	Summer	Fall
Grebes	Nearshore	D=	0.6	0.6	
		PT=	1	1	
		BOI=	0.02	0.02	
Cormorants	Nearshore	D=	17.1	6.5	26.7
		PT=	34	13	53
		BOI=	0.78	0.30	1.2
	Offshore	D=	5.0		
		PT=	240		
		BOI=	5.5		
	Sum	D=	5.4		
		PT=	270		
		BOI=	6.3		
Ducks and Geese	Nearshore	D=	5.3		20.6
		PT=	11		41
		BOI=	0.22		0.76
Phalaropes	Offshore	D=			
		PT=			20.6
		BOI=			990
Jaegers	Nearshore	D=			6.6
		PT=			0.6
		BOI=			1
Gulls and Terns					<0.01
	Nearshore	D=	10.6	6.5	80.0
		PT=	21	13	160
		BOI=	0.40	0.23	2.0
	Offshore	D=	5.0	5.0	51.8
		PT=	240	240	2,500
		BOI=	3.2	4.5	38
	Sum	D=	5.2	5.0	52.0
		PT=	260	250	2,600
		BOI=	3.6	4.8	40

TABLE E-54 (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Nearshore	D=	3.5	2.4	24.4
		PT=	7	5	49
		BOI=	0.24	0.16	2.6
	Offshore	D=			31.2
		PT=			1,500
		BOI=			50
	Sum	D=			30.0
		PT=			1,500
		BOI=			53
Summary	Nearshore	D=	37.1	15.9	152.2
		PT=	74	32	300
		BOI=	1.7	0.71	6.5
	Offshore	D=	10.0	5.0	103.5
		PT=	480	240	5,000
		BOI=	8.7	4.5	94
	Sum	D=	11.0	5.4	106.0
		PT=	550	270	5,300
		BOI=	10	5.2	100

SECTION XI

Region II. San Juan Islands-Interior Channels and Passages region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-55. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, SPEIDEN CHANNEL SUBREGION (1101), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Offshore	D=	0.8		0.4
		PT=	10		5
		BOI=	0.21		0.10
Grebes	Offshore	D=	1.1		0.2
		PT=	13		2
		BOI=	0.40		0.05
Cormorants	Nearshore	D=	70.0	5.0	40.0
		PT=	77	6	44
		BOI=	1.8	0.13	0.61
	Offshore	D=	1.4	1.0	2.4
		PT=	18	12	30
		BOI=	0.34	0.20	0.47
	Sum	D=	7.0	1.2	5.4
		PT=	95	17	74
		BOI=	2.1	0.33	1.1
Ducks and Geese	Nearshore	D=	13.3		
		PT=	15		
		BOI=	0.27		
	Offshore	D=	0.1		<0.1
		PT=	1		<1
		BOI=	0.02		<0.01
	Sum	D=	1.2		
		PT=	16		
		BOI=	0.30		
Phalaropes	Offshore	D=			
		PT=			1.0
		BOI=			13
					0.09
Jaegers	Offshore	D=			
		PT=			<0.1
		BOI=			<1
					<0.01

TABLE E-55 (continued).

Family	Area		Period: Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	13.3		37.5
		PT=	15		41
		BOI=	0.26		0.67
	Offshore	D=	2.2	1.8	50.2
		PT=	27	23	630
		BOI=	0.46	0.43	6.0
	Sum	D=	3.1		48.9
		PT=	42		670
		BOI=	0.72		6.7
Alcids	Nearshore	D=		5.0	
		PT=		6	
		BOI=		0.19	
	Offshore	D=	2.3	1.7	2.3
		PT=	29	21	30
		BOI=	1.0	0.73	1.4
	Sum	D=		2.0	
		PT=		27	
		BOI=		0.92	
Summary	Nearshore	D=	96.7	10.0	77.5
		PT=	110	11	85
		BOI=	2.3	0.32	1.3
	Offshore	D=	8.0	4.5	56.7
		PT=	100	57	710
		BOI=	2.4	1.4	8.1
	Sum	D=	15.3	5.0	58.4
		PT=	210	68	800
		BOI=	4.7	1.7	9.4

TABLE E-56. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR PASSAGES AND CHANNELS REGION, NORTHERN SAN JUAN CHANNEL SUBREGION (1102), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Offshore	D=	<0.1		0.1
		PT=	<1		3
		BOI=	<0.01		0.07
Grebes	Nearshore	D=			10.3
		PT=			30
		BOI=			0.88
	Offshore	D=	0.2		0.2
		PT=	6		5
		BOI=	0.16		0.16
	Sum	D=			1.0
		PT=			35
		BOI=			1.0
Cormorants	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.01		
	Offshore	D=	0.2	0.1	0.6
		PT=	7	4	18
		BOI=	0.12	0.06	0.29
	Sum	D=	0.2		
		PT=	7		
		BOI=	0.13		
Herons	Nearshore	D=	<0.1		0.2
		PT=	<1		<1
		BOI=	<0.01		<0.01
Ducks and Geese	Nearshore	D=			3.8
		PT=			11
		BOI=			0.13
	Offshore	D=	<0.1		0.2
		PT=	1		5
		BOI=	0.02		0.09

TABLE E-56 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Sum	D=			
		PT=			0.4
		BOI=			16
					0.22
Eagles and Hawks	Nearshore	D=	0.4	0.2	<0.1
		PT=	1	<1	<1
		BOI=	<0.01	<0.01	<0.01
Phalaropes	Nearshore	D=			
		PT=			0.2
		BOI=			5
					0.04
Gulls and Terns	Nearshore	D=	3.9	1.7	13.3
		PT=	11	5	39
		BOI=	0.22	0.09	0.46
	Offshore	D=	5.8	0.9	4.0
		PT=	190	30	130
		BOI=	2.3	0.57	1.6
	Sum	D=	5.5	1.0	4.7
		PT=	200	35	170
		BOI=	2.5	0.66	2.1
Alcids	Nearshore	D=	0.7		
		PT=	2		0.2
		BOI=	0.07		<1
					0.02
	Offshore	D=	0.8	0.1	1.0
		PT=	27	4	35
		BOI=	1.1	0.20	1.5
	Sum	D=	0.8		
		PT=	29		1.0
		BOI=	1.2		36
					1.6
Summary	Nearshore	D=	5.3	1.9	27.9
		PT=	15	6	81
		BOI=	0.30	0.10	1.5

TABLE E-56 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Summary	Offshore	D=	7.0	1.2	6.2
		PT=	230	38	210
		BOI=	3.7	0.83	3.8
	Sum	D=	6.8	1.2	8.2
		PT=	250	44	290
		BOI=	4.0	0.93	5.3

TABLE [illegible]. [illegible] OF [illegible], [illegible] AND [illegible] AS [illegible] BY [illegible] AND [illegible] [illegible] [illegible]

TABLE E-57 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Nearshore	D=	0.2		5.5
		PT=	1		27
		BOI=	0.02		0.53
	Offshore	D=			0.6
		PT=			24
		BOI=			0.01
	Sum	D=			1.1
		PT=			51
		BOI=			1.1
Eagles and Hawks	Nearshore	D=		0.2	<0.1
		PT=		1	2
		BOI=		<0.01	<0.01
Oystercatchers	Nearshore	D=		0.5	0.7
		PT=		2	4
		BOI=		0.06	0.08
Sandpipers and other shore-birds	Nearshore	D=			0.2
		PT=			1
		BOI=			<0.01
Phalaropes	Nearshore	D=			5.2
		PT=			26
		BOI=			0.17
Jaegers	Nearshore	D=			0.1
		PT=			<1
		BOI=			<0.01
	Offshore	D=			<0.1
		PT=			2
		BOI=			<0.01
	Sum	D=			<0.1
		PT=			2
		BOI=			<0.01

TABLE E-57 (continued).

Family	Area		Period Spring	Summer	Fall
Gulls and Terns	Nearshore	D=	43.4	112.0	196.4
		PT=	220	560	980
		BOI=	3.7	9.8	13
	Offshore	D=	7.1	36.2	44.1
		PT=	310	1,600	1,900
		BOI=	5.8	30	27
	Sum	D=	10.9	43.3	59.8
		PT=	530	2,100	2,900
		BOI=	9.5	40	40
Alcids	Nearshore	D=	3.4	9.0	8.8
		PT=	17	45	44
		BOI=	0.80	2.2	1.9
	Offshore	D=	2.9		33.0
		PT=	130		1,400
		BOI=	5.0		50
	Sum	D=	2.9		30.9
		PT=	140		1,500
		BOI=	5.8		52
Summary	Nearshore	D=	65.4	143.5	249.2
		PT=	330	720	1,200
		BOI=	6.6	15	19
	Offshore	D=	10.8	46.2	78.9
		PT=	470	2,000	3,400
		BOI=	12	39	79
	Sum	D=	16.5	55.7	96.9
		PT=	800	2,700	4,700
		BOI=	18	53	98

TABLE E-58. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, WASP PASS SUBREGION (1104), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.0		0.8
		PT=	3		2
		BOI=	0.05		0.04
Grebes	Nearshore	D=	2.4		2.2
		PT=	6		6
		BOI=	0.12		0.15
Cormorants	Nearshore	D=	1.3	0.4	1.9
		PT=	3	1	5
		BOI=	0.06	0.02	0.10
Herons	Nearshore	D=	0.1		0.2
		PT=	<1		<1
		BOI=	<0.01		<0.01
Ducks and Geese	Nearshore	D=	1.5	<0.1	0.4
		PT=	4	<1	1
		BOI=	0.05	<0.01	0.02
Eagles and Hawks	Nearshore	D=	<0.1	0.2	<0.1
		PT=	<1	<1	<1
		BOI=	<0.01	<0.01	<0.01
Gulls and Terns	Nearshore	D=	8.3	6.0	22.6
		PT=	21	15	56
		BOI=	0.39	0.28	0.55
Alcids	Nearshore	D=	4.1	1.8	1.9
		PT=	10	5	5
		BOI=	0.36	0.20	0.20
Summary	Nearshore	D=	18.7	8.4	30.4
		PT=	47	21	76
		BOI=	1.0	0.50	1.1

TABLE E-59. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, UPRIGHT CHANNEL SUBREGION (1105), 1979

Family	Area		Period		
			Spring	Summer*	Fall
Loons	Offshore	D=			0.5
		PT=			4
		BOI=			0.09
Grebes	Offshore	D=			0.1
		PT=			1
		BOI=			0.03
Cormorants	Offshore	D=	0.7		0.6
		PT=	6		5
		BOI=	0.09		0.09
Ducks and Geese	Offshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Eagles and Hawks	Offshore	D=	0.2		
		PT=	2		
		BOI=	0.01		
Gulls and Terns	Offshore	D=	2.0		13.6
		PT=	18		120
		BOI=	0.33		1.8
Alcids	Offshore	D=	1.3		13.2
		PT=	11		120
		BOI=	0.42		4.3
Summary	Offshore	D=	4.2		28.0
		PT=	37		250
		BOI=	0.85		6.3

*No data are available

TABLE E-60. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, HARNEY CHANNEL SUBREGION (1106), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.1		0.3
		PT=	<1		<1
		BOI=	<0.01		<0.01
	Offshore	D=	0.2		<0.1
		PT=	6		2
		BOI=	0.13		0.04
	Sum	D=	0.2		0.1
		PT=	6		3
		BOI=	0.13		0.05
Grebes	Nearshore	D=	0.9		2.6
		PT=	2		6
		BOI=	0.04		0.11
	Offshore	D=	7.7		1.1
		PT=	240		34
		BOI=	7.0		1.0
	Sum	D=	7.3		1.2
		PT=	240		40
		BOI=	7.0		1.1
Cormorants	Nearshore	D=	0.3		1.4
		PT=	<1		3
		BOI=	0.02		0.6
	Offshore	D=	0.5	<0.1	0.8
		PT=	17	<1	18
		BOI=	0.34	0.01	0.38
	Sum	D=	0.5		0.6
		PT=	17		21
		BOI=	0.36		0.44
Herons	Nearshore	D=	0.1		0.3
		PT=	<1		<1
		BOI=	<0.01		<0.01

TABLE E-60 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Ducks and Geese	Nearshore	D=	1.8		0.3
		PT=	4		<1
		BOI=	0.08		<0.01
	Offshore	D=	0.1		1.1
		PT=	4		34
		BOI=	0.07		0.77
	Sum	D=	0.2		1.1
		PT=	8		35
		BOI=	0.15		0.78
Phalaropes	Nearshore	D=			
		PT=			3.3
		BOI=			7
					0.05
	Offshore	D=			
		PT=			0.3
		BOI=			11
					0.07
	Sum	D=			
		PT=			0.5
		BOI=			18
					0.12
Gulls and Terns	Nearshore	D=	2.9	0.8	7.2
		PT=	6	2	16
		BOI=	0.12	0.03	0.22
	Offshore	D=	2.9	1.1	5.8
		PT=	89	34	180
		BOI=	1.6	0.65	2.6
	Sum	D=	2.9	1.1	6.0
		PT=	96	36	190
		BOI=	1.7	0.68	2.8
Alcids	Nearshore	D=	0.8	0.6	1.3
		PT=	2	1	3
		BOI=	0.08	0.05	0.10

TABLE E-60 (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Offshore	D=	0.7	0.7	4.4
		PT=	21	20	130
		BOI=	0.78	0.90	4.5
	Sum	D=	0.7	0.7	3.9
		PT=	23	22	140
		BOI=	0.86	0.95	4.6
Summary	Nearshore	D=	7.0	1.3	16.7
		PT=	15	3	37
		BOI=	0.34	0.08	0.57
	Offshore	D=	12.2	1.8	13.4
		PT=	380	55	410
		BOI=	9.9	1.6	9.4
	Sum	D=	11.0	1.6	13.7
		PT=	390	58	450
		BOI=	10	1.6	9.9

TABLE E-61. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, OBSTRUCTION PASS SUBREGION (1107), 1979

Family	Area		Period Spring	Summer	Fall
Grebes	Nearshore	D=	3.3		26.7
		PT=	8		67
		BOI=	0.14		1.9
Cormorants	Nearshore	D=	3.3	0.8	0.8
		PT=	8	2	2
		BOI=	0.19	0.03	0.05
Herons	Nearshore	D=			2.5
		PT=			6
		BOI=			0.03
Eagles and Hawks	Nearshore	D=	1.7		
		PT=	4		
		BOI=	0.03		
Gulls and Terns	Nearshore	D=	8.3	13.3	288.3
		PT=	21	33	720
		BOI=	0.39	0.63	7.1
Alcids	Nearshore	D=	15.0	1.7	210.8
		PT=	38	4	530
		BOI=	1.3	0.19	27
Summary	Nearshore	D=	31.7	15.8	529.8
		PT=	79	40	1,300
		BOI=	2.0	0.85	36

TABLE E-62. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR ISLANDS AND CHANNELS REGION, THATCHER PASS SUBREGION (1108), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.1		
Grebes	Nearshore	D=	0.5		1.2
		PT=	3		6
		BOI=	<0.1		0.19
Cormorants	Nearshore	D=	0.5	0.2	0.7
		PT=	2	1	3
		BOI=	0.10	0.01	0.08
Herons	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Ducks and Geese	Nearshore	D=	0.5		
		PT=	2		
		BOI=	0.10		
Eagles and Hawks	Nearshore	D=	0.1		<0.1
		PT=	<1		<1
		BOI=	<0.01		<0.01
Phalaropes	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Gulls and Terns	Nearshore	D=	8.2	1.9	19.7
		PT=	43	10	100
		BOI=	0.10	0.24	1.1
Alcids	Nearshore	D=	3.0	0.6	1.2
		PT=	15	3	6
		BOI=	0.60	0.11	0.24

TABLE E-62 (continued).

Family	Area		Period Spring	Summer	Fall
Summary	Nearshore	D=	12.8	3.3	22.9
		PT=	67	17	120
		BOI=	1.4	0.40	1.6

SECTION XII

Region 12. San Juan Islands-Interior Bays region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-63. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, MOSQUITO/ROCHE COMPLEX SUBREGION (1201), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.1		0.2
		PT=	1		2
		BOI=	0.02		0.04
Grebes	Nearshore	D=	27.0		2.5
		PT=	270		25
		BOI=	6.3		0.41
Cormorants	Nearshore	D=	3.8	7.8	9.6
		PT=	40	80	100
		BOI=	0.79	1.5	1.9
Herons	Nearshore	D=	0.5	0.2	0.8
		PT=	5	2	8
		BOI=	0.02	0.01	0.04
Ducks and Geese	Nearshore	D=	153.8	3.9	16.8
		PT=	1,600	40	170
		BOI=	26	0.68	4.0
Eagles and Hawks	Nearshore	D=	0.1	0.7	
		PT=	1	7	
		BOI=	0.01	0.05	
Sandpipers and other shore-birds	Nearshore	D=	2.9		1.4
		PT=	30		14
		BOI=	0.17		0.08
Gulls and Terns	Nearshore	D=	29.3	38.2	35.6
		PT=	300	390	360
		BOI=	5.6	7.3	4.6

TABLE E-63 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Nearshore	D=	0.2	2.0	
		PT=	13	20	
		BOI=	0.45	0.70	
Summary	Nearshore	D=	218.7	52.6	66.9
		PT=	2,200	540	680
		BOI=	40	10	11

TABLE E-64. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, FRIDAY HARBOR SUBREGION (1202), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	0.3		0.1
		PT=	<1		<1
		BOI=	<0.01		<0.01
Grebes	Nearshore	D=	7.2		3.4
		PT=	11		5
		BOI=	0.23		0.15
Cormorants	Nearshore	D=	0.4		0.6
		PT=	<1		<1
		BOI=	0.01		0.02
Herons	Nearshore	D=			0.1
		PT=			<1
		BOI=			<0.01
Ducks and Geese	Nearshore	D=	3.3		1.0
		PT=	5		2
		BOI=	0.07		0.02
Eagles and Hawks	Nearshore	D=	<0.1		
		PT=	<1		
		BOI=	<0.01		
Gulls and Terns	Nearshore	D=	41.8	23.4	52.6
		PT=	63	35	79
		BOI=	1.2	0.66	0.91
Alcids	Nearshore	D=	0.2		14.1
		PT=	<1		21
		BOI=	<0.01		1.1
Summary	Nearshore	D=	53.2	23.4	72.0
		PT=	80	35	110
		BOI=	1.5	0.66	2.2

TABLE E-65. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, GRIFFIN BAY SUBREGION (1203), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=			0.8
		PT=			6
		BOI=			0.09
Grebes	Nearshore	D=	81.5		44.7
		PT=	610		340
		BOI=	16		7.0
	Offshore	D=			0.5
		PT=			7
		BOI=			0.11
	Sum	D=			23.3
		PT=			350
		BOI=			7.1
Cormorants	Nearshore	D=	1.0	4.0	20.8
		PT=	12	28	160
		BOI=	0.27	0.52	3.3
	Offshore	D=	1.8		2.7
		PT=	14		20
		BOI=	0.31		0.47
	Sum	D=	1.7		12.0
		PT=	26		180
		BOI=	0.58		3.8
Herons	Nearshore	D=		0.3	1.6
		PT=		2	12
		BOI=		0.01	0.06
Ducks and Geese	Nearshore	D=	147.7	5.3	20.8
		PT=	1,100	45	160
		BOI=	16	1.2	3.9
	Offshore	D=	16.4		
		PT=	120		
		BOI=	2.6		

TABLE E-65 (continued).

Family	Area		Period Spring	Summer	Fall
Ducks and Geese	Sum	D=	80.0		
		PT=	1,200		
		BOI=	19		
Eagles and Hawks	Nearshore	D=	1.6		
		PT=	12		
		BOI=	0.08		
Plovers	Nearshore	D=			0.2
		PT=			1
		BOI=			<0.01
Gulls and Terns	Nearshore	D=	68.3	105.3	169.3
		PT=	510	790	1,300
		BOI=	9.7	15	17
	Offshore	D=	10.0	0.9	14.6
		PT=	75	7	110
		BOI=	1.4	0.13	1.7
	Sum	D=	40	53.3	93.3
		PT=	600	800	1,400
		BOI=	11	15	19
Alcids	Nearshore	D=	17.9	0.3	10.8
		PT=	130	2	82
		BOI=	5.4	0.08	3.3
	Offshore	D=	15.4	1.8	44.6
		PT=	120	14	330
		BOI=	5.6	0.74	14
	Sum	D=	16.7	1.1	27.3
		PT=	250	16	410
		BOI=	11	0.82	17
Summary	Nearshore	D=	313.2	116.2	269.0
		PT=	2,300	870	2,000
		BOI=	6.3	16.8	35

TABLE E-65 (continued).

Family	Area		Period Spring	Summer	Fall
Summary	Offshore	D=	43.6	2.7	62.7
		PT=	330	20	470
		BOI=	10	0.87	16
	Sum	D=	173.3	59.3	166.7
		PT=	2,600	890	2,500
		BOI=	16	17.7	51

TABLE E-66. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, FISHERMAN BAY SUBREGION (1205), 1979

Family	Area		Period		
			Spring	Summer	Fall
Grebes	Nearshore	D=	11.3		0.3
		PT=	22		<1
		BOI=	0.65		0.01
Cormorants	Nearshore	D=	3.3	14.7	9.7
		PT=	6	28	18
		BOI=	0.11	0.42	0.31
Herons	Nearshore	D=	6.0		4.0
		PT=	11		8
		BOI=	0.06		0.04
Ducks and Geese	Nearshore	D=	115.3	9.3	2.0
		PT=	220	18	4
		BOI=	3.5	0.33	0.02
Oystercatchers	Nearshore	D=			1.7
		PT=			3
		BOI=			0.07
Plovers	Nearshore	D=			2.7
		PT=			5
		BOI=			0.02
Sandpipers and other shore-birds	Nearshore	D=	92.0		39.7
		PT=	170		75
		BOI=	0.96		0.25
Gulls and Turns	Nearshore	D=	36.7	59.3	159.7
		PT=	70	110	300
		BOI=	1.3	2.1	4.1
Alcids	Nearshore	D=			3.3
		PT=			6
		BOI=			0.27

TABLE E-66 (continued).

Family	Area		Period Spring	Summer	Fall
Summary	Nearshore	D=	264.7	83.3	223.3
		PT=	500	160	420
		BOI=	6.6	2.9	5.1

TABLE E-67. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, SWIFT'S/SHOAL BAYS SUBREGION (1206), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=		0.3	0.6
		PT=		2	3
		BOI=		0.02	0.4
Grebes	Nearshore	D=	17.6		8.3
		PT=	81		38
		BOI=	2.4		0.74
Cormorants	Nearshore	D=	1.9	1.4	6.2
		PT=	9	6	28
		BOI=	0.18	0.14	0.64
Herons	Nearshore	D=	0.5		0.5
		PT=	2		2
		BOI=	0.01		0.01
Ducks and Geese	Nearshore	D=	56.6	1.0	15.3
		PT=	260	5	70
		BOI=	5.5	0.12	1.2
Eagles and Hawks	Nearshore	D=	0.3		<0.1
		PT=	2		<1
		BOI=	0.01		<0.01
Plovers	Nearshore	D=	0.2		0.4
		PT=	<1		2
		BOI=	<0.01		<0.01
Sandpipers and other shore-birds	Nearshore	D=	1.2		5.4
		PT=	5		25
		BOI=	0.03		0.16
Gulls and Terns	Nearshore	D=	13.2	13.2	50.0
		PT=	61	61	230
		BOI=	1.2	1.2	3.4

TABLE E-67 (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Nearshore	D=	13.2	2.2	24.2
		PT=	61	10	110
		BOI=	2.2	0.35	3.7
Summary	Nearshore	D=	104.8	18.1	110.9
		PT=	480	83	510
		BOI=	11	1.8	9.9

TABLE E-68. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, DEER HARBOR SUBREGION (1207), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	1.0		0.6
		PT=	2		12
		BOI=	0.03		0.23
Grebes	Nearshore	D=	10.5		23.5
		PT=	21		47
		BOI=	0.53		1.0
Cormorants	Nearshore	D=	3.5	2.5	6.0
		PT=	7	5	12
		BOI=	0.14	0.07	0.17
Herons	Nearshore	D=	1.0	2.0	1.5
		PT=	2	4	3
		BOI=	0.01	0.02	0.02
Ducks and Geese	Nearshore	D=	7.0		4.0
		PT=	14		8
		BOI=	0.16		0.07
Eagles and Hawks	Nearshore	D=		1.0	
		PT=		2	
		BOI=		0.01	
Plovers	Nearshore	D=			1.5
		PT=			3
		BOI=			<0.01
Sandpipers and other shore-birds	Nearshore	D=	3.0		1.5
		PT=	6		3
		BOI=	0.03		<0.01
Gulls and Terns	Nearshore	D=	2.0	7.5	24.5
		PT=	4	15	49
		BOI=	0.08	0.28	0.64

TABLE E-68 (continued).

Family	Area		Period Spring	Summer	Fall
Alcids	Nearshore	D=	3.5	4.5	12.5
		PT=	7	9	25
		BOI=	0.28	0.35	1.4
Summary	Nearshore	D=	32.0	17.5	81.0
		PT=	64	35	160
		BOI=	1.3	0.74	3.5

TABLE E-69. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, WEST SOUND SUBREGION (1208), 1979.

Family	Area		Period Spring	Summer	Fall
Loons	Nearshore	D=	0.9	0.2	1.9
		PT=	8	2	17
		BOI=	0.13	0.03	0.27
Grebes	Nearshore	D=	4.7		103.7
		PT=	42		940
		BOI=	0.87		27
Cormorants	Nearshore	D=	3.3	1.4	0.9
		PT=	30	13	8
		BOI=	0.68	0.18	0.11
Herons	*Nearshore*	D=	0.2		
		PT=	2		
		BOI=	0.01		
Ducks and Geese	Nearshore	D=	4.7		23.3
		PT=	42		210
		BOI=	0.94		5.4
Eagles and Hawks	Nearshore	D=	0.2	0.5	
		PT=	2	4	
		BOI=	0.02	0.03	
Gulls and Terns	Nearshore	D=	2.1	3.3	0.9
		PT=	19	30	8
		BOI=	0.35	0.56	0.14
Alcids	Nearshore	D=	0.5	0.2	1.9
		PT=	4	2	17
		BOI=	0.15	0.07	0.92
Summary	Nearshore	D=	16.5	5.6	132.6
		PT=	150	51	1,200
		BOI=	3.1	0.87	34

TABLE E-70. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, EAST SOUND SUBREGION (1209), 1979

Family	Area		Period Spring	Summer	Fall
Loons	Nearshore	D=	0.7	0.2	0.1
		PT=	2	1	<1
		BOI=	0.04	0.01	0.01
	Offshore	D=			<0.1
		PT=			2
		BOI=			0.03
	Sum	D=			0.1
		PT=			2
		BOI=			0.04
Grebes	Nearshore	D=	1.9		19.5
		PT=	6		61
		BOI=	0.10		1.8
Cormorants	Nearshore	D=	16.4	0.8	0.6
		PT=	51	2.5	2
		BOI=	1.2	0.04	0.03
Herons	Nearshore	D=	0.3	0.2	0.1
		PT=	1	<1	<1
		BOI=	0.01	<0.01	<0.01
Ducks and Geese	Nearshore	D=	31.9	0.8	31.8
		PT=	99	2.4	99
		BOI=	2.1	0.05	2.3
Eagles and Hawks	Nearshore	D=		0.1	
		PT=		<1	
		BOI=		<0.01	
Plovers	Nearshore	D=		0.1	0.1
		PT=		<1	<1
		BOI=		<0.01	<0.01
Gulls and Terns	Nearshore	D=	7.4	5.6	2.8
		PT=	23	17	9
		BOI=	0.40	0.33	0.15

TABLE E-70 (continued).

Family	Area		Period: Spring	Summer	Fall
Gulls and Terns	Offshore	D=		0.9	3.3
		PT=		24	87
		BOI=		0.45	1.2
	Sum	D=		1.4	3.2
		PT=		41	96
		BOI=		0.78	1.3
Alcids	Nearshore	D=		<0.1	0.3
		PT=		<1	1
		BOI=		0.01	0.03
	Offshore	D=			2.1
		PT=			54
		BOI=			2.0
	Sum	D=			1.9
		PT=			55
		BOI=			2.0
Summary	Nearshore	D=	59.0	7.7	55.3
		PT=	180	24	170
		BOI=	3.8	0.44	4.3
	Offshore	D=		0.9	5.4
		PT=		24	140
		BOI=		0.45	3.2
	Sum	D=		1.6	10.5
		PT=		48	310
		BOI=		0.89	7.5

TABLE E-71. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, LOPEZ SOUND SUBREGION (1210), 1979

Family	Area		Period Spring	Summer	Fall
Loons	Nearshore	D=	0.5	0.2	0.9
		PT=	11	6	22
		BOI=	0.24	0.10	0.35
Grebes	Nearshore	D=	9.3		30.1
		PT=	220		720
		BOI=	4.5		12
Cormorants	Nearshore	D=	4.8	7.2	8.1
		PT=	120	170	190
		BOI=	2.5	2.8	3.9
Herons	Nearshore	D=	0.6		0.5
		PT=	14		11
		BOI=	0.07		0.06
Ducks and Geese	Nearshore	D=	30.6	4.8	66.7
		PT=	730	120	1,600
		BOI=	15	3.0	40
Eagles and Hawks	Nearshore	D=	0.1	0.1	
		PT=	3	3	
		BOI=	0.02	0.02	
Oystercatchers	Nearshore	D=			0.2
		PT=			6
		BOI=			0.12
Gulls and Terns	Nearshore	D=	22.0	14.2	16.1
		PT=	530	340	390
		BOI=	10	6.4	6.5
Alcids	Nearshore	D=	7.5	0.9	21.8
		PT=	180	22	520
		BOI=	7.7	0.89	22

TABLE E-71 (continued).

Family	Area		Period Spring	Summer	Fall
Summary	Nearshore	D=	75.4	27.5	145.1
		PT=	1,800	660	3,500
		BOI=	40	13	85

SECTION XIII

Region 13. Canadian Waters region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE E-72. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE CANADIAN WATERS REGION, ACTIVE PASS SUBREGION (1301), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Nearshore	D=	169.1		8.8
		PT=	1,800		93
		BOI=	36		1.9
Grebes	Nearshore	D=	0.3		0.9
		PT=	3		9
		BOI=	0.09		0.28
Cormorants	Nearshore	D=	64.9	0.2	1.7
		PT=	680	2	18
		BOI=	14	0.04	0.37
Herons	Nearshore	D=			0.1
		PT=			1
		BOI=			<0.01
Ducks and Geese	Nearshore	D=			0.1
		PT=			1
		BOI=			0.03
Eagles and Hawks	Nearshore	D=	0.5	0.7	0.1
		PT=	5	8	1
		BOI=	0.04	0.06	<0.01
Jaegers	Nearshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Gulls and Terns	Nearshore	D=	113.4	14.5	93.5
		PT=	1,200	150	980
		BOI=	12	2.9	11
Alcids	Nearshore	D=	0.4	0.2	2.0
		PT=	4	2	21
		BOI=	0.15	0.05	0.78

TABLE E-72 (continued).

Family	Area		Period Spring	Summer	Fall
Summary	Nearshore	D=	348.5	15.6	107.3
		PT=	3,700	160	1,100
		BOI=	62	3.0	14

TABLE E-73. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE CANADIAN WATERS REGION, CANADIAN GULF ISLANDS SUBREGION (1302), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Offshore	D=	0.1		0.4
		PT=	20		60
		BOI=	0.41		1.2
Grebes	Offshore	D=	<0.1		0.2
		PT=	5		25
		BOI=	0.15		0.73
Cormorants	Offshore	D=	0.3	0.2	1.0
		PT=	47	26	140
		BOI=	1.0	0.36	2.9
Herons	Offshore	D=	<0.1		
		PT=	2		
		BOI=	0.01		
Ducks and Geese	Offshore	D=	<0.1		<0.1
		PT=	5		13
		BOI=	0.11		0.26
Eagles and Hawks	Offshore	D=			<0.1
		PT=			<1
		BOI=			<0.01
Oystercatchers	Offshore	D=			<0.1
		PT=			1
		BOI=			0.02
Phalaropes	Offshore	D=			<0.1
		PT=			12
		BOI=			0.08
Gulls and Terns	Offshore	D=	17.2	0.8	4.5
		PT=	2,400	110	640
		BOI=	25	2.1	9.8

TABLE E-73 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Offshore	D=	0.4	0.1	0.2
		PT=	52	11	23
		BOI=	2.3	0.29	0.95
Summary	Offshore	D=	18.1	1.0	6.4
		PT=	2,600	150	920
		BOI=	29	2.7	16

TABLE E-74. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE CANADIAN WATERS REGION, SIDNEY APPROACH SUBREGION (1303), 1979

Family	Area		Period		
			Spring	Summer	Fall
Loons	Offshore	D=	1.4	<0.1	1.7
		PT=	160	6	200
		BOI=	3.2	0.10	4.0
Grebes	Offshore	D=	<0.1		1.2
		PT=	10		140
		BOI=	0.15		3.0
Cormorants	Offshore	D=	3.2	1.2	2.9
		PT=	370	140	340
		BOI=	7.1	2.5	6.3
Herons	Offshore	D=			
		PT=		<0.1	
		BOI=		6	
				0.03	
Ducks and Geese	Offshore	D=	9.3		7.0
		PT=	1,100		820
		BOI=	27		17
Eagles and Hawks	Offshore	D=	<0.1		
		PT=	3		
		BOI=	0.02		
Sandpipers and other shore-birds	Offshore	D=			
		PT=			0.5
		BOI=			60
					0.34
Phalaropes	Offshore	D=			
		PT=			0.9
		BOI=			100
					0.69
Gulls and Terns	Offshore	D=	8.6	1.1	12.5
		PT=	1,000	130	1,500
		BOI=	19	2.5	21

TABLE E-74 (continued).

Family	Area		Period		
			Spring	Summer	Fall
Alcids	Offshore	D=	5.3	1.2	5.5
		PT=	620	140	650
		BOI=	24	6.6	25
Summary	Offshore	D=	27.8	3.6	32.3
		PT=	3,300	430	3,800
		BOI=	81	12	78

APPENDIX F

Regional and Subregional Summaries of Bird Family Densities, Projected Totals, and Bird Oil Indices, 1978 and 1979. Seasonal monthly groupings for 1978 and 1979 combined are as follows: Spring -- April and May; Summer -- June; Fall -- July, August, September, and October; and Winter -- January, February, March, November, and December.

SECTION 1

Region 1. Swiftsure Bank region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-1. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SWIFTSURE BANK REGION, SWIFTSURE BANK SUBREGION (0101), 1978 and 1979, COMBINED

Family	Area		Period			
			Spring*	Summer	Fall	Winter
Loons	Offshore	D=			<0.1	
		PT=			34	
		BOI=			0.59	
Albatrosses	Offshore	D=			<0.1	
		PT=			17	
		BOI=			0.18	
Shearwaters	Offshore	D=			23.1	
		PT=			19,000	
		BOI=			130	
Storm-Petrels	Offshore	D=			1.7	
		PT=			1,500	
		BOI=			13	
Ducks and Geese	Offshore	D=			<0.1	
		PT=			17	
		BOI=			0.14	
Phalaropes	Offshore	D=			1.3	
		PT=			1,000	
		BOI=			6.9	
Jaegers	Offshore	D=			0.2	
		PT=			150	
		BOI=			0.14	
Gulls and Terns	Offshore	D=			68.2	
		PT=			57,000	
		BOI=			560	
Alcids	Offshore	D=			70.4	
		PT=			59,000	
		BOI=			1,000	

TABLE F-1 (continued).

Family	Area		Period			
			Spring*	Summer	Fall	Winter
Summary	Offshore	D=			165.3	
		PT=			140,000	
		BOI=			1,700	

*No data are available

SECTION II

Region 2. Strait of Juan de Fuca - Outer region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-2. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA - OUTER REGION, STRAIT OF JUAN DE FUCA (OUTER) SUBREGION (0201), 1978 and 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Offshore	D=	0.6			<0.1
		PT=	1,100			130
		BOI=	22			2.5
Grebes	Offshore	D=				0.2
		PT=				300
		BOI=				6.8
Shearwaters	Offshore	D=			0.2	
		PT=			340	
		BOI=			2.2	
Storm-Petrels	Offshore	D=			<0.1	<0.1
		PT=			74	44
		BOI=			0.63	0.38
Cormorants	Offshore	D=	0.1		0.3	0.2
		PT=	240		490	310
		BOI=	5.3		9.0	6.7
Ducks and Geese	Offshore	D=	0.4			0.2
		PT=	650			350
		BOI=	12			8.0
Phalaropes	Offshore	D=	0.2		3.6	<0.1
		PT=	410		6,900	88
		BOI=	2.7		46	0.23
Gulls and Terns	Offshore	D=	1.1	0.6	8.2	5.8
		PT=	2,000	1,000	16,000	11,000
		BOI=	35	18	230	170
Alcids	Offshore	D=	1.2	0.6	59.0	13.3
		PT=	2,200	1,200	110,000	25,000
		BOI=	89	38	3,600	820

TABLE F-2 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Summary	Offshore	D=	3.5	1.2	71.5	19.6
		PT=	6,600	2,400	130,000	37,000
		BOI=	170	56	3,900	1,000

TABLE F-3. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA - OUTER REGION, VANCOUVER ISLAND SUBREGION (0202), 1978 and 1979, COMBINED

Family	Area	Period			
		Spring	Summer*	Fall	Winter
Loons	Nearshore D=	0.7		2.0	0.7
	PT=	36		100	36
	BOI=	0.54		1.9	0.54
Grebes	Nearshore D=	0.2		13.2	2.6
	PI=	9		680	140
	BOI=	0.15		17	3.0
Cormorants	Nearshore D=	49.8		0.9	15.8
	PT=	2,600		46	810
	BOI	59		0.80	18
Herons	Nearshore D=			0.7	
	PT=			37	
	BOI=			0.19	
Ducks and Geese	Nearshore D=	2.6		25.0	7.5
	PT=	140		1,300	390
	BOI=	2.8		24	7.3
Eagles and Hawks	Nearshore D=			0.4	0.2
	PT=			18	9
	BOI=			0.13	0.06
Oystercatchers	Nearshore D=				0.2
	PT=				9
	BOI=				0.20
Gulls and Terns	Nearshore D=	32.3		210.7	51.8
	PT=	1,700		11,000	2,700
	BOI=	28		190	50
Alcids	Nearshore D=			2.3	2.1
	PT=			120	110
	BOI=			4.0	3.5
Summary	Nearshore D=	85.6		255.2	80.9
	PT=	4,400		13,000	4,200
	BOI=	90		230	83

*No data are available

TABLE F-4. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA - OUTER REGION, CAPE FLATTERY SUBREGION (0203), 1978 and 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.2		0.2	1.4
		PT=	1		1	8
		BOI=	0.02		0.03	0.14
Grebes	Nearshore	D=	6.6		0.2	1.3
		PT=	36		1	7
		BOI=	0.76		0.04	0.13
Cormorants	Nearshore	D=	72.6	24.6	68.7	45.1
		PT=	390	130	370	240
		BOI=	8.9	3.0	8.4	5.3
Herons	Nearshore	D=				0.1
		PT=				<1
		BOI=				<0.01
Ducks and Geese	Nearshore	D=	9.9		1.1	7.3
		PT=	53		6	39
		BOI=	1.1		0.15	0.80
Eagles and Hawks	Nearshore	D=	0.1			0.7
		PT=	<1			4
		BOI=	<0.01			0.03
Oystercatchers	Nearshore	D=	0.7		1.1	0.1
		PT=	4		6	<1
		BOI=	0.08		0.14	0.01
Sandpipers and other shorebirds	Nearshore	D=	0.7			
		PT=	4			
		BOI=	0.04			
Phalaropes	Nearshore	D=	38.4			
		PT=	210			
		BOI=	1.4			
Gulls and Terns	Nearshore	D=	734.2	34.6	1,353.8	392.4
		PT=	4,000	190	7,300	2,100
		BOI=	74	3.5	130	37

TABLE F-4 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	52.0	1.8	44.0	39.8
		PT=	280	10	240	210
		BOI=	9.1	0.34	8.2	6.9
Summary	Nearshore	D=	916.0	60.9	1,471.0	488.8
		PT=	4,900	330	7,900	2,600
		BOI=	95	7	150	50

TABLE F-5. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, NEAH BAY SUBREGION (0204), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.0	0.2	0.9	2.0
		PT=	4	1	4	9
		BOI=	0.07	0.01	0.08	0.15
Grebes	Nearshore	D=	9.2	0.1	20.7	18.4
		PT=	41	<1	93	83
		BOI=	0.86	<0.01	1.7	1.8
Cormorants	Nearshore	D=	2.4	1.7	7.4	5.5
		PT=	11	8	33	25
		BOI=	0.24	0.15	0.71	0.53
Herons	Nearshore	D=	0.2	0.2	0.5	0.2
		PT=	<1	1	2	<1
		BOI=	<0.01	<0.01	0.01	<0.01
Ducks and Geese	Nearshore	D=	52.8	1.9	39.0	82.5
		PT=	240	8	180	370
		BOI=	4.0	0.14	3.6	6.0
Eagles and Hawks	Nearshore	D=	<0.1	0.2		<0.1
		PT=	<1	1		<1
		BOI=	<0.01	<0.01		<0.01
Rails	Nearshore	D=	1.3		0.6	3.0
		PT=	6		3	13
		BOI=	0.02		<0.01	0.04
Oystercatchers	Nearshore	D=	<0.1			
		PT=	<1			
		BOI=	<0.01			
Plovers	Nearshore	D=	0.2		0.6	<0.1
		PT=	<1		3	<1
		BOI=	<0.01		0.01	<0.01

TABLE F-5 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Sandpipers and other shore-birds	Nearshore	D=	17.8	0.4	23.6	4.9
		PT=	80	2	110	22
		BOI=	0.48	<0.01	0.62	0.20
Gulls and Terns	Nearshore	D=	17.5	38.1	386.2	37.2
		PT=	79	170	1,700	170
		BOI=	1.4	2.9	23	3.0
Alcids	Nearshore	D=	1.5	0.4	3.0	0.2
		PT=	7	2	13	<1
		BOI=	0.32	0.07	0.53	0.03
Summary	Nearshore	D=	103.9	43.4	483.0	154.0
		PT=	470	200	2,200	690
		BOI=	7.4	3.3	31	12

TABLE F-6. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA - OUTER REGION, NEAH BAY TO CLALLAM BAY SUBREGION (0205), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.7	1.3	0.7	2.2
		PT=	9	17	9	29
		BOI=	0.15	0.25	0.15	0.53
Grebes	Nearshore	D=	3.7		3.6	21.1
		PT=	47		46	270
		BOI=	1.2		0.81	6.1
Cormorants	Nearshore	D=	22.6	4.5	41.4	30.0
		PT=	290	58	530	390
		BOI=	6.5	1.3	12	8.0
Herons	Nearshore	D=	0.1		0.2	0.1
		PT=	1		3	1
		BOI=	<0.01		0.02	<0.01
Ducks and Geese	Nearshore	D=	29.5	13.6	45.3	80.0
		PT=	380	170	580	1,000
		BOI=	7.3	3.8	14	18
Eagles and Hawks	Nearshore	D=	0.4	1.0	<0.1	0.4
		PT=	5	12	<1	5
		BOI=	0.04	0.09	<0.01	0.04
Oystercatchers	Nearshore	D=			0.1	<0.1
		PT=			2	<1
		BOI=			0.03	0.01
Sandpipers and other shorebirds	Nearshore	D=			2.3	2.0
		PT=			29	25
		BOI=			0.23	0.10
Phalaropes	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	

TABLE F-6 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	66.2	116.4	443.9	70.4
		PT=	850	1,500	5,700	910
		BOI=	16	28	78	15
Alcids	Nearshore	D=	3.9	2.9	35.8	0.2
		PT=	51	37	460	3
		BOI=	1.5	1.8	14	0.09
Summary	Nearshore	D=	128.9	140.3	575.0	210.6
		PT=	1,700	1,800	7,400	2,700
		BOI=	32	36	120	48

TABLE F-7. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA - OUTER REGION, CLALLAM BAY SUBREGION (0206), 1978 AND 1979, COMBINED

Family	Area		Period Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.9	0.1	0.5	1.8
		PT=	3	<1	2	6
		BOI=	0.05	<0.01	0.03	0.10
Grebes	Nearshore	D=	6.0		4.6	16.1
		PT=	19		15	52
		BOI=	0.42		0.34	1.2
Cormorants	Nearshore	D=	3.8	3.4	3.8	9.5
		PT=	12	11	12	30
		BOI=	0.24	0.22	0.24	0.62
Herons	Nearshore	D=		0.1	0.2	0.2
		PT=		<1	<1	<1
		BOI=		<0.01	<0.01	<0.01
Ducks and Geese	Nearshore	D=	26.5	4.5	18.2	41.6
		PT=	85	14	58	130
		BOI=	1.6	0.33	1.4	2.7
Eagles and Hawks	Nearshore	D=	0.1		<0.1	<0.1
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Oystercatchers	Nearshore	D=	<0.1			
		PT=	<1			
		BOI=	<0.01			
Plovers	Nearshore	D=		0.1	0.2	0.2
		PT=		<1	<1	<1
		BOI=		<0.01	<0.01	<0.01
Sandpipers and other shorebirds	Nearshore	D=			0.2	0.5
		PT=			<1	2
		BOI=			<0.01	0.02
Phalaropes	Nearshore	D=	0.5		0.4	<0.1
		PT=	1		1	<1
		BOI=	<0.01		<0.01	<0.01

TABLE F-7 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	20.7	28.8	190.8	13.0
		PT=	66	92	610	42
		BOI=	1.0	1.4	7.5	0.66
Alcids	Nearshore	D=	1.8	8.3	1.9	0.7
		PT=	6	27	6	2
		BOI=	0.27	1.4	0.24	0.09
Summary	Nearshore	D=	60.5	45.3	222.0	84.1
		PT=	190	140	710	270
		BOI=	3.7	3.3	10	5.3

TABLE F-8. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA - OUTER REGION, CLALLAM BAY TO CRESCENT BAY SUBREGION (0207), 1978 and 1979, COMBINED

Family	Area		Period Spring	Summer	Fall	Winter
Loons	Nearshore	D=	2.1	0.7	1.4	2.1
		PT=	44	15	30	43
		BOI=	0.74	0.24	0.48	0.75
Grebes	Nearshore	D=	6.9		6.1	12.7
		PT=	140		130	260
		BOI=	3.1		2.6	5.6
Cormorants	Nearshore	D=	8.3	2.4	7.6	17.4
		PT=	170	49	160	360
		BOI=	3.6	1.1	3.4	7.4
Herons	Nearshore	D=	0.3	0.7	1.0	0.2
		PT=	5	15	20	3
		BOI=	0.03	0.08	0.10	0.02
Ducks and Geese	Nearshore	D=	87.0	2.6	22.8	113.7
		PT=	1,800	53	470	2,400
		BOI=	43	1.0	10	34
Eagles and Hawks	Nearshore	D=	<0.1		<0.1	<0.2
		PT=	1		<1	4
		BOI=	<0.01		<0.01	0.03
Oystercatchers	Nearshore	D=				<0.1
		PT=				1
		BOI=				0.03
Plovers	Nearshore	D=			0.2	0.1
		PT=			3	2
		BOI=			<0.01	<0.01
Sandpipers and other shorebirds	Nearshore	D=	0.6		8.3	1.2
		PT=	12		170	24
		BOI=	0.07		0.77	0.21

TABLE F-8 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	25.3	26.3	330.4	70.8
		PT=	530	550	6,900	1,500
		BOI=	9.3	8.7	78	22
Alcids	Nearshore	D=	3.3	4.7	13.4	0.5
		PT=	68	98	280	9
		BOI=	2.6	3.7	13	0.39
Summary	Nearshore	D=	134.2	37.4	392.2	225.7
		PT=	2,800	780	8,200	4,700
		BOI=	63	15	110	71

TABLE F-9. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA - OUTER REGION, CRESCENT BAY SUBREGION (0208), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	2.7	1.2	3.0	8.5
		PT=	3	1	3	9
		BOI=	0.05	0.02	0.06	0.18
Grebes	Nearshore	D=	4.2		10.3	29.5
		PT=	5		11	32
		BOI=	0.09		0.20	0.72
Cormorants	Nearshore	D=	11.5	1.7	9.4	21.8
		PT=	13	2	10	24
		BOI=	0.26	0.04	0.23	0.50
Herons	Nearshore	D=	0.2		0.7	0.6
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Ducks and Geese	Nearshore	D=	46.0	4.6	28.6	117.8
		PT=	51	5	31	130
		BOI=	0.95	0.12	0.74	2.2
Eagles and Hawks	Nearshore	D=	0.3	0.4	<0.1	0.1
		PT=	<1	<1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Oystercatchers	Nearshore	D=	3.1	3.3	1.4	9.8
		PT=	3	4	2	11
		BOI=	0.07	0.08	0.03	0.24
Plovers	Nearshore	D=	2.2	1.7	2.0	1.0
		PT=	2	2	2	1
		BOI=	0.01	<0.01	<0.01	<0.01
Sandpipers and other shorebirds	Nearshore	D=	14.2	4.2	9.8	9.5
		PT=	16	5	11	10
		BOI=	0.12	0.02	0.06	0.12

TABLE F-9 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	75.6	8.3	240.5	37.3
		PT=	83	9	260	41
		BOI=	1.5	0.16	3.0	0.69
Alcids	Nearshore	D=	17.7	15.8	13.8	2.9
		PT=	20	17	15	3
		BOI=	0.91	0.68	0.56	0.12
Summary	Nearshore	D=	178.1	41.7	321.1	238.8
		PT=	200	46	350	260
		BOI=	4.0	1.1	4.9	4.8

TABLE F-10. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-OUTER REGION, CRESCENT BAY TO EDIZ HOOK SUBREGION (0209), 1978 AND 1979, COMBINED

Family	Area		Period Spring	Summer	Fall	Winter
Loons	Nearshore	D=	3.9	0.4	1.2	3.8
		PT=	35	4	10	34
		BOI=	0.66	0.06	0.16	0.64
Grebes	Nearshore	D=	8.6		6.6	12.9
		PT=	77		59	120
		BOI=	1.6		1.3	2.3
Cormorants	Nearshore	D=	11.1	8.6	19.9	23.8
		PT=	100	78	180	210
		BOI=	2.2	1.8	4.1	4.5
Herons	Nearshore	D=	0.8	3.6	0.6	0.5
		PT=	7	33	6	5
		BOI=	0.04	0.16	0.03	0.02
Ducks and Geese	Nearshore	D=	165.9	10.4	9.9	180.8
		PT=	1,500	94	89	1,600
		BOI=	16	2.1	2.0	22
Eagles and Hawks	Nearshore	D=				0.1
		PT=				1
		BOI=				<0.01
Plovers	Nearshore	D=	0.5			
		PT=	5			
		BOI=	0.02			
Sandpipers and other shore-birds	Nearshore	D=	7.8		1.2	
		PT=	70		10	
		BOI=	0.37		<0.01	

TABLE F-10 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	236.9	19.1	450.2	635.8
		PT=	2,100	170	4,100	5,700
		BOI=	38	3.2	61	100
Alcids	Nearshore	D=	4.7	15.0	16.6	0.7
		PT=	42	140	150	6
		BOI=	1.5	5.0	5.0	0.25
Summary	Nearshore	D=	442.0	57.7	509.2	861.1
		PT=	4,000	520	4,600	7,800
		BOI=	60	12	74	130

SECTION III

Region 3. Strait of Juan de Fuca-inner region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-11. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, STRAIT OF JUAN DE FUCA (INNER) SUBREGION (0301), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Offshore	D=	0.9	<0.1	0.2	0.2
		PT=	1,500	13	260	290
		BOI=	30	0.19	5.1	5.8
Grebes	Offshore	D=	0.1	<0.1	2.5	0.2
		PT=	240	63	4,000	380
		BOI=	4.6	1.9	63	7.6
Shearwaters	Offshore	D=				
		PT=		<0.1	<0.1	
		BOI=		25	50	
				0.17	0.34	
Storm-Petrels	Offshore	D=				
		PT=		<0.1	<0.1	
		BOI=		63	10	
				0.54	0.13	
Cormorants	Offshore	D=	0.7	0.1	0.8	0.8
		PT=	1,100	180	1,300	1,300
		BOI=	27	4.0	27	27
Ducks and Geese	Offshore	D=	0.5	<0.1	2.3	1.9
		PT=	810	38	3,800	3,100
		BOI=	49	0.90	91	61
Phalaropes	Offshore	D=				
		PT=			0.6	<0.1
		BOI=			1,000	4
					6.7	<0.01
Jaegers	Offshore	D=				
		PT=			<0.1	
		BOI=			10	
					0.03	
Gulls and Terns	Offshore	D=	0.5	7.1	18.4	12.3
		PT=	8,000	12,000	30,000	20,000
		BOI=	110	190	460	280

TABLE F-11 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Alcids	Offshore	D=	4.0	3.0	17.2	6.7
		PT=	6,400	5,000	28,000	11,000
		BOI=	270	220	1,000	370
Summary	Offshore	D=	11.1	10.5	42.0	22.1
		PT=	18,000	17,000	69,000	36,000
		BOI=	490	420	1,700	750

TABLE F-12. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, EDIZ HOOK SUBREGION (0302), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.6		0.6	1.0
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Grebes	Nearshore	D=	4.2		3.0	5.3
		PT=	2		1	2
		BOI=	0.03		0.02	0.04
Cormorants	Nearshore	D=	2.7	1.9	5.0	3.3
		PT=	1	<1	2	1
		BOI=	0.02	0.02	0.05	0.03
Herons	Nearshore	D=	<0.1		<0.1	0.3
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Ducks and Geese	Nearshore	D=	9.2		7.8	12.1
		PT=	4		3	5
		BOI=	0.08		0.07	0.08
Eagles and Hawks	Nearshore	D=				
		PT=				<0.1
		BOI=				<1
						<0.01
Oystercatchers	Nearshore	D=		<0.1		
		PT=		<1		
		BOI=		<0.01		
Plovers	Nearshore	D=	<0.1		<0.1	0.1
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	<0.1	0.1	0.8	0.3
		PT=	<1	<1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01

TABLE F-12 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Phalaropes	Nearshore	D=			6.8	
		PT=			3	
		BOI=			0.02	
Gulls and Terns	Nearshore	D=	9.3	22.0	72.1	14.1
		PT=	4	9	29	6
		BOI=	0.06	0.16	0.39	0.10
Alcids	Nearshore	D=	5.1	7.6	43.9	1.2
		PT=	2	3	18	<1
		BOI=	0.10	0.15	0.77	0.02
Summary	Nearshore	D=	31.4	31.7	140.3	38.0
		PT=	13	13	56	15
		BOI=	0.29	0.33	1.3	0.27

TABLE F-13. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, PORT ANGELES SUBREGION (0303), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.8	<0.1	0.3	0.8
		PT=	8	<1	3	9
		BOI=	0.14	<0.01	0.06	0.15
Grebes	Nearshore	D=	11.6	<0.1	6.2	34.5
		PT=	120	<1	65	360
		BOI=	3.0	0.02	1.3	9.2
Cormorants	Nearshore	D=	8.8	9.8	11.4	9.5
		PT=	91	100	120	99
		BOI=	2.0	2.3	2.7	2.1
Herons	Nearshore	D=	<0.1		1.1	1.6
		PT=	<1		11	17
		BOI=	<0.01		0.06	0.08
Ducks and Geese	Nearshore	D=	21.0	0.9	23.2	63.2
		PT=	220	9	240	660
		BOI=	5.0	0.17	3.3	12
Rails	Nearshore	D=	<0.1		<0.1	0.1
		PT=	<1		<1	1
		BOI=	<0.01		<0.01	<0.01
Oystercatchers	Nearshore	D=	<0.1	<0.1		
		PT=	<1	1		
		BOI=	0.01	0.02		
Plovers	Nearshore	D=	1.0	<0.1	1.5	3.3
		PT=	10	<1	16	34
		BOI=	0.05	<0.01	0.08	0.17
Sandpipers and other shore-birds	Nearshore	D=	4.8		6.5	11.3
		PT=	50		68	120
		BOI=	0.36		0.45	0.70

TABLE F-13 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	18.2	21.9	212.7	75.9
		PT=	190	230	2,200	790
		BOI=	3.5	4.2	29	13
Alcids	Nearshore	D=	2.3	1.2	4.8	3.5
		PT=	24	12	50	36
		BOI=	1.1	0.55	2.0	1.4
Summary	Nearshore	D=	68.6	34.0	267.8	203.8
		PT=	710	350	2,800	2,100
		BOI=	15	7.3	39	39

TABLE F-14. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, VOICE OF AMERICA SUBREGION (0304), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.4	0.8	1.6	1.9
		PT=	34	19	39	46
		BOI=	0.66	0.39	0.73	0.88
Grebes	Nearshore	D=	3.8	<0.1	20.6	11.7
		PT=	92	1	490	280
		BOI=	1.8	0.04	8.9	6.4
Cormorants	Nearshore	D=	4.1	2.5	4.8	7.1
		PT=	99	60	120	170
		BOI=	2.2	1.4	2.6	3.8
Herons	Nearshore	D=		<0.1	<0.1	<0.1
		PT=		<1	2	2
		BOI=		<0.01	<0.01	0.01
Ducks and Geese	Nearshore	D=	25.4	47.7	31.2	60.4
		PT=	610	1,100	749	1,400
		BOI=	12	25	16	24
Eagles and Hawks	Nearshore	D=	0.1		<0.1	<0.1
		PT=	3		<1	1
		BOI=	0.02		<0.01	<0.01
Plovers	Nearshore	D=	<0.1	<0.1	<0.1	<0.1
		PT=	<1	2	1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=			0.6	
		PT=			14	
		BOI=			0.06	
Phalaropes	Nearshore	D=			<0.1	<0.1
		PT=			2	<1
		BOI=			0.01	<0.01

TABLE F-14 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	44.0	61.3	126.0	46.5
		PT=	1,100	1,500	3,000	1,100
		BOI=	18	23	45	13
Alcids	Nearshore	D=	19.9	22.1	20.0	2.0
		PT=	480	530	480	49
		BOI=	23	25	22	2.0
Summary	Nearshore	D=	98.9	134.8	205.9	130.3
		PT=	2,400	3,200	4,900	3,100
		BOI=	58	75	95	50

TABLE F-15. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DUNGENESS SPIT SUBREGION (0305), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	6.6		3.9	9.4
		PT=	26		16	38
		BOI=	0.53		0.26	0.74
Grebes	Nearshore	D=	12.4		10.9	12.1
		PT=	50		44	48
		BOI=	0.78		0.59	0.92
Cormorants	Nearshore	D=	11.2	1.0	12.5	9.7
		PT=	45	4	50	39
		BOI=	1.0	0.09	1.1	0.86
Herons	Nearshore	D=	0.3		43.2	0.1
		PT=	1		170	<1
		BOI=	<0.01		0.87	<0.01
Ducks and Geese	Nearshore	D=	75.4	1.0	44.5	506.0
		PT=	300	4	180	2,000
		BOI=	6.2	0.08	3.6	18
Eagles and Hawks	Nearshore	D=	0.2			0.1
		PT=	<1			<1
		BOI=	<0.01			<0.01
Oystercatchers	Nearshore	D=				
		PT=			<0.1	0.2
		BOI=			<1	<1
					<0.01	0.01
Plovers	Nearshore	D=				
		PT=			125.4	5.8
		BOI=			500	23
					2.5	0.12
Sandpipers and other shore-birds	Nearshore	D=	3.1		47.4	49.1
		PT=	12		190	200
		BOI=	0.06		1.0	1.0

TABLE F-15 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	33.0	258.0	598.6	140.6
		PT=	130	1,000	2,400	560
		BOI=	2.4	18	36	8.7
Alcids	Nearshore	D=	15.7	17.0	51.4	10.2
		PT=	63	68	210	41
		BOI=	2.8	3.3	8.5	1.6
Summary	Nearshore	D=	158.1	277.0	939.3	747.3
		PT=	630	1,100	3,800	3,000
		BOI=	14	22	55	32

TABLE F-16. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DUNGENESS BAY/HARBOR SUBREGION (0306), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	2.0	<0.1	1.3	4.0
		PT=	24	<1	16	48
		BOI=	0.44	0.01	0.25	0.92
Grebes	Nearshore	D=	16.2	<0.1	4.7	8.0
		PT=	190	<1	56	96
		BOI=	4.5	0.01	0.95	2.1
Shearwaters	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Cormorants	Nearshore	D=	5.4	5.3	11.8	6.5
		PT=	65	64	140	78
		BOI=	1.5	1.4	3.0	1.7
Herons	Nearshore	D=	0.1	0.5	1.9	0.2
		PT=	1	6	23	2
		BOI=	<0.01	0.03	0.12	0.01
Ducks and Geese	Nearshore	D=	296.7	6.9	155.4	407.3
		PT=	3,600	83	1,900	4,900
		BOI=	94	1.1	21	57
Eagles and Hawks	Nearshore	D=	<0.1			<0.1
		PT=	<1			<1
		BOI=	<0.01			<0.01
Rails	Nearshore	D=	0.4			<0.1
		PT=	5			<1
		BOI=	0.01			<0.01
Oystercatchers	Nearshore	D=	0.1		0.1	<0.1
		PT=	1		1	<1
		BOI=	0.03		0.03	<0.01

TABLE F-16 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Plovers	Nearshore	D=	18.4	3.0	14.9	23.2
		PT=	220	36	180	280
		BOI=	1.1	0.18	0.88	1.4
Sandpipers and other shore-birds	Nearshore	D=	99.4	7.2	46.4	55.7
		PT=	1,200	86	560	670
		BOI=	5.9	0.90	2.6	3.4
Phalaropes	Nearshore	D=			<0.1	<0.1
		PT=			<1	<1
		BOI=			<0.01	<0.01
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	93.6	151.7	278.4	67.2
		PT=	1,100	1,800	3,300	810
		BOI=	16	30	47	11
Alcids	Nearshore	D=	6.6	4.3	3.5	0.3
		PT=	80	52	42	4
		BOI=	2.7	1.9	1.6	0.14
Summary	Nearshore	D=	539.1	179.1	518.8	575.1
		PT=	6,500	2,100	6,200	6,900
		BOI=	130	35	78	78

TABLE F-17. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, JAMESTOWN SUBREGION (0307), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.8		2.4	2.7
		PT=	38		51	59
		BOI=	0.62		0.81	0.96
Grebes	Nearshore	D=	3.4		16.5	25.5
		PT=	73		350	550
		BOI=	1.3		5.9	14
Cormorants	Nearshore	D=	5.4	0.3	3.4	4.4
		PT=	120	7	73	95
		BOI=	2.6	0.17	1.6	2.1
Herons	Nearshore	D=		4.5	3.8	<0.1
		PT=		96	80	<1
		BOI=		0.48	0.40	<0.01
Ducks and Geese	Nearshore	D=	452.9		919.4	1,022.7
		PT=	9,700		20,000	22,000
		BOI=	240		160	270
Eagles and Hawks	Nearshore	D=				0.2
		PT=				3
		BOI=				0.02
Rails	Nearshore	D=				0.2
		PT=				5
		BOI=				0.01
Plovers	Nearshore	D=	3.6	1.4	8.8	1.3
		PT=	78	30	190	27
		BOI=	0.40	0.09	0.95	0.14
Sandpipers and other shore-birds	Nearshore	D=	39.7	24.5	15.6	17.9
		PT=	850	520	330	380
		BOI=	4.3	6.1	1.5	2.0

TABLE F-17 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	204.4	490.7	318.7	86.1
		PT=	4,300	10,000	6,800	1,800
		BOI=	73	190	95	28
Alcids	Nearshore	D=	6.7	4.1	12.8	3.3
		PT=	140	89	270	71
		BOI=	5.7	3.1	11	2.4
Summary	Nearshore	D=	720.5	525.9	1,305.8	1,164.5
		PT=	15,000	11,000	28,000	25,000
		BOI=	330	200	270	320

TABLE F-18. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, SEQUIM BAY SUBREGION (0308), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.7	1.4	1.7	2.5
		PT=	20	17	20	30
		BOI=	0.34	0.25	0.34	0.53
	Offshore	D=	3.9		7.0	13.9
		PT=	8		14	28
		BOI=	0.14		0.27	0.57
	Sum	D=	2.0		2.5	4.1
		PT=	27		34	57
		BOI=	0.48		0.61	1.1
Grebes	Nearshore	D=	9.0		30.4	32.3
		PT=	110		360	380
		BOI=	2.6		9.2	8.8
	Offshore	D=	22.2		177.8	32.5
		PT=	44		360	65
		BOI=	1.2		10	1.7
	Sum	D=	10.9		51.4	32.6
		PT=	150		710	450
		BOI=	3.8		19	10
Cormorants	Nearshore	D=	1.1		0.8	2.2
		PT=	13		10	26
		BOI=	0.25		0.21	0.54
	Offshore	D=	0.6		0.4	3.3
		PT=	1		<1	7
		BOI=	0.03		0.2	0.15

TABLE F-18 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Cormorants	Sum	D=	1.0		0.7	2.3
		PT=	14		10	32
		BOI=	0.27		0.23	0.69
Herons	Nearshore	D=	0.5		1.0	0.9
		PT=	6		11	11
		BOI=	0.03		0.06	0.05
	Offshore	D=			1.1	
		PT=			2	
		BOI=			0.01	
	Sum	D=			0.9	
		PT=			13	
		BOI=			0.07	
Ducks and Geese	Nearshore	D=	98.2		60.0	185.8
		PT=	1,200		710	2,200
		BOI=	22		9.4	29
	Offshore	D=	132.8		12.6	137.7
		PT=	270		25	280
		BOI=	4.7		0.62	3.8
	Sum	D=	101.4		52.9	181.2
		PT=	1,400		730	2,500
		BOI=	26		10	33
Eagles and Hawks	Nearshore	D=	<0.1		<0.1	<0.1
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Rails	Nearshore	D=	0.5		1.0	5.1
		PT=	6		12	60
		BOI=	0.02		0.03	0.17
Oystercatchers	Nearshore	D=	0.3		<0.1	0.2
		PT=	4		<1	2
		BOI=	0.09		0.02	0.05

TABLE F-18 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Plovers	Nearshore	D=	6.6		1.9	1.5
		PT=	78		23	17
		BOI=	0.40		0.11	0.08
Sandpipers and other shore-birds	Nearshore	D=	56.1		17.3	30.6
		PT=	660		200	360
		BOI=	3.6		1.1	1.9
Jaegers	Nearshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
Gulls and Terns	Nearshore	D=	24.6		93.6	20.9
		PT=	290		1,100	250
		BOI=	5.1		17	3.6
	Offshore	D=	6.9	1.7	35.6	7.2
		PT=	14	3	71	14
		BOI=	0.24	0.06	0.83	0.21
	Sum	D=	21.7		87.0	18.8
		PT=	300		1,200	260
		BOI=	5.3		18	3.8
Alcids	Nearshore	D=	7.3	1.4	7.2	3.0
		PT=	86	17	85	36
		BOI=	3.2	0.58	3.0	1.3
	Offshore	D=	1.9		29.6	9.8
		PT=	4		59	20
		BOI=	0.14		2.3	0.74
	Sum	D=	6.5		10.1	4.1
		PT=	90		140	56
		BOI=	3.3		5.3	2.0
Summary	Nearshore	D=	206.1	2.9	215.5	285.8
		PT=	2,400	34	2,540	3,400
		BOI=	37	0.83	41	46

TABLE F-18 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Summary	Offshore	D=	130.0	1.7	266.7	236.1
		PT=	260	3	530	470
		BOI=	6.0	0.06	14	7.5
	Sum	D=	202.9	2.7	224.6	275.4
		PT=	2,800	37	3,100	3,800
		BOI=	44	0.90	55	54

TABLE F-19. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, MILLER PENINSULA SUBREGION (0309), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.5	1.0	1.0	4.0
		PT=	7	5	5	19
		BOI=	0.11	0.10	0.08	0.32
Grebes	Nearshore	D=	8.3		4.1	21.8
		PT=	40		20	100
		BOI=	0.68		0.32	2.0
Cormorants	Nearshore	D=	9.1		3.2	16.6
		PT=	44		16	80
		BOI=	0.96		0.32	1.7
Herons	Nearshore	D=			0.6	<0.1
		PT=			3	<1
		BOI=			0.01	<0.01
Ducks and Geese	Nearshore	D=	52.4		9.9	357.4
		PT=	250		48	1,700
		BOI=	4.4		1.1	30
Eagles and Hawks	Nearshore	D=	0.2		<0.1	0.2
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Oystercatchers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Sandpipers and other shore-birds	Nearshore	D=			10.5	
		PT=			50	
		BOI=			0.27	
Gulls and Terns	Nearshore	D=	18.4	243.0	114.5	43.6
		PT=	89	1,200	550	210
		BOI=	1.7	22	8.0	3.0

TABLE F-19 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	28.6	46.0	21.4	6.6
		PT=	140	220	100	32
		BOI=	5.4	8.7	3.6	1.1
Summary	Nearshore	D=	120.1	290.0	170.7	454.2
		PT=	580	1,400	820	2,200
		BOI=	13	31	14	39

TABLE F-20. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, PROTECTION ISLAND SUBREGION (0310), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.7		0.6	4.8
		PT=	2		2	15
		BOI=	0.03		0.03	0.26
Grebes	Nearshore	D=	5.8		16.4	65.1
		PT=	18		51	200
		BOI=	0.32		0.89	4.8
Cormorants	Nearshore	D=	26.3	7.8	186.9	27.8
		PT=	82	24	580	86
		BOI=	1.8	0.55	13	1.9
Herons	Nearshore	D=			0.2	
		PT=			<1	
		BOI=			<0.01	
Ducks and Geese	Nearshore	D=	130.8		44.6	285.5
		PT=	400		140	890
		BOI=	11		2.8	12
Eagles and Hawks	Nearshore	D=	0.5			1.2
		PT=	2			4
		BOI=	0.01			0.03
Oystercatchers	Nearshore	D=	1.8		4.5	
		PT=	5		14	
		BOI=	0.12		0.31	
Sandpipers and other shore-birds	Nearshore	D=				
		PT=				25.2
		BOI=				78
						0.41
Gulls and Terns	Nearshore	D=	615.2	2,488.9	1,358.0	735.2
		PT=	1,900	7,700	4,200	2,300
		BOI=	36	150	75	43

TABLE F-20 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	670.8	182.2	235.4	19.9
		PT=	2,100	560	730	62
		BOI=	72	19	25	2.2
Summary	Nearshore	D=	1,452.2	2,680.0	1,857.5	1,189.6
		PT=	4,500	8,300	5,800	3,700
		BOI=	120	170	120	64

TABLE F-21. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DISCOVERY BAY SUBREGION (0311), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.2	<0.1	1.5	2.4
		PT=	16	<1	20	32
		BOI=	0.28	0.01	0.33	0.60
	Offshore	D=	1.8		3.1	5.5
		PT=	43		76	130
		BOI=	0.97		1.5	2.8
	Sum	D=	1.7		2.7	4.9
		PT=	59		95	170
		BOI=	1.2		1.8	3.4
Grebes	Nearshore	D=	22.2		20.9	48.5
		PT=	290		270	630
		BOI=	7.9		5.7	17
	Offshore	D=	28.8		1.6	64.1
		PT=	690		40	1,500
		BOI=	21		1.0	46
	Sum	D=	28.2		8.9	63.2
		PT=	980		310	2,200
		BOI=	29		6.7	64
Cormorants	Nearshore	D=	0.7	0.6	1.0	1.0
		PT=	10	8	13	14
		BOI=	0.20	0.12	0.28	0.28
	Offshore	D=	<0.1	0.7	0.2	0.9
		PT=	2	16	4	22
		BOI=	0.04	0.37	0.07	0.50
	Sum	D=	0.3	0.7	0.5	1.0
		PT=	11	24	17	35
		BOI=	0.23	0.48	0.35	0.78
Herons	Nearshore	D=	0.6	0.4	0.8	<0.1
		PT=	7	5	10	<1
		BOI=	0.04	0.02	0.05	<0.01

TABLE F-21 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	119.8	1.1	35.5	317.3
		PT=	1,600	14	460	4,100
		BOI=	35	0.30	9.9	71
	Offshore	D=	23.6		4.6	63.6
		PT=	570		110	1,500
		BOI=	13.6		1.5	34
	Sum	D=	60.3		16.4	160.9
		PT=	2,100		570	5,600
		BOI=	49		11	100
Eagles and Hawks	Nearshore	D=	<0.1			<0.1
		PT=	<1			<1
		BOI=	<0.01			<0.01
Rails	Nearshore	D=	1.0		1.5	2.6
		PT=	13		20	34
		BOI=	0.04		0.06	0.10
Plovers	Nearshore	D=	<0.1		<0.1	0.3
		PT=	<1		<1	4
		BOI=	<0.01		<0.01	0.01
Sandpipers and other shore-birds	Nearshore	D=	5.7		0.2	0.8
		PT=	74		3	10
		BOI=	0.30		0.02	0.05
Phalaropes	Offshore	D=				
		PT=			<0.1	
		BOI=			2	
					0.01	
Gulls and Terns	Nearshore	D=	19.2	9.4	24.3	29.9
		PT=	250	120	320	320
		BOI=	4.5	2.3	4.9	5.1
	Offshore	D=	5.5	7.3	17.2	22.8
		PT=	130	180	420	550
		BOI=	2.4	3.3	6.5	9.0

TABLE F-21 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Sum	D=	10.9	8.6	21.0	25.0
		PT=	380	300	730	870
		BOI=	6.9	5.6	11	14
Alcids	Nearshore	D=	2.7	1.8	4.7	4.0
		PT=	34	24	61	51
		BOI=	1.3	1.1	2.2	1.7
	Offshore	D=	2.4		52.8	54.4
		PT=	58		1,300	1,300
		BOI=	2.4		42	42
	Sum	D=	2.6		37.4	40.2
		PT=	92		1,300	1,400
		BOI=	3.7		45	44
Summary	Nearshore	D=	173.3	13.4	93.2	401.8
		PT=	2,300	170	1,200	5,200
		BOI=	50	3.8	23	96
	Offshore	D=	62.4	8.0	79.7	212.3
		PT=	1,500	190	1,900	5,100
		BOI=	40	3.7	53	130
	Sum	D=	109.2	10.6	89.1	287.4
		PT=	3,800	370	3,100	10,000
		BOI=	90	7.5	76	230

TABLE F-22. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, QUIMPER PENINSULA SUBREGION (0312), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	2.1		2.5	4.7
		PT=	23		27	50
		BOI=	0.33		0.43	0.81
Grebes	Nearshore	D=	16.5		17.0	92.1
		PT=	180		180	990
		BOI=	3.2		3.6	26
Cormorants	Nearshore	D=	13.3	30.8	21.7	37.3
		PT=	140	330	230	400
		BOI=	3.2	7.5	5.1	8.7
Herons	Nearshore	D=		0.8	0.3	4.1
		PT=		8	4	44
		BOI=		0.04	0.02	0.22
Ducks and Geese	Nearshore	D=	82.3	22.3	9.0	198.4
		PT=	880	240	96	2,100
		BOI=	18	4.6	2.4	31
Sandpipers and other shore-birds	Nearshore	D=	22.7		8.6	2.6
		PT=	240		92	28
		BOI=	1.2		0.42	0.13
Phalaropes	Nearshore	D=			8.5	
		PT=			91	
		BOI=			0.60	
Gulls and Terns	Nearshore	D=	57.3	240.0	607.0	266.5
		PT=	610	2,600	6,500	2,900
		BOI=	9.6	45	89	36
Alcids	Nearshore	D=	3.5	46.2	25.2	21.7
		PT=	37	500	270	230
		BOI=	1.8	24	8.8	7.4

TABLE F-22 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Summary	Nearshore	D=	199.7	340.8	709.2	640.6
		PT=	2,100	3,600	7,600	6,900
		BOI=	38	81	110	110

TABLE F-23. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, WHIDBEY ISLAND SUBREGION (0313), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.2		1.9	1.3
		PT=	5		41	39
		BOI=	0.09		0.75	0.81
Grebes	Nearshore	D=	3.1	0.7	13.1	30.9
		PT=	65	14	280	650
		BOI=	1.2	0.42	7.7	18
Cormorants	Nearshore	D=	1.2	0.7	1.9	1.8
		PT=	25	14	40	38
		BOI=	0.56	0.32	0.90	0.84
Herons	Nearshore	D=	<0.1		<0.1	
		PT=	2		2	
		BOI=	<0.01		<0.01	
Ducks and Geese	Nearshore	D=	15.3	8.2	27.2	26.0
		PT=	320	170	570	550
		BOI=	6.3	4.2	13	11
Eagles and Hawks	Nearshore	D=	<0.1			
		PT=	2			
		BOI=	<0.01			
Oystercatchers	Nearshore	D=			<0.1	0.2
		PT=			<1	4
		BOI=			0.01	0.09
Plovers	Nearshore	D=		0.2	<0.1	<0.1
		PT=		4	<1	2
		BOI=		0.01	<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	1.2	0.2	3.1	43.2
		PT=	26	4	66	910
		BOI=	0.13	<0.01	0.34	5.9

TABLE F-23 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Jaegers	Nearshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
Gulls and Terns	Nearshore	D=	3.9	9.5	91.7	14.9
		PT=	82	200	1,900	310
		BOI=	1.5	3.8	27	4.8
Alcids	Nearshore	D=	2.0	6.7	56.7	6.8
		PT=	42	140	1,200	140
		BOI=	1.7	6.6	41	4.7
Summary	Nearshore	D=	27.2	26.0	203.7	126.2
		PT=	570	550	4,300	2,700
		BOI=	11	15	92	45

TABLE F-24. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, SMITH ISLAND SUBREGION (0314), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	3.3	3.3	5.6	31.0
		PT=	1	1	2	9
		BOI=	0.01	0.02	0.03	0.18
Grebes	Nearshore	D=	36.7	3.3	10.0	72.0
		PT=	11	1	3	22
		BOI=	0.19	0.02	0.05	0.55
Cormorants	Nearshore	D=	46.7	116.7	197.8	82.0
		PT=	14	35	59	25
		BOI=	0.31	0.80	1.4	0.54
Ducks and Geese	Nearshore	D=	566.7	16.7	212.2	714.0
		PT=	170	5	64	210
		BOI=	4.6	0.04	1.3	4.3
Oystercatchers	Nearshore	D=			1.1	
		PT=			<1	
		BOI=			<0.01	
Plovers	Nearshore	D=	3.3			0.5
		PT=	1			<1
		BOI=	<0.01			<0.01
Sandpipers and other shore-birds	Nearshore	D=			286.7	3,553.5
		PT=			86	1,100
		BOI=			0.53	5.7
Gulls and Terns	Nearshore	D=	601.1	2,340.0	2,611.1	370.0
		PT=	180	700	780	110
		BOI=	3.3	13	14	1.9
Alcids	Nearshore	D=	25.6	163.3	60.0	34.0
		PT=	8	49	18	10
		BOI=	0.33	2.1	0.64	0.55

TABLE F-24 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Summary	Nearshore	D=	1,285.6	2,643.3	3,400.0	4,858.0
		PT=	390	1,000	1,000	1,500
		BOI=	8.8	16	18	14

TABLE F-25. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, DECEPTION PASS SUBREGION (0315), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	2.5	<0.1	0.6	5.8
		PT=	14	<1	3	33
		BOI=	0.32	<0.01	0.07	0.73
Grebes	Nearshore	D=	15.8		9.9	20.3
		PT=	83		55	110
		BOI=	2.5		1.5	3.1
Shearwaters	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Cormorants	Nearshore	D=	4.8	3.1	9.2	7.4
		PT=	27	17	52	42
		BOI=	0.59	0.38	0.98	0.86
Herons	Nearshore	D=			0.1	0.1
		PT=			<1	<1
		BOI=			<0.01	<0.01
Ducks and Geese	Nearshore	D=	6.9	0.5	6.0	19.6
		PT=	39	3	34	110
		BOI=	0.79	0.05	0.73	2.1
Eagles and Hawks	Nearshore	D=	<0.1			0.3
		PT=	<1			2
		BOI=	<0.01			0.01
Oystercatchers	Nearshore	D=	0.2		0.2	<0.1
		PT=	1		1	<1
		BOI=	0.02		0.03	<0.01
Plovers	Nearshore	D=	<0.1			<0.1
		PT=	<1			<1
		BOI=	<0.01			<0.01

TABLE F-25 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Sandpipers and other shore-birds	Nearshore	D=	<0.1		0.9	
		PT=	<1		5	
		BOI=	<0.01		0.03	
Jaegers	Nearshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
Gulls and Terns	Nearshore	D=	14.0	26.2	74.5	33.5
		PT=	78	150	420	190
		BOI=	1.4	2.8	5.6	2.6
Alcids	Nearshore	D=	5.0	15.0	44.4	19.8
		PT=	28	84	250	110
		BOI=	1.0	4.0	8.3	3.8
Summary	Nearshore	D=	49.4	45.0	145.9	106.9
		PT=	280	250	820	600
		BOI=	6.7	7.3	17	13

TABLE F-26. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, LOPEZ ISLAND SUBREGION (0316), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.3	0.5	0.6	19.5
		PT=	3	4	6	170
		BOI=	0.05	0.06	0.10	3.5
Grebes	Nearshore	D=	5.4		3.3	19.8
		PT=	48		29	180
		BOI=	0.94		0.50	3.5
Storm-Petrels	Nearshore	D=				
		PT=			0.9	
		BOI=			8	
					0.07	
Cormorants	Nearshore	D=	60.1	60.2	237.5	137.5
		PT=	530	540	2,100	1,200
		BOI=	11	11	44	25
Herons	Nearshore	D=	<0.1	0.2	0.6	0.1
		PT=	<1	2	5	1
		BOI=	<0.01	0.01	0.03	<0.01
Ducks and Geese	Nearshore	D=	16.8	2.0	1.3	38.8
		PT=	150	18	11	340
		BOI=	2.5	0.38	0.30	5.3
Eagles and Hawks	Nearshore	D=	0.6			0.6
		PT=	5			5
		BOI=	0.04			0.02
Oystercatchers	Nearshore	D=	0.9	0.1	0.3	2.3
		PT=	8	1	3	21
		BOI=	0.18	0.02	0.06	0.46
Plovers	Nearshore	D=	0.1	0.2		<0.1
		PT=	1	2		<1
		BOI=	<0.01	0.01		<0.01

TABLE F-26 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Sandpipers and other shore-birds	Nearshore	D=	0.2		0.6	5.6
		PT=	2		6	50
		BOI=	0.02		0.07	0.53
Gulls and Terns	Nearshore	D=	611.5	437.8	522.8	178.6
		PT=	5,400	3,900	4,700	1,600
		BOI=	100	74	81	29
Alcids	Nearshore	D=	28.7	28.6	73.4	27.2
		PT=	260	250	650	240
		BOI=	10	10	22	8.4
Summary	Nearshore	D=	724.9	529.9	841.6	431.0
		PT=	6,500	4,800	7,500	3,800
		BOI=	130	95	150	76

TABLE F-27. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, SAN JUAN ISLAND (SOUTH SHORE) SUBREGION (0317), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	12.3	0.1	1.5	7.3
		PT=	43	<1	5	25
		BOI=	0.87	<0.01	0.10	0.51
Grebes	Nearshore	D=	5.5		4.4	17.5
		PT=	19		16	61
		BOI=	0.47		0.28	1.2
Storm-Petrels	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Cormorants	Nearshore	D=	9.5	2.0	28.6	4.8
		PT=	33	7	100	17
		BOI=	0.76	0.14	2.2	0.38
Herons	Nearshore	D=	0.6		0.5	0.9
		PT=	2		2	3
		BOI=	0.01		0.01	0.02
Ducks and Geese	Nearshore	D=	46.1	0.3	17.1	32.3
		PT=	160	1	60	110
		BOI=	2.2	0.02	1.4	1.8
Eagles and Hawks	Nearshore	D=	0.3	0.7	0.7	0.2
		PT=	1	2	3	<1
		BOI=	<0.01	0.02	0.02	<0.01
Oystercatchers	Nearshore	D=	0.2		<0.1	0.4
		PT=	<1		<1	1
		BOI=	0.02		<0.01	0.03
Plovers	Nearshore	D=	15.4	1.2	9.3	12.6
		PT=	54	4	33	44
		BOI=	0.27	0.02	0.14	0.22

TABLE F-27 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Sandpipers and other shore-birds	Nearshore	D=	39.4	0.1	17.3	62.2
		PT=	140	<1	60	220
		BOI=	0.75	<0.01	0.34	1.2
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	59.7	42.0	327.7	194.7
		PT=	210	150	1,100	680
		BOI=	2.7	2.6	15	7.5
Alcids	Nearshore	D=	3.7	1.5	96.5	17.5
		PT=	13	5	340	61
		BOI=	0.59	0.27	12	2.0
Summary	Nearshore	D=	192.8	48.2	514.6	353.0
		PT=	670	170	1,800	1,200
		BOI=	8.6	3.0	32	15

TABLE F-28. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE STRAIT OF JUAN DE FUCA-INNER REGION, VICTORIA, VANCOUVER ISLAND SUBREGION (0318), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring*	Summer*	Fall*	Winter
Grebes	Nearshore	D=				
		PT=				5.0
		BOI=				34
						1.0
Cormorants	Nearshore	D=				
		PT=				15.0
		BOI=				100
						2.4
Ducks and Geese	Nearshore	D=				
		PT=				110.0
		BOI=				760
						11
Plovers	Nearshore	D=				
		PT=				1.7
		BOI=				12
						0.06
Gulls and Terns	Nearshore	D=				
		PT=				970.0
		BOI=				6,700
						120
Alcids	Nearshore	D=				
		PT=				8.3
		BOI=				58
						1.9
Summary	Nearshore	D=				
		PT=				1,110.0
		BOI=				7,700
						140.5

*No data are available

SECTION IV

Region 4. Admiralty Inlet region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-29. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ADMIRALTY INLET REGION, ADMIRALTY INLET SUBREGION (0401), 1979 DATA ONLY*

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.4		0.2	1.1
		PT=	6		2	17
		BOI=	0.11		0.04	0.35
	Offshore	D=	2.0		0.1	0.5
		PT=	120		5	31
		BOI=	2.3		0.08	0.61
	Sum	D=	1.7		0.1	0.6
		PT=	130		7	48
		BOI=	2.4		0.12	0.96
Grebes	Nearshore	D=	1.7		1.6	4.7
		PT=	27		26	72
		BOI=	0.51		0.60	1.3
	Offshore	D=	1.0		0.1	3.7
		PT=	60		8	220
		BOI=	1.0		0.13	3.6
	Sum	D=	1.2		0.5	3.9
		PT=	90		34	290
		BOI=	1.5		0.73	4.9
Cormorants	Nearshore	D=	4.1	0.6	0.6	1.4
		PT=	63	10	9	22
		BOI=	1.3	0.23	0.19	0.48
	Offshore	D=	1.5	1.4	0.5	0.5
		PT=	90	86	29	27
		BOI=	1.8	2.0	0.63	0.58
	Sum	D=	2.1	1.3	0.5	0.7
		PT=	150	96	38	49
		BOI=	3.1	2.2	0.82	1.0
Ducks and Geese	Nearshore	D=	9.5	0.5	1.5	10.4
		PT=	150	8	23	160
		BOI=	2.9	0.19	0.54	2.6

TABLE F-29 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter
Ducks and Geese	Offshore	D=	0.4	0.1	0.4	2.2
		PT=	21	1	22	130
		BOI=	0.52	0.03	0.53	3.2
	Sum	D=	2.3	0.1	0.6	7.1
		PT=	170	9	45	290
		BOI=	3.4	0.22	1.1	5.8
Plovers	Nearshore	D=			0.1	
		PT=			2	
		BOI=			<0.01	
Sandpipers and other shore-birds	Nearshore	D=			1.6	<0.1
		PT=			24	1
		BOI=			0.14	<0.01
Phalaropes	Offshore	D=			0.3	
		PT=			15	
		BOI=			0.10	
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
	Offshore	D=			<0.1	
		PT=			1	
		BOI=			<0.01	
	Sum	D=			<0.1	
		PT=			1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	14.0	26.6	47.7	32.7
		PT=	220	410	740	510
		BOI=	4.0	6.5	11	8.0
	Offshore	D=	28.6	18.0	43.9	27.1
		PT=	1,700	1,100	2,600	1,600
		BOI=	22	20	41	24

TABLE F-29 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Sum	D=	25.5	19.9	44.3	28.2
		PT=	1,900	1,500	3,300	2,100
		BOI=	26	27	52	32
Alcids	Nearshore	D=	15.8	10.1	16.4	33.3
		PT=	240	160	250	520
		BOI=	12	7.5	12	17
	Offshore	D=	38.7	100.0	43.0	16.9
		PT=	2,300	5,900	2,500	1,000
		BOI=	110	300	120	35
	Sum	D=	33.6	80.8	37.6	20.1
		PT=	2,500	6,100	2,800	1,500
		BOI=	120	310	132	52
Summary	Nearshore	D=	46.2	37.9	69.7	86.1
		PT=	720	590	1,100	1,300
		BOI=	21	14	25	30
	Offshore	D=	72.0	119.5	88.3	50.8
		PT=	4,200	7,000	5,200	3,000
		BOI=	140	320	160	67
	Sum	D=	65.9	100.7	84.6	57.7
		PT=	4,900	7,600	6,300	4,300
		BOI=	160	330	190	97

*Based on census transects used in 1978 supplemented with data from Edmonds-Port Townsend ferry in 1979. (Subregion area recalculated as 74.4 km^2).

SECTION V

Region 5. Anacortes to Hales Passage region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-30. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, BELLINGHAM CHANNEL SUBREGION (0501), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.3	0.2	0.3	1.5
		PT=	6	<1	1	7
		BOI=	0.12	0.01	0.03	0.13
	Offshore	D=	9.4		3.0	6.1
		PT=	650		210	420
		BOI=	14		4.3	8.8
	Sum	D=	8.9		2.8	5.8
		PT=	660		210	430
		BOI=	14		4.3	8.9
Grebes	Nearshore	D=	9.2		17.0	38.4
		PT=	43		80	180
		BOI=	1.1		2.2	4.6
	Offshore	D=	6.4		6.3	25.5
		PT=	440		440	1,800
		BOI=	10		12	50
	Sum	D=	6.5		7.0	25.7
		PT=	480		520	1,900
		BOI=	11		15	55
Cormorants	Nearshore	D=	4.6	12.0	13.3	12.3
		PT=	22	56	63	58
		BOI=	0.49	1.1	1.3	1.2
	Offshore	D=	0.8	2.2	0.6	5.2
		PT=	59	150	43	360
		BOI=	1.3	3.4	0.91	7.8
	Sum	D=	1.1	2.8	1.5	5.7
		PT=	81	210	110	420
		BOI=	1.8	4.5	2.3	9.0
Herons	Nearshore	D=	0.2		0.5	0.7
		PT=	1		2	3
		BOI=	<0.01		0.01	0.02

TABLE F-30 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	41.6	0.2	8.3	132.9
		PT=	200	<1	39	620
		BOI=	3.3	<0.01	0.89	8.5
	Offshore	D=	10.9	7.9	29.1	10.2
		PT=	760	550	2,000	700
		BOI=	18	13	48	11
	Sum	D=	12.9	7.4	28.4	17.6
		PT=	950	550	2,100	1,300
		BOI=	22	13	49	20
Eagles and Hawks	Nearshore	D=	0.7	0.4	0.4	0.8
		PT=	3	2	2	4
		BOI=	0.02	0.01	0.01	0.03
Oystercatchers	Nearshore	D=	0.2		0.1	<0.1
		PT=	<1		<1	<1
		BOI=	0.02		0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=				
		PT=			0.7	1.3
		BOI=			3	6
					0.03	0.04
Gulls and Terns	Nearshore	D=	141.3	106.2	271.3	133.7
		PT=	660	500	1,300	630
		BOI=	12	9.4	19	8.3
	Offshore	D=	8.0	4.7	17.8	43.7
		PT=	550	330	1,200	3,000
		BOI=	8.9	6.2	17	39
	Sum	D=	16.2	11.2	33.8	48.7
		PT=	1,200	830	2,500	3,600
		BOI=	21	16	36	47

TABLE F-30 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	1.6	5.9	29.7	13.8
		PT=	7	28	140	65
		BOI=	0.29	0.99	5.7	2.2
	Offshore	D=	3.9	0.7	94.4	42.7
		PT=	270	51	6,500	3,000
		BOI=	9.6	2.0	210	98
	Sum	D=	3.8	1.1	90.7	40.6
		PT=	280	79	6,700	3,000
		BOI=	9.8	3.0	220	100
Summary	Nearshore	D=	201.3	124.9	345.3	344.2
		PT=	950	590	1,600	1,600
		BOI=	18	12	29	25
	Offshore	D=	39.7	15.6	151.7	135.6
		PT=	2,700	1,100	10,000	9,400
		BOI=	62	25	300	220
	Sum	D=	50.1	23.0	162.4	148.8
		PT=	3,700	1,700	12,00	11,000
		BOI=	79	37	320	240

TABLE F-31. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, GUEMES CHANNEL SUBREGION (0502), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.0			1.2
		PT=	11			12
		BOI=	0.16			0.27
Grebes	Nearshore	D=	4.7			30.0
		PT=	48			310
		BOI=	0.85			7.5
Cormorants	Nearshore	D=	7.4	2.1	3.3	21.8
		PT=	75	21	34	220
		BOI=	1.7	0.33	0.62	4.6
Herons	Nearshore	D=	1.0			0.2
		PT=	11			2
		BOI=	0.05			0.01
Ducks and Geese	Nearshore	D=	10.5		1.7	17.2
		PT=	110		17	180
		BOI=	1.5		0.40	2.5
Gulls and Terns	Nearshore	D=	7.9	11.2	21.7	49.2
		PT=	81	110	220	500
		BOI=	1.4	2.1	2.1	6.0
Alcids	Nearshore	D=	28.4	14.6	1.7	40.8
		PT=	290	150	17	420
		BOI=	11	7.6	0.59	21
Summary	Nearshore	D=	61.0	27.9	28.3	160.4
		PT=	620	280	290	1,600
		BOI=	17	10	3.7	42

TABLE F-32. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, FIDALGO BAY SUBREGION (0503), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.9		0.2	1.8
		PT=	11		2	20
		BOI=	0.21		0.03	0.39
Grebes	Nearshore	D=	8.1		13.0	79.9
		PT=	93		150	920
		BOI=	2.3		4.0	27
Cormorants	Nearshore	D=	4.5	10.3	14.9	9.8
		PT=	52	120	170	110
		BOI=	0.86	1.7	2.6	1.7
Herons	Nearshore	D=	0.9	1.6	2.2	0.6
		PT=	11	18	25	7
		BOI=	0.05	0.09	0.12	0.03
Ducks and Geese	Nearshore	D=	118.5	3.4	26.1	215.2
		PT=	1,400	39	300	2,500
		BOI=	32	0.97	4.3	25
Eagles and Hawks	Nearshore	D=	<0.1	0.1		<0.1
		PT=	<1	2		<1
		BOI=	<0.01	0.01		<0.01
Rails	Nearshore	D=	0.2		<0.1	0.1
		PT=	2		<1	2
		BOI=	<0.01		<0.01	<0.01
Plovers	Nearshore	D=	0.3	0.3	0.8	<0.1
		PT=	4	3	9	1
		BOI=	0.01	<0.01	0.03	<0.01
Sandpipers and other shore-birds	Nearshore	D=	<0.1		17.5	65.2
		PT=	<1		200	750
		BOI=	<0.01		1.1	4.0

TABLE F-32 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	11.3	13.6	28.6	18.1
		PT=	130	160	330	210
		BOI=	2.3	3.0	4.2	2.9
Alcids	Nearshore	D=	0.1	0.4	<0.1	<0.1
		PT=	1	5	1	<1
		BOI=	0.04	0.21	0.05	0.04
Summary	Nearshore	D=	145.0	29.7	103.3	391.1
		PT=	1,700	340	1,200	4,500
		BOI=	38	6.0	16	61

TABLE F-33. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, PADILLA BAY SUBREGION (0504), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.2	0.1	0.2	0.4
		PT=	63	6	12	24
		BOI=	0.57	0.10	0.18	0.41
	Offshore	D=	2.8	1.1	2.8	5.6
		PT=	71	28	71	140
		BOI=	1.3	0.42	1.2	2.5
	Sum	D=	1.6	<0.1	1.0	2.0
		PT=	130	34	82	160
		BOI=	1.9	0.51	1.4	3.0
Grebes	Nearshore	D=	4.2	0.3	5.5	21.5
		PT=	230	19	300	1,200
		BOI=	6.5	0.55	8.0	35
	Offshore	D=	8.3	0.6	73.2	71.9
		PT=	210	14	1,800	1,800
		BOI=	5.0	0.42	34	44
	Sum	D=	5.5	0.4	26.2	37.5
		PT=	440	33	2,100	3,000
		BOI=	12	0.97	42	78
Cormorants	Nearshore	D=	1.7	1.5	2.7	1.9
		PT=	92	82	150	100
		BOI=	1.4	1.2	2.2	1.6
	Offshore	D=	1.0			6.9
		PT=	25			170
		BOI=	0.54			3.2
	Sum	D=	1.5			3.4
		PT=	120			270
		BOI=	1.9			4.8
Herons	Nearshore	D=	1.5	3.8	2.5	0.4
		PT=	78	210	140	20
		BOI=	0.39	1.1	0.70	0.10

TABLE F-33 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter
Herons	Offshore	D=	0.4	2.2	9.1	
		PT=	9	56	230	
		BOI=	0.05	0.28	1.1	
	Sum	D=	1.1	3.4	4.5	
		PT=	87	270	360	
		BOI=	0.44	1.3	1.8	
Ducks and Geese	Nearshore	D=	247.1	17.6	105.3	327.1
		PT=	14,000	970	5,800	18,000
		BOI=	400	19	65	310
	Offshore	D=	1,013.2	1.7	349.1	2,272.7
		PT=	25,000	42	8,700	57,000
		BOI=	550	0.65	170	1,100
	Sum	D=	487.5	12.5	187.5	937.5
		PT=	39,000	1,000	15,000	75,000
		BOI=	950	19	230	1,400
Eagles and Hawks	Nearshore	D=	<0.1	<0.1	<0.1	<0.1
		PT=	2	<1	<1	3
		BOI=	0.02	<0.01	<0.01	0.02
Rails	Nearshore	D=	<0.01			
		PT=	<1			
		BOI=	<0.01			
Oystercatchers	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Plovers	Nearshore	D=	0.3	<0.1	0.6	0.2
		PT=	18	<1	35	12
		BOI=	0.09	<0.01	0.17	0.06
Sandpipers and other shore-birds	Nearshore	D=	85.1	0.9	9.8	47.7
		PT=	4,700	51	540	2,600
		BOI=	22	0.29	2.8	14

TABLE F-33 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	27.9	25.2	38.5	14.5
		PT=	1,500	1,400	2,100	800
		BOI=	28	26	31	13
	Offshore	D=	24.6	78.3	210.2	53.2
		PT=	610	2,000	5,300	1,330
		BOI=	11	37	66	22
	Sum	D=	26.3	41.3	92.5	26.3
		PT=	2,100	3,300	7,400	2,100
		BOI=	39	63	97	35
Alcids	Nearshore	D=	0.2	1.0	0.2	0.3
		PT=	12	55	9	16
		BOI=	0.60	2.5	0.39	0.57
	Offshore	D=			1.7	8.1
		PT=			42	200
		BOI=			2.2	8.9
	Sum	D=			0.6	2.8
		PT=			52	220
		BOI=			2.6	9.4
Summary	Nearshore	D=	369.1	50.5	165.5	414.1
		PT=	20,000	2,800	9,100	23,000
		BOI=	470	50	110	370
	Offshore	D=	1,050.5	83.9	649.6	2,424.9
		PT=	26,000	2,100	16,000	61,000
		BOI=	570	39	270	1,200
	Sum	D=	575.0	61.3	312.5	1,050.0
		PT=	46,000	4,900	25,000	84,000
		BOI=	1,000	89	380	1,600

TABLE F-34. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, SAMISH BAY SUBREGION (0505), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.2	0.1	0.3	1.4
		PT=	35	4	10	40
		BOI=	0.57	0.06	0.27	0.79
	Offshore	D=	42.2	0.8	3.5	10.0
		PT=	1,600	30	130	370
		BOI=	35	0.68	2.6	7.7
	Sum	D=	24.2	0.5	2.1	6.2
		PT=	1,600	34	140	410
		BOI=	36	0.74	2.9	8.5
Grebes	Nearshore	D=	40.1		34.5	81.7
		PT=	1,200		1,000	2,400
		BOI=	35		30	70
	Offshore	D=	91.4	5.4	121.6	83.7
		PT=	3,400	200	4,500	3,100
		BOI=	98	5.9	130	75
	Sum	D=	69.7		33.3	83.3
		PT=	4,600		5,500	5,500
		BOI=	130		160	150
Cormorants	Nearshore	D=	1.2	0.5	1.7	2.3
		PT=	36	16	50	67
		BOI=	0.55	0.36	0.76	1.1
	Offshore	D=	1.0		2.7	4.2
		PT=	36		100	160
		BOI=	0.83		2.1	3.4
	Sum	D=	1.1		2.3	3.5
		PT=	72		150	230
		BOI=	1.4		2.9	4.5
Herons	Nearshore	D=	1.8	11.8	4.5	0.7
		PT=	51	340	130	20
		BOI=	0.26	1.7	0.65	0.10

TABLE F-34 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Herons	Offshore	D=	1.6			
		PT=	60			
		BOI=	0.30			
	Sum	D=	1.7			
		PT=	110			
		BOI=	0.56			
Ducks and Geese	Nearshore	D=	135.1	11.2	172.4	471.9
		PT=	3,900	320	5,000	14,000
		BOI=	220	7.0	55	170
	Offshore	D=	512.0	14.6	43.2	621.6
		PT=	19,000	540	1,600	23,000
		BOI=	420	8.1	39	300
	Sum	D=	348.5	13.0	100.0	560.6
		PT=	23,000	860	6,600	37,000
		BOI=	640	15	94	470
Eagles and Hawks	Nearshore	D=	<0.1	<0.1	<0.1	<0.1
		PT=	<1	<1	<1	2
		BOI=	<0.01	<0.01	<0.01	0.01
Rails	Nearshore	D=	<0.1			<0.1
		PT=	<1			<1
		BOI=	<0.01			<0.01
Plovers	Nearshore	D=	3.5	0.1	2.1	2.3
		PT=	100	3	60	68
		BOI=	0.52	<0.01	0.30	0.34
Sandpipers and other shore-birds	Nearshore	D=	132.1		25.5	172.0
		PT=	3,800		740	5,000
		BOI=	20		7.9	26
Gulls and Terns	Nearshore	D=	27.4	26.9	32.4	13.3
		PT=	800	780	940	390
		BOI=	12.7	13	12	5.7

TABLE F-34 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Offshore	D=	18.7	1.4	10.5	45.9
		PT=	690	50	390	1,700
		BOI=	12.2	1.0	5.5	24
	Sum	D=	22.7	12.6	19.7	31.8
		PT=	1,500	830	1,300	2,100
		BOI=	24.9	14	18	30
Alcids	Nearshore	D=	0.2	2.4	0.21	<0.1
		PT=	5	70	6	3
		BOI=	0.27	3.5	0.25	0.14
	Offshore	D=	1.0	0.8	1.1	10.5
		PT=	36	30	40	390
		BOI=	1.8	1.6	2.2	17
	Sum	D=	0.6	1.5	0.7	5.9
		PT=	41	100	46	390
		BOI=	2.1	5.1	2.4	17
Summary	Nearshore	D=	342.6	53.1	273.1	745.8
		PT=	9,900	1,500	7,900	22,000
		BOI=	290	25	110	280
	Offshore	D=	667.9	23.0	182.7	783.8
		PT=	25,000	850	6,800	29,000
		BOI=	570	17	180	430
	Sum	D=	530.3	36.4	227.3	772.7
		PT=	35,000	2,400	15,000	51,000
		BOI=	860	42	290	710

TABLE F-35. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, BELLINGHAM BAY SUBREGION (0506), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.9	0.7	<0.1	1.2
		PT=	32	24	3	44
		BOI=	0.60	0.35	0.04	0.90
	Offshore	D=	7.2		1.8	6.6
		PT=	880		220	800
		BOI=	20		4.8	17
	Sum	D=	5.8		1.4	5.3
		PT=	910		220	840
		BOI=	21		4.8	18
Grebes	Nearshore	D=	38.3	14.9	25.0	126.2
		PT=	1,400	540	900	4,500
		BOI=	41	16	27	140
	Offshore	D=	88.0	1.9	31.4	161.8
		PT=	11,000	230	3,800	20,000
		BOI=	320	6.6	110	590
	Sum	D=	75.9	4.8	29.7	151.9
		PT=	12,000	760	4,700	24,000
		BOI=	360	23	140	720
Cormorants	Nearshore	D=	3.1	1.3	1.8	6.1
		PT=	110	46	64	220
		BOI=	2.1	0.86	1.2	4.3
	Offshore	D=	1.6	0.1	0.2	4.5
		PT=	200	17	30	550
		BOI=	4.3	0.40	0.66	12
	Sum	D=	2.0	0.4	0.6	4.9
		PT=	310	63	94	770
		BOI=	6.4	1.3	1.9	16
Herons	Nearshore	D=				
		PT=		0.8	1.2	0.5
		BOI=		27	43	19
				0.14	0.21	0.10

TABLE F-35 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Herons	Offshore	D=	0.7	0.1		
		PT=	24	17		
		BOI=	0.11	0.09		
	Sum	D=		0.7		
		PT=		45		
		BOI=		0.22		
Ducks and Geese	Nearshore	D=	31.3	8.6	10.5	76.7
		PT=	1,100	310	380	2,800
		BOI=	18	5.6	5.0	34
	Offshore	D=	5.9			25.6
		PT=	730			3,100
		BOI=	15			62
	Sum	D=	11.4			37.3
		PT=	1,800			5,900
		BOI=	33			96
Eagles and Hawks	Nearshore	D=	0.3	<0.1	<0.1	0.2
		PT=	9	3	2	6
		BOI=	0.07	0.02	0.02	0.05
Rails	Nearshore	D=	<0.1		<0.1	<0.1
		PT=	1		<1	3
		BOI=	<0.01		<0.01	<0.01
Oystercatchers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Plovers	Nearshore	D=	0.1	0.1	0.3	0.2
		PT=	3	4	9	7
		BOI=	0.01	0.01	0.03	0.02
Sandpipers and other shore-birds	Nearshore	D=	10.0	<0.1	4.6	7.2
		PT=	350	<1	170	260
		BOI=	1.8	<0.01	0.87	1.6

TABLE F-35 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Jaegers	Nearshore	D=	<0.1		<0.1	
		PT=	1		<1	
		BOI=	<0.01		<0.01	
Gulls and Terns	Nearshore	D=	28.3	37.5	34.8	22.6
		PT=	1,000	1,300	1,300	810
		BOI=	16	22	18	12
	Offshore	D=	16.2	14.1	15.7	28.2
		PT=	2,000	1,700	1,900	3,400
		BOI=	27	28	28	50
	Sum	D=	19.0	19.6	20.3	27.2
		PT=	3,000	3,100	3,200	4,300
		BOI=	43	50	46	62
Alcids	Nearshore	D=	0.7	1.2	0.4	1.9
		PT=	25	45	16	69
		BOI=	0.97	1.8	0.62	3.4
	Offshore	D=	1.7	0.3	24.1	29.8
		PT=	200	35	2,900	3,600
		BOI=	7.1	1.1	100	130
	Sum	D=	1.5	0.5	19.0	23.4
		PT=	230	80	3,000	3,700
		BOI=	8.0	2.9	100	130
Summary	Nearshore	D=	113.3	65.1	78.7	243.0
		PT=	4,100	2,300	2,800	8,700
		BOI=	81	47	53	190
	Offshore	D=	121.2	16.6	73.9	258.7
		PT=	15,000	2,000	9,000	32,000
		BOI=	390	37	250	860
	Sum	D=	120.3	27.8	75.9	253.2
		PT=	19,000	4,400	12,000	41,000
		BOI=	470	83	300	1,000

TABLE F-36. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ANACORTES TO HALES PASSAGE REGION, HALES PASSAGE SUBREGION (0507), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	5.8	0.5	0.8	3.9
		PT=	93	8	12	63
		BOI=	1.8	0.16	0.19	1.3
Grebes	Nearshore	D=	4.7	0.2	4.1	16.2
		PT=	76	2	66	260
		BOI=	1.8	0.07	1.8	6.4
Cormorants	Nearshore	D=	1.3	0.2	0.4	2.1
		PT=	21	2	6	34
		BOI=	0.36	0.04	0.10	0.64
Herons	Nearshore	D=	<0.1	0.2	0.4	<0.1
		PT=	<1	3	6	<1
		BOI=	<0.01	0.02	0.03	<0.01
Ducks and Geese	Nearshore	D=	102.1	4.2	7.0	34.8
		PT=	1,600	68	110	560
		BOI=	38	1.6	2.8	10
Eagles and Hawks	Nearshore	D=	<0.1		<0.1	0.1
		PT=	<1		<1	2
		BOI=	<0.01		<0.01	0.01
Plovers	Nearshore	D=		0.1	<0.1	
		PT=		2	<1	
		BOI=		<0.01	<0.01	
Sandpipers and other shore-birds	Nearshore	D=			0.3	3.0
		PT=			4	49
		BOI=			0.02	0.26
Jaegers	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01

TABLE F-36 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	66.2	16.1	17.9	11.5
		PT=	1,100	260	290	180
		BOI=	14	4.0	4.3	2.7
Alcids	Nearshore	D=	2.6	17.1	4.8	5.5
		PT=	42	280	78	89
		BOI=	1.6	15	3.7	3.8
Summary	Nearshore	D=	182.9	38.5	35.6	77.8
		PT=	2,900	620	570	1,300
		BOI=	58	21	13	25

SECTION VI

Region 6. Eastern Georgia Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-37. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, LUMMI BAY SUBREGION (0601), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.2	0.2	0.2	1.0
		PT=	20	3	3	18
		BOI=	0.32	0.04	0.04	0.32
	Offshore	D=	108.8		1.8	5.7
		PT=	870		15	46
		BOI=	18		0.24	0.88
	Sum	D=	35.6		0.7	2.6
		PT=	890		18	64
		BOI=	18		0.28	1.2
Grebes	Nearshore	D=	1.8		11.2	2.7
		PT=	30		190	46
		BOI=	0.66		4.7	1.0
	Offshore	D=	7.5	1.1	11.0	6.7
		PT=	60	9	88	53
		BOI=	1.6	0.27	1.9	1.2
	Sum	D=	3.6		11.2	4.0
		PT=	90		280	99
		BOI=	3.3		6.6	2.2
Cormorants	Nearshore	D=	4.1	3.3	5.0	2.7
		PT=	70	56	85	46
		BOI=	1.0	0.78	1.4	0.77
	Offshore	D=	2.5	4.4	3.9	3.9
		PT=	20	36	31	31
		BOI=	0.47	0.65	0.47	0.46
	Sum	D=	3.6	3.6	4.8	3.1
		PT=	90	91	120	77
		BOI=	1.5	1.4	1.9	1.2
Herons	Nearshore	D=	2.9	2.5	7.9	0.6
		PT=	50	43	140	10
		BOI=	0.35	0.22	0.69	0.05

TABLE F-37 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Herons	Offshore	D=	1.3	5.6	9.4	0.4
		PT=	10	44	75	3
		BOI=	0.06	0.22	0.38	0.01
	Sum	D=	2.4	3.5	8.8	0.5
		PT=	60	87	220	13
		BOI=	0.41	0.44	1.1	0.07
Ducks and Geese	Nearshore	D=	700.0	15.8	194.1	500.4
		PT=	12,000	270	3,300	8,500
		BOI=	280	4.0	39	90
	Offshore	D=	400.0	3.3	33.5	487.6
		PT=	3,200	27	270	3,900
		BOI=	68	0.69	6.0	100
	Sum	D=	600.0	11.6	144.0	480.0
		PT=	15,000	290	3,600	12,000
		BOI=	350	4.7	45	190
Eagles and Hawks	Nearshore	D=	<0.1			<0.1
		PT=	<1			<1
		BOI=	<0.01			<0.01
Plovers	Nearshore	D=	5.9	<0.1	1.8	1.0
		PT=	100	<1	30	17
		BOI=	0.49	<0.01	0.11	0.09
Sandpipers and other shore-birds	Nearshore	D=	817.7		43.5	202.8
		PT=	14,000		740	3,400
		BOI=	54		2.2	18
Gulls and Terns	Nearshore	D=	45.3	33.2	94.1	20.3
		PT=	770	560	1,600	350
		BOI=	12	10	20	5.4

TABLE F-37 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Offshore	D=	55.0	31.1	80.8	24.3
		PT=	440	250	650	190
		BOI=	7.6	4.7	9.1	3.1
	Sum	D=	48.0	32.4	92.0	21.6
		PT=	1,200	810	2,300	540
		BOI=	18	15	29	8.6
Alcids	Nearshore	D=			<0.01	<0.1
		PT=			<1	<1
		BOI=			0.03	<0.01
	Offshore	D=	1.3		20.0	0.6
		PT=	10		160	4
		BOI=	0.42		7.1	0.21
	Sum	D=			6.4	0.2
		PT=			160	5
		BOI=			7.1	0.22
Summary	Nearshore	D=	1,578.8	54.9	357.8	731.7
		PT=	27,000	930	6,100	12,000
		BOI=	350	15	68	120
	Offshore	D=	576.3	45.6	151.3	529.6
		PT=	4,600	360	1,200	4,200
		BOI=	96	6.5	25	110
	Sum	D=	1,280.0	52.0	292.0	680.0
		PT=	32,000	1,300	7,300	17,000
		BOI=	450	22	93	220

TABLE F-38. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, CHERRY POINT SUBREGION (0602), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	45.1	5.3	0.6	2.4
		PT=	640	75	8	34
		BOI=	13	1.5	0.14	0.67
Grebes	Nearshore	D=	11.3	1.1	3.7	7.8
		PT=	160	16	52	110
		BOI=	4.7	0.47	1.4	2.6
Cormorants	Nearshore	D=	1.7	0.8	3.2	4.5
		PT=	23	12	45	64
		BOI=	0.51	0.25	0.93	1.4
Herons	Nearshore	D=	<0.1	<0.1	<0.1	<0.1
		PT=	<1	<1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Ducks and Geese	Nearshore	D=	1,200.0	15.4	11.3	84.3
		PT=	16,000	220	160	1,200
		BOI=	410	5.2	3.8	23
Eagles and Hawks	Nearshore	D=	<0.1			<0.1
		PT=	<1			<1
		BOI=	<0.01			<0.01
Plovers	Nearshore	D=	<0.1	<0.1	<0.1	<0.1
		PT=	<1	<1	1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Sandpipers and other shorebirds	Nearshore	D=	0.2	<0.1	0.3	3.6
		PT=	3	<1	5	51
		BOI=	0.01	<0.01	0.03	0.27
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	

TABLE F-38 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	139.1	13.9	16.2	22.5
		PT=	2,000	200	230	320
		BOI=	24	3.6	3.3	5.0
Alcids	Nearshore	D=	0.9	2.0	2.8	1.4
		PT=	13	28	40	20
		BOI=	0.63	1.4	1.7	0.72
Summary	Nearshore	D=	1,370.1	38.8	38.5	126.9
		PT=	19,000	550	540	1,800
		BOI=	460	12	11	34

TABLE F-39. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, BIRCH BAY SUBREGION (0603), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.0	0.7	4.4	2.4
		PT=	9	6	40	21
		BOI=	0.14	0.10	0.71	0.38
	Offshore	D=	2.0		2.0	2.0
		PT=	20		20	20
		BOI=	0.41		0.41	0.39
	Sum	D=	1.5		3.2	2.2
		PT=	29		60	41
		BOI=	0.55		1.1	0.77
Grebes	Nearshore	D=	18.9	6.7	71.1	10.0
		PT=	170	60	640	90
		BOI=	4.8	1.8	18	2.4
	Offshore	D=	8.0		8.0	17.0
		PT=	80		80	170
		BOI=	2.4		2.4	3.8
	Sum	D=	18.4		37.9	13.7
		PT=	350		720	260
		BOI=	7.2		20	6.2
Cormorants	Nearshore	D=	0.9	0.5	4.4	0.8
		PT=	8	5	40	8
		BOI=	0.73	0.09	0.71	0.14
	Offshore	D=	8.0		2.0	4.0
		PT=	80		20	40
		BOI=	1.4		0.41	0.82
	Sum	D=	4.6		3.2	2.5
		PT=	88		60	48
		BOI=	2.2		1.1	0.95
Herons	Nearshore	D=	0.9	3.9	3.3	0.3
		PT=	8	35	30	3
		BOI=	0.04	0.18	0.13	0.01

TABLE F-39 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	522.2	3.2	355.6	318.9
		PT=	4,700	29	3,200	2,900
		BOI=	120	0.63	45	44
	Offshore	D=	100.0		26.0	159.7
		PT=	1,000		260	1,600
		BOI=	23		6.5	37
	Sum	D=	300.0		184.2	236.8
		PT=	5,700		3,500	4,500
		BOI=	140		52	81
Eagles and Hawks	Nearshore	D=		<0.1		
		PT=		<1		
		BOI=		<0.01		
Rails	Nearshore	D=			0.3	
		PT=			3	
		BOI=			0.01	
Plovers	Nearshore	D=	<0.1	0.1	0.8	0.2
		PT=	<1	1	7	2
		BOI=	<0.01	<0.01	0.03	<0.01
Sandpipers and other shore-birds	Nearshore	D=	51.3		6.7	31.6
		PT=	460		60	280
		BOI=	2.8		0.27	1.5
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
	Offshore	D=			0.3	
		PT=			3	
		BOI=			0.01	
	Sum	D=			0.2	
		PT=			3	
		BOI=			0.01	

TABLE F-39 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	122.2	57.4	87.8	46.9
		PT=	1,100	520	790	420
		BOI=	14	7.4	10	6.5
	Offshore	D=	30.0	26.0	33.0	29.7
		PT=	300	260	330	300
		BOI=	3.8	3.7	4.2	3.3
	Sum	D=	73.7	41.1	57.9	37.9
		PT=	1,400	780	1,100	720
		BOI=	18	11	14	9.8
Alcids	Nearshore	D=	0.1	1.1	0.6	0.1
		PT=	1	10	5	1
		BOI=	0.05	0.35	0.23	0.07
	Offshore	D=	<0.1	2.0	20.0	4.7
		PT=	10	20	200	47
		BOI=	0.37	0.69	9.1	1.5
	Sum	D=	0.6	1.6	10.5	2.5
		PT=	11	30	200	48
		BOI=	0.42	1.0	9.3	1.6
Summary	Nearshore	D=	784.2	73.8	535.0	411.3
		PT=	7,100	660	4,800	3,700
		BOI=	140	11	77	55
	Offshore	D=	149.0	30.0	91.3	217.7
		PT=	1,500	300	910	2,200
		BOI=	32	4.4	23	47
	Sum	D=	452.6	50.5	300.0	310.5
		PT=	8,600	960	5,700	5,900
		BOI=	170	15	100	100

TABLE F-40. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, SEMIAHMOOO SPIT SUBREGION (0604), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	3.1	0.6	3.5	5.7
		PT=	30	6	33	54
		BOI=	0.55	0.09	0.53	0.93
Grebes	Nearshore	D=	5.1	0.4	286.2	39.8
		PT=	49	3	2,700	380
		BOI=	1.1	0.11	81	9.1
Cormorants	Nearshore	D=	3.4	2.2	6.0	7.3
		PT=	32	21	57	69
		BOI=	0.69	0.41	1.1	1.4
Herons	Nearshore	D=	1.6	11.6	4.3	0.1
		PT=	16	110	41	1
		BOI=	0.08	0.55	0.21	<0.01
Ducks and Geese	Nearshore	D=	761.6	150.5	276.6	737.0
		PT=	7,200	1,400	2,600	7,000
		BOI=	170	27	59	140
Eagles and Hawks	Nearshore	D=	<0.1			
		PT=	<1			
		BOI=	<0.01			
Plovers	Nearshore	D=	<0.1		<0.1	
		PT=	<1		<1	
		BOI=	<0.01		<0.01	
Sandpipers and other shore-birds	Nearshore	D=	0.2		1.2	307.2
		PT=	2		11	2,900
		BOI=	0.01		0.06	15
Gulls and Terns	Nearshore	D=	207.7	270.0	90.6	54.8
		PT=	2,000	2,600	860	520
		BOI=	23	46	14	8.2

TABLE F-40 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	1.3	0.5	0.7	2.3
		PT=	12	5	6	22
		BOI=	0.64	0.20	0.34	0.86
Summary	Nearshore	D=	984.5	435.8	671.6	1,159.0
		PT=	9,400	4,100	6,400	11,000
		BOI=	190	74	160	180

TABLE F-41. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, DRAYTON HARBOR SUBREGION (0605), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	2.8	0.6	4.3	9.2
		PT=	36	8	55	120
		BOI=	0.55	0.12	0.84	2.4
Grebes	Nearshore	D=	23.4	0.4	24.4	22.6
		PT=	300	6	310	290
		BOI=	8.0	0.17	7.8	7.3
Cormorants	Nearshore	D=	3.8	4.4	6.3	8.4
		PT=	48	56	81	110
		BOI=	0.77	0.82	1.3	2.0
Herons	Nearshore	D=	2.5	11.0	7.1	0.6
		PT=	32	140	91	7
		BOI=	0.16	0.71	0.46	0.04
Ducks and Geese	Nearshore	D=	221.5	13.2	289.5	652.4
		PT=	2,800	170	3,700	8,400
		BOI=	57	3.1	41	95
Eagles and Hawks	Nearshore	D=	<0.1	<0.1	<0.1	<0.1
		PT=	<1	<1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Rails	Nearshore	D=	0.3	<0.1	<0.1	0.6
		PT=	4	<1	1	8
		BOI=	0.01	<0.01	<0.01	0.02
Plovers	Nearshore	D=	0.3	2.4	2.8	0.2
		PT=	4	30	36	3
		BOI=	0.01	0.09	0.13	0.01
Sandpipers and other shore-birds	Nearshore	D=	200.7	6.3	44.6	110.4
		PT=	2,600	80	570	1,400
		BOI=	14	0.46	2.9	7.5

TABLE F-41 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	84.8	99.2	125.3	71.7
		PT=	1,100	1,300	1,600	920
		BOI=	15	21	19	13
Alcids	Nearshore	D=	0.4	<0.1	<0.1	0.2
		PT=	5	<1	<1	3
		BOI=	0.28	0.02	<0.01	0.12
Summary	Nearshore	D=	540.6	137.7	506.2	877.1
		PT=	6,900	1,800	6,500	11,000
		BOI=	96	26	74	130

TABLE F-42.. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, BOUNDARY BAY SUBREGION (0606), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	2.5		10.0	3.3
		PT=	190		750	250
		BOI=	3.8		11	3.7
	Offshore	D=	8.0	1.0	3.7	33.5
		PT=	650	[illegible]	300	2,700
		BOI=	14	1.5	5.9	62
	Sum	D=	5.4		7.0	19.1
		PT=	840		1,100	3,000
		BOI=	18		17	65
Grebes	Nearshore	D=	6.7		25.0	3.3
		PT=	500		1,900	250
		BOI=	9.1		29	4.2
	Offshore	D=	59.1	2.6	25.9	291.0
		PT=	4,800	220	2,100	24,000
		BOI=	130	6.5	61	710
	Sum	D=	33.8		25.5	152.9
		PT=	5,300		4,000	24,000
		BOI=	140		90	710
Cormorants	Nearshore	D=	0.7	3.3	1.7	2.1
		PT=	50	250	120	160
		BOI=	1.1	5.7	1.7	2.2
	Offshore	D=	0.4			3.2
		PT=	35			270
		BOI=	0.79			5.9
	Sum	D=	0.5			2.7
		PT=	85			430
		BOI=	1.9			8.1
Herons	Nearshore	D=	2.5		6.7	
		PT=	190		500	
		BOI=	0.94		2.5	

TABLE F-42 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter
Herons	Offshore	D=				<0.1
		PT=				7
		BOI=				0.04
Ducks and Geese	Nearshore	D=	461.7	60.0	11.7	190.0
		PT=	35,000	4,500	880	14,000
		BOI=	530	110	21	220
	Offshore	D=	76.9	1.0	107.8	230.8
		PT=	6,300	86	8,800	19,000
		BOI=	110	2.2	220	320
	Sum	D=	261.1	29.3	61.8	210.2
		PT=	41,000	4,600	9,700	33,000
		BOI=	640	110	240	550
Eagles and Hawks	Nearshore	D=	0.8			
		PT=	62			
		BOI=	0.45			
Sandpipers and other shore-birds	Nearshore	D=	41.7		0.5	
		PT=	3,100		43	
		BOI=	20		0.20	
Gulls and Terns	Nearshore	D=	173.3	190.0	371.7	108.3
		PT=	13,000	14,000	28,000	8,100
		BOI=	210	190	400	150
	Offshore	D=	73.3	31.6	13.5	75.3
		PT=	6,000	2,600	1,100	6,200
		BOI=	65	40	17	98
	Sum	D=	121.0	108.3	184.7	89.2
		PT=	19,000	17,000	29,000	14,000
		BOI=	270	230	420	250

TABLE F-42 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	1.7	13.3	5.0	
		PT=	120	1,000	380	
		BOI=	6.8	54	13	
	Offshore	D=	3.2	1.6	8.2	63.2
		PT=	260	130	670	5,200
		BOI=	13	5.2	28	170
	Sum	D=	2.5	7.0	6.4	
		PT=	390	1,100	1,000	
		BOI=	20	60	41	
Summary	Nearshore	D=	706.7	270.0	438.3	306.7
		PT=	53,000	20,000	33,000	23,000
		BOI=	780	360	480	380
	Offshore	D=	221.8	39.5	165.0	702.2
		PT=	18,000	3,200	14,000	58,000
		BOI=	340	56	330	1,400
	Sum	D=	452.2	146.5	293.0	515.9
		PT=	71,000	23,000	46,000	81,000
		BOI=	1,100	410	810	1,800

TABLE F-43. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, SAN JUAN ISLANDS NORTHERN TIER SUBREGION (0607), 1978 AND 1979, COMBINED

Family	Area		Period Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.8		5.5	8.4
		PT=	4		27	42
		BOI=	0.08		0.55	0.85
	Offshore	D=	13.8			3.8
		PT=	410			110
		BOI=	8.2			2.1
	Sum	D=	11.9			4.4
		PT=	410			150
		BOI=	8.2			2.9
Grebes	Nearshore	D=	2.9		8.1	9.6
		PT=	14		40	48
		BOI=	0.40		0.78	1.1
	Offshore	D=				10.0
		PT=				290
		BOI=				8.7
	Sum	D=				9.9
		PT=				340
		BOI=				9.8
Cormorants	Nearshore	D=	4.0	6.7	24.8	25.3
		PT=	20	33	120	130
		BOI=	0.44	0.76	2.7	2.9
	Offshore	D=	1.4			
		PT=	42			
		BOI=	0.96			
	Sum	D=	1.8			
		PT=	62			
		BOI=	1.4			
Herons	Nearshore	D=		0.1	0.5	<0.1
		PT=		<1	2	<1
		BOI=		<0.01	0.01	<0.01

TABLE F-43 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	13.4	2.7	1.8	50.6
		PT=	67	13	9	250
		BOI=	1.2	0.25	0.22	5.3
	Offshore	D=				1.2
		PT=				39
		BOI=				0.31
	Sum	D=				8.4
		PT=				290
		BOI=				5.6
Eagles and Hawks	Nearshore	D=	1.0	0.8	0.4	1.5
		PT=	5	4	2	7
		BOI=	0.03	0.03	0.01	0.05
Oystercatchers	Nearshore	D=	0.2		<0.1	0.3
		PT=	1		<1	2
		BOI=	0.02		<0.01	0.04
Sandpipers and other shore-birds	Nearshore	D=	5.6		1.1	4.0
		PT=	28		5	20
		BOI=	0.22		0.06	0.22
Jaegers	Nearshore	D=			<0.1	<0.1
		PT=			<1	<1
		BOI=			<0.01	<0.01
Gulls and Terns	Nearshore	D=	229.6	43.8	260.6	110.8
		PT=	1,100	220	1,300	550
		BOI=	16	4.1	19	8.3
	Offshore	D=	195.7	1.0	16.1	116.2
		PT=	5,800	29	470	3,400
		BOI=	82	0.56	5.3	38
	Sum	D=	220.0	7.3	52.3	116.3
		PT=	6,900	250	1,800	4,000
		BOI=	97	4.7	24	46

TABLE F-43 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	22.0	20.8	52.1	21.8
		PT=	110	100	260	110
		BOI=	3.8	3.7	8.6	4.0
	Offshore	D=	11.0		19.4	126.7
		PT=	320		570	3,700
		BOI=	11		19	120
	Sum	D=	12.5		24.1	110.5
		PT=	430		830	3,800
		BOI=	15		27	130
Summary	Nearshore	D=	281.2	74.8	362.0	233.4
		PT=	1,400	370	1,800	1,200
		BOI=	22	8.9	32	23
	Offshore	D=	223.8	1.0	35.6	259.2
		PT=	6,600	29	1,000	7,600
		BOI=	100	0.56	24	170
	Sum	D=	232.6	11.6	84.3	255.8
		PT=	8,000	400	2,900	8,800
		BOI=	120	9.4	56	200

TABLE F-44. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE EASTERN GEORGIA STRAIT REGION, GEORGIA STRAIT OPEN WATERS SUBREGION (0608), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Offshore	D=	9.4		0.6	4.3
		PT=	2,700		180	1,300
		BOI=	56		3.6	26
Grebes	Offshore	D=	5.9		1.7	4.7
		PT=	1,700		500	1,400
		BOI=	50		15	39
Cormorants	Offshore	D=	0.8	0.2	0.5	1.3
		PT=	220	59	130	390
		BOI=	5.0	1.3	2.6	8.7
Ducks and Geese	Offshore	D=	3.9		0.3	14.4
		PT=	1,100		80	4,200
		BOI=	23		1.8	73
Gulls and Terns	Offshore	D=	80.8	10.0	30.5	17.2
		PT=	23,000	2,900	8,800	5,000
		BOI=	270	52	120	78
Alcids	Offshore	D=	28.2	1.6	27.8	34.2
		PT=	8,100	470	8,000	9,900
		BOI=	280	15	360	320
Summary	Offshore	D=	130.3	11.8	61.4	76.6
		PT=	38,000	3,400	18,000	22,000
		BOI=	680	68	510	540

SECTION VII

Region 7. Western Georgia Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-45. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE WESTERN GEORGIA STRAIT REGION, POINT ROBERTS SUBREGION (0701), 1978 AND 1979, COMBINED

Family	Area		Period Spring	Summer	Fall	Winter
Loons	Nearshore	D=	12.8	3.3	2.4	4.1
		PT=	210	53	39	67
		BOI=	4.1	0.92	0.68	1.3
Grebes	Nearshore	D=	23.6	0.6	16.5	60.5
		PT=	380	9	270	990
		BOI=	11	0.29	7.5	28
Cormorants	Nearshore	D=	5.5	3.4	3.7	8.9
		PT=	90	55	60	140
		BOI=	2.0	1.0	1.1	2.9
Herons	Nearshore	D=		0.6	0.5	0.2
		PT=		9	8	3
		BOI=		0.05	0.04	0.01
Ducks and Geese	Nearshore	D=	291.8	3.6	24.9	301.1
		PT=	4,800	59	410	4,900
		BOI=	110	1.1	8.3	81
Eagles and Hawks	Nearshore	D=		0.1	<0.1	<0.1
		PT=		2	<1	<1
		BOI=		0.01	<0.01	<0.01
Oystercatchers	Nearshore	D=		0.4		
		PT=		6		
		BOI=		0.13		
Plovers	Nearshore	D=	0.2	0.4	0.2	<0.1
		PT=	4	6	3	<1
		BOI=	0.01	0.02	<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	5.7		0.4	10.8
		PT=	93		6	180
		BOI=	0.53		0.03	0.92

TABLE F-45 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Jaegers	Nearshore	D=			0.4	
		PT=			6	
		BOI=			0.01	
Gulls and Terns	Nearshore	D=	77.5	75.0	110.7	109.6
		PT=	1,300	1,200	1,800	1,800
		BOI=	20	22	25	28
Alcids	Nearshore	D=	43.6	13.5	3.2	22.0
		PT=	710	220	52	360
		BOI=	23	11	2.0	13
Summary	Nearshore	D=	461.4	100.7	163.2	518.2
		PT=	7,500	1,600	2,700	8,400
		BOI=	170	37	44	160

TABLE F-46. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE WESTERN GEORGIA STRAIT REGION, TSAWWASSEN BAY SUBREGION (0702), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	2.4	0.1	0.8	2.5
		PT=	14	1	5	15
		BOI=	0.23	0.01	0.07	0.23
Grebes	Nearshore	D=	1.6		14.5	15.7
		PT=	10		88	96
		BOI=	0.20		2.3	1.6
Cormorants	Nearshore	D=	4.9	4.5	2.1	23.0
		PT=	30	27	13	140
		BOI=	0.68	0.49	0.26	2.7
Herons	Nearshore	D=	0.5		0.2	0.2
		PT=	3		1	1
		BOI=	0.02		<0.1	0.01
Ducks and Geese	Nearshore	D=	805.0	1.5	97.7	360.0
		PT=	4,900	9	600	2,200
		BOI=	110	0.19	12	31
Sandpipers and other shore-birds	Nearshore	D=			0.2	327.9
		PT=			1	2,000
		BOI=			0.01	11
Jaegers	Nearshore	D=			0.2	
		PT=			1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	255.2	58.1	122.9	136.1
		PT=	1,600	350	750	830
		BOI=	21	6.7	11	11
Alcids	Nearshore	D=		0.1	0.1	
		PT=		1	1	
		BOI=		0.04	0.03	

TABLE F-46 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Summary	Nearshore	D=	1,069.3	64.3	238.7	868.9
		PT=	6,500	390	1,500	5,300
		BOI=	130	7.4	25	56

TABLE F-47. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE WESTERN GEORGIA STRAIT REGION, GEORGIA STRAIT OPEN WATERS SUBREGION (0703), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Offshore	D=	1.1		<0.1	0.1
		PT=	400		10	30
		BOI=	8.5		0.34	0.59
Grebes	Offshore	D=	2.3	<0.1	0.2	0.1
		PT=	840	7	80	24
		BOI=	26	0.20	2.3	0.72
Cormorants	Offshore	D=	0.3	<0.1	0.1	<0.1
		PT=	100	27	40	15
		BOI=	1.6	0.55	0.88	0.32
Ducks and Geese	Offshore	D=	0.4	0.1	0.3	0.1
		PT=	160	40	90	34
		BOI=	8.8	1.0	2.0	0.71
Phalaropes	Offshore	D=				
		PT=			<0.1	
		BOI=			5	
					0.03	
Jaegers	Offshore	D=				
		PT=			<0.1	
		BOI=			8	
					0.02	
Gulls and Terns	Offshore	D=	3.3	2.3	1.7	1.8
		PT=	1,200	850	620	640
		BOI=	17	12	7.1	12
Alcids	Offshore	D=	1.8	0.1	0.2	1.4
		PT=	650	40	60	530
		BOI=	21	1.6	1.9	18
Summary	Offshore	D=	9.2	2.7	2.5	3.5
		PT=	3,400	970	910	1,300
		BOI=	82	15	15	32

SECTION VIII

Region 8. Haro Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-48. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE HARO STRAIT REGION, NORTHERN SUBREGION (0801), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	3.5	0.2	5.3	5.1
		PT=	34	2	50	49
		BOI=	0.65	0.04	0.98	0.97
	Offshore	D=				
		PT=			0.2	1.7
		BOI=			70	560
					1.3	11
	Sum	D=				
		PT=			0.4	1.8
		BOI=			120	600
					2.3	12
Grebes	Nearshore	D=	2.3			
		PT=	22		9.1	18.3
		BOI=	0.49		88	180
					1.9	3.7
	Offshore	D=		0.8		
		PT=		260	0.9	0.6
		BOI=		7.9	30	210
					0.99	4.7
	Sum	D=				
		PT=			0.4	1.2
		BOI=			120	390
					2.9	8.4
Cormorants	Nearshore	D=	6.7	47.0	56.7	27.3
		PT=	64	450	540	260
		BOI=	1.3	10	11	5.8
	Offshore	D=				
		PT=		0.8	0.6	0.6
		BOI=		260	200	210
				5.8	4.7	4.9
	Sum	D=				
		PT=		2.1	2.2	1.4
		BOI=		710	740	480
				16	16	11
Herons	Nearshore	D=	<0.1			
		PT=	<1		0.4	0.3
		BOI=	<0.01		4	3
					0.02	0.01

TABLE F-48 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	56.1	10.5	17.9	182.5
		PT=	540	100	170	1,800
		BOI=	8.5	1.9	4.2	24
	Offshore	D=	0.4			
		PT=	120			
		BOI=	2.9			
	Sum	D=	1.9			
		PT=	660			
		BOI=	11			
Eagles and Hawks	Nearshore	D=	0.6		<0.1	1.7
		PT=	6		<1	16
		BOI=	0.04		<0.01	0.12
Oystercatchers	Nearshore	D=			0.2	<0.1
		PT=			2	<1
		BOI=			0.05	0.01
Plovers	Nearshore	D=			0.1	
		PT=			1	
		BOI=			<0.01	
Sandpipers and other shore-birds	Nearshore	D=	0.2		0.3	3.2
		PT=	2		3	31
		BOI=	<0.01		0.02	0.33
Gulls and Terns	Nearshore	D=	138.9	181.2	314.9	63.7
		PT=	1,300	1,700	3,000	610
		BOI=	25	33	39	10
	Offshore	D=	5.9	3.2	16.7	13.2
		PT=	2,000	1,000	5,500	4,400
		BOI=	34	20	55	72
	Sum	D=	9.7	8.3	25.1	14.8
		PT=	3,300	2,800	8,500	5,000
		BOI=	59	53	94	82

TABLE F-48 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	2.1	34.2	56.4	5.4
		PT=	20	330	540	51
		BOI=	0.75	15	18	2.0
	Offshore	D=	0 4	0.3	21.3	3.4
		PT=	'20	87	7,000	1,100
		BOI=	3.9	3.0	230	37
	Sum	D=	0.4	1.2	22.1	3.5
		PT=	140	420	7,500	1,200
		BOI=	4.7	18	250	39
Summary	Nearshore	D=	212.2	274.2	465.8	312.4
		PT=	2,000	2,600	4,500	3,000
		BOI=	37	61	76	47
	Offshore	D=	6.7	5.0	38.9	19.8
		PT=	2,200	1,600	13,000	6,500
		BOI=	41	36	290	130
	Sum	D=	12.4	12.7	53.1	28.0
		PT=	4,200	4,300	18,000	9,500
		BOI=	78	97	370	180

TABLE F-49. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE HARO STRAIT REGION, SOUTHERN SUBREGION (0802), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.5		3.4	7.3
		PT=	3		17	37
		BOI=	0.05		0.34	0.74
	Offshore	D=	<0.1		0.1	1.7
		PT=	7		29	370
		BOI=	0.13		0.59	7.6
	Sum	D=	<0.1		0.2	1.8
		PT=	10		46	410
		BOI=	0.18		0.92	8.4
Grebes	Nearshore	D=	2.6		2.3	6.2
		PT=	13		11	31
		BOI=	0.38		0.32	0.63
	Offshore	D=	0.2		<0.1	0.4
		PT=	52		13	83
		BOI=	1.5		0.34	2.5
	Sum	D=	0.3		0.1	0.5
		PT=	65		25	110
		BOI=	1.9		0.66	3.1
Cormorants	Nearshore	D=	1.0	0.6	2.7	2.1
		PT=	5	3	14	10
		BOI=	0.10	0.06	0.28	0.20
	Offshore	D=	0.6	1.0	1.2	0.7
		PT=	140	220	250	150
		BOI=	2.4	3.1	4.2	3.1
	Sum	D=	0.6	1.0	1.2	0.7
		PT=	142	220	270	160
		BOI=	2.5	3.1	4.5	3.3
Herons	Nearshore	D=				
		PT=			0.3	0.3
		BOI=			2	2
					<0.01	<0.01

TABLE F-49 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	3.4		0.9	17.4
		PT=	17		4	87
		BOI=	0.25		0.08	1.2
	Offshore	D=	0.4		<0.1	0.6
		PT=	82		4	150
		BOI=	2.7		0.06	2.9
	Sum	D=	0.4		<0.1	1.0
		PT=	99		9	230
		BOI=	2.9		0.14	4.1
Eagles and Hawks	Nearshore	D=	0.2	0.2	0.2	0.5
		PT=	1	<1	1	3
		BOI=	<0.01	<0.01	<0.01	0.02
Oystercatchers	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Plovers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Sandpipers and other shore-birds	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Phalaropes	Nearshore	D=			0.2	
		PT=			1	
		BOI=			<0.01	
	Offshore	D=			<0.1	
		PT=			7	
		BOI=			0.04	
	Sum	D=			<0.1	
		PT=			8	
		BOI=			0.05	

TABLE F-49 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Jaegers	Offshore	D=			<0.1	
		PT=			2	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	25.8	3.1	168.0	54.0
		PT=	130	15	840	270
		BOI=	1.7	0.29	10	4.0
	Offshore	D=	2.7	0.4	2.3	3.2
		PT=	590	90	500	700
		BOI=	9.4	1.6	8.3	11
	Sum	D=	3.2	0.4	5.8	4.3
		PT=	720	100	1,300	970
		BOI=	11	1.9	18	15
Alcids	Nearshore	D=	0.6	0.4	19.9	5.2
		PT=	3	2	100	26
		BOI=	0.11	0.08	3.3	0.94
	Offshore	D=	0.6	0.3	0.9	3.2
		PT=	140	75	200	710
		BOI=	5.2	3.2	7.5	23
	Sum	D=	0.6	0.3	1.3	3.3
		PT=	140	77	300	740
		BOI=	5.3	3.3	11	24
Summary	Nearshore	D=	34.2	4.2	198.4	95.9
		PT=	170	21	990	480
		BOI=	2.6	0.43	14	7.8
	Offshore	D=	4.7	1.7	4.6	9.9
		PT=	1,000	380	1,000	2,200
		BOI=	21	7.9	21	49
	Sum	D=	5.3	1.8	8.9	12.0
		PT=	1,200	400	2,000	2,700
		BOI=	24	8.3	35	57

SECTION IX

Region 9. Rosario Strait region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-50. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ROSARIO STRAIT REGION, SOUTHERN SUBREGION (0901), 1978 AND 1979, COMBINED

Family	Area		Period Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.4	0.1	0.42	2.3
		PT=	4	1	5	24
		BOI=	0.08	0.02	0.08	0.50
	Offshore	D=	0.3		<0.1	3.0
		PT=	29		3	340
		BOI=	0.58		0.06	6.9
	Sum	D=	0.3		0.1	2.9
		PT=	33		8	360
		BOI=	0.66		0.14	7.4
Grebes	Nearshore	D=	2.9		10.3	7.0
		PT=	32		110	76
		BOI=	0.69		3.0	1.5
	Offshore	D=	0.1		<0.1	0.2
		PT=	16		7	27
		BOI=	0.35		0.17	0.63
	Sum	D=	0.4		1.0	0.8
		PT=	48		120	100
		BOI=	1.0		3.2	2.1
Storm-Petrels	Offshore	D=			<0.1	
		PT=			4	
		BOI=			0.04	
Cormorants	Nearshore	D=	13.3	38.9	21.0	38.4
		PT=	140	420	230	410
		BOI=	2.8	6.9	4.6	8.6
	Offshore	D=	0.6	0.8	2.1	8.4
		PT=	62	92	230	940
		BOI=	1.3	1.5	4.1	19
	Sum	D=	1.7	4.1	3.7	11.4
		PT=	210	510	460	1,400
		BOI=	4.1	8.4	8.7	28

TABLE F-50 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Herons	Nearshore	D=		<0.1	0.1	<0.1
		PT=		<1	1	<1
		BOI=		<0.01	<0.01	<0.01
Ducks and Geese	Nearshore	D=	4.0	0.2	6.2	17.9
		PT=	43	2	67	190
		BOI=	0.92	0.05	1.1	3.5
	Offshore	D=	1.1		0.2	0.9
		PT=	120		19	98
		BOI=	1.9		0.43	2.0
	Sum	D=	1.3		0.7	2.4
		PT=	160		85	290
		BOI=	2.9		1.5	5.2
Eagles and Hawks	Nearshore	D=	<0.1	0.1	<0.1	0.2
		PT=	<1	1	<1	2
		BOI=	<0.01	<0.01	<0.01	0.02
Oystercatchers	Nearshore	D=	0.7	0.2	0.1	0.2
		PT=	7	2	1	2
		BOI=	0.16	0.04	0.02	0.04
Plovers	Nearshore	D=				<0.1
		PT=				<1
		BOI=				<0.01
Sandpipers and other shore-birds	Nearshore	D=	0.2		0.5	2.1
		PT=	2		5	23
		BOI=	0.01		0.06	0.24
Phalaropes	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
	Offshore	D=	0.1		0.4	
		PT=	16		40	
		BOI=	0.11		0.27	

TABLE F-50 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Phalaropes	Nearshore	D=			0.2	
		PT=			40	
		BOI=			0.27	
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
	Offshore	D=			<0.1	
		PT=			2	
		BOI=			<0.01	
	Sum	D=			<0.1	
		PT=			2	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	78.8	113.9	67.5	61.8
		PT=	850	1,200	730	670
		BOI=	15	23	11	11
	Offshore	D=	2.6	1.4	15.9	20.3
		PT=	300	160	1,800	2,300
		BOI=	4.6	3.1	25	29
	Sum	D=	8.9	11.4	20.3	23.5
		PT=	1,100	1,400	2,500	2,900
		BOI=	20	26	36	39
Alcids	Nearshore	D=	8.4	14.3	31.2	131.6
		PT=	90	150	340	1,400
		BOI=	4.0	7.2	12	47
	Offshore	D=	1.4	0.9	16.8	51.9
		PT=	150	100	1,900	5,800
		BOI=	6.1	4.9	63	190
	Sum	D=	1.9	2.0	17.9	59.3
		PT=	240	250	2,200	7,300
		BOI=	10	12	75	240
Summary	Nearshore	D=	109.0	167.8	138.0	264.0
		PT=	1,200	1,800	1,500	2,900
		BOI=	24	38	32	72

TABLE F-50 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Summary	Offshore	D=	6.2	3.2	35.6	84.8
		PT=	700	360	4,000	9,500
		BOI=	15	9.4	93	250
	Sum	D=	15.4	17.9	44.6	97.4
		PT=	1,900	2,200	5,500	12,000
		BOI=	39	47	120	320

TABLE F-51. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ROSARIO STRAIT REGION, CENTRAL SUBREGION (0902), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.7	0.4	0.5	2.8
		PT=	6	1	2	10
		BOI=	0.13	0.02	0.03	0.21
	Offshore	D=			1.2	2.3
		PT=			95	180
		BOI=			1.9	3.7
	Sum	D=			1.2	2.3
		PT=			97	190
		BOI=			2.0	3.9
Grebes	Nearshore	D=	2.5		5.4	20.3
		PT=	9		20	75
		BOI=	0.16		0.53	2.0
	Offshore	D=	0.8		11.0	4.1
		PT=	66		870	330
		BOI=	2.0		26	8.3
	Sum	D=	0.9		10.7	4.8
		PT=	75		890	400
		BOI=	2.2		26	10
Cormorants	Nearshore	D=	4.2	9.2	14.6	15.8
		PT=	16	34	54	58
		BOI=	0.36	0.74	1.0	1.3
	Offshore	D=	0.8		1.2	2.1
		PT=	66		95	160
		BOI=	1.5		2.2	3.6
	Sum	D=	1.0		1.8	2.6
		PT=	82		150	220
		BOI=	1.8		3.2	4.9
Herons	Nearshore	D=		0.2	0.4	0.2
		PT=		<1	1	<1
		BOI=		<0.01	<0.01	<0.01

TABLE F-51 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	8.8	8.0	4.0	19.8
		PT=	33	30	15	73
		BOI=	0.50	0.55	0.24	1.1
	Offshore	D=	1.2		3.0	2.3
		PT=	99		240	180
		BOI=	2.4		4.6	3.0
	Sum	D=	1.6		3.0	3.0
		PT=	130		250	250
		BOI=	2.9		4.8	4.1
Eagles and Hawks	Nearshore	D=	1.0	1.0	0.1	1.2
		PT=	4	4	<1	4
		BOI=	0.03	0.03	<0.01	0.03
Oystercatchers	Nearshore	D=	<0.1	0.2	0.6	1.4
		PT=	<1	<1	2	5
		BOI=	<0.01	<0.02	0.05	0.11
Plovers	Nearshore	D=				
		PT=				1.2
		BOI=				4
						0.02
Sandpipers and other shore-birds	Nearshore	D=	0.7		1.7	9.0
		PT=	3		6	33
		BOI=	0.03		0.07	0.32
Phalaropes	Nearshore	D=			14.6	
		PT=			54	
		BOI=			0.36	
	Offshore	D=			0.4	
		PT=			32	
		BOI=			0.21	
	Sum	D=			1.0	
		PT=			86	
		BOI=			0.57	

TABLE F-51 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Jaegers	Nearshore	D=			0.4	
		PT=			1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	153.5	172.0	422.1	214.6
		PT=	570	640	1,600	790
		BOI=	11	12	19	9.8
	Offshore	D=	4.9	0.3	22.7	23.6
		PT=	390	25	1,800	1,900
		BOI=	7.2	0.47	21	29
	Sum	D=	11.4	7.9	40.9	32.5
		PT=	950	660	3,400	2,700
		BOI=	18	12	40	38
Alcids	Nearshore	D=	1.5	8.6	66.9	9.8
		PT=	6	32	250	36
		BOI=	0.22	1.1	8.9	1.3
	Offshore	D=	2.2		53.0	29.7
		PT=	180		4,200	2,400
		BOI=	7.1		140	77
	Sum	D=	2.2		54.2	28.9
		PT=	180		4,500	2,400
		BOI=	7.3		140	79
Summary	Nearshore	D=	174.8	199.8	533.9	299.8
		PT=	650	740	2,000	1,100
		BOI=	12	15	30	16
	Offshore	D=	10.1	0.3	92.7	64.7
		PT=	800	25	7,400	5,100
		BOI=	20	0.47	190	120
	Sum	D=	18.1	9.1	113.1	74.6
		PT=	1,500	760	9,400	6,200
		BOI=	32	15	220	140

TABLE F-52. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE ROSARIO STRAIT REGION, NORTHERN SUBREGION (0903), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.7	0.7	0.2	2.8
		PT=	6	2	<1	9
		BOI=	0.11	0.04	0.01	0.18
	Offshore	D=	39.1	0.2	0.4	0.4
		PT=	3,500	19	33	37
		BOI=	70	0.37	0.66	0.76
	Sum	D=	38.0	0.2	0.4	0.5
		PT=	3,500	21	33	46
		BOI=	70	0.41	0.67	0.94
Grebes	Nearshore	D=	4.0		9.5	40.0
		PT=	13		31	130
		BOI=	0.24		0.85	3.6
	Offshore	D=	6.8		2.7	1.6
		PT=	610		240	140
		BOI=	18		7.2	3.8
	Sum	D=	6.7		2.9	2.9
		PT=	620		270	270
		BOI=	18		8.0	7.4
Cormorants	Nearshore	D=	4.4	3.0	3.0	5.4
		PT=	15	10	10	18
		BOI=	0.33	0.23	0.19	0.38
	Offshore	D=	0.3	2.3	<0.1	1.6
		PT=	30	200	8	140
		BOI=	0.70	3.2	0.17	2.6
	Sum	D=	0.5	2.3	0.2	1.7
		PT=	45	210	18	160
		BOI=	1.0	3.4	0.36	3.0
Herons	Nearshore	D=			0.3	0.2
		PT=			1	<1
		BOI=			<0.01	<0.01

TABLE F-52 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	152.2	1.1	0.8	41.2
		PT=	500	4	3	140
		BOI=	9.2	0.07	0.06	1.9
	Offshore	D=	17.6	0.4	<0.1	1.8
		PT=	1,600	37	8	160
		BOI=	36	0.69	0.21	2.8
	Sum	D=	22.8	0.4	0.1	3.3
		PT=	2,100	41	11	300
		BOI=	46	0.75	0.27	4.7
Eagles and Hawks	Nearshore	D=	0.6	0.8	0.2	1.9
		PT=	2	3	<1	6
		BOI=	0.01	0.02	<0.01	0.04
Plovers	Nearshore	D=				
		PT=			0.3	
		BOI=			1	
					<0.01	
Sandpipers and other shore-birds	Nearshore	D=	0.1			
		PT=	<1		1.1	2.6
		BOI=	<0.01		4	9
					0.04	0.09
Jaegers	Offshore	D=				
		PT=			<0.1	
		BOI=			8	
					0.01	
Gulls and Terns	Nearshore	D=	186.9	125.9	168.4	112.1
		PT=	620	420	560	370
		BOI=	10	7.8	7.5	5.0
	Offshore	D=	190.1	69.8	31.5	9.0
		PT=	17,000	6,200	2,800	800
		BOI=	170	120	38	13.6
	Sum	D=	195.2	71.6	36.9	13.0
		PT=	18,000	6,600	3,400	1,200
		BOI=	180	130	46	19

TABLE F-52 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	1.7	4.4	17.3	7.6
		PT=	6	14	57	25
		BOI=	0.25	0.68	2.2	0.89
	Offshore	D=	7.2	2.7	50.3	22.5
		PT=	640	240	4,500	2,000
		BOI=	21	8.3	150	63
	Sum	D=	6.9	2.8	4.9	21.7
		PT=	640	260	4,500	2,000
		BOI=	21	9.0	150	64
Summary	Nearshore	D=	352.7	135.9	203.6	218.8
		PT=	1,100	450	670	720
		BOI=	20	8.9	11	12
	Offshore	D=	266.0	75.4	86.1	36.9
		PT=	24,000	6,700	7,600	3,300
		BOI=	310	130	200	87
	Sum	D=	271.1	78.1	90.0	43.4
		PT=	25,000	7,200	8,300	4,000
		BOI=	330	140	210	99

SECTION X

Region 10. San Juan Islands-Northern Waters region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-53. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-NORTHERN WATERS REGION, PRESIDENT CHANNEL SUBREGION (1001), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	4.8		16.2	5.4
		PT=	15		52	17
		BOI=	0.31		1.0	0.34
	Offshore	D=	0.7		0.2	1.5
		PT=	73		20	150
		BOI=	1.5		0.40	2.7
	Sum	D=	0.9		0.7	1.6
		PT=	89		72	170
		BOI=	1.8		1.4	3.0
Grebes	Nearshore	D=	4.6		1.9	23.3
		PT=	15		6	74
		BOI=	0.35		0.16	1.7
	Offshore	D=	2.0		0.7	3.5
		PT=	200		74	350
		BOI=	5.9		2.2	9.8
	Sum	D=	2.0		0.8	4.1
		PT=	210		80	420
		BOI=	6.2		2.4	11
Cormorants	Nearshore	D=	1.8	2.5	16.7	5.3
		PT=	6	8	54	17
		BOI=	0.14	0.17	0.88	0.37
	Offshore	D=			0.9	1.0
		PT=			94	100
		BOI=			2.1	2.6
	Sum	D=			1.4	1.2
		PT=			150	120
		BOI=			3.0	3.0
Herons	Nearshore	D=	0.1		0.1	0.1
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01

TABLE F-53 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	24.6		4.3	79.9
		PT=	79		14	260
		BOI=	1.4		0.34	3.8
	Offshore	D=	0.8		1.1	3.1
		PT=	84		110	310
		BOI=	1.1		2.9	6.9
	Sum	D=	1.5		1.3	5.5
		PT=	160		130	570
		BOI=	2.5		3.2	11
Eagles and Hawks	Nearshore	D=	0.6			0.4
		PT=	2			1
		BOI=	0.01			<0.01
Sandpipers and other shore-birds	Nearshore	D=				
		PT=			2.2	1.2
		BOI=			7	4
					0.08	0.04
Phalaropes	Nearshore	D=				
		PT=			0.4	
		BOI=			1	
					<0.01	
	Offshore	D=				
		PT=			0.6	
		BOI=			60	
					0.40	
	Sum	D=				
		PT=			0.5	
		BOI=			62	
					0.41	
Gulls and Terns	Nearshore	D=	144.4	228.8	163.0	119.6
		PT=	460	730	520	380
		BOI=	8.7	14	7.6	5.9
	Offshore	D=	3.5	2.0	12.4	18.6
		PT=	360	200	1,200	1,900
		BOI=	6.2	3.4	18	23.4

TABLE F-53 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Sum	D=	7.9	9.0	17.4	22.2
		PT=	820	930	1,800	2,300
		BOI=	15	17	26	29
Alcids	Nearshore	D=	1.2	14.2	12.1	12.3
		PT=	4	45	39	39
		BOI=	0.13	1.6	1.6	1.9
	Offshore	D=	0.4		13.4	10.9
		PT=	42		1,300	1,100
		BOI=	1.6		53	36
	Sum	D=	0.4		13.5	10.6
		PT=	46		1,400	1,100
		BOI=	1.7		55	38
Summary	Nearshore	D=	182.4	245.4	220.4	253.0
		PT=	580	790	710	810
		BOI=	11	15.6	12	14
	Offshore	D=	7.6	2.0	29.7	37.9
		PT=	760	200	3,000	3,800
		BOI=	16	3.4	80	81
	Sum	D=	12.5	9.6	35.7	44.4
		PT=	1,300	990	3,700	4,600
		BOI=	27	19	92	95

TABLE F-54. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-NORTHERN WATERS REGION, NORTHERN AREAS SUBREGION (1002), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=			0.1	0.4
		PT=			<1	<1
		BOI=			<0.01	0.02
	Offshore	D=				6.0
		PT=				290
		BOI=				5.9
	Sum	D=				5.8
		PT=				290
		BOI=				5.9
Grebes	Nearshore	D=	0.2	0.6	0.6	14.8
		PT=	<1	1	1	30
		BOI=	<0.01	0.02	0.04	0.84
	Offshore	D=			0.9	19.0
		PT=			44	910
		BOI=			1.3	27
	Sum	D=			0.9	18.9
		PT=			45	940
		BOI=			1.4	28
Cormorants	Nearshore	D=	6.5	6.5	11.7	7.1
		PT=	13	13	23	14
		BOI=	0.30	0.30	0.43	0.32
	Offshore	D=	1.9			3.7
		PT=	90			180
		BOI=	2.1			3.5
	Sum	D=	2.0			3.8
		PT=	100			190
		BOI=	2.4			3.8
Herons	Nearshore	D=			0.1	0.5
		PT=			<1	1
		BOI=			<0.01	<0.01

TABLE F-54 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	3.6		7.3	10.1
		PT=	7		15	20
		BOI=	0.15		0.22	0.27
	Offshore	D=	3.8			10.6
		PT=	180			510
		BOI=	1.5			6.4
	Sum	D=	3.8			10.6
		PT=	190			530
		BOI=	1.7			6.7
Eagles and Hawks	Nearshore	D=	1.0		0.1	0.7
		PT=	2		<1	1
		BOI=	0.01		<0.01	0.01
Sandpipers and other shore-birds	Nearshore	D=				2.6
		PT=				130
		BOI=				0.64
Phalaropes	Offshore	D=			10.6	
		PT=			510	
		BOI=			3.4	
Jaegers	Nearshore	D=			0.2	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	9.2	6.5	112.1	30.3
		PT=	18	13	220	61
		BOI=	0.32	0.23	2.5	0.95
	Offshore	D=	25.6	5.0	42.7	78.5
		PT=	1,200	240	2,100	3,800
		BOI=	20	4.5	30	51

TABLE F-54 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Sum	D=	24.0	5.0	46.0	78.0
		PT=	1,200	250	2,300	3,900
		BOI=	20	4.8	33	52
Alcids	Nearshore	D=	2.1	2.4	8.4	4.8
		PT=	4	5	17	10
		BOI=	0.18	0.16	0.90	0.39
	Offshore	D=				
		PT=			19.1	50.0
		BOI=			920	2,400
					31	79
	Sum	D=				
		PT=			18.6	48.0
		BOI=			930	2,400
					31	79
Summary	Nearshore	D=	22.7	15.9	141.5	69.4
		PT=	45	32	280	140
		BOI=	0.97	0.71	4.0	2.8
	Offshore	D=	31.9	5.0	74.6	168.4
		PT=	1,500	240	3,600	8,100
		BOI=	24	4.5	65	170
	Sum	D=	32.0	5.4	78.0	164.0
		PT=	1,600	270	3,900	8,200
		BOI=	25	5.2	70	170

SECTION XI

Region 11. San Juan Islands-Interior Channels and Passages region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-55. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, SPEIDEN CHANNEL SUBREGION (1101), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	19.1		0.8	36.2
		PT=	21		<1	40
		BOI=	0.42		0.02	0.80
	Offshore	D=	0.5		0.4	11.5
		PT=	6		5	150
		BOI=	0.12		0.10	2.9
	Sum	D=	2.0		0.4	13.9
		PT=	27		6	190
		BOI=	0.54		0.12	3.7
Grebes	Nearshore	D=	11.8		58.3	3.8
		PT=	13		64	4
		BOI=	0.39		1.8	0.10
	Offshore	D=	0.9		0.5	3.0
		PT=	11		6	38
		BOI=	0.32		0.17	1.1
	Sum	D=	1.8		5.1	3.1
		PT=	24		70	42
		BOI=	0.71		2.0	1.2
Cormorants	Nearshore	D=	26.4	5.0	82.5	91.2
		PT=	29	6	91	100
		BOI=	0.66	0.13	1.9	2.2
	Offshore	D=	1.4	0.8	1.8	6.5
		PT=	17	10	23	82
		BOI=	0.35	0.18	0.39	1.8
	Sum	D=	3.4	1.1	8.0	13.1
		PT=	46	15	110	180
		BOI=	1.0	0.30	2.3	4.0
Herons	Offshore	D=				<0.1
		PT=				<1
		BOI=				<0.01

TABLE F-55 (continued).

Family	Area		Period: Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	3.6			11.9
		PT=	4			13
		BOI=	0.07			0.25
	Offshore	D=	0.2	0.3	0.3	2.1
		PT=	2	4	3	27
		BOI=	0.04	0.09	0.06	0.37
	Sum	D=	0.4			2.9
		PT=	6			40
		BOI=	0.12			0.62
Eagles and Hawks	Nearshore	D=	0.9			2.5
		PT=	1			3
		BOI=	<0.01			0.02
Oystercatchers	Nearshore	D=				0.6
		PT=				<1
		BOI=				0.02
Sandpipers and other shore-birds	Nearshore	D=				1.2
		PT=				1
		BOI=				0.02
Phalaropes	Offshore	D=			0.8	
		PT=			10	
		BOI=			0.07	
Jaegers	Offshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	12.7		171.7	92.5
		PT=	14		190	100
		BOI=	0.26		1.5	1.7
	Offshore	D=	1.9	1.2	63.5	40.5
		PT=	24	14	800	510
		BOI=	0.40	0.27	7.4	5.2

TABLE F-55 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Sum	D=	2.8		72.3	44.5
		PT=	38		990	610
		BOI=	0.66		8.9	6.9
Alcids	Nearshore	D=		5.0	4.2	11.2
		PT=		6	5	12
		BOI=		0.19	0.25	0.49
	Offshore	D=	3.5	0.8	2.7	12.5
		PT=	44	10	35	160
		BOI=	1.6	0.35	1.6	5.8
	Sum	D=		1.2	2.8	12.4
		PT=		16	39	170
		BOI=		0.54	1.8	6.3
Summary	Nearshore	D=	74.6	10.0	318.3	251.2
		PT=	82	11	350	280
		BOI=	1.8	0.32	5.5	5.6
	Offshore	D=	8.4	3.1	70.2	76.4
		PT=	110	39	890	960
		BOI=	2.9	0.91	9.8	17
	Sum	D=	13.9	3.6	87.6	87.6
		PT=	190	50	1,200	1,200
		BOI=	4.7	1.2	15	23

TABLE F-56. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR PASSAGES AND CHANNELS REGION, NORTHERN SAN JUAN CHANNEL SUBREGION (1102), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=				0.2
		PT=				<1
		BOI=				<0.01
	Offshore	D=	<0.1		0.6	0.6
		PT=	<1		21	22
		BOI=	0.01		0.42	0.44
	Sum	D=				0.6
		PT=				22
		BOI=				0.45
Grebes	Nearshore	D=			6.1	1.1
		PT=			18	3
		BOI=			0.52	0.08
	Offshore	D=	0.1		0.1	0.4
		PT=	4		3	15
		BOI=	0.11		0.10	0.37
	Sum	D=			0.6	0.5
		PT=			21	18
		BOI=			0.62	0.46
Cormorants	Nearshore	D=	0.1		0.1	1.0
		PT=	<1		<1	3
		BOI=	<0.01		<0.01	0.06
	Offshore	D=	0.2	<0.1	0.5	0.6
		PT=	7	3	15	22
		BOI=	0.13	0.04	0.24	0.45
	Sum	D=	0.2		0.4	0.7
		PT=	7		15	24
		BOI=	0.14		0.24	0.51
Herons	Nearshore	D=	<0.1		<0.1	<0.1
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01

TABLE F-56 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=				
		PT=			2.3	7.3
		BOI=			7	21
					0.08	0.25
	Offshore	D=	<0.1			
		PT=	1		0.2	1.1
		BOI=	0.02		7	36
					0.16	0.50
	Sum	D=				
		PT=			0.4	1.6
		BOI=			13	57
					0.23	0.75
Eagles and Hawks	Nearshore	D=	0.4	0.2	<0.1	0.2
		PT=	1	<1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Phalaropes	Nearshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
	Offshore	D=				
		PT=			0.1	
		BOI=			4	
					0.03	
	Sum	D=				
		PT=			0.1	
		BOI=			5	
					0.03	
Jaegers	Offshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
Gulls and Terns	Nearshore	D=	3.9	1.7	12.6	16.7
		PT=	11	5	37	48
		BOI=	0.22	0.09	0.40	0.56
	Offshore	D=	3.9	0.5	5.7	4.5
		PT=	130	18	190	150
		BOI=	1.7	0.34	2.1	2.2

TABLE F-56 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Sum	D=	3.9	0.6	6.4	5.5
		PT=	140	23	230	200
		BOI=	1.9	0.43	2.5	2.7
Alcids	Nearshore	D=	0.7		0.3	2.1
		PT=	2		<1	6
		BOI=	0.07		0.03	0.23
	Offshore	D=	0.8	<0.1	0.8	9.2
		PT=	27	3	27	310
		BOI=	1.1	0.14	1.2	10
	Sum	D=	0.8		0.8	8.6
		PT=	30		28	310
		BOI=	1.2		1.2	11
Summary	Nearshore	D=	5.3	1.9	21.5	28.6
		PT=	15	6	62	83
		BOI=	0.30	0.10	1.0	1.2
	Offshore	D=	5.2	0.8	8.1	16.6
		PT=	170	26	270	550
		BOI=	3.0	0.53	4.2	14
	Sum	D=	5.3	0.8	9.1	17.5
		PT=	190	31	330	630
		BOI=	3.3	0.63	5.3	16

TABLE F-57. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, SOUTHERN SAN JUAN CHANNEL SUBREGION (1103), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	2.0	0.2	1.1	3.2
		PT=	10	1	6	16
		BOI=	0.17	0.03	0.11	0.30
	Offshore	D=	0.1		0.3	4.0
		PT=	4		13	170
		BOI=	0.09		0.26	3.5
	Sum	D=	0.3		0.4	3.9
		PT=	14		18	190
		BOI=	0.26		0.36	3.8
Grebes	Nearshore	D=	16.0		2.2	7.6
		PT=	80		11	38
		BOI=	1.5		0.24	0.64
	Offshore	D=	0.1		<0.1	0.8
		PT=	6		3	36
		BOI=	0.15		0.08	0.79
	Sum	D=	1.8		0.3	1.5
		PT=	86		14	73
		BOI=	1.7		0.31	1.4
Shearwaters	Offshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
Storm-Petrels	Nearshore	D=				
		PT=			0.2	
		BOI=			<1	
					<0.01	
Cormorants	Nearshore	D=	52.0	21.3	98.8	29.4
		PT=	260	110	490	150
		BOI=	5.4	2.4	11	3.0
	Offshore	D=	<0.1	0.8	9.0	24.1
		PT=	3	35	390	1,000
		BOI=	0.07	0.71	0.9	24

TABLE F-57 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Cormorants	Sum	D=	5.4	2.9	18.4	24.7
		PT=	260	140	890	1,200
		BOI=	5.5	3.1	20	27
Herons	Nearshore	D=	0.4	0.2	0.4	3.6
		PT=	2	1	2	18
		BOI=	0.01	<0.01	<0.01	0.09
Ducks and Geese	Nearshore	D=	26.0		6.0	31.6
		PT=	130		30	160
		BOI=	2.7		0.54	2.3
	Offshore	D=	2.4		0.4	1.8
		PT=	110		17	76
		BOI=	1.8		0.42	1.1
	Sum	D=	4.9		1.0	4.7
		PT=	240		47	230
		BOI=	4.5		0.96	3.3
Eagles and Hawks	Nearshore	D=		0.2		0.3
		PT=		1		2
		BOI=		<0.01		0.01
Oystercatchers	Nearshore	D=	1.2	0.5	0.6	4.2
		PT=	6	2	3	21
		BOI=	0.18	0.06	0.06	0.46
Sandpipers and other shore-birds	Nearshore	D=	6.0		0.1	1.9
		PT=	30		<1	10
		BOI=	0.39		<0.01	0.05
Phalaropes	Nearshore	D=			3.1	
		PT=			16	
		BOI=			0.10	
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	

TABLE F-57 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Jaegers	Offshore	D=				
		PT=			0.1	
		BOI=			4	
					<0.01	
	Sum	D=				
		PT=			<0.1	
		BOI=			5	
					<0.01	
Gulls and Terns	Nearshore	D=	76.0	112.0	214.2	81.1
		PT=	380	560	1,000	410
		BOI=	6.2	9.9	15	6.3
	Offshore	D=	2.4	187.0	35.9	10.3
		PT=	110	8,100	1,600	450
		BOI=	1.8	150	21	6.6
	Sum	D=	10.1	179.4	53.6	17.5
		PT=	490	8,700	2,600	850
		BOI=	8	160	36	13
Alcids	Nearshore	D=	14.0	9.0	9.2	25.8
		PT=	70	45	46	130
		BOI=	2.3	2.2	1.9	4.4
	Offshore	D=	0.9	84.5	21.5	47.5
		PT=	40	3,700	930	2,100
		BOI=	1.6	180	34	67
	Sum	D=	2.3	76.3	20.2	45.4
		PT=	110	3,700	980	2,200
		BOI=	3.9	190	36	72
Summary	Nearshore	D=	193.6	143.5	336.0	188.7
		PT=	970	720	1,700	940
		BOI=	19	15	29	18
	Offshore	D=	3.6	272.3	67.3	88.5
		PT=	160	12,000	2,900	3,800
		BOI=	3.7	340	65	100
	Sum	D=	22.7	268.0	94.8	96.9
		PT=	1,100	13,000	4,600	4,700
		BOI=	23	350	94	120

TABLE F-58. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, WASP PASS SUBREGION (1104). 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.9		0.6	1.7
		PT=	2		1	4
		BOI=	0.04		0.03	0.08
Grebes	Nearshore	D=	2.9		1.6	17.2
		PT=	7		4	43
		BOI=	0.15		0.11	1.1
Cormorants	Nearshore	D=	1.7	0.4	2.3	6.8
		PT=	4	1	6	17
		BOI=	0.08	0.02	0.11	0.36
Herons	Nearshore	D=	<0.1		0.2	0.2
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Ducks and Geese	Nearshore	D=	1.9	<0.1	1.0	14.5
		PT=	5	<1	2	36
		BOI=	0.07	<0.01	0.05	0.49
Eagles and Hawks	Nearshore	D=	<0.1	0.2	<0.1	0.3
		PT=	<1	<1	<1	<1
		BOI=	<0.01	<0.01	<0.01	<0.01
Phalaropes	Nearshore	D=				
		PT=			0.4	
		BOI=			1	
					<0.01	
Jaegers	Nearshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
Gulls and Terns	Nearshore	D=	8.2	6.0	20.6	17.5
		PT=	20	15	52	44
		BOI=	0.39	0.28	0.54	0.59

TABLE F-58 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	5.8	1.8	2.1	12.3
		PT=	14	5	5	31
		BOI=	0.53	0.20	0.21	1.2
Summary	Nearshore	D=	21.5	8.4	29.0	70.6
		PT=	54	21	72	180
		BOI=	1.3	0.50	1.1	3.8

TABLE F-59. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, UPRIGHT CHANNEL SUBREGION (1105), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Offshore	D=			0.5	4.9
		PT=			4	43
		BOI=			0.09	0.88
Grebes	Offshore	D=	0.6		0.7	0.9
		PT=	5		6	8
		BOI=	0.11		0.18	0.18
Cormorants	Offshore	D=	0.3		0.9	8.8
		PT=	2		8	77
		BOI=	0.04		0.16	1.7
Ducks and Geese	Offshore	D=	2.6		0.6	3.3
		PT=	23		5	29
		BOI=	0.77		0.08	0.39
Eagles and Hawks	Offshore	D=	0.1			
		PT=	1			
		BOI=	<0.01			
Jaegers	Offshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Offshore	D=	2.1	39.2	20.3	18.5
		PT=	18	340	180	160
		BOI=	0.31	6.5	2.6	2.3
Alcids	Offshore	D=	1.0	13.0	9.3	27.1
		PT=	9	110	82	240
		BOI=	0.41	5.7	3.1	7.6
Summary	Offshore	D=	6.7	52.2	32.4	63.6
		PT=	59	460	280	560
		BOI=	1.6	12	6.2	13

TABLE F-60. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIORS CHANNELS AND PASSAGE REGION, HARNEY CHANNEL SUBREGION (1106), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.1		0.2	0.6
		PT=	<1		<1	1
		BOI=	<0.01		<0.01	0.03
	Offshore	D=	0.7		0.5	2.7
		PT=	23		14	83
		BOI=	0.45		0.28	1.7
	Sum	D=	0.7		0.5	2.6
		PT=	23		15	84
		BOI=	0.45		0.29	1.7
Grebes	Nearshore	D=	1.0		2.3	6.1
		PT=	2		5	13
		BOI=	0.04		0.10	0.29
	Offshore	D=	5.2		1.0	21.1
		PT=	160		32	650
		BOI=	4.5		0.94	19
	Sum	D=	4.9		1.1	20.1
		PT=	160		37	660
		BOI=	4.6		1.0	19
Cormorants	Nearshore	D=	0.4		1.2	2.5
		PT=	1		3	6
		BOI=	0.02		0.06	0.12
	Offshore	D=	0.8	1.1	1.4	2.8
		PT=	24	33	44	86
		BOI=	0.51	0.72	0.93	1.9
	Sum	D=	0.8		1.4	2.8
		PT=	25		47	92
		BOI=	0.53		0.98	2.0
Herons	Nearshore	D=	0.1		0.2	0.9
		PT=	<1		<1	2
		BOI=	<0.01		<0.01	0.01

TABLE F-60 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	1.5		0.3	15.0
		PT=	3		<1	33
		BOI=	0.06		0.01	0.42
	Offshore	D=	0.8		1.2	19.1
		PT=	25		36	580
		BOI=	0.57		0.74	12
	Sum	D=	0.9		1.1	18.8
		PT=	28		37	620
		BOI=	0.63		0.75	13
Eagles and Hawks	Nearshore	D=	<0.1		<0.1	0.2
		PT=	1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	<0.1			<0.1
		PT=	3			<1
		BOI=	<0.01			<0.01
Phalaropes	Nearshore	D=				
		PT=			2.8	
		BOI=			6	
					0.4	
	Offshore	D=				
		PT=			0.2	
		BOI=			7	
					0.05	
	Sum	D=				
		PT=			0.4	
		BOI=			13	
					0.09	
Gulls and Terns	Nearshore	D=	3.5	0.8	9.3	9.8
		PT=	8	2	20	21
		BOI=	0.14	0.03	0.27	0.32

TABLE F-60 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Offshore	D=	3.2	2.6	6.0	7.4
		PT=	97	79	190	230
		BOI=	1.8	1.5	2.5	3.2
	Sum	D=	3.0	2.5	6.4	7.6
		PT=	100	81	210	250
		BOI=	1.9	1.5	2.8	3.5
Alcids	Nearshore	D=	1.6	0.6	1.1	1.9
		PT=	3	1	2	4
		BOI=	0.14	0.05	0.09	0.15
	Offshore	D=	1.1	0.5	4.6	7.8
		PT=	35	14	140	240
		BOI=	1.4	0.65	4.7	8.4
	Sum	D=	1.2	0.5	4.3	7.3
		PT=	39	16	140	240
		BOI=	1.5	0.70	4.8	8.5
Summary	Nearshore	D=	8.2	1.3	17.6	37.1
		PT=	18	3	39	82
		BOI=	0.41	0.08	0.57	1.3
	Offshore	D=	11.9	4.2	15.0	61.0
		PT=	370	130	460	1,900
		BOI=	9.2	2.9	10	46
	Sum	D=	11.6	4.0	15.2	60.8
		PT=	380	130	500	2,000
		BOI=	9.6	3.0	11	48

TABLE F-61. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR CHANNELS AND PASSAGES REGION, OBSTRUCTION PASS SUBREGION (1107), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.6			
		PT=	1			17.0
		BOI=	0.03			42
						0.84
Grebes	Nearshore	D=	3.9			
		PT=	10		26.7	27.0
		BOI=	0.16		67	68
					1.9	1.8
Cormorants	Nearshore	D=	3.3	0.8		
		PT=	8	2	0.8	16.3
		BOI=	0.19	0.03	2	41
					0.05	0.87
Herons	Nearshore	D=				
		PT=			2.5	0.7
		BOI=			6	2
					0.03	<0.01
Ducks and Geese	Nearshore	D=				
		PT=				21.7
		BOI=				54
						0.67
Eagles and Hawks	Nearshore	D=	1.1			
		PT=	3			
		BOI=	0.02			
Gulls and Terns	Nearshore	D=	15.0	13.3	288.3	121.3
		PT=	38	33	720	300
		BOI=	0.71	0.63	7.1	4.2
Alcids	Nearshore	D=	11.7	1.7	210.8	25.3
		PT=	29	4	530	63
		BOI=	1.0	0.19	27	2.3
Summary	Nearshore	D=	35.6	15.8	529.2	229.3
		PT=	89	40	1,300	570
		BOI=	2.1	0.85	36	11

TABLE F-62. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR ISLANDS AND CHANNELS REGION, THATCHER PASS SUBREGION (1108), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	<0.1			0.4
		PT=	<1			2
		BOI=	<0.01			0.05
Grebes	Nearshore	D=	0.3		1.0	1.7
		PT=	2		6	9
		BOI=	0.03		0.17	0.21
Cormorants	Nearshore	D=	1.0	0.2	0.6	3.1
		PT=	5	1	3	16
		BOI=	0.01	0.01	0.06	0.35
Herons	Nearshore	D=			<0.1	<0.1
		PT=			<1	<1
		BOI=			<0.01	<0.01
Ducks and Geese	Nearshore	D=	0.4		<0.1	3.8
		PT=	2		<1	20
		BOI=	0.03		<0.01	0.35
Eagles and Hawks	Nearshore	D=	<0.1		<0.1	0.3
		PT=	<1		<1	2
		BOI=	<0.01		<0.01	0.01
Oystercatchers	Nearshore	D=				<0.1
		PT=				1
		BOI=				<0.01
Phalaropes	Nearshore	D=			0.3	
		PT=			2	
		BOI=			0.01	
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	

TABLE F-62 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	5.7	2.4	29.7	11.5
		PT=	30	10	150	60
		BOI=	0.47	0.23	1.6	0.78
Alcids	Nearshore	D=	2.6	0.9	2.1	6.7
		PT=	10	5	10	35
		BOI=	0.47	0.17	0.46	1.3
Summary	Nearshore	D=	10.2	3.4	34.0	26.9
		PT=	53	18	180	140
		BOI=	1.2	0.43	2.3	3.1

SECTION XII

Region 12. San Juan Islands-Interior Bays region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-63. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, MOSQUITO/ROCHE COMPLEX SUBREGION (1201), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.9		3.9	10.6
		PT=	9		40	110
		BOI=	0.17		0.82	2.2
Grebes	Nearshore	D=	15.7		19.6	37.7
		PT=	160		200	380
		BOI=	3.4		4.9	8.4
Cormorants	Nearshore	D=	3.9	7.8	22.6	14.6
		PT=	40	80	230	150
		BOI=	0.85	1.5	4.8	3.2
Herons	Nearshore	D=	0.3	0.2	1.0	1.0
		PT=	3	2	10	10
		BOI=	0.01	0.01	0.07	0.05
Ducks and Geese	Nearshore	D=	117.7	2.9	107.8	360.0
		PT=	1,200	30	1,100	3,700
		BOI=	19	0.62	24	49
Eagles and Hawks	Nearshore	D=	<0.1	0.6		0.3
		PT=	<1	6		3
		BOI=	<0.01	0.05		0.02
Sandpipers and other shore-birds	Nearshore	D=	1.0		1.0	
		PT=	10		10	
		BOI=	0.05		0.05	
Gulls and Terns	Nearshore	D=	18.6	34.3	71.6	13.4
		PT=	190	350	730	140
		BOI=	3.4	6.7	9.4	2.1
Alcids	Nearshore	D=	2.0	2.0	1.0	1.0
		PT=	20	20	10	10
		BOI=	0.7	0.74	0.53	0.35

TABLE F-63 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Summary	Nearshore	D=	156.9	48.9	228.4	440.0
		PT=	1,600	500	2,300	4,500
		BOI=	27	9.6	44	65

TABLE F-64. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, FRIDAY HARBOR SUBREGION (1202), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.3		<0.1	0.6
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	0.02
Grebes	Nearshore	D=	5.3		3.0	23.8
		PT=	8		4	36
		BOI=	0.17		0.12	0.77
Cormorants	Nearshore	D=	0.8		0.4	2.8
		PT=	1		<1	4
		BOI=	0.02		0.01	0.08
Herons	Nearshore	D=			<0.1	0.5
		PT=			<1	<1
		BOI=			<0.01	<0.01
Ducks and Geese	Nearshore	D=	2.3		0.7	66.2
		PT=	3		1	99
		BOI=	0.05		0.01	1.3
Eagles and Hawks	Nearshore	D=	<0.1		0.4	0.1
		PT=	<1		<1	<1
		BOI=	<0.01		<0.01	<0.01
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	29.7	17.4	71.8	137.8
		PT=	44	26	110	210
		BOI=	0.82	0.49	1.1	2.4
Alcids	Nearshore	D=	0.3		12.0	14.7
		PT=	<1		18	22
		BOI=	<0.01		0.91	1.1

TABLE F-64 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Summary	Nearshore	D=	38.6	17.4	88.6	246.6
		PT=	58	26	130	370
		BOI=	1.1	0.49	2.2	5.6

TABLE F-65. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, GRIFFIN BAY SUBREGION (1203), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.9		0.8	14.3
		PT=	6		6	110
		BOI=	0.11		0.09	2.1
	Offshore	D=				0.5
		PT=				4
		BOI=				0.07
	Sum	D=				7.3
		PT=				110
		BOI=				2.2
Grebes	Nearshore	D=	25.7		44.7	88.9
		PT=	200		340	670
		BOI=	5.1		7.0	12
	Offshore	D=			0.9	3.8
		PT=			7	29
		BOI=			0.11	0.76
	Sum	D=			23.3	46.7
		PT=			350	700
		BOI=			7.1	13
Cormorants	Nearshore	D=	5.4	3.8	20.8	38.1
		PT=	40	30	160	290
		BOI=	0.88	0.52	3.3	6.4
	Offshore	D=	2.4		2.7	4.4
		PT=	18		20	33
		BOI=	0.42		0.47	0.71
	Sum	D=	3.9		12.0	21.3
		PT=	58		180	320
		BOI=	1.3		3.8	7.1
Herons	Nearshore	D=	0.2	0.3	1.6	0.3
		PT=	2	3	12	2
		BOI=	<0.01	0.01	0.06	0.01

TABLE F-65 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	50.9	5.9	20.8	510.0
		PT=	400	40	160	3,900
		BOI=	6.6	1.2	3.9	58
	Offshore	D=	5.8			14.4
		PT=	43			110
		BOI=	0.93			2.2
	Sum	D=	29.3			266.7
		PT=	440			4,000
		BOI=	7.5			60
Eagles and Hawks	Nearshore	D=	0.6			1.2
		PT=	5			9
		BOI=	0.04			0.07
Oystercatchers	Nearshore	D=				
		PT=				2.2
		BOI=				16
						0.36
Plovers	Nearshore	D=				
		PT=			0.2	0.2
		BOI=			1	1
					<0.01	<0.01
Gulls and Terns	Nearshore	D=	23.7	105.0	169.2	33.0
		PT=	200	800	1,300	250
		BOI=	3.4	15	17	3.8
	Offshore	D=	8.2	0.9	14.6	19.2
		PT=	61	7	110	140
		BOI=	1.1	0.13	1.7	1.7
	Sum	D=	17.3	54.0	93.3	26.0
		PT=	260	810	1,400	390
		BOI=	4.5	15	19	5.5
Alcids	Nearshore	D=	7.8	0.3	10.8	3.3
		PT=	60	3	82	24
		BOI=	2.5	0.08	3.3	0.81

TABLE F-65 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Offshore	D=	5.4	1.8	44.6	20.5
		PT=	41	14	330	150
		BOI=	2.0	0.74	14	5.0
	Sum	D=	6.7	1.1	27.3	11.3
		PT=	100	17	410	170
		BOI=	4.5	0.82	17	5.8
Summary	Nearshore	D=	115.2	115.3	269.0	696.0
		PT=	870	870	2,000	5,200
		BOI=	18	17	35	84
	Offshore	D=	21.8	2.7	62.7	63.1
		PT=	160	20	470	470
		BOI=	4.4	0.87	16	10
	Sum	D=	66.7	59.3	166.7	380.0
		PT=	1,000	890	2,500	5,700
		BOI=	22	18	51	94

TABLE F-66. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, FISHERMAN BAY SUBREGION (1205), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=				3.3
		PT=				6
		BOI=				0.10
Grebes	Nearshore	D=	11.3		0.3	72.5
		PT=	22		<1	140
		BOI=	0.65		0.01	2.8
Cormorants	Nearshore	D=	3.3	14.7	9.7	10.5
		PT=	6	28	18	20
		BOI=	0.11	0.42	0.31	0.33
Herons	Nearshore	D=	6.0		4.0	3.1
		PT=	11		8	6
		BOI=	0.06		0.04	0.03
Ducks and Geese	Nearshore	D=	115.3	9.3	2.0	548.8
		PT=	220	18	4	1,000
		BOI=	3.5	0.33	0.02	15
Eagles and Hawks	Nearshore	D=				0.8
		PT=				2
		BOI=				0.01
Oystercatchers	Nearshore	D=			1.7	
		PT=			3	
		BOI=			0.07	
Plovers	Nearshore	D=			2.7	1.2
		PT=			5	2
		BOI=			0.01	0.01
Sandpipers and other shore-birds	Nearshore	D=	92.0		39.7	2.9
		PT=	170		75	6
		BOI=	0.96		0.25	0.03

TABLE F-66 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Gulls and Terns	Nearshore	D=	36.7	59.3	159.7	62.1
		PT=	70	110	300	120
		BOI=	1.3	2.1	4.1	1.8
Alcids	Nearshore	D=			3.3	0.1
		PT=			6	<1
		BOI=			0.27	<0.01
Summary	Nearshore	D=	264.7	83.3	223.3	705.5
		PT=	500	160	420	1,300
		BOI=	6.6	2.9	5.1	20

TABLE F-67. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, SWIFT'S/SHOAL BAYS SUBREGION (1206), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=		0.3	0.6	0.8
		PT=		2	3	4
		BOI=		0.02	0.04	0.07
Grebes	Nearshore	D=	17.6		8.3	19.7
		PT=	81		38	91
		BOI=	2.4		0.73	2.1
Cormorants	Nearshore	D=	1.9	1.4	6.2	4.3
		PT=	9	6	28	20
		BOI=	0.18	0.14	0.64	0.44
Herons	Nearshore	D=	0.5		0.5	0.4
		PT=	2		2	2
		BOI=	0.01		0.01	<0.01
Ducks and Geese	Nearshore	D=	56.6	1.0	15.2	99.5
		PT=	260	5	70	460
		BOI=	5.5	0.12	1.2	7.9
Eagles and Hawks	Nearshore	D=	0.3		<0.1	0.4
		PT=	2		<1	2
		BOI=	0.01		<0.01	0.01
Plovers	Nearshore	D=	0.2		0.4	0.6
		PT=	<1		2	3
		BOI=	<0.01		<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=	1.2		5.4	3.4
		PT=	5		25	16
		BOI=	0.03		0.16	0.10
Gulls and Terns	Nearshore	D=	13.2	13.2	50.0	23.5
		PT=	61	61	230	110
		BOI=	1.2	1.2	3.4	1.8

TABLE F-67 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	13.2	2.2	24.2	0.9
		PT=	61	10	110	4
		BOI=	2.2	0.35	3.7	0.13
Summary	Nearshore	D=	104.8	18.1	110.9	153.6
		PT=	480	83	510	710
		BOI=	11	1.8	9.9	13

TABLE F-68. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, DEER HARBOR SUBREGION (1207), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	1.0		6.0	11.5
		PT=	2		12	23
		BOI=	0.03		0.23	0.46
Grebes	Nearshore	D=	10.5		23.5	32.5
		PT=	21		47	65
		BOI=	0.53		1.0	1.5
Cormorants	Nearshore	D=	3.5	2.5	6.0	2.7
		PT=	7	5	12	5
		BOI=	0.14	0.07	0.17	0.10
Herons	Nearshore	D=	1.0	2.0	1.5	1.0
		PT=	2	4	3	2
		BOI=	0.01	0.02	0.02	0.01
Ducks and Geese	Nearshore	D=	7.0		4.0	48.5
		PT=	14		8	97
		BOI=	0.16		0.07	1.1
Eagles and Hawks	Nearshore	D=	3.0	1.0		
		PT=	6	2		
		BOI=	0.03	0.01		
Plovers	Nearshore	D=				
		PT=			1.5	0.3
		BOI=			3	<1
					<0.01	<0.01
Sandpipers and other shore-birds	Nearshore	D=				
		PT=			1.5	0.3
		BOI=			3	<1
					<0.01	<0.01
Gulls and Terns	Nearshore	D=	2.0	7.5	24.5	16.8
		PT=	4	15	49	34
		BOI=	0.08	0.28	0.64	0.54

TABLE F-68 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	3.5	4.5	12.5	4.5
		PT=	7	9	25	9
		BOI=	0.28	0.35	1.4	0.37
Summary	Nearshore	D=	32.0	17.5	81.0	118.2
		PT=	64	35	160	240
		BOI=	1.3	0.74	3.5	4.0

TABLE F-69. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, WEST SOUND SUBREGION (1208), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.9	0.2	1.9	3.0
		PT=	8	2	17	27
		BOI=	0.13	0.03	0.27	0.44
Grebes	Nearshore	D=	4.6		103.7	39.7
		PT=	42		940	360
		BOI=	0.87		27	8.5
Cormorants	Nearshore	D=	3.3	1.4	0.9	3.4
		PT=	30	13	8	31
		BOI=	0.68	0.18	0.12	0.56
Herons	Nearshore	D=	0.2			
		PT=	2			
		BOI=	0.01			
Ducks and Geese	Nearshore	D=	4.6		23.3	57.2
		PT=	42		210	520
		BOI=	0.94		5.4	6.9
Eagles and Hawks	Nearshore	D=	0.2	0.5		
		PT=	2	4		
		BOI=	0.02	0.03		
Gulls and Terns	Nearshore	D=	2.1	3.3	0.9	4.1
		PT=	19	30	8	37
		BOI=	0.35	0.56	0.14	0.59
Alcids	Nearshore	D=	0.5	0.2	1.9	8.1
		PT=	4	2	17	73
		BOI=	0.15	0.07	0.92	2.4
Summary	Nearshore	D=	16.5	5.6	132.6	115.4
		PT=	150	51	1,200	1,000
		BOI=	3.1	0.87	34	19

TABLE F-70. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, EAST SOUND SUBREGION (1209), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.6	0.2	0.1	0.6
		PT=	2	1	<1	2
		BOI=	0.04	0.01	0.01	0.04
	Offshore	D=				
		PT=			<0.1	0.2
		BOI=			2	6
					0.03	0.11
	Sum	D=				
		PT=			0.1	0.3
		BOI=			2	8
					0.04	0.15
Grebes	Nearshore	D=	1.9		19.5	3.9
		PT=	6		61	12
		BOI=	0.12		1.8	0.25
	Offshore	D=				65.7
		PT=				1,700
		BOI=				53
	Sum	D=				57.4
		PT=				1,700
		BOI=				53
Cormorants	Nearshore	D=	16.5	0.8	0.6	2.3
		PT=	50	2	2	7
		BOI=	1.2	0.04	0.03	0.16
	Offshore	D=				1.4
		PT=				38
		BOI=				0.84
	Sum	D=				1.5
		PT=				45
		BOI=				1.0
Herons	Nearshore	D=	0.3	0.2	0.1	0.2
		PT=	1	<1	<1	1
		BOI=	<0.01	<0.01	<0.01	<0.01

TABLE F-70 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Ducks and Geese	Nearshore	D=	31.9	0.8	31.8	28.0
		PT=	100	2	99	87
		BOI=	2.1	0.05	2.3	1.4
	Offshore	D=				3.4
		PT=				91
		BOI=				1.9
	Sum	D=				6.1
		PT=				180
		BOI=				3.3
Eagles and Hawks	Nearshore	D=		0.1		0.2
		PT=		<1		1
		BOI=		<0.01		0.01
Plovers	Nearshore	D=		0.1	0.1	
		PT=		<1	<1	
		BOI=		<0.01	<0.01	
Gulls and Terns	Nearshore	D=	7.4	5.6	2.8	2.4
		PT=	20	20	9	7
		BOI=	0.37	0.31	0.15	0.12
	Offshore	D=		0.9	3.3	0.5
		PT=		24	87	14
		BOI=		0.45	1.2	0.24
	Sum	D=		1.5	3.2	0.7
		PT=		44	96	21
		BOI=		0.76	1.4	0.36
Alcids	Nearshore	D=		<0.1	0.3	1.3
		PT=		<1	1	4
		BOI=		0.01	0.03	0.16
	Offshore	D=			2.0	0.7
		PT=			54	20
		BOI=			2.0	0.84

TABLE F-70 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Offshore	D=			2.0	0.7
		PT=			54	20
		BOI=			2.0	0.84
	Sum	D=			1.9	0.8
		PT=			55	24
		BOI=			2.0	1.0
Summary	Nearshore	D=	58.1	8.1	54.8	38.7
		PT=	180	25	170	120
		BOI=	3.8	0.42	4.3	2.2
	Offshore	D=		0.9	5.4	72.0
		PT=		24	140	1,900
		BOI=		0.45	3.2	57
	Sum	D=		1.7	10.5	67.6
		PT=		49	310	2,000
		BOI=		0.87	7.5	59

TABLE F-71. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE SAN JUAN ISLANDS-INTERIOR BAYS REGION, LOPEZ SOUND SUBREGION (1210), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	0.5	0.2	1.2	4.9
		PT=	11	6	28	120
		BOI=	0.24	0.10	0.45	2.5
Grebes	Nearshore	D=	9.3		53.6	100.8
		PT=	220		1,300	2,400
		BOI=	4.5		28	60
Cormorants	Nearshore	D=	4.8	7.2	19.2	11.1
		PT=	120	170	460	270
		BOI=	2.5	2.8	9.4	5.7
Herons	Nearshore	D=	0.6		0.7	0.9
		PT=	14		17	22
		BOI=	0.07		0.08	0.11
Ducks and Geese	Nearshore	D=	30.6	4.8	114.9	238.4
		PT=	730	120	2,700	5,700
		BOI=	15	3.0	66	75
Eagles and Hawks	Nearshore	D=	0.1	0.1		0.1
		PT=	3	3		3
		BOI=	0.02	0.02		0.02
Oystercatchers	Nearshore	D=				
		PT=			0.1	
		BOI=			3	
					0.06	
Sandpipers and other shore-birds	Nearshore	D=				
		PT=				0.2
		BOI=				4
						0.02
Gulls and Terns	Nearshore	D=	22.0	14.2	20.9	20.6
		PT=	530	340	500	490
		BOI=	10	6.4	7.5	8.3

TABLE F-71 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Nearshore	D=	7.5	0.9	14.3	6.1
		PT=	180	22	340	150
		BOI=	7.7	0.89	14	5.4
Summary	Nearshore	D=	75.4	27.5	225.2	383.2
		PT=	1,800	660	5,400	9,200
		BOI=	40	13	130	160

SECTION XIII

Region 13. Canadian Waters region, subregional family densities, projected totals, and bird oil indices for NEARSHORE, OFFSHORE, and their SUMs where both occur for a family in a subregion. Unless otherwise noted, empty cells or cells not present indicate a lack of observations of appropriate species.

TABLE F-72. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE CANADIAN WATERS REGION, ACTIVE PASS SUBREGION (1301), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Nearshore	D=	205.8		6.5	80.0
		PT=	2,200		69	840
		BOI=	44		1.4	17
Grebes	Nearshore	D=	1.0		0.7	2.5
		PT=	10		7	27
		BOI=	0.30		0.22	0.79
Cormorants	Nearshore	D=	225.3	0.2	9.8	152.7
		PT=	2,400	2	100	1,600
		BOI=	49	0.03	2.1	33
Herons	Nearshore	D=		0.2	0.1	<0.1
		PT=		2	1	<1
		BOI=		<0.01	<0.01	<0.01
Ducks and Geese	Nearshore	D=	0.8	0.1	0.3	13.1
		PT=	8	1	4	140
		BOI=	0.18	0.02	0.08	1.8
Eagles and Hawks	Nearshore	D=	0.4	0.6	<0.1	0.4
		PT=	4	7	<1	4
		BOI=	0.03	0.05	<0.01	0.03
Jaegers	Nearshore	D=			<0.1	
		PT=			<1	
		BOI=			<0.01	
Gulls and Terns	Nearshore	D=	101.3	13.1	80.5	113.7
		PT=	1,100	140	840	1,200
		BOI=	11	2.6	9.3	15
Alcids	Nearshore	D=	2.4	0.4	1.3	23.0
		PT=	26	5	13	240
		BOI=	0.85	0.15	0.50	7.9

TABLE F-72 (continued).

Family	Area		Period Spring	Summer	Fall	Winter
Summary	Nearshore	D=	537.0	14.5	99.4	385.5
		PT=	5,600	150	1,000	4,000
		BOI=	100	2.8	14	76

TABLE F-73. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE CANADIAN WATERS REGION, CANADIAN GULF ISLANDS SUBREGION (1302), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Offshore	D=	0.4		0.4	3.2
		PT=	53		60	460
		BOI=	1.1		1.2	9.3
Grebes	Offshore	D=	0.5		0.2	1.2
		PT=	65		25	180
		BOI=	1.8		0.70	5.0
Cormorants	Offshore	D=	1.0	0.3	1.8	5.5
		PT=	150	40	260	790
		BOI=	3.1	0.71	5.6	16
Herons	Offshore	D=	<0.1			<0.1
		PT=	<1			<1
		BOI=	<0.01			<0.01
Ducks and Geese	Offshore	D=	0.2	<0.1	<0.1	1.0
		PT=	27	5	12	140
		BOI=	0.58	0.09	0.24	2.8
Eagles and Hawks	Offshore	D=	<0.1	<0.1	<0.1	0.2
		PT=	5	2	1	27
		BOI=	0.03	0.02	<0.01	0.19
Oystercatchers	Offshore	D=			<0.1	<0.1
		PT=			<1	5
		BOI=			<0.01	0.11
Phalaropes	Offshore	D=				
		PT=			<0.1	
		BOI=			7	
					0.05	
Jaegers	Offshore	D=				
		PT=			<0.1	
		BOI=			<1	
					<0.01	
Gulls and Terns	Offshore	D=	15.4	1.1	5.6	13.1
		PT=	2,200	160	800	1,900
		BOI=	23	3.0	12	25

TABLE F-73 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Alcids	Offshore	D=	0.6	0.1	0.7	8.3
		PT=	85	15	110	1,200
		BOI=	3.2	0.50	3.6	39
Summary	Offshore	D=	18.1	1.5	8.9	32.6
		PT=	2,600	220	1,300	4,700
		BOI=	33	4.3	23	97

TABLE F-74. SEASONAL PROJECTIONS OF DENSITY, NUMBERS AND IMPORTANCE BY FAMILY FOR THE CANADIAN WATERS REGION, SIDNEY APPROACH SUBREGION (1303), 1978 AND 1979, COMBINED

Family	Area		Period			
			Spring	Summer	Fall	Winter
Loons	Offshore	D=	0.8	<0.1	1.1	5.0
		PT=	100	3	130	590
		BOI=	1.9	0.05	2.6	12
Grebes	Offshore	D=	0.4		0.8	4.2
		PT=	48		90	490
		BOI=	0.76		1.9	10.0
Cormorants	Offshore	D=	3.4	1.6	3.4	8.1
		PT=	400	180	390	950
		BOI=	7.4	3.4	7.8	21
Herons	Offshore	D=		<0.1	<0.1	
		PT=		3	10	
		BOI=		0.02	0.05	
Ducks and Geese	Offshore	D=	7.7	<0.1	5.4	27.9
		PT=	910	3	630	3,300
		BOI=	24	0.08	13	57
Eagles and Hawks	Offshore	D=	<0.1			<0.1
		PT=	2			11
		BOI=	0.01			0.08
Oystercatchers	Offshore	D=		<0.1	<0.1	0.2
		PT=		6	<1	20
		BOI=		0.14	0.02	0.44
Plovers	Offshore	D=				<0.1
		PT=				6
		BOI=				0.03
Sandpipers and other shore-birds	Offshore	D=			0.4	1.8
		PT=			42	220
		BOI=			0.23	1.2

TABLE F-74 (continued).

Family	Area		Period			
			Spring	Summer	Fall	Winter
Phalaropes	Offshore	D=				
		PT=			0.5	
		BOI=			57	
					0.38	
Gulls and Terns	Offshore	D=	7.0	24.9	14.1	24.1
		PT=	820	2,900	1,700	2,800
		BOI=	15	55	24	46
Alcids	Offshore	D=	4.4	2.7	4.3	15.0
		PT=	510	320	510	1,800
		BOI=	19	15	19	58
Summary	Offshore	D=	23.8	29.3	29.9	86.3
		PT=	2,800	3,400	3,500	10,000
		BOI=	68	74	68	200