

## Ringed Seal Data

NBSB Number*	RGSL-002	RGSL-005	RGSL-006	RGSL-010	RGSL-023	RGSL-025	RGSL-028	RGSL-048b	RGSL-054	RGSL-055	RGSL-047	RGSL-049	RGSL-050	RGSL-051	RGSL-052	RGSL-053	RGSL-037
Collection Year	1988	1988	1988	1988	1991	1991	1991	1996	1996	1996	1996	1996	1996	1996	1996	1996	1994
LIPID (mass fraction %)	81.3	82.1	82.2	81.5	78.0	84.3	81.5	86.3	84.9	85.3	83.2	84.5	87.0	85.9	87.0	88.3	88.3
GENDER	female	female	female	female	female	female	female	female	female	female	male	male	male	male	male	male	male
LOCAT	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow	barrow
Blubber Thickness (cm)	2.5	2.7	2.8	3.0	2.3	2.5	2.0	1.8	2.0	2.4	3.5	2.9	2.8	2.9	1.9	1.9	3.2
AGE (Yr)	0.5	1.0	0.5	2.0	5.5	1.5	9.0	7.0	5.0	5.0	7.0	7.0	6.0	7.0	5.0	6.0	8.0
PCB 18	5.40	3.94	4.53	3.86	3.25	1.86	2.71	7.18	5.94	4.66	7.89	<4	4.32	3.23	9.58	4.20	1.41
PCB 28	17.04	15.37	19.34	13.85	14.97	20.12	18.86	11.65	9.32	11.80	35.51	8.96	18.19	18.32	14.92	11.00	10.55
PCB 31	<4	5.70	6.20	<4	5.52	11.46	4.16	8.98	8.00	5.68	12.03	<4	7.30	9.71	11.41	8.32	<4
PCB 44	4.15	2.71	5.85	2.61	4.20	2.55	2.41	2.14	2.30	1.95	4.08	0.80	3.37	3.33	2.66	2.02	1.45
PCB 49	9.76	6.10	13.83	8.98	7.62	5.01	13.22	4.69	6.27	5.19	7.56	2.08	14.33	18.62	6.82	11.03	4.75
PCB 52	44.20	35.00	46.92	34.90	29.23	26.04	46.11	15.29	16.52	17.73	35.55	13.17	63.99	52.23	20.22	60.79	17.88
PCB 66	24.51	20.28	24.99	12.03	10.75	30.39	15.70	7.67	6.66	6.64	44.90	8.84	7.57	14.26	16.32	7.70	13.58
PCB 87	17.76	10.70	17.55	12.19	9.23	7.65	19.08	5.24	6.18	6.75	12.26	3.27	10.55	14.54	6.72	6.52	9.42
PCB 95	10.52	6.10	13.82	10.21	6.51	4.42	10.51	5.44	5.33	4.23	6.43	1.50	21.95	14.53	6.82	12.43	5.61
PCB 99	67.72	69.27	44.04	76.62	54.26	58.10	77.47	17.50	20.00	39.10	104.00	42.90	147.60	66.90	52.80	141.89	26.46
PCB 101+90	125.69	90.55	76.16	91.62	104.07	79.53	113.06	43.35	46.25	51.65	71.50	42.35	116.80	95.20	47.15	91.44	31.60
PCB 105	20.46	22.63	11.51	12.44	11.32	19.91	19.47	8.99	9.77	12.81	33.29	11.64	22.78	21.52	15.41	17.01	10.98
PCB 110	21.71	16.22	26.33	11.57	14.97	17.30	12.77	7.20	6.62	6.00	15.80	6.62	9.30	9.50	10.00	7.33	9.47
PCB 118	68.89	69.23	37.00	35.42	38.88	70.52	50.70	32.85	33.08	30.26	112.32	40.13	56.45	60.19	57.99	37.07	24.31
PCB 128	6.94	3.47	6.17	12.02	3.32	2.19	10.28	1.10	2.20	2.87	<2.4	1.38	19.95	20.15	1.80	21.26	<0.3
PCB 138	83.05	98.21	50.52	100.44	62.09	46.24	82.32	65.51	84.35	83.75	147.97	55.00	208.43	133.14	80.71	203.14	39.85
PCB 149	20.80	15.19	15.59	20.09	15.23	14.46	20.14	10.51	11.37	13.77	5.62	22.33	14.00	6.05	15.17	9.59	9.59
PCB 151	8.92	3.10	11.52	14.86	3.96	1.84	17.65	3.07	4.39	3.44	3.40	<1	<1	<1	1.72	11.49	9.32
PCB 153	142.37	164.98	75.70	157.40	150.26	128.17	164.82	127.17	149.06	129.94	245.35	101.18	276.69	175.11	137.47	283.79	69.70
PCB 156	4.75	5.42	2.03	3.33	3.28	3.77	3.20	3.40	3.40	3.20	6.10	2.64	6.50	4.10	9.30	5.50	1.37
PCB 170	8.10	10.41	3.15	8.20	6.87	5.12	13.45	10.46	10.46	6.93	13.35	4.45	13.18	8.20	5.11	14.74	8.78
PCB 180	24.42	28.31	9.10	24.31	25.64	18.72	32.64	38.45	36.95	23.45	37.80	15.86	42.20	31.80	17.45	47.57	19.11
PCB 183	10.20	10.01	4.80	11.72	10.79	7.24	17.64	20.28	23.21	18.42	25.67	5.34	33.18	26.71	10.72	30.27	9.94
PCB 187	23.09	16.34	11.43	31.90	21.36	12.55	37.23	15.10	21.33	17.29	24.86	8.58	47.62	31.35	10.11	49.43	20.36
PCB 194	1.37	1.63	0.34	1.69	2.04	0.97	4.55	4.07	3.52	1.83	2.65	0.77	3.01	1.92	1.14	3.29	3.63
PCB 195	0.39	0.43	<0.3	0.68	0.58	<0.3	5.47	1.29	1.29	1.14	1.09	<1	1.23	0.75	0.36	1.24	4.96
PCB 206	<0.3	0.16	<0.3	0.38	0.55	<0.3	3.98	1.51	1.13	0.89	0.78	<1	0.95	0.72	<1	0.84	3.73
PCB 209	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	1.10	0.81	<0.3	<1.1	<1	0.55	0.59	<1	<1	<0.3
HCB	50.46	48.68	26.47	12.70	26.67	21.67	37.76	13.76	11.40	44.19	8.24	16.86	11.44	14.93	7.45	10.66	15.78
a-HCH	902.18	407.48	367.71	293.08	144.87	275.59	116.01	104.21	122.89	285.17	284.81	164.58	264.74	87.52	423.39	367.17	103.45
b-HCH	62.24	35.19	65.40	58.80	42.69	64.60	NA	NA	NA	55.01	121.80	NA	NA	53.81	125.47	40.54	36.85
g-HCH	21.43	12.26	19.06	12.77	8.31	23.27	2.96	4.78	4.73	8.30	27.90	18.28	20.95	3.62	44.51	6.73	9.85
cis-chlordane	13.21	4.98	27.05	20.72	4.69	32.16	1.81	2.68	3.09	3.99	3.74	28.60	19.02	1.49	29.80	1.68	19.02
trans-chlordane	2.47	1.56	3.22	3.70	1.82	3.97	2.63	3.30	3.17	1.50	2.66	6.25	5.15	2.22	6.11	1.90	3.94
oxychlordane	265.08	245.51	145.87	216.30	86.32	226.24	92.00	106.05	195.50	429.00	321.64	262.62	165.50	587.03	168.61	54.23	17.67
cis-nonachlor	30.21	12.06	28.33	24.04	5.44	34.68	3.26	3.10	7.08	4.96	11.93	47.22	20.57	4.09	33.59	4.22	17.67
trans-nonachlor	216.00	108.20	258.87	366.59	67.13	650.13	365.53	58.56	103.09	47.37	132.47	830.30	643.61	76.33	1080.44	55.01	216.67
nonachlor III	NA**	72.00	69.00	89.00	NA	NA	28.00	40.00	48.00	NA	NA	240.00	140.00	31.00	NA	42.00	NA
heptachlor epoxide	72.12	50.08	67.78	69.41	23.88	98.02	23.30	30.19	39.30	32.47	73.61	190.01	101.89	33.09	221.73	34.70	30.93
2,4'-DDD	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.9	3.10	3.50	<1.5	<1.5	<1.5
2,4'-DDE	<1	<1.5	<1.5	<1.5	<1.5	5.90	5.60	<1.5	<1.5	<1	1.40	1.70	<1.5	<1.5	<1.5	<1.5	5.66
2,4'-DDT	2.02	<1.5	2.50	<1.5	<1.8	<1.8	7.53	7.84	8.45	<1.8	9.62	13.46	13.88	3.50	5.91	<1.5	17.79
4,4'-DDD	15.26	38.30	9.82	17.00	<1.2	21.23	5.33	4.00	4.81	6.79	8.81	10.53	6.27	3.62	4.88	2.90	7.17
4,4'-DDE	413.60	417.91	194.88	349.74	296.01	502.39	235.96	270.38	321.80	312.29	643.73	785.63	543.99	363.29	778.70	271.70	141.90
4,4'-DDT	195.62	196.24	66.39	60.14	43.41	112.13	24.36	21.26	30.11	67.34	79.00	75.67	32.81	18.88	90.40	46.01	28.90
dieldrin	80.13	59.87	46.75	29.88	20.56	47.62	20.46	18.22	22.34	38.67	52.08	89.97	34.33	13.05	60.35	20.76	22.90
mirex	8.14	5.86	3.10	14.48	9.14	20.88	7.90	11.00	7.20	5.23	NA	18.00	11.00	5.90	32.82	3.83	14.31

\*National Biomonitoring Specimen Bank operated by the National Institute of Standards and Technology  
 \*\*Not Available

## Ringed Seal Data

NBSB Number* Collection Year	RGSL-012	RGSL-015	RGSL-017	RGSL-018	RGSL-035	RGSL-036	RGSL-048a	RGSL-056	RGSL-011	RGSL-014	RGSL-016	RGSL-029	RGSL-030	RGSL-031	RGSL-033	RGSL-034	RGSL-034
	1989	1989	1991	1991	1994	1994	1997	1997	1989	1989	1991	1993	1993	1993	1993	1994	1994
LIPID (mass fraction %)	74.0	85.5	89.5	90.9	87.5	85.8	79.4	90.0	86.7	84.2	87.6	90.0	87.0	91.0	85.1	86.5	86.5
GENDER	female	female	female	female	female	female	female	female	male	male	male	female	Male	male	male	male	male
LOCAT	nome	nome	nome	nome	nome	nome	nome	nome	Nome	Nome	Nome	Nome	Nome	Nome	Nome	Nome	Nome
Blubber Thickness (cm)	3.5	3.3	7.0	2.0	3.5	3.8	4.4	2.0	4.0	3.0	4.0	3.4	6.0	4.0	4.0	4.0	4.0
AGE (Yr)	2.0	0.5		1.0				4.0	1.0	1.0	0.5						
PCB 18	<4	1.53	3.45	2.34	2.08	2.64	<4	<4	<1.7	<1.4	<1.1	NA	NA	NA	NA	NA	NA
PCB 28	5.77	11.12	16.65	12.31	9.26	13.16	8.81	7.26	9.90	7.60	8.70	NA	NA	NA	NA	NA	NA
PCB 31	<4	3.00	3.79	5.19	<4	<4	<4	<4	4.20	2.30	1.30	NA	NA	NA	NA	NA	NA
PCB 44	6.90	1.55	5.22	3.24	1.79	5.74	3.49	3.10	2.00	<1.4	<1.1	NA	NA	NA	NA	NA	NA
PCB 49	1.66	4.45	2.97	7.65	4.39	6.61	2.63	1.90	5.00	2.60	1.90	NA	NA	NA	NA	NA	NA
PCB 52	10.84	18.23	16.57	20.48	16.85	31.50	11.67	9.27	19.00	13.00	9.10	NA	NA	NA	NA	NA	NA
PCB 66	3.52	8.22	19.53	13.66	15.37	11.67	11.43	4.56	NR	NR	NR	NA	NA	NA	NA	NA	NA
PCB 87	1.63	4.62	3.59	4.41	3.58	14.67	3.63	2.18	8.10	5.70	4.30	NA	NA	NA	NA	NA	NA
PCB 95	1.75	3.31	2.24	6.49	4.25	6.82	2.05	2.08	4.90	3.00	1.70	NA	NA	NA	NA	NA	NA
PCB 99	18.74	31.99	42.67	28.17	31.98	44.06	19.06	23.37	28.00	43.00	29.00	NA	NA	NA	NA	NA	NA
PCB 101+90	47.67	29.20	35.19	19.02	21.22	66.02	22.44	31.71	41.00	42.00	30.00	NA	NA	NA	NA	NA	NA
PCB 105	3.03	7.95	16.83	7.56	9.22	10.88	7.98	7.23	7.60	9.60	7.80	NA	NA	NA	NA	NA	NA
PCB 110	3.79	7.31	9.67	9.44	8.60	11.98	6.87	4.47	9.60	6.40	5.70	NA	NA	NA	NA	NA	NA
PCB 118	19.72	22.91	51.38	24.62	32.62	31.05	20.29	16.70	23.00	24.00	21.00	NA	NA	NA	NA	NA	NA
PCB 128	2.35	4.66	6.13	10.29	8.31	5.17	1.30	1.30	3.80	2.20	1.60	NA	NA	NA	NA	NA	NA
PCB 138	38.41	40.55	61.47	29.00	31.31	56.31	25.84	32.25	41.00	65.00	34.00	NA	NA	NA	NA	NA	NA
PCB 149	3.58	7.57	6.99	7.60	5.78	13.54	5.20	4.74	6.60	8.10	4.50	NA	NA	NA	NA	NA	NA
PCB 151	1.09	2.92	1.25	6.37	5.20	8.98	3.37	2.64	5.60	2.30	1.30	NA	NA	NA	NA	NA	NA
PCB 153	87.57	71.61	148.30	55.04	72.27	87.36	38.53	57.80	60.00	100.00	54.00	NA	NA	NA	NA	NA	NA
PCB 156	1.60	1.74	3.29	1.51	1.99	1.80	0.69	1.06	<1.7	2.80	1.50	NA	NA	NA	NA	NA	NA
PCB 170	4.48	2.95	11.35	2.01	2.93	6.17	3.90	4.82	2.70	5.40	1.80	NA	NA	NA	NA	NA	NA
PCB 180	17.47	8.64	28.67	6.91	9.50	14.15	7.02	11.23	7.40	14.00	4.90	NA	NA	NA	NA	NA	NA
PCB 183	5.73	3.73	8.08	3.43	4.14	9.12	4.81	5.71	3.30	4.70	2.00	NA	NA	NA	NA	NA	NA
PCB 187	8.08	7.87	15.11	8.13	8.31	20.10	9.04	10.52	8.20	8.50	3.60	NA	NA	NA	NA	NA	NA
PCB 194	1.99	0.77	3.11	0.61	0.82	2.91	2.34	2.40	<1.7	<1.4	<1.1	NA	NA	NA	NA	NA	NA
PCB 195	0.70	<1	4.12	<0.3	0.44	4.83	4.64	4.13	<1.7	<1.4	<1.1	NA	NA	NA	NA	NA	NA
PCB 206	1.51	<1	3.83	<0.3	0.40	3.53	3.41	3.00	<1.7	<1.4	<1.1	NA	NA	NA	NA	NA	NA
PCB 209	0.48	<1	5.00	<0.3	<0.3	<1	<1	<1	<1.7	<1.4	<1.1	NA	NA	NA	NA	NA	NA
HCB	20.29	12.13	22.46	24.51	15.56	27.48	13.52	10.74	25.00	23.00	32.00	50.00	7.00	13.00	15.00	21.00	21.00
a-HCH	71.40	319.03	129.36	130.95	129.64	184.23	93.54	73.72	140.00	300.00	110.00	NA	NA	NA	NA	NA	NA
b-HCH	17.98	50.18	56.12	27.27	32.38	97.00	57.20	37.86	31.00	56.00	48.00	NA	NA	NA	NA	NA	NA
g-HCH	5.04	16.69	8.04	13.38	9.28	7.02	5.06	3.22	10.00	8.70	3.00	4.00	<1	2.00	3.00	3.50	3.50
cis-chlordane	2.97	4.99	6.70	14.26	12.31	8.55	1.62	1.81	17.00	6.70	1.40	2.00	1.00	1.00	1.60	11.00	11.00
trans-chlordane	1.28	2.09	5.43	3.82	2.98	3.18	1.36	1.23	2.40	<1.5	<1.1	1.00	<0.8	<0.9	1.80	3.90	3.90
oxychlordane	100.31	107.95	116.36	124.45	141.14	157.13	49.96	52.65	76.00	190.00	55.00	110.00	29.00	55.00	60.00	79.00	79.00
cis-nonachlor	4.03	7.84	6.90	10.62	11.34	17.96	3.54	3.78	11.00	6.90	4.10	4.00	2.00	1.00	2.50	8.30	8.30
trans-nonachlor	43.23	103.80	39.69	248.10	167.54	180.44	35.62	31.81	140.00	81.00	38.00	110.00	65.00	16.00	26.00	99.00	99.00
nonachlor III	NA	32.00	28.00	NA	NA	32.00	14.00	15.00	39.00	65.00	16.00	37.00	13.00	17.00	19.00	29.00	29.00
heptachlor epoxide	21.29	43.00	30.29	49.86	43.32	61.63	22.78	20.59	29.00	49.00	24.00	46.00	14.00	17.00	21.00	38.00	38.00
2,4'-DDD	3.00	<1.5	3.00	<1.5	<1.5	<1.5	<1.5	<1.5	<1.7	<1.4	<1.1	<2	<1	<1	<0.67	<0.66	<0.66
2,4'-DDE	<1.5	<1.5	10.00	<1	<1	<1.5	<1.5	<1.5	<1.7	<1.4	<1.1	<2	<1	<2	<1	<1	<1
2,4'-DDT	<1.5	<1.5	9.00	2.09	<1.8	<1.5	<1.5	<1.5	1.70	<1.4	<1.1	<2	<2	<2	1.20	3.90	3.90
4,4'-DDD	4.10	7.25	15.01	6.02	5.16	8.55	2.91	3.33	5.40	17.00	4.80	4.00	<1	3.00	2.80	3.30	3.30
4,4'-DDE	134.13	253.24	313.24	180.15	106.86	224.67	96.53	132.70	140.00	240.00	140.00	220.00	62.00	240.00	150.00	150.00	150.00
4,4'-DDT	18.21	33.41	37.41	23.10	30.85	24.80	7.87	13.08	25.00	59.00	16.00	15.00	4.00	9.00	11.00	15.00	15.00
dieldrin	19.81	23.19	24.91	14.95	18.58	35.50	12.58	10.70	15.00	84.00	16.00	21.00	4.00	16.00	15.00	16.00	16.00
mirex	11.90	4.26	14.10	6.41	9.63	7.51	3.13	3.65	4.00	3.90	1.40	3.00	<1	2.00	3.60	5.20	5.20

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\*\*Not Available

