

Long-term, Harvest-based Monitoring of Ringed Seal Body Condition and Reproduction in Canada's Western Arctic: An Update through 2019

Lois A. Harwood,¹ Thomas G. Smith,² John Alikamik,³ Emma Alikamik,³ Ellen V. Lea,⁴ Ian Stirling,⁵
 Harold Wright,³ Humfrey Melling⁶ and Xinhua Zhu⁷

TABLE S1. Incidence of ovulation in the 7–20 y females (n = 576), and percent pups in the open-water subsistence harvest at Masoyak, by year, June–July 1992–2019.

Year	7–20 y nulliparous		7–20 y multiparous			% of multiparous females ovulating	% pups in June–July open-water harvest
	No ovulation (immature)	Ovulation (first time)	Ovulation	No ovulation	Total		
1992	1	2	28	3	31	90.3	9.3
1993		4	32	5	37	86.5	0.0
1994		1	25		25	100.0	8.4
1995	5	1	16		16	100.0	39.5
1996	1	4	33		33	100.0	10.7
1997		1	13		13	100.0	6.2
1998		1	12		12	100.0	61.5
1999	4	1	11		11	100.0	33.7
2000		3	8	2	10	80.0	38.8
2001		2	13		13	100.0	48.4
2002	4		6		6	100.0	39.1
2003	2	2	21	3	24	87.5	24.4
2004	3		16	4	20	80.0	6.4
2005	7	1	3	6	9	33.3	3.3
2006	3	3	9		9	100.0	20.0
2007	1	4	16		16	100.0	54.7
2008		2	17		17	100.0	59.1
2009	1	4	13	2	15	86.7	38.0
2010		1	11		11	100.0	35.4
2011	2	1	7		7	100.0	60.0
2012	4		12	12	24	50.0	6.7
2013	4		14	3	17	82.4	9.4
2014	3		16	7	23	69.6	8.7
			18	1	19	94.7	38.5
2015			18	2	20	90.0	39.5
2016	1	5	18	1	18	94.4	71.4
2017		2	17		16	100.0	34.0
2018	2		16		11	100.0	16.1
2019			11				
Total	48	45	432	51	483		

¹ Fisheries and Oceans Canada, 301-5204 50th Avenue, Yellowknife, Northwest Territories X1A 1E2, Canada;
Lois.Harwood@dfo-mpo.gc.ca

² EMC Eco Marine Corporation, 5694 Camp Comfort Rd., Garthby, Quebec G0Y 1B0, Canada

³ Olokhaktomut Hunters and Trappers Committee, Box 161, Ulukhaktok, Northwest Territories X0E 0S0, Canada

⁴ Fisheries and Oceans Canada, Box 1871, Inuvik, Northwest Territories X0E 0T0, Canada

⁵ Wildlife Research Division, Environment Canada and Department of Biological Sciences, University of Alberta, Edmonton, Alberta T6G 2E9, Canada

⁶ Fisheries and Oceans Canada, 9860 West Saanich Road, Victoria, British Columbia V8L 4B2, Canada

⁷ Fisheries and Oceans Canada, 501 University Crescent, Winnipeg, Manitoba R3T 2N6, Canada

TABLE S2. Age-specific ovulation and status of reproductive tract for female ringed seals 0 to 20 y, sampled from the subsistence harvest at Masoyak, 1992–2019.¹

Age	Number examined	Number ovulated	Number multiparous
0	202	3	6
1	23	0	0
2	17	1	2
3	16	2	1
4	16	2	0
5	24	2	4
6	26	2	4
7	41	19	7
8	33	21	14
9	40	26	22
10	43	33	31
11	45	33	36
12	40	34	32
13	51	45	50
14	64	54	64
15	51	45	51
16	48	47	46
17	53	51	52
18	49	45	49
19	40	35	40
20	22	19	21
Total	944	519	532

¹ Includes female seals with age, tract, and ovary data sampled on or after June 1.