

Table S6: Collection dates, locations, bulk $\delta^{13}\text{C}$ (no Suess effect correction), $\delta^{15}\text{N}$, and $\delta^{15}\text{N}_{\text{Phenylalanine}}$ from archival museum specimens of adult harbor seal (*Phoca vitulina*) collected in the northeast Pacific. Institution Codes: National Marine Mammal Laboratory (NMML), University of Washington Burke Museum (UWBM), Royal British Columbia Museum (RBCM), Smithsonian Institute (USNM), University of Puget Sound Slater Museum (PSM), University of Alaska Museum of the North (UAM). Additional archived metadata associated with UWBM, USNM, UWBM, PSM, and UAM specimens is available through: <http://vertnet.org/>. Metadata for RBCM is available on the mammalogy collection website [here](#) and for NMML is available on GitHub [here](#).

Institution Code	Catalogue Number	$\delta^{15}\text{N}_{\text{Phenylalanine}}$	$\delta^{13}\text{C}$	$\delta^{15}\text{N}$	Year	Subregion
UWBM	20228	10.9	NA	NA	1959	Coastal WA
UWBM	32052	9.9	NA	NA	1977	Salish Sea
UWBM	32053	13.7	NA	NA	1977	Salish Sea
UWBM	32516	NA	NA	NA	1979	Coastal WA
UWBM	34967	11.9	NA	NA	1987	Coastal WA
UWBM	34969	12.6	NA	NA	1987	Coastal WA
UWBM	34974	9.5	NA	NA	1987	Coastal WA
UWBM	34983	9.3	NA	NA	1986	Coastal WA
UWBM	34988	12.6	NA	NA	1987	Coastal WA
UWBM	34989	11.2	NA	NA	1987	Coastal WA
UWBM	34990	9.6	NA	NA	1987	Coastal WA
UWBM	34991	9.8	NA	NA	1987	Coastal WA
UWBM	34997	11.6	NA	NA	1987	Coastal WA
UWBM	35001	10.9	NA	NA	1988	Coastal WA
UWBM	36044	11.9	NA	NA	1979	Salish Sea
UWBM	36045	10.8	NA	NA	1989	Salish Sea
UWBM	36047	12.1	NA	NA	1989	Salish Sea
UWBM	39398	10.5	NA	NA	1980	Salish Sea
UWBM	51206	10.8	-11.8	17.5	1980	Salish Sea
UWBM	51213	13.8	-10.5	19.8	1983	Salish Sea
UWBM	80771	10.2	NA	NA	2004	Salish Sea
UWBM	80772	11.4	-10.9	16.6	2007	Salish Sea
UWBM	80773	12.0	NA	NA	2007	Coastal WA

UWBM	80774	11.3	NA	NA	1994	Coastal WA
UWBM	80776	11.8	-12.4	17.6	2006	Salish Sea
UWBM	80777	11.4	-13.1	17.3	2007	Coastal WA
UWBM	80778	10.8	-12.8	16.2	2008	Coastal WA
UWBM	80780	17.6	-11.2	17.2	2006	Salish Sea
UWBM	80782	10.7	-11.9	17.1	2007	Salish Sea
UWBM	81078	10.3	NA	NA	2008	Salish Sea
UWBM	81979	13.8	NA	NA	2011	Salish Sea
UWBM	82369	13.2	NA	NA	2014	Southeast GoA
UWBM	82370	9.2	NA	NA	2014	Southeast GoA
UWBM	82371	8.4	NA	NA	2014	Southeast GoA
UWBM	82372	8.0	NA	NA	2014	Southeast GoA
UWBM	82685	12.0	-13.4	18.7	2012	Salish Sea
NMML	1905	14.9	-10.2	18.2	1999	Salish Sea
NMML	1915	13.5	-10.6	17.8	1996	Salish Sea
NMML	1917	5.9	-9.9	17.9	1998	Salish Sea
NMML	1918	12.6	-10.3	18.3	1998	Salish Sea
NMML	1919	11.9	-10.5	18.0	1998	Salish Sea
NMML	1984	11.2	-13.0	17.8	1991	Coastal WA
NMML	1995	13.3	-13.2	17.6	1991	Coastal WA
NMML	2001	10.3	-14.1	16.8	1991	Coastal WA
NMML	2016	12.0	-13.4	17.3	1991	Coastal WA
NMML	2024	10.7	-14.0	17.0	1992	Coastal WA
NMML	2025	10.7	-14.9	16.3	1992	Coastal WA
NMML	2027	11.0	-13.4	17.5	1992	Coastal WA
NMML	2028	8.9	-12.1	17.8	1992	Coastal WA
NMML	2032	11.3	-13.2	17.2	1992	Coastal WA
NMML	2044	10.8	-13.4	18.0	1981	Coastal WA
NMML	2045	13.2	-13.4	17.7	1981	Coastal WA
NMML	2048	9.9	-14.0	17.4	1981	Coastal WA
NMML	2050	14.4	-13.2	17.9	1981	Coastal WA
NMML	2062	12.9	-12.6	18.4	1982	Coastal WA
NMML	2064	12.8	-12.6	18.1	1982	Coastal WA

NMML	2065	13.4	-12.3	17.0	1982	Coastal WA
NMML	2067	11.5	-12.8	17.8	1982	Coastal WA
NMML	2068	15.2	NA	NA	1982	Coastal WA
NMML	2231	12.1	-10.6	17.8	2013	Salish Sea
NMML	2232	12.1	-12.9	16.9	2013	Salish Sea
NMML	2233	14.3	-12.5	17.0	2013	Salish Sea
NMML	2234	11.6	-13.2	16.3	2013	Salish Sea
NMML	2235	10.3	-13.8	16.4	2013	Salish Sea
NMML	2236	13.9	-14.1	16.4	2014	Salish Sea
RBCM	10273	14.4	-12.3	18.2	1979	Salish Sea
RBCM	10834	13.9	-13.4	18.5	1982	Salish Sea
RBCM	11409	18.2	-11.7	16.9	1983	Salish Sea
RBCM	11449	14.9	NA	NA	1982	Salish Sea
RBCM	11768	14.1	-12.0	18.6	1983	Salish Sea
RBCM	12847	14.7	-12.8	18.8	1979	Salish Sea
RBCM	2361	14.1	-14.2	17.7	1937	Salish Sea
RBCM	4934	14.9	-13.6	18.9	1942	Salish Sea
RBCM	7412	14.7	-12.4	16.4	1971	Salish Sea
RBCM	7714	11.3	-10.4	17.8	1969	Salish Sea
RBCM	9723	9.9	-12.9	18.5	1977	Salish Sea
RBCM	9729	11.6	-12.0	17.6	1969	Salish Sea
RBCM	9730	11.7	-12.8	15.5	1969	Salish Sea
RBCM	9732	15.2	-10.8	16.7	1969	Salish Sea
RBCM	9733	14.7	-14.0	15.8	1969	Salish Sea
RBCM	9802	12.4	-11.7	17.1	1970	Salish Sea
RBCM	9804	10.9	-12.2	17.4	1969	Salish Sea
RBCM	9874	11.5	-13.0	17.5	1970	Salish Sea
USNM	253041	16.6	-6.7	18.0	1928	Salish Sea
USNM	253042	8.9	-10.5	17.7	1928	Salish Sea
USNM	253043	17.5	-11.3	17.9	1928	Salish Sea
USNM	274144	15.8	-13.5	19.4	1942	Coastal WA
USNM	274146	7.5	-13.3	17.4	1942	Coastal WA
USNM	274152	11.6	-12.0	17.4	1942	Salish Sea

USNM	274153	12.6	-10.5	18.4	1942	Salish Sea
USNM	274154	9.8	-9.8	18.3	1942	Salish Sea
USNM	274156	13.9	-12.2	17.4	1942	Coastal WA
USNM	276058	10.5	-11.9	18.8	1942	Coastal WA
USNM	276059	6.0	-13.8	18.8	1942	Coastal WA
PSM	15182	9.7	-12.0	17.6	1970	Salish Sea
PSM	15204	10.7	-12.4	18.5	1971	Salish Sea
PSM	15209	NA	-11.8	18.3	1970	Salish Sea
PSM	15210	9.9	-10.8	17.2	1970	Salish Sea
PSM	15274	11.6	-11.4	17.5	1969	Coastal WA
PSM	16043	11.9	-11.7	17.6	1972	Salish Sea
PSM	16044	11.1	-10.3	18.2	1977	Salish Sea
PSM	16056	NA	-13.6	16.9	1972	Salish Sea
PSM	16062	9.6	-13.2	17.6	1972	Salish Sea
PSM	16095	8.9	-15.0	17.2	1972	Coastal WA
PSM	16096	7.7	-13.4	16.9	1972	Coastal WA
PSM	16096	7.7	-13.7	17.5	1972	Coastal WA
PSM	16097	10.4	-11.5	19.1	1972	Coastal WA
PSM	20085	13.6	-11.4	18.8	1975	Salish Sea
PSM	20087	16.0	-12.2	17.5	1976	Salish Sea
PSM	21180	13.5	-13.9	18.2	1976	Salish Sea
PSM	21182	15.1	-11.7	18.7	1976	Salish Sea
PSM	25695	NA	-12.8	16.9	1977	Coastal WA
PSM	25696	11.6	-12.5	18.2	1977	Coastal WA
PSM	25700	NA	-12.8	17.1	1977	Coastal WA
PSM	25701	12.5	-12.1	17.2	1977	Coastal WA
PSM	25702	13.1	-14.3	19.5	1977	Coastal WA
PSM	25705	10.4	-11.7	17.2	1977	Coastal WA
PSM	25706	11.5	-14.2	19.0	1977	Coastal WA
PSM	25711	12.6	-12.5	16.9	1977	Coastal WA
PSM	25712	NA	-12.8	17.1	1977	Coastal WA
PSM	25714	13.3	-12.8	18.4	1977	Coastal WA
PSM	25740	11.6	-14.0	18.8	1978	Coastal WA

PSM	25742	12.3	-13.2	18.8	1978	Coastal WA
PSM	25743	11.4	-12.9	17.1	1978	Coastal WA
PSM	25744	7.3	-12.9	17.9	1978	Coastal WA
PSM	25892	11.9	-12.7	18.6	1977	Salish Sea
PSM	25893	NA	-11.1	18.9	1977	Salish Sea
PSM	25894	9.9	-12.7	18.1	1977	Salish Sea
PSM	25895	10.3	-13.0	18.2	1977	Salish Sea
PSM	25896	12.5	NA	NA	NA	Coastal WA
PSM	27370	12.1	-11.3	18.4	1979	Salish Sea
UAM	11475	11.3	-13.0	17.2	1962	Northern GoA
UAM	11712	10.1	-14.3	16.2	1972	Southeast GoA
UAM	11713	11.4	-13.8	16.6	1965	Southeast GoA
UAM	11738	8.3	-13.7	16.2	1973	Northern GoA
UAM	11740	9.3	-13.7	16.0	1973	Northern GoA
UAM	11742	10.1	-13.4	18.4	1973	Northern GoA
UAM	11743	21.5	-12.8	20.2	1973	Northern GoA
UAM	11747	13.5	-13.8	16.7	1973	Northern GoA
UAM	11770	13.0	-13.4	16.7	1972	Northern GoA
UAM	11771	13.4	-13.2	16.5	1980	Northern GoA
UAM	11774	9.2	-13.4	16.8	1972	Northern GoA
UAM	11777	10.9	-12.8	19.0	1972	Southeast GoA
UAM	11779	8.8	-14.4	16.2	1972	Southeast GoA
UAM	11816	9.6	-14.2	16.5	1973	Northern GoA
UAM	11817	10.9	-14.0	16.4	1973	Northern GoA
UAM	11827	13.7	-13.0	17.4	1975	Eastern Bering Sea
UAM	11836	13.5	-14.7	16.8	1973	Northern GoA
UAM	11920	11.1	-14.8	16.1	1975	Northern GoA
UAM	11921	14.9	-13.6	17.4	1972	Northern GoA
UAM	19119	12.7	-11.7	18.8	1972	Southeast GoA
UAM	19122	8.2	-14.4	16.0	1972	Southeast GoA
UAM	19123	10.5	-12.4	18.7	1972	Southeast GoA
UAM	19124	13.0	-12.6	17.1	1972	Southeast GoA
UAM	19159	16.9	-11.7	20.4	1981	Eastern Bering Sea

UAM	19161	17.2	-11.8	19.7	1981	Eastern Bering Sea
UAM	19172	14.4	-13.1	19.3	1981	Eastern Bering Sea
UAM	19173	15.0	-12.8	20.2	1981	Eastern Bering Sea
UAM	19174	13.3	-14.1	18.5	1981	Eastern Bering Sea
UAM	19175	15.4	-12.6	19.1	1981	Eastern Bering Sea
UAM	21485	11.0	-13.1	17.0	1965	Southeast GoA
UAM	28932	11.9	-13.1	19.0	1965	Southeast GoA
UAM	28933	11.4	-12.7	16.3	1965	Southeast GoA
UAM	28935	14.9	-13.0	19.0	1966	Eastern Bering Sea
UAM	28936	18.9	-11.9	20.2	1966	Eastern Bering Sea
UAM	28937	18.4	NA	NA	1966	Eastern Bering Sea
UAM	28938	12.4	NA	NA	1966	Eastern Bering Sea
UAM	28940	14.9	-11.8	20.0	1966	Eastern Bering Sea
UAM	28941	14.4	-12.6	18.6	1966	Eastern Bering Sea
UAM	28943	14.5	-12.5	19.5	1966	Eastern Bering Sea
UAM	28950	9.3	-13.7	17.0	1980	Northern GoA
UAM	35432	13.5	-12.9	17.2	1995	Southeast GoA
UAM	35434	10.4	-13.8	17.2	1996	Southeast GoA
UAM	35437	10.2	-14.4	16.8	1996	Northern GoA
UAM	35438	13.9	-14.5	17.7	1996	Northern GoA
UAM	35439	11.3	-14.5	16.2	1996	Northern GoA
UAM	35440	20.1	-14.6	17.7	1996	Northern GoA
UAM	35442	12.0	-14.7	16.8	1996	Northern GoA
UAM	35445	12.4	-14.0	16.7	1996	Northern GoA
UAM	35446	12.5	-13.8	17.6	1996	Northern GoA
UAM	35447	10.8	-15.4	16.7	1996	Northern GoA
UAM	35449	14.2	-13.6	17.7	1996	Northern GoA
UAM	35450	10.7	-14.6	16.7	1996	Northern GoA
UAM	36254	10.0	-13.8	17.4	1965	Southeast GoA
UAM	3702	12.0	-13.3	18.5	1955	Northern GoA
UAM	37972	11.9	-14.4	17.1	1996	Southeast GoA
UAM	37973	10.0	-13.2	17.0	1995	Southeast GoA
UAM	37974	9.8	-13.2	16.4	1995	Southeast GoA

UAM	41613	9.5	-13.4	16.7	1996	Southeast GoA
UAM	41615	9.8	-14.5	15.6	1995	Southeast GoA
UAM	41616	8.9	-13.5	16.4	1995	Southeast GoA
UAM	42151	12.6	-14.2	17.8	1996	Eastern Bering Sea
UAM	42152	16.3	-13.1	19.9	1996	Eastern Bering Sea
UAM	43044	16.7	-13.3	19.5	1996	Eastern Bering Sea
UAM	47510	16.9	-12.1	20.2	1985	Eastern Bering Sea
UAM	47511	14.2	-13.1	19.5	1985	Eastern Bering Sea
UAM	52183	15.2	-14.0	17.5	1997	Eastern Bering Sea
UAM	52184	14.6	-13.5	19.7	1997	Eastern Bering Sea
UAM	84943	9.8	-14.1	17.0	2002	Northern GoA
UAM	84950	12.5	-15.2	17.8	2002	Northern GoA
UAM	84958	6.2	-15.9	15.3	2002	Northern GoA
UAM	84959	12.0	-14.3	16.8	2002	Northern GoA
UAM	85206	15.2	-13.3	18.9	2006	Southeast GoA
UAM	85207	11.8	-13.9	17.3	2006	Southeast GoA
UAM	85208	9.5	-14.4	16.4	2006	Southeast GoA
UAM	85212	11.4	-14.3	15.7	2005	Southeast GoA
UAM	87032	11.4	-14.4	17.2	2003	Northern GoA
UAM	99535	13.5	-14.3	16.6	2003	Southeast GoA
UAM	99536	11.5	-15.1	16.4	2003	Southeast GoA
UAM	99537	12.1	-14.3	5.9	2003	Southeast GoA
UAM	99543	10.9	-16.5	16.2	2003	Southeast GoA
UAM	99544	10.8	-13.4	16.9	2003	Southeast GoA
UAM	99563	9.9	-14.5	16.4	2003	Southeast GoA
UAM	99566	12.2	-14.1	17.3	2003	Southeast GoA
UAM	99570	11.8	-14.3	17.3	2003	Southeast GoA
UAM	99572	11.0	-15.8	16.2	2003	Southeast GoA
UAM	99575	10.0	-14.2	18.0	2005	Northern GoA
UAM	99641	10.7	-13.8	16.9	2004	Northern GoA
UAM	99657	11.0	-14.3	15.4	2004	Southeast GoA
UAM	99658	9.6	-14.4	14.9	2004	Southeast GoA
UAM	99665	8.6	-15.2	14.9	2006	Southeast GoA

UAM	99667	11.2	-14.3	16.2	2005	Southeast GoA
UAM	99693	12.5	-14.2	17.1	2003	Northern GoA
