

Supplementary Materials

Spatio-Temporal Characterization of Pinniped Strandings and Human Interaction Cases in the Pacific Northwest, 1991-2016

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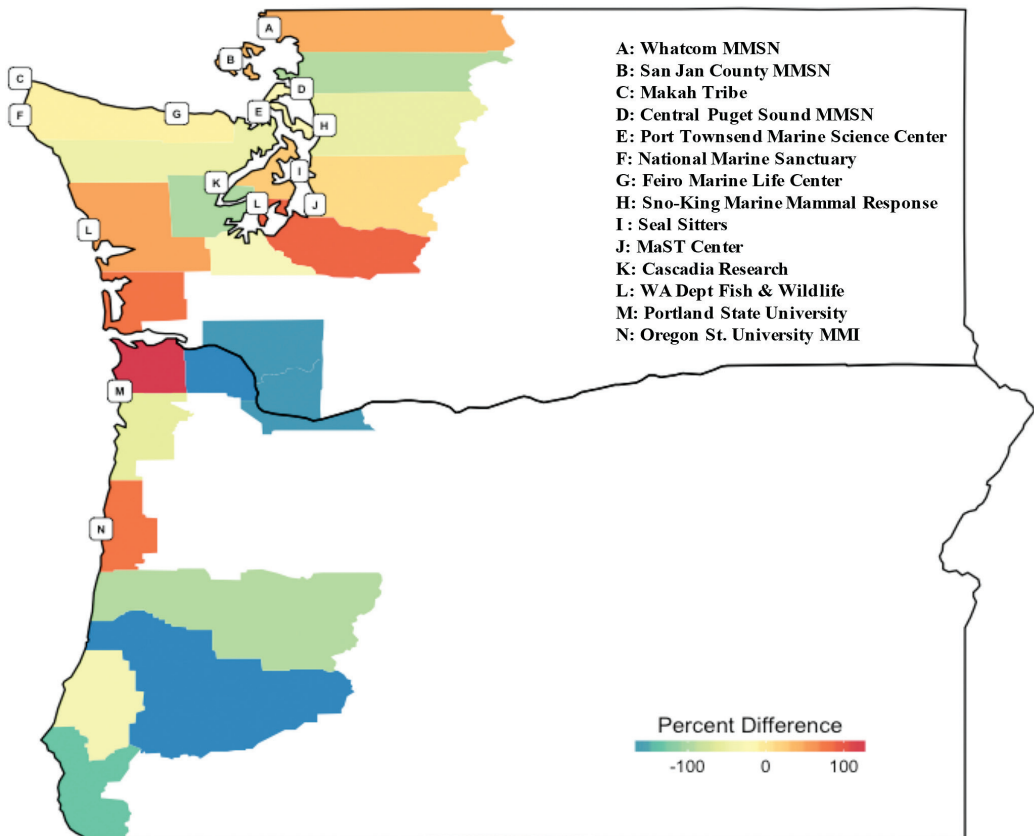


Figure S1. Percent difference in the total number of human interaction (HI) cases in each county from the mean across all counties from 1991 to 2016. Points indicate locations of marine mammal stranding networks (MMSNs).

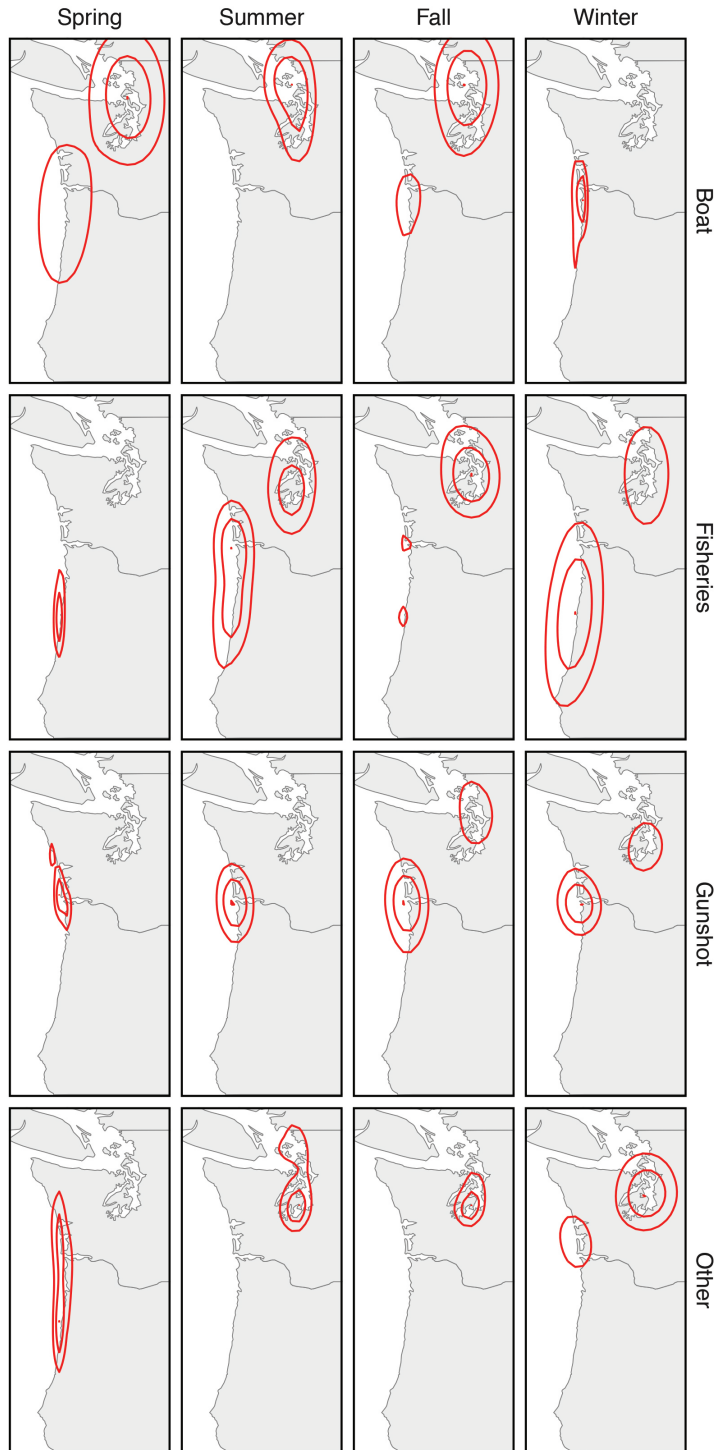


Figure S2. Kernel density map of HI cases for each season of the year. Kernel density estimation is calculated for each season and HI type separately, so contour lines are intended to show the spatial density of each panel relative to itself, not compared to others.

Table S1. The number and proportion of all strandings and human interaction (HI) cases and the composition of HI cases for each county in Washington ($N = 9,419$)

County	All strandings		Human interactions		HI composition (% of HI cases)			
	(<i>n</i>)	(%)	(<i>n</i>)	(%)	Fisheries	Gunshot	Boat	Other
Clallam	509	5.4	70	6.4	30.0	27.1	4.3	38.6
Clark	8	0.1	6	0.5	0.0	100.0	0.0	0.0
Columbia	1	0.0	1	0.1	100.0	0.0	0.0	0.0
Cowlitz	13	0.1	7	0.6	0.0	100.0	0.0	0.0
Grays Harbor	793	8.5	117	10.6	11.1	43.6	0.0	45.3
Island	835	8.9	50	4.5	16.0	44.0	16.0	24.0
Jefferson	311	3.3	37	3.4	24.3	13.5	5.4	56.8
King	797	8.5	73	6.6	28.8	26.0	0.0	45.2
Kitsap	706	7.5	79	7.2	29.1	17.7	0.0	53.2
Mason	215	2.3	19	1.7	26.3	21.1	0.0	52.6
Pacific	664	7.1	167	15.2	16.8	68.3	0.6	14.4
Pierce	1,354	14.5	187	17.0	10.2	11.2	2.7	75.9
San Juan	1,907	20.4	85	7.7	16.5	20.0	16.5	47.1
Skagit	140	1.5	22	2.0	18.2	4.5	9.1	68.2
Snohomish	286	3.1	36	3.3	22.2	25.0	2.8	50.0
Thurston	307	3.3	46	4.2	26.1	15.2	8.7	50.0
Whatcom	488	5.2	97	8.8	7.2	17.5	11.3	63.9

Table S2. The number and proportion of all strandings and HI cases and the composition of HI cases for each county in Oregon ($N = 5,310$)

County	All strandings		Human interactions		HI composition (% of HI cases)			
	(<i>n</i>)	(%)	(<i>n</i>)	(%)	Fisheries	Gunshot	Boat	Other
Clackamas	7	0.1	3	0.5	0.0	100.0	0.0	0.0
Clatsop	1,008	19.1	289	52.8	13.5	71.3	4.5	10.7
Columbia	5	0.1	4	0.7	75.0	25.0	0.0	0.0
Coos	705	13.3	41	7.5	36.6	26.8	0.0	36.6
Curry	403	7.6	11	2.0	27.3	45.5	0.0	27.3
Douglas	108	2.0	4	0.7	25.0	50.0	0.0	25.0
Lane	371	7.0	22	4.0	59.1	27.3	0.0	13.6
Lincoln	2,180	41.2	137	24.9	46.7	17.5	7.3	28.5
Multnomah	15	0.3	6	1.1	16.7	83.3	0.0	0.0
Tillamook	488	9.2	33	6.0	39.4	42.4	0.0	18.2