

Supplementary Table 2. Transect summary statistics. For each transect the total distance, number of frames and sample area is provided. The number of frames and sample area are separated into dense live, dead and mixed (i.e., live and dead) mussel coverage, where dense is defined as covering $\geq 75\%$ of the image. Remaining frames are classed as ‘sparse coverage’. Pick-Up Sticks and Shallop West transects only consist of ‘sparse coverage’ because an extensive mussel bed was not observed, only areas of active methane seepage. NA = not applicable (no mussels present).

Site Name	Alvin Dive Number	Distance (m)	Total Number of Frames	Total Area (m ²)	Dense Live Mussels		Dense Dead Mussels		Dense Mixed Mussels		Sparse Coverage	
					No. of Frames	Area (m ²)	No. of Frames	Area (m ²)	No. of Frames	Area (m ²)	No. of Frames	Area (m ²)
Pick-Up Sticks	4805	95	50	360	NA	NA	NA	NA	NA	NA	50	360
Baltimore	4808 (Transect 1)	80	60	655	5	51.7	39	423.3	16	179.4	0	0
	4808 (Transect 2)	65	46	265	12	79.1	6	23.1	28	161.1	0	0
	Total	145	106	920	17	130.8	45	446.4	44	340.5	0	0
Shallop West Chincoteague East	4814	10	42	100	NA	NA	NA	NA	NA	NA	42	100
	4804	95	64	265	45	197.9	10	38.0	8	27.7	1	2.2
	4806	90	70	150	36	75.4	14	34.2	20	39.9	0	0
Total	185	134	415	81	273.3	24	72.2	28	67.6	1	2.2	
Norfolk West Veatch	4803	100	89	310	12	45.3	29	96.0	35	116.5	13	50.3
	4813 (Transect 1)	50	41	195	12	58.5	10	47.8	7	34.4	12	52.4
	4813 (Transect 2)	75	62	315	22	108.6	8	40.2	8	44.6	24	123.8
	Total	125	103	510	34	167.1	18	88.0	15	79.0	36	176.2