

APPENDIX A
DATA COLLECTION SHEET



DELAWARE BAY WINTER BLUE CRAB ASSESSMENT

Date: ___ / ___ / '01 Time: ___ : ___ Crew: ___ / ___ / ___

Station: ___ - ___ (DEEP 01-25; NJL 26-50; DEL 51-75; NJU 76-100; DEU 101-125; DBC 200-260) Depth(m) _____

Start: Latitude: ___ ° ___ . ___ ' Longitude: ___ ° ___ . ___ ' Tow(min) _____

End: Latitude: ___ ° ___ . ___ ' Longitude: ___ ° ___ . ___ ' Direction: US / DS

Tide: F / HS / E / LS

Weather: _____ (1=clear, 2=partly cloudy, 3=overcast, 4=rain, 5=snow, 6=fog)

Water Quality:

Depth (m)	Temp. (C)	DO (mg/L)	% Sat	pH	Salinity (ppt)	Conductivity (mS/cm)	Turbidity (NTU)
0.5	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•

Sediment Characterization:

Mud / Sand / Muddy-sand / Sandy-mud / Oyster-shell / Other _____

Species: Blue Crab (<i>Callinectes sapidus</i>)										Total Measured:									
1	M	2	M	3	M	4	M	5	M	6	M	7	M	8	M	9	M	10	M
11	M	12	M	13	M	14	M	15	M	16	M	17	M	18	M	19	M	20	M
21	M	22	M	23	M	24	M	25	M	26	M	27	M	28	M	29	M	30	M
31	M	32	M	33	M	34	M	35	M	36	M	37	M	38	M	39	M	40	M
41	M	42	M	43	M	44	M	45	M	46	M	47	M	48	M	49	M	50	M
51	M	52	M	53	M	54	M	55	M	56	M	57	M	58	M	59	M	60	M
61	M	62	M	63	M	64	M	65	M	66	M	67	M	68	M	69	M	70	M
71	M	72	M	73	M	74	M	75	M	76	M	77	M	78	M	79	M	80	M
81	M	82	M	83	M	84	M	85	M	86	M	87	M	88	M	89	M	90	M
91	M	92	M	93	M	94	M	95	M	96	M	97	M	98	M	99	M	100	M
101	M	102	M	103	M	104	M	105	M	106	M	107	M	108	M	109	M	110	M
111	M	112	M	113	M	114	M	115	M	116	M	117	M	118	M	119	M	120	M
121	M	122	M	123	M	124	M	125	M	126	M	127	M	128	M	129	M	130	M
131	M	132	M	133	M	134	M	135	M	136	M	137	M	138	M	139	M	140	M
141	M	142	M	143	M	144	M	145	M	146	M	147	M	148	M	149	M	150	M
Ancillary Species:										Total		Total							
Horseshoe crab												Hard clam							
Spider crab												Moon snail							
Lady crab												Knobbed whelk							
Hermit crab												Channeled whelk							

APPENDIX B
NUMBER OF BLUE CRAB BY STATION

Station	Date	Start Lat		Start Long		End Lat		End Long		Stratum	Sub-stratum	Depth (M)	Tow Dur (MIN)	Sed Quality	Catch (N)
		DEG	MIN	DEG	MIN	DEG	MIN	DEG	MIN						
DBC001	1/23	38	56.0924	75	6.1833	38	56.1379	75	6.2203	Channel	Dredge	13.6	1	Coarse Sand	0
DBC002	1/23	38	56.4458	75	6.4708	38	56.4922	75	6.5034	Channel	Previous_3	13.5	1	Coarse Sand	0
DBC003	1/23	38	56.4943	75	6.4977	38	56.5467	75	6.5338	Channel	Previous_3	13.7	1	Sand	0
DBC004	1/23	38	56.5667	75	6.5065	38	56.6148	75	6.5489	Channel	Previous_3	13.8	1	Sand	0
DBC005	1/23	38	56.6225	75	6.6596	38	56.6684	75	6.6925	Channel	Dredge	13.8	1	Sand	0
DBC006	1/23	38	56.6888	75	6.7335	38	56.7301	75	6.7745	Channel	Dredge	13.8	1	Sand	0
DBC007	1/23	38	57.0175	75	6.9093	38	57.0692	75	6.936	Channel	Dredge	13.8	1	Muddy-sand	0
DBC008	1/23	38	57.7033	75	7.1068	38	57.7546	75	7.1346	Channel	No_Dredge	14.1	1	Sand	0
DBC009	1/23	38	57.957	75	7.3553	38	58.0046	75	7.3943	Channel	No_Dredge	14.7	1	Sand	0
DBC010	1/23	38	58.0473	75	7.3223	38	58.0771	75	7.3433	Channel	No_Dredge	14.6	0.5	Sand	0
DBC011	1/23	38	58.4921	75	7.6533	38	58.4417	75	7.6304	Channel	No_Dredge	15.4	1	Sand	0
DBC012	1/23	38	58.7429	75	7.677	38	58.6941	75	7.6438	Channel	No_Dredge	15.7	1	Sand	0
DBC013	1/23	38	59.1542	75	8.0164	38	59.1109	75	7.9711	Channel	No_Dredge	15.1	1	Sand	0
DBC014	1/23	38	59.2379	75	7.7985	38	59.1817	75	7.779	Channel	No_Dredge	15.4	1	Sand	0
DBC015	1/23	38	59.2844	75	8.0765	38	59.2416	75	8.0362	Channel	No_Dredge	15.1	1	Sand	0
DBC016	1/23	38	59.5754	75	8.1823	38	59.5353	75	8.1389	Channel	Dredge	14.6	1	Sand	0
DBC017	1/23	38	59.717	75	8.2387	38	59.6722	75	8.1974	Channel	Dredge	14.7	1	Coarse Sand	0
DBC018	1/23	39	0.3058	75	8.4864	39	0.256	75	8.4473	Channel	Dredge	15.7	1	Coarse Sand	0
DBC019	1/23	39	0.4271	75	8.5991	39	0.3853	75	8.5599	Channel	Previous_1	14.5	1	Sand	0
DBC020	1/23	39	0.5005	75	8.6368	39	0.4476	75	8.6031	Channel	Previous_1	13.9	1	Sand	0
DBC021	1/23	39	0.7114	75	8.8312	39	0.6654	75	8.7952	Channel	Dredge	14.0	1	Sand	0
DBC022	1/23	39	0.9604	75	8.7919	39	0.9064	75	8.7612	Channel	Previous_1	13.9	1	Sand w/ few pebbles	0
DBC023	1/23	39	0.9872	75	8.9868	39	0.9376	75	8.9624	Channel	Previous_1	14.6	1	Sand	0
DBC024	1/23	39	1.1759	75	9.0701	39	1.1272	75	9.0281	Channel	Previous_1	14.2	1	Sand	0
DBC025	1/23	39	1.2985	75	9.1808	39	1.2438	75	9.147	Channel	Previous_1	14.6	1	Sand	0
DBC026	1/23	39	1.3242	75	9.205	39	1.2774	75	9.181	Channel	Previous_1	14.2	1	Sand	0
DBC027	1/23	39	1.3913	75	9.2157	39	1.3342	75	9.1884	Channel	Previous_1	14.4	1	Sand	0
DBC028	1/23	39	1.363	75	9.2765	39	1.3091	75	9.2464	Channel	Dredge	13.3	1	Sand	0
DBC029	1/24	39	1.5095	75	9.231	39	1.5577	75	9.2675	Channel	Previous_1	14.1	1	Sand	0
DBC030	1/24	39	1.5687	75	9.2713	39	1.6104	75	9.3175	Channel	Previous_1	14.1	1	Sand	0
DBC031	1/24	39	2.8671	75	9.992	39	2.9317	75	10.037	Channel	Dredge	13.6	1.25	Sand	0
DBC032	1/24	39	2.9666	75	9.9993	39	3.0243	75	10.017	Channel	Dredge	13.8	1	Sand w/ shells	0
DBC033	1/24	39	3.2206	75	10.303	39	3.2726	75	10.345	Channel	Dredge	13.2	1	Sand w/ shells	0
DBC034	1/24	39	3.3268	75	10.262	39	3.3798	75	10.282	Channel	Previous_1	13.7	1	Sandy/Clay	0
DBC035	1/24	39	3.6522	75	10.395	39	3.7113	75	10.428	Channel	Previous_1	13.7	1	Coarse Sand	0
DBC036	1/24	39	3.7519	75	10.452	39	3.8089	75	10.493	Channel	Previous_1	13.9	1	Coarse Sand w/shells	0
DBC037	1/24	39	3.7699	75	10.426	39	3.8227	75	10.466	Channel	Previous_1	13.7	1	Sand w/shells	0

Station	Date	Start Lat		Start Long		End Lat		End Long		Stratum	Sub-stratum	Depth (M)	Tow Dur (MIN)	Sed Quality	Catch (N)
		DEG	MIN	DEG	MIN	DEG	MIN	DEG	MIN						
DBC038	1/24	39	3.8433	75	10.443	39	3.8978	75	10.48	Channel	Previous_1	13.7	1	Sand	1
DBC039	1/24	39	3.9446	75	10.54	39	4.0019	75	10.576	Channel	Previous_1	13.6	1	Coarse Sand w/shells	0
DBC040	1/24	39	4.0278	75	10.528	39	4.0869	75	10.562	Channel	Previous_1	13.7	1	Sand	0
DBC041	1/24	39	4.101	75	10.635	39	4.0466	75	10.607	Channel	Previous_1	13.8	1	Coarse Sand w/shell fragments	0
DBC042	1/24	39	4.7649	75	11.122	39	4.7027	75	11.09	Channel	Dredge	13.4	1	Mud	5
DBC043	1/24	39	4.9645	75	11.188	39	4.9071	75	11.159	Channel	Previous_2	13.4	1	Fine Sand	0
DBC044	1/24	39	4.9897	75	11.131	39	4.9346	75	11.1	Channel	Previous_2	14.1	1	Coarse Sand	0
DBC045	1/24	39	5.2578	75	11.359	39	5.2164	75	11.32	Channel	Previous_2	14.1	1	Coarse Sand w/pebbles	0
DBC046	1/24	39	5.322	75	11.283	39	5.2847	75	11.243	Channel	Previous_3	14.3	1	Sand	1
DBC047	1/24	39	5.388	75	11.405	39	5.3407	75	11.372	Channel	Previous_3	14.8	1	Sand	0
DBC048	1/24	39	5.3857	75	11.471	39	5.3498	75	11.435	Channel	Previous_2	14.1	1	Sand	0
DBC049	1/24	39	5.4489	75	11.585	39	5.4054	75	11.537	Channel	Previous_2	14.3	1	Sand	0
DBC050	1/24	39	5.5369	75	11.586	39	5.49	75	11.551	Channel	Previous_2	14.5	1	Sand	0
DBC051	1/24	39	5.5347	75	11.57	39	5.5097	75	11.508	Channel	Previous_3	14.1	1	Sand	0
DBC052	1/24	39	5.5505	75	11.727	39	5.5043	75	11.696	Channel	Dredge	14.5	1	Mud	7
DBC053	1/24	39	5.6189	75	11.56	39	5.5783	75	11.513	Channel	Previous_3	14.3	1	Sand	0
DBC054	1/29	39	5.656	75	11.57	39	5.6156	75	11.529	Channel	Previous_3	15.2	1	Sand	1
DBC055	1/29	39	5.7406	75	11.914	39	5.6981	75	11.87	Channel	Dredge	16.3	1	Sand	3
DBC056	1/29	39	5.8154	75	11.959	39	5.7661	75	11.916	Channel	Dredge	16.6	1	Sandy-mud	1
DBC057	1/29	39	5.8835	75	11.809	39	5.851	75	11.774	Channel	Previous_3	15.5	1	Sand	0
DBC058	1/29	39	5.8615	75	11.863	39	5.8224	75	11.822	Channel	Previous_3	15.3	1	Sand	0
DBC059	1/29	39	6.4144	75	12.287	39	6.3744	75	12.247	Channel	Dredge	15.9	1	Sand	0
DBC060	1/29	39	6.6516	75	12.444	39	6.6126	75	12.397	Channel	Dredge	15.5	1	Sand	0
DBC061	1/29	39	6.9355	75	12.86	39	6.8994	75	12.822	Channel	Previous_2	15.4	1	Sand	0
DBC062	1/29	39		75		39	6.9512	75	12.852	Channel	Previous_2	15.1	1	Sand w/pebbles	0
DBC063	1/29	39	6.9827	75	12.837	39	6.9585	75	12.815	Channel	Previous_2	15.1	1	Sand	0
DBC064	1/29	39	7.0085	75	12.86	39	6.9828	75	12.839	Channel	Previous_2	15.0	1	Sand	0
DBC065	1/17	39	7.0643	75	12.84	39	7.0251	75	12.79	Channel	Previous_2	14.4	1	Sand w/pebbles	0
DBC066	1/17	39	7.0767	75	12.897	39	7.0351	75	12.856	Channel	Previous_2	15.2	1	Fine Sand	0
DBC067	1/17	39	7.101	75	12.855	39	7.0539	75	12.837	Channel	Previous_2	14.9	1	Coarse Sand	0
DBC068	1/17	39	7.1148	75	12.968	39	7.0673	75	12.949	Channel	Previous_2	14.3	1	Sand w/rocks	0
DBC069	1/17	39	7.2635	75	13.115	39	7.2341	75	13.059	Channel	Previous_2	14.3	1	Sand w/gravel	0
DBC070	1/17	39	7.3106	75	13.062	39	7.2633	75	13.034	Channel	Previous_2	15.1	1	Rocky	0
DBC071	1/17	39	7.3417	75	13.115	39	7.2961	75	13.08	Channel	Previous_2	15.1	1	Rocky	0
DBC072	1/17	39	7.4003	75	13.319	39	7.3467	75	13.283	Channel	No_Dredge	16.9	1	Coarse Sand	0
DBC073	1/17	39	7.6286	75	13.393	39	7.5818	75	13.353	Channel	No_Dredge	16.6	1	Coarse Sand	0
DBC074	1/17	39	7.7939	75	13.653	39	7.7539	75	13.596	Channel	Dredge	16.6	1	Sand	0

Station	Date	Start Lat		Start Long		End Lat		End Long		Stratum	Sub-stratum	Depth (M)	Tow Dur (MIN)	Sed Quality	Catch (N)
		DEG	MIN	DEG	MIN	DEG	MIN	DEG	MIN						
DBC075	1/17	39	8.2748	75	13.987	39	8.2355	75	13.951	Channel	Previous_2	15.5	1	Sand	0
DBC076	1/17	39	8.2827	75	13.93	39	8.2325	75	13.88	Channel	Previous_2	15.5	1	Coarse Sand	0
DBC077	1/17	39	8.3135	75	13.933	39	8.2692	75	13.893	Channel	Dredge	15.3	1	Sand	0
DBC078	1/17	39	8.3069	75	13.888	39	8.2675	75	13.845	Channel	Dredge	14.8	1	Rocky	0
DBC079	1/17	39	9.6702	75	15.153	39	9.6245	75	15.111	Channel	Dredge	16.7	1	Fine Sand	0
DBC080	1/17	39	9.7912	75	15.308	39	9.7315	75	15.26	Channel	No_Dredge	16.8	1	Sand	1
DBC081	1/17	39	9.8715	75	15.532	39	9.8361	75	15.483	Channel	No_Dredge	15.5	1	Fine Sand	0
DBC082	1/17	39	10.5606	75	15.919	39	10.5328	75	15.879	Channel	Previous_1	14.8	1	Coarse Sand	0
DBC083	1/17	39	10.6255	75	16.207	39	10.5855	75	16.162	Channel	Dredge	16.3	1	Sand	0
DBC084	1/17	39	11.0235	75	16.459	39	11.0899	75	16.482	Channel	No_Dredge	16.5	1	Sand	0
DBC085	1/17	39	10.9931	75	16.268	39	11.0452	75	16.3	Channel	No_Dredge	14.8	1	Gravel	5
DBC086	1/17	39	11.7251	75	16.844	39	11.8073	75	16.904	Channel	No_Dredge	17.0	1	Sand	0
DBC087	1/17	39	12.0295	75	17.02	39	12.0865	75	17.048	Channel	Dredge	16.9	1	Sand	0
DBC088	1/17	39	12.2254	75	17.031	39	12.2763	75	17.07	Channel	Dredge	16.5	1	Sand	1
DBC089	1/17	39	13.183	75	17.774	39	13.2436	75	17.812	Channel	Previous_2	14.4	1	Sand	0
DBC090	1/17	39	13.359	75	17.737	39	13.4197	75	17.77	Channel	No_Dredge	16.2	1	Sand	0
DBC091	1/17	39	13.7543	75	17.969	39	13.8142	75	17.997	Channel	No_Dredge	17.7	1	Very Fine Sand	3
DBC092	1/17	39	14.4814	75	18.643	39	14.5267	75	18.68	Channel	Dredge	16.3	1	Very Fine Sand	1
DBC093	1/17	39	14.9047	75	19.305	39	14.9496	75	19.359	Channel	Dredge	18.0	1	Sand	0
DBC094	1/17	39	14.9875	75	19.217	39	15.0234	75	19.253	Channel	Dredge	15.5	1	Rocky	0
DBC095	1/17	39	15.525	75	19.972	39	15.5734	75	20.023	Channel	No_Dredge	16.2	1	Mud	0
DBC096	1/30	39	15.7263	75	20.209	39	15.6803	75	20.17	Channel	No_Dredge	16.9	1	Sand	1
DBC097	1/30	39	15.9169	75	20.376	39	15.8804	75	20.336	Channel	No_Dredge	16.9	1	Sand	0
DBC098	1/30	39	16.0368	75	20.422	39	16.0008	75	20.379	Channel	No_Dredge	17.1	1	Sandy-mud	0
DBC099	1/30	39	16.089	75	21.44	39	16.0508	75	21.397	Channel	No_Dredge	17.0	1	Sand	0
DBC100	1/30	39	16.7009	75	21.257	39	16.6692	75	21.219	Channel	No_Dredge	16.0	1	Sand	0
DBC101	1/30	39	16.9993	75	21.699	39	16.9698	75	21.655	Channel	Previous_3	15.7	1	Sand	0
DBC102	1/30	39	17.0101	75	21.653	39	16.9811	75	21.603	Channel	Previous_3	15.5	1	Sand	0
DBC103	1/30	39	17.1025	75	21.823	39	17.0687	75	21.783	Channel	Previous_3	15.9	1	Sand	0
DBC104	1/30	39	17.1325	75	21.664	39	17.0941	75	21.623	Channel	Previous_3	15.2	1	Sand	3
DBC105	1/30	39	17.1533	75	21.738	39	17.1174	75	21.698	Channel	Previous_3	16.1	1	Sand and Gravel	0
DBC106	1/29	39	17.272	75	21.896	39	17.2383	75	21.852	Channel	Previous_1	16.2	1	Sand w/gravel	1
DBC107	1/30	39	17.331	75	22.091	39	17.3001	75	22.052	Channel	Previous_3	15.8	1	Sand	0
DBC108	1/30	39	17.3501	75	22.078	39	17.3194	75	22.034	Channel	Previous_3	15.7	1	Coarse Sand w/gravel	0
DBC109	1/30	39	17.3769	75	22.165	39	17.3366	75	22.131	Channel	Previous_3	15.8	1	Coarse Sand	0
DBC110	1/30	39	17.4932	75	22.149	39	17.4621	75	22.104	Channel	Dredge	16.3	1	Sand w/sand tubes	0
DBC111	1/30	39	17.5289	75	22.3	39	17.4847	75	22.269	Channel	Previous_3	15.6	1	Sand	0

Station	Date	Start Lat		Start Long		End Lat		End Long		Stratum	Sub-stratum	Depth (M)	Tow Dur (MIN)	Sed Quality	Catch (N)
		DEG	MIN	DEG	MIN	DEG	MIN	DEG	MIN						
DBC112	1/18	39	17.61	75	22.423	39	17.65	75	22.465	Channel	Previous_3	15.0	1	Sand w/rocks	0
DBC113	1/18	39	17.942	75	22.837	39	17.978	75	22.884	Channel	Dredge	16.5	1	Sand	0
DBC114	1/18	39	18.195	75	23.068	39	18.235	75	23.12	Channel	No_Dredge	17.3	1	Sand	0
DBC115	1/18	39	18.602	75	23.542	39	18.644	75	23.584	Channel	No_Dredge	17.6	1	Clay/Mud	0
DBC116	1/18	39	18.721	75	23.634	39	18.757	75	23.669	Channel	No_Dredge	18.2	1	Mud/Clay	0
DBC117	1/18	39	18.881	75	23.68	39	18.919	75	23.72	Channel	No_Dredge	17.9	1	muddy-sand	6
DBC118	1/18	39	18.901	75	23.924	39	18.947	75	23.976	Channel	No_Dredge	18.4	1	Mud/Clay	0
DBC119	1/18	39	19.4933	75	24.572	39	19.5382	75	24.623	Channel	No_Dredge	19.1	1	Mud/Clay	0
DBC120	1/18	39	19.6146	75	24.536	39	19.673	75	24.574	Channel	No_Dredge	17.4	1	Sandy-mud	1
DEL153	1/17	39	3.1613	75	14.873	39	3.0607	75	14.789	DEL		7.5	2	Fine Sand	0
DEL155	1/17	39	6.4038	75	15.592	39	6.3007	75	15.528	DEL		6.1	2	Mud	54
DEL156	1/30	39	6.5072	75	18.253	39	6.3958	75	18.175	DEL		3.7	2	Sand	0
DEL158	1/16	38	49.5456	75	8.8835	38	49.4463	75	8.7917	DEL		6.4	2	Sand	7
DEL161	1/16	38	56.7329	75	15.876	38	56.6671	75	15.755	DEL		3.7	2	Fine Sand	0
DEL162	1/18	39	3.2559	75	17.741	39	3.1868	75	17.635	DEL		5.1	2	Sandy-mud	35
DEL164	1/16	38	52.1067	75	12.558	38	52.0632	75	12.416	DEL		5.2	2	Sandy-mud	3
DEL217	1/16	38	53.4801	75	14.906	38	53.392	75	14.811	DEL		4.4	2	Sandy-mud	3
DEL218	1/18	39	0.5852	75	17.051	39	0.5116	75	16.927	DEL		7.8	2	Mud	20
DEL219	1/18	39	3.2124	75	19.586	39	3.1673	75	19.476	DEL		5.5	2	Muddy-sand	5
DEL220	1/18	39	5.15	75	20.371	39	5.067	75	20.263	DEL		3.9	2	Muddy-sand	10
DEL221	1/18	39	3.52	75	18.261	39	3.4333	75	18.159	DEL		5.6	2	Muddy-sand	12
DEL222	1/18	39	5.4499	75	22.282	39	5.3458	75	22.221	DEL		3.3	2	Mud	20
DEL223	1/16	38	49.8207	75	6.3129	38	49.901	75	6.3927	DEL		6.7	2	Sand	0
DEL224	1/16	38	51.3293	75	11.861	38	51.2414	75	11.766	DEL		3.1	2	Sand	0
DEU101	1/18	39	11.2229	75	19.889	39	11.1262	75	19.822	DEU		3.4	2	Fine Sand	0
DEU102	1/30	39	10.5045	75	16.586	39	10.3952	75	16.512	DEU		8.5	2	Mud	14
DEU104	1/30	39	9.137	75	17.917	39	9.0319	75	17.82	DEU		3.3	2	Sandy-mud	2
DEU108	1/18	39	13.6051	75	21.598	39	13.5282	75	21.49	DEU		4.8	2	Mud	4
DEU111	1/18	39	15.7594	75	23.855	39	15.6514	75	23.754	DEU		3.2	2	Muddy-sand	4
DEU114	1/18	39	7.3335	75	21.501	39	7.2397	75	21.419	DEU		4.0	2	Mud	27
DEU115	1/17	39	11.5953	75	21.378	39	11.6937	75	21.426	DEU		3.7	2	Mud	3
DEU233	1/18	39	10.8705	75	21.915	39	10.8303	75	21.764	DEU		4.0	2	Mud	26
DEU234	1/18	39	13.2042	75	19.431	39	13.1576	75	19.308	DEU		8.1	2	Sand w/shells	3
DEU235	1/18	39	12.5162	75	20.806	39	12.4559	75	20.688	DEU		4.3	2	Fine Sand	12
DEU236	1/18	39	13.4073	75	20.505	39	13.3106	75	20.419	DEU		4.5	2	Sand	3
DEU237	1/18	39	12.8896	75	18.894	39	12.8049	75	18.816	DEU		6.7	2	Sand	3
DEU238	1/18	39	8.1854	75	20.794	39	8.107	75	20.679	DEU		3.7	2	Mud	11

Station	Date	Start Lat		Start Long		End Lat		End Long		Stratum	Sub-stratum	Depth (M)	Tow Dur (MIN)	Sed Quality	Catch (N)
		DEG	MIN	DEG	MIN	DEG	MIN	DEG	MIN						
DEU239	1/18	39	11.2801	75	21.724	39	11.2051	75	21.619	DEU		4.0	2	Muddy-sand	23
DEU240	1/30	39	11.5235	75	17.456	39	11.4319	75	17.384	DEU		3.6	2	Fine Sand	0
Deep101	1/16	38	56.9772	75	8.3652	38	57.0533	75	8.4525	Deep		10.1	2	Coarse Sand w/sand tubes	0
Deep102	1/16	38	53.8382	75	6.6689	38	53.9518	75	6.7004	Deep		19.6	2	Sand	0
Deep103	1/23	38	55.1553	75	3.502	38	55.2652	75	3.4764	Deep		13.3	2	Sand	1
Deep107	1/23	38	56.7898	75	3.5702	38	56.9063	75	3.5867	Deep		10.4	2	Sand w/razor clams	0
Deep108	1/16	38	53.1609	75	9.3728	38	53.2638	75	9.4253	Deep		11.7	2	Mud	5
Deep109	1/16	38	56.5807	75	9.4978	38	56.6703	75	9.572	Deep		16.9	2	Fine Sand	0
Deep114	1/16	38	58.3902	75	7.9391	38	58.4996	75	7.9577	Deep		14.3	2	Sand	0
Deep201	1/16	38	53.6207	75	4.4874	38	53.6454	75	4.5092	Deep		16.2	2	Mud	2
Deep202	1/23	38	58.7858	75	5.8835	38	58.6845	75	5.8335	Deep		10.9	2	Muddy-sand	0
Deep203	1/23	38	54.9478	75	1.7038	38	55.0719	75	1.7147	Deep		9.7	2	Muddy-sand	1
Deep204	1/16	38	59.3865	75	11.679	38	59.4749	75	11.762	Deep		7.9	2	Sand	0
Deep205	1/23	38	56.5423	75	3.3112	38	56.4426	75	3.2565	Deep		10.5	2	Muddy-sand	0
Deep206	1/16	39	0.5466	75	9.6998	39	0.6513	75	9.7318	Deep		12.5	2	Fine Sand	0
Deep207	1/16	38	52.791	75	6.4251	38	52.8947	75	6.4783	Deep		25.6	2	Sand	1
Deep208	1/16	38	57.3158	75	10.038	38	57.4268	75	10.107	Deep		16.1	2	Coarse Sand	0
NJL127	1/23	39	0.8599	75	1.2948	39	0.7536	75	1.2848	NJL		3.4	2	Fine Sand	0
NJL128	1/24	39	2.1143	75	7.7228	39	2.218	75	7.7828	NJL		8.8	2	Sand	0
NJL132	1/23	39	0.7624	75	2.7768	39	0.6567	75	2.7466	NJL		7.9	2	Fine Sand	0
NJL135	1/24	39	2.9129	75	5.9141	39	3.0143	75	5.9706	NJL		6.1	2	Sand	0
NJL136	1/23	38	58.903	75	3.0946	38	58.7923	75	3.092	NJL		7.2	2	Muddy-sand	0
NJL138	1/24	39	7.5573	75	1.6191	39	7.5884	75	1.618	NJL		3.5	0.5	Muddy-sand w/shells	0
NJL139	1/29	39	9.6799	75	13.494	39	9.7827	75	13.551	NJL		8.8	2	Muddy-sand	0
NJL209	1/24	39	8.8368	75	4.3862	39	8.7488	75	4.4834	NJL		3.3	2	Sandy-mud	39
NJL210	1/24	39	10.7511	75	1.5327	39	10.6574	75	1.4593	NJL		1.6	2	Sandy-mud	9
NJL211	1/24	39	9.4996	75	6.7356	39	9.5569	75	6.8538	NJL		2.6	2	Muddy-sand	5
NJL212	1/23	38	58.711	74	58.833	38	58.8365	74	58.781	NJL		6.3	2	Mud	1
NJL213	1/24	39	9.6848	75	1.7722	39	9.78	75	1.8432	NJL		2.9	2	Sandy-mud	5
NJL214	1/24	39	2.7801	75	6.2078	39	2.8866	75	6.2298	NJL		5.8	2	Sand	0
NJL215	1/24	39	6.2679	75	7.778	39	6.3247	75	7.9008	NJL		4.1	2	Sand	0
NJL216	1/24	39	4.1473	75	5.6206	39	4.2578	75	5.633	NJL		6.1	2	Sand	2
NJU177	1/29	39	16.0053	75	18.999	39	16.092	75	19.076	NJU		6.7	2	Sand	5
NJU178	1/30	39	17.5749	75	20.679	39	17.5475	75	20.652	NJU		6.6	0.5	Oyster-shell	2
NJU180	1/29	39	18.6911	75	21.912	39	18.7132	75	21.936	NJU		5.9	0.5	Oyster-shell	5
NJU181	1/29	39	16.7884	75	18.162	39	16.881	75	18.219	NJU		5.3	2	Detritus	3
NJU186	1/29	39	18.3787	75	20.116	39	18.4602	75	20.202	NJU		4.9	2	Sand	2

Station	Date	Start Lat		Start Long		End Lat		End Long		Stratum	Sub-stratum	Depth (M)	Tow Dur (MIN)	Sed Quality	Catch (N)
		DEG	MIN	DEG	MIN	DEG	MIN	DEG	MIN						
NJU187	1/29	39	15.7194	75	16.733	39	15.8088	75	16.806	NJU		6.4	2	Mud	3
NJU188	1/29	39	17.5487	75	20.332	39	17.5714	75	20.356	NJU		4.8	0.5	Oyster-shell	7
NJU225	1/29	39	16.0588	75	19.478	39	16.0885	75	19.494	NJU		6.9	0.5	Oyster-shell	7
NJU226	1/29	39	14.0975	75	16.494	39	14.158	75	16.554	NJU		8.7	2	Oyster-shell	4
NJU227	1/29	39	12.3633	75	13.663	39	12.2661	75	13.596	NJU		6.2	2	Sand	17
NJU228	1/29	39	10.576	75	13.55	39	10.6774	75	13.616	NJU		8.3	2	Muddy-sand w/shells	0
NJU229	1/29	39	15.0674	75	15.042	39	15.0961	75	15.062	NJU		6.1	0.5	Muddy-sand	2
NJU230	1/29	39	15.7462	75	16.131	39	15.7685	75	16.155	NJU		7.1	0.5	Muddy-sand w/oyster-shells	11
NJU231	1/29	39	13.0739	75	15.949	39	13.1515	75	16.055	NJU		6.9	2	Sand	5
NJU232	1/29	39	11.6961	75	13.457	39	11.799	75	13.521	NJU		8.4	2	Sand	7

APPENDIX C
BYCATCH BY STATION

Date	Station	Start Lat		Start Long		End Lat		End Long		Stratum	Sub-stratum	Depth (M)	Tow Dur (MIN)	Sed Quality	Species	Scientific_Name	Catch (N)
		DEG	MIN	DEG	MIN	DEG	MIN	DEG	MIN								
1/23	DBC001	38	56.0924	75	6.1833	38	56.1379	75	6.2203	Channel	Dredge	13.6	1	Coarse Sand	portly spider crab	Libinia emarginata	1
1/23	DBC005	38	56.6225	75	6.6596	38	56.6684	75	6.6925	Channel	Dredge	13.8	1	Sand	portly spider crab	Libinia emarginata	4
1/23	DBC005	38	56.6225	75	6.6596	38	56.6684	75	6.6925	Channel	Dredge	13.8	1	Sand	atlantic rock crab	Cancer irroratus	2
1/23	DBC005	38	56.6225	75	6.6596	38	56.6684	75	6.6925	Channel	Dredge	13.8	1	Sand	starfish	Asteroidea	1
1/23	DBC006	38	56.6888	75	6.7335	38	56.7301	75	6.7745	Channel	Dredge	13.8	1	Sand	knobbed whelk	Busycon carica	2
1/23	DBC006	38	56.6888	75	6.7335	38	56.7301	75	6.7745	Channel	Dredge	13.8	1	Sand	portly spider crab	Libinia emarginata	1
1/23	DBC006	38	56.6888	75	6.7335	38	56.7301	75	6.7745	Channel	Dredge	13.8	1	Sand	starfish	Asteroidea	1
1/23	DBC006	38	56.6888	75	6.7335	38	56.7301	75	6.7745	Channel	Dredge	13.8	1	Sand	clearnose skate	Raja eglanteria	1
1/23	DBC006	38	56.6888	75	6.7335	38	56.7301	75	6.7745	Channel	Dredge	13.8	1	Sand	windowpane	Scophthalmus aquosus	1
1/23	DBC006	38	56.6888	75	6.7335	38	56.7301	75	6.7745	Channel	Dredge	13.8	1	Sand	hogchoker	Trinectes maculatus	2
1/23	DBC007	38	57.0175	75	6.9093	38	57.0692	75	6.936	Channel	Dredge	13.8	1	Muddy-sand	knobbed whelk	Busycon carica	2
1/23	DBC007	38	57.0175	75	6.9093	38	57.0692	75	6.936	Channel	Dredge	13.8	1	Muddy-sand	portly spider crab	Libinia emarginata	3
1/23	DBC007	38	57.0175	75	6.9093	38	57.0692	75	6.936	Channel	Dredge	13.8	1	Muddy-sand	windowpane	Scophthalmus aquosus	2
1/23	DBC016	38	59.5754	75	8.1823	38	59.5353	75	8.1389	Channel	Dredge	14.6	1	Sand	windowpane	Scophthalmus aquosus	3
1/23	DBC018	39	0.3058	75	8.4864	39	0.256	75	8.4473	Channel	Dredge	15.7	1	Coarse Sand	knobbed whelk	Busycon carica	1
1/23	DBC018	39	0.3058	75	8.4864	39	0.256	75	8.4473	Channel	Dredge	15.7	1	Coarse Sand	portly spider crab	Libinia emarginata	1
1/23	DBC018	39	0.3058	75	8.4864	39	0.256	75	8.4473	Channel	Dredge	15.7	1	Coarse Sand	atlantic rock crab	Cancer irroratus	1
1/23	DBC018	39	0.3058	75	8.4864	39	0.256	75	8.4473	Channel	Dredge	15.7	1	Coarse Sand	hogchoker	Trinectes maculatus	3
1/23	DBC021	39	0.7114	75	8.8312	39	0.6654	75	8.7952	Channel	Dredge	14.0	1	Sand	windowpane	Scophthalmus aquosus	1
1/23	DBC028	39	1.363	75	9.2765	39	1.3091	75	9.2464	Channel	Dredge	13.3	1	Sand	portly spider crab	Libinia emarginata	16
1/23	DBC028	39	1.363	75	9.2765	39	1.3091	75	9.2464	Channel	Dredge	13.3	1	Sand	atlantic rock crab	Cancer irroratus	3
1/24	DBC031	39	2.8671	75	9.992	39	2.9317	75	10.0367	Channel	Dredge	13.6	1.25	Sand	portly spider crab	Libinia emarginata	2
1/24	DBC031	39	2.8671	75	9.992	39	2.9317	75	10.0367	Channel	Dredge	13.6	1.25	Sand	windowpane	Scophthalmus aquosus	4
1/24	DBC031	39	2.8671	75	9.992	39	2.9317	75	10.0367	Channel	Dredge	13.6	1.25	Sand	hogchoker	Trinectes maculatus	5
1/24	DBC032	39	2.9666	75	9.9993	39	3.0243	75	10.0171	Channel	Dredge	13.8	1	Sand w/ shells	portly spider crab	Libinia emarginata	3
1/24	DBC032	39	2.9666	75	9.9993	39	3.0243	75	10.0171	Channel	Dredge	13.8	1	Sand w/ shells	windowpane	Scophthalmus aquosus	1
1/24	DBC033	39	3.2206	75	10.3028	39	3.2726	75	10.3449	Channel	Dredge	13.2	1	Sand w/ shells	knobbed whelk	Busycon carica	9
1/24	DBC033	39	3.2206	75	10.3028	39	3.2726	75	10.3449	Channel	Dredge	13.2	1	Sand w/ shells	portly spider crab	Libinia emarginata	2
1/24	DBC033	39	3.2206	75	10.3028	39	3.2726	75	10.3449	Channel	Dredge	13.2	1	Sand w/ shells	windowpane	Scophthalmus aquosus	3
1/24	DBC042	39	4.7649	75	11.1219	39	4.7027	75	11.09	Channel	Dredge	13.4	1	Mud	portly spider crab	Libinia emarginata	1
1/24	DBC042	39	4.7649	75	11.1219	39	4.7027	75	11.09	Channel	Dredge	13.4	1	Mud	atlantic rock crab	Cancer irroratus	1
1/24	DBC042	39	4.7649	75	11.1219	39	4.7027	75	11.09	Channel	Dredge	13.4	1	Mud	starfish	Asteroidea	2
1/24	DBC042	39	4.7649	75	11.1219	39	4.7027	75	11.09	Channel	Dredge	13.4	1	Mud	windowpane	Scophthalmus aquosus	1

Date	Station	Start Lat		Start Long		End Lat		End Long		Stratum	Sub-stratum	Depth (M)	Tow Dur (MIN)	Sed Quality	Species	Scientific_Name	Catch (N)
		DEG	MIN	DEG	MIN	DEG	MIN	DEG	MIN								
1/24	DBC052	39	5.5505	75	11.7274	39	5.5043	75	11.6963	Channel	Dredge	14.5	1	Mud	knobbed whelk	Busycon carica	1
1/24	DBC052	39	5.5505	75	11.7274	39	5.5043	75	11.6963	Channel	Dredge	14.5	1	Mud	portly spider crab	Libinia emarginata	1
1/24	DBC052	39	5.5505	75	11.7274	39	5.5043	75	11.6963	Channel	Dredge	14.5	1	Mud	atlantic rock crab	Cancer irroratus	1
1/24	DBC052	39	5.5505	75	11.7274	39	5.5043	75	11.6963	Channel	Dredge	14.5	1	Mud	windowpane	Scophthalmus aquosus	2
1/29	DBC055	39	5.7406	75	11.9144	39	5.6981	75	11.8704	Channel	Dredge	16.3	1	Sand	portly spider crab	Libinia emarginata	2
1/29	DBC056	39	5.8154	75	11.9585	39	5.7661	75	11.9164	Channel	Dredge	16.6	1	Sandy-mud	northern quahog	Mercenaria mercenaria	2
1/29	DBC056	39	5.8154	75	11.9585	39	5.7661	75	11.9164	Channel	Dredge	16.6	1	Sandy-mud	portly spider crab	Libinia emarginata	4
1/29	DBC056	39	5.8154	75	11.9585	39	5.7661	75	11.9164	Channel	Dredge	16.6	1	Sandy-mud	summer flounder	Paralichthys dentatus	1
1/29	DBC056	39	5.8154	75	11.9585	39	5.7661	75	11.9164	Channel	Dredge	16.6	1	Sandy-mud	windowpane	Scophthalmus aquosus	1
1/29	DBC059	39	6.4144	75	12.287	39	6.3744	75	12.2474	Channel	Dredge	15.9	1	Sand	summer flounder	Paralichthys dentatus	1
1/29	DBC059	39	6.4144	75	12.287	39	6.3744	75	12.2474	Channel	Dredge	15.9	1	Sand	windowpane	Scophthalmus aquosus	1
1/29	DBC060	39	6.6516	75	12.4443	39	6.6126	75	12.3969	Channel	Dredge	15.5	1	Sand	portly spider crab	Libinia emarginata	1
1/29	DBC060	39	6.6516	75	12.4443	39	6.6126	75	12.3969	Channel	Dredge	15.5	1	Sand	windowpane	Scophthalmus aquosus	2
1/29	DBC060	39	6.6516	75	12.4443	39	6.6126	75	12.3969	Channel	Dredge	15.5	1	Sand	hogchoker	Trinectes maculatus	2
1/17	DBC074	39	7.7939	75	13.6525	39	7.7539	75	13.5961	Channel	Dredge	16.6	1	Sand	northern quahog	Mercenaria mercenaria	1
1/17	DBC074	39	7.7939	75	13.6525	39	7.7539	75	13.5961	Channel	Dredge	16.6	1	Sand	atlantic rock crab	Cancer irroratus	2
1/17	DBC074	39	7.7939	75	13.6525	39	7.7539	75	13.5961	Channel	Dredge	16.6	1	Sand	windowpane	Scophthalmus aquosus	1
1/17	DBC074	39	7.7939	75	13.6525	39	7.7539	75	13.5961	Channel	Dredge	16.6	1	Sand	hogchoker	Trinectes maculatus	1
1/17	DBC077	39	8.3135	75	13.9327	39	8.2692	75	13.8926	Channel	Dredge	15.3	1	Sand	knobbed whelk	Busycon carica	1
1/17	DBC077	39	8.3135	75	13.9327	39	8.2692	75	13.8926	Channel	Dredge	15.3	1	Sand	atlantic rock crab	Cancer irroratus	2
1/17	DBC077	39	8.3135	75	13.9327	39	8.2692	75	13.8926	Channel	Dredge	15.3	1	Sand	windowpane	Scophthalmus aquosus	2
1/17	DBC077	39	8.3135	75	13.9327	39	8.2692	75	13.8926	Channel	Dredge	15.3	1	Sand	hogchoker	Trinectes maculatus	6
1/17	DBC078	39	8.3069	75	13.888	39	8.2675	75	13.8446	Channel	Dredge	14.8	1	Rocky	northern quahog	Mercenaria mercenaria	1
1/17	DBC078	39	8.3069	75	13.888	39	8.2675	75	13.8446	Channel	Dredge	14.8	1	Rocky	portly spider crab	Libinia emarginata	4
1/17	DBC078	39	8.3069	75	13.888	39	8.2675	75	13.8446	Channel	Dredge	14.8	1	Rocky	hogchoker	Trinectes maculatus	1
1/17	DBC079	39	9.6702	75	15.1526	39	9.6245	75	15.1106	Channel	Dredge	16.7	1	Fine Sand	knobbed whelk	Busycon carica	1
1/17	DBC079	39	9.6702	75	15.1526	39	9.6245	75	15.1106	Channel	Dredge	16.7	1	Fine Sand	atlantic rock crab	Cancer irroratus	1
1/17	DBC079	39	9.6702	75	15.1526	39	9.6245	75	15.1106	Channel	Dredge	16.7	1	Fine Sand	summer flounder	Paralichthys dentatus	2
1/17	DBC079	39	9.6702	75	15.1526	39	9.6245	75	15.1106	Channel	Dredge	16.7	1	Fine Sand	windowpane	Scophthalmus aquosus	1
1/17	DBC079	39	9.6702	75	15.1526	39	9.6245	75	15.1106	Channel	Dredge	16.7	1	Fine Sand	hogchoker	Trinectes maculatus	4
1/17	DBC083	39	10.6255	75	16.2065	39	10.5855	75	16.1622	Channel	Dredge	16.3	1	Sand	hogchoker	Trinectes maculatus	4
1/17	DBC087	39	12.0295	75	17.0201	39	12.0865	75	17.0481	Channel	Dredge	16.9	1	Sand	northern quahog	Mercenaria mercenaria	8
1/17	DBC087	39	12.0295	75	17.0201	39	12.0865	75	17.0481	Channel	Dredge	16.9	1	Sand	portly spider crab	Libinia emarginata	1

Date	Station	Start Lat		Start Long		End Lat		End Long		Stratum	Sub-stratum	Depth (M)	Tow Dur (MIN)	Sed Quality	Species	Scientific_Name	Catch (N)
		DEG	MIN	DEG	MIN	DEG	MIN	DEG	MIN								
1/17	DBC087	39	12.0295	75	17.0201	39	12.0865	75	17.0481	Channel	Dredge	16.9	1	Sand	atlantic rock crab	Cancer irroratus	6
1/17	DBC087	39	12.0295	75	17.0201	39	12.0865	75	17.0481	Channel	Dredge	16.9	1	Sand	hogchoker	Trinectes maculatus	1
1/17	DBC088	39	12.2254	75	17.0307	39	12.2763	75	17.0701	Channel	Dredge	16.5	1	Sand	portly spider crab	Libinia emarginata	1
1/17	DBC088	39	12.2254	75	17.0307	39	12.2763	75	17.0701	Channel	Dredge	16.5	1	Sand	clearnose skate	Raja eglantera	1
1/17	DBC088	39	12.2254	75	17.0307	39	12.2763	75	17.0701	Channel	Dredge	16.5	1	Sand	white perch	Morone americana	1
1/17	DBC088	39	12.2254	75	17.0307	39	12.2763	75	17.0701	Channel	Dredge	16.5	1	Sand	hogchoker	Trinectes maculatus	3
1/17	DBC092	39	14.4814	75	18.6428	39	14.5267	75	18.68	Channel	Dredge	16.3	1	Very Fine Sand	blood ark	Anadara ovalis	1
1/17	DBC092	39	14.4814	75	18.6428	39	14.5267	75	18.68	Channel	Dredge	16.3	1	Very Fine Sand	hermit crab	Paguridae	1
1/17	DBC092	39	14.4814	75	18.6428	39	14.5267	75	18.68	Channel	Dredge	16.3	1	Very Fine Sand	portly spider crab	Libinia emarginata	2
1/17	DBC092	39	14.4814	75	18.6428	39	14.5267	75	18.68	Channel	Dredge	16.3	1	Very Fine Sand	atlantic rock crab	Cancer irroratus	2
1/17	DBC092	39	14.4814	75	18.6428	39	14.5267	75	18.68	Channel	Dredge	16.3	1	Very Fine Sand	white perch	Morone americana	10
1/17	DBC092	39	14.4814	75	18.6428	39	14.5267	75	18.68	Channel	Dredge	16.3	1	Very Fine Sand	hogchoker	Trinectes maculatus	4
1/17	DBC093	39	14.9047	75	19.3054	39	14.9496	75	19.3594	Channel	Dredge	18.0	1	Sand	clearnose skate	Raja eglantera	1
1/17	DBC093	39	14.9047	75	19.3054	39	14.9496	75	19.3594	Channel	Dredge	18.0	1	Sand	white perch	Morone americana	3
1/17	DBC093	39	14.9047	75	19.3054	39	14.9496	75	19.3594	Channel	Dredge	18.0	1	Sand	hogchoker	Trinectes maculatus	9
1/17	DBC094	39	14.9875	75	19.2168	39	15.0234	75	19.253	Channel	Dredge	15.5	1	Rocky	atlantic rock crab	Cancer irroratus	1
1/17	DBC094	39	14.9875	75	19.2168	39	15.0234	75	19.253	Channel	Dredge	15.5	1	Rocky	white perch	Morone americana	5
1/17	DBC094	39	14.9875	75	19.2168	39	15.0234	75	19.253	Channel	Dredge	15.5	1	Rocky	hogchoker	Trinectes maculatus	5
1/30	DBC110	39	17.4932	75	22.1487	39	17.4621	75	22.1035	Channel	Dredge	16.3	1	Sand w/sand tubes	white perch	Morone americana	2
1/30	DBC110	39	17.4932	75	22.1487	39	17.4621	75	22.1035	Channel	Dredge	16.3	1	Sand w/sand tubes	summer flounder	Paralichthys dentatus	1