Transect Report

Overview

This report provides summary statistics and figures for ongoing transect sampling. The first section of the report focuses on the current sampling (Winter 2021-2022) and how the collected data compare to last year's sampling (Winter 2020-2021). So far 0 days have been sampled this season. The second half of the report gives summaries of all of the data that have been collected since the beginning of the project (2010-05-27). In total, 118 days have been sampled over this entire project.

Definition of Localities

LOCALITY	LOCATION
BT	Big Trout
CK	Cedar Key
CR	Corrigan's Reef
HB	Horseshoe Beach
LC	Lone Cabbage
LT	Little Trout
NN	No Name

Definition of Strata

STRATA	DEFINITION
<u>N</u>	Yes Harvest, No Rock
Y_Y	Yes Harvest, Yes Rock
N_N	No Harvest, No Rock
N_Y	No Harvest, Yes Rock
N_PILOT	No Harvest, Pilot Rocks

Current Sampling

Here, we provide a progress bar showing how much of the sampling has been completed for this season, plus summary tables and plots comparing live counts and density of oysters between this current season and last year. The current sampling period is period 24, and last year's sampling period is period 22.

Summary Tables for Periods 18, 20, 22, and 24

These summary tables provide summary statistics on live counts and oyster densities for just periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022).

Summary statistics include:

- Locality or Strata or Period Mean
- Median
- Standard Deviation (SD)
- Variance (Var)
- Coefficient of variation (CV)
- Standard Error (SE)
- Lower 95% Confidence Interval assuming normal distribution (L95)
- Upper 95% Confidence Interval assuming normal distribution (U95)
- Bootstrap Mean (Bstrap Mean)
- Lower 95% Confidence Interval from Bootstrap Values (L95 Bstrap)
- Upper 95% Confidence Interval from Bootstrap Values (U95 Bstrap)

Summary of Live Counts for Periods 18, 20, 22, and 24

2 21 112 21		as 10, 1 0, 1 1, 0				
Live Oyster Counts	ov Locality					
Locality Mean Medi	•	r CV SE L9	5 U95 Bstrap_Mean	L95 Bstrap	U95 Bstrap	
· ·	97 2257 5094708		3 2892 1671	768	3020	
	54 1719 2953527			1132	1712	
			2 1339 1058	810	1331	
NN 786 7	27 649 42084	7 0.83 196 40	3 1169 788	466	1181	
Live Oyster Counts	oy Strata					
Strata Mean Media	=	CV SE L95	U95 Bstrap_Mean 1	L95 Bstrap U	195 Bstrap	
N_N 1104 81	3 1219 1486772		1424 1104	839	1455	
N_PILOT 356 35			NA 177	6	344	
N_Y 2337 143	3 2128 4529713	0.91 402 1548	3125 2312	1604	3110	
Y_N 845 69	4 777 603969	0.92 102 645	1045 850	660	1049	
Y_Y 2524 177	2 2954 8726548	1.17 790 976	4071 2490	1226	4095	
Live Oyster Counts	oy Period					
Period Mean Median	SD Var	CV SE L95	U95 Bstrap_Mean L	95_Bstrap U9	5_Bstrap	
18 982 695	935 874733 (0.95 120 748	1217 975	753	1234	
20 1844 1253	2125 4517189	1.15 310 1236 3	2451 1835	1307	2461	
22 1334 702	1693 2867783 :	1.27 242 860	1808 1350	911	1827	
Iina Danaitu ku Iaa	.1:4					
Live Density by Loc		CA GE LOE HOE	Datman Maan IOE D	atmon HOE Da	+	
Locality Mean Medi BT 262 2	18 190 36278 0		260	173	380	
	18 190 36278 0 48 128 16298 0			143	186	
	49 143 20392 0			214	345	
	19 143 20392 0 34 224 50174 1			122	363	
NN 224 I	04 224 50174 1	.00 60 92 356	223	122	303	
Live Density by Strata						
Strata Mean Media		~V QF 1 QF 11QF 1	Bstrap_Mean L95_Bs	tran IIOE Bat	ran	
	2 165 27289 0.6		238	199	284	
N_PILOT 102 10		NA NA NA NA	51	3	99	
N_Y 142 12		67 18 106 177	141	107	176	
-	7 150 22472 0.8		184	147	222	
-		32 20 143 222 31 25 67 164	114	71	164	
1_1 110 9	20 0101 0.0	JI 20 01 10 4	114	1 1	104	

Live Density by Period

Period	${\tt Mean}$	${\tt Median}$	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
18	177	155	131	17117	0.74	17	144	210	177	146	211
20	258	203	188	35185	0.73	27	204	312	258	206	312
22	138	121	93	8671	0.68	13	112	164	138	110	165

Summary of Dead Counts for Periods $18,\,20,\,22,\,\mathrm{and}\,\,24$

Summary of Dead Counts for Feriods 16, 26, 22, and 24		
Dead Oyster Counts by Locality		
Locality Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95	Bstrap U95	Bstrap
BT 313 169 317 100240 1.01 88 141 485 314	176	485
LC 131 70 150 22448 1.15 14 103 158 131	105	159
LT 240 210 193 37090 0.80 47 148 331 239	162	331
NN 104 74 96 9216 0.92 29 48 161 104	57	162
WW 101 11 00 0210 0.02 20 10 101 101	01	102
Dead Oyster Counts by Strata		
Strata Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_B	stran IIO5 E	Retran
N_N 206 136 208 43319 1.01 28 152 261 207.2	158	264
N_PILOT 9 9 NA NA NA NA NA NA 5.1	1	9
N_Y 96 59 108 11604 1.12 20 56 136 96.6	61	138
Y_N 127 83 125 15698 0.99 16 94 159 126.7	97	161
-	97 75	346
Y_Y 205 80 288 82752 1.40 77 54 356 201.5	75	340
Dood Oreston County by Donied		
Dead Oyster Counts by Period		
Period Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bs	-	-
18 133 55 192 36903 1.44 25 85 182 135	91	187
20 148 107 140 19727 0.95 20 108 188 148	110	190
22 191 128 193 37399 1.01 28 137 245 191	142	253
Dead Oyster Density by Locality		
Locality Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_B	strap U95 E	Sstrap
BT 52 39 34 1162 0.65 9.5 34 71 53	36	72
LC 20 11 22 484 1.10 2.0 16 24 20	16	24
LT 59 50 38 1426 0.64 9.2 42 77 59	42	77
NN 29 17 25 602 0.85 7.4 14 43 29	16	44
M. 20 11 20 002 0100 111 11 10 20	10	
Dead Oyster Density by Strata		
Strata Mean Median SD Var CV SE L95 U95 Bstrap_Mean L	95 Betran I	195 Betran
N N 43.9 37.5 32.5 1054 0.74 4.34 35.4 52.4 43.6	35.8	51.8
N_PILOT 2.6 2.6 NA NA NA NA NA NA 1.5	1.0	2.0
N_Y 5.8 4.0 4.6 21 0.80 0.87 4.1 7.4 5.7	4.2	7.5
-	21.1	
=		33.7
Y_Y 8.4 7.7 6.5 42 0.77 1.73 5.0 11.8 8.5	5.4	11.7
Dead Oration Density has Density		
Dead Oyster Density by Period	1105 5	
Period Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstr	=	_
	19	34
	21	35
22 29 14 29 822 1.00 4.1 21 37 29	21	37

Summary Plots for Periods 18, 20, 22, and 24

Live Oyster Density by Locality for Periods 18, 20, and 22

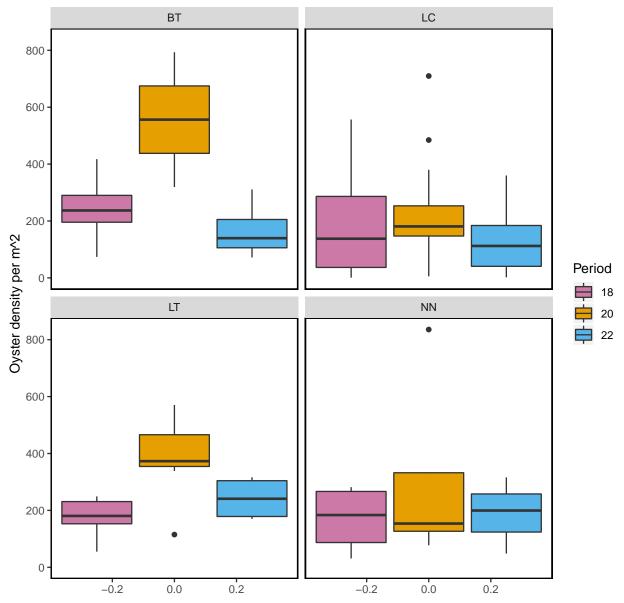


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-02-26.

Dead Oyster Density by Locality for Periods 18, 20, 22, and 24

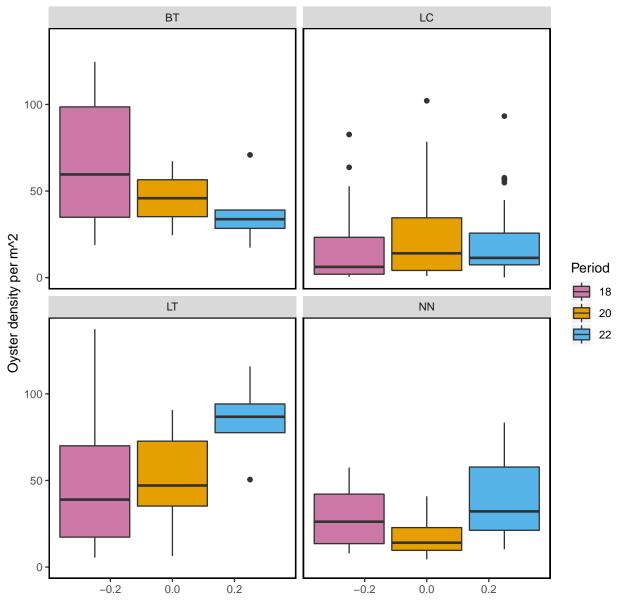


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-02-26.

Live Oyster Density by Strata for Periods 18, 20, 22, and 24

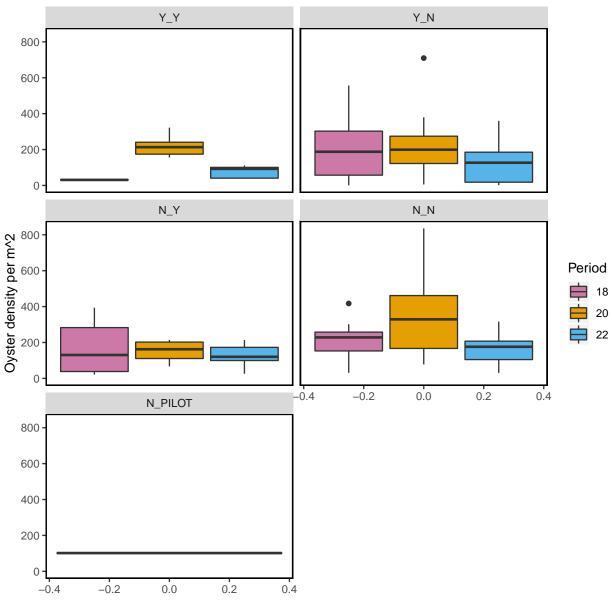


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-02-26.

Dead Oyster Density by Strata for Periods 18, 20, 22, and 24

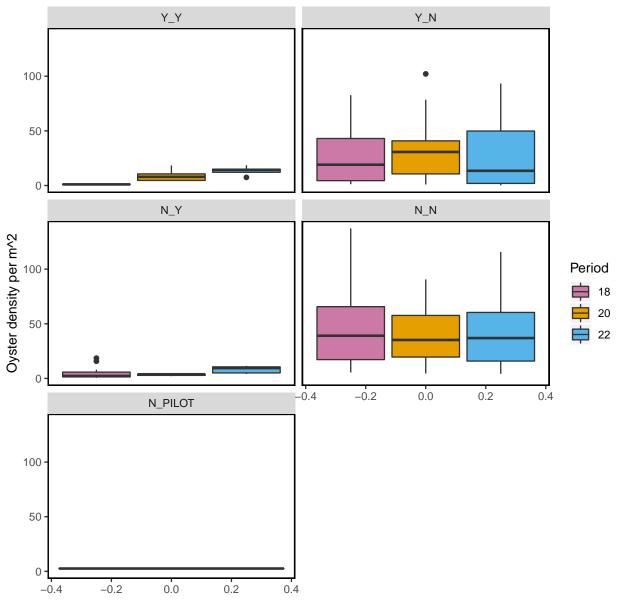


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-02-26.

The following summary plot is calculated in R using the <code>geom_density</code> (https://ggplot2.tidyverse.org/refere nce/geom_density.html) statistical function in <code>ggplot</code>. The <code>geom_density</code> function computes and draws kernel density estimates, which is then represented as a smoothed version of a histogram.

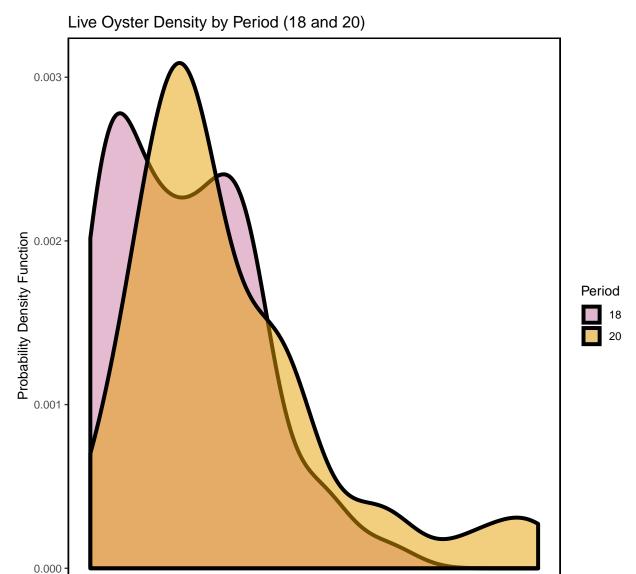


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-02-26.

600

800

400

Oyster density per m^2

Ö

200

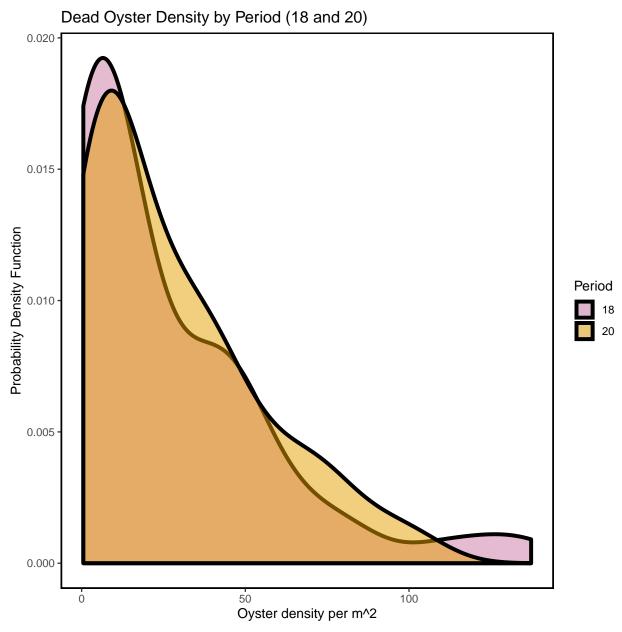


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-02-26.

Live Oyster Density by Period (20 and 22)

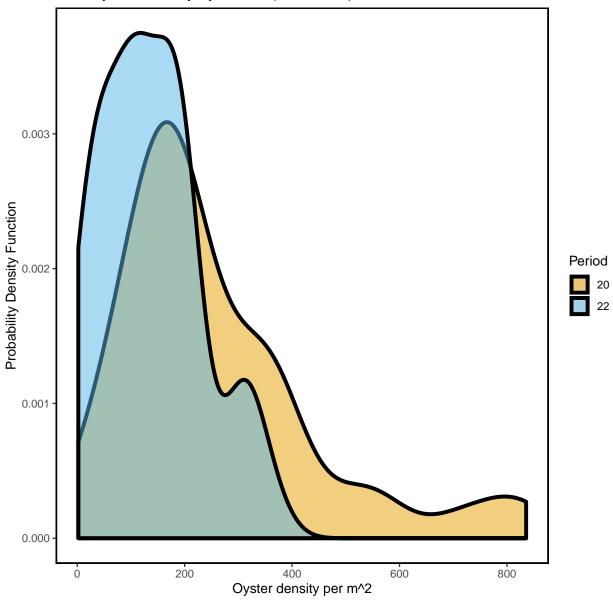


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-02-26.

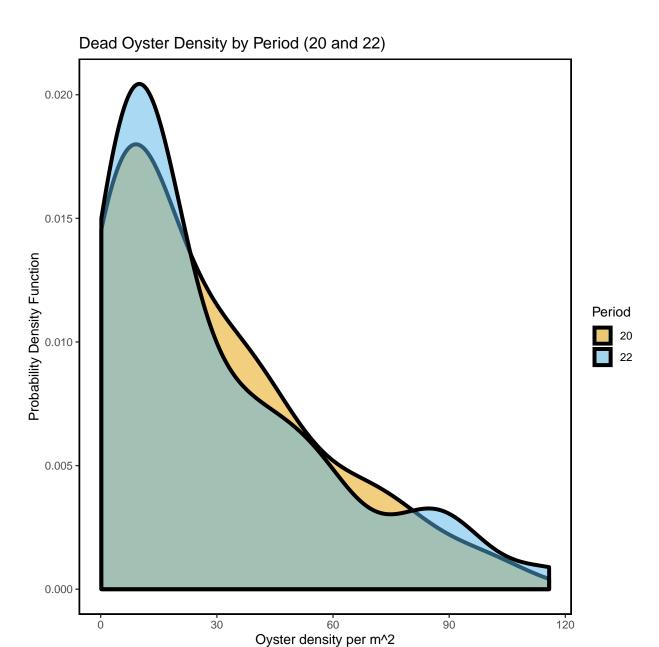


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-02-26.

Live Oyster Density by Period (22 and 24)

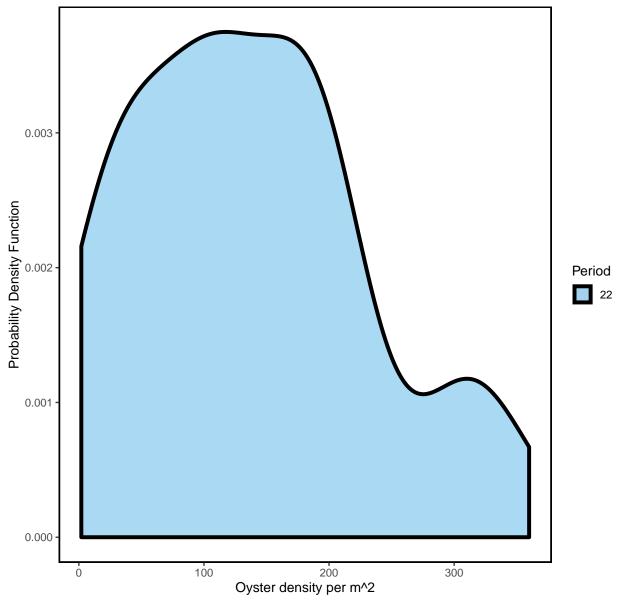


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-02-26.

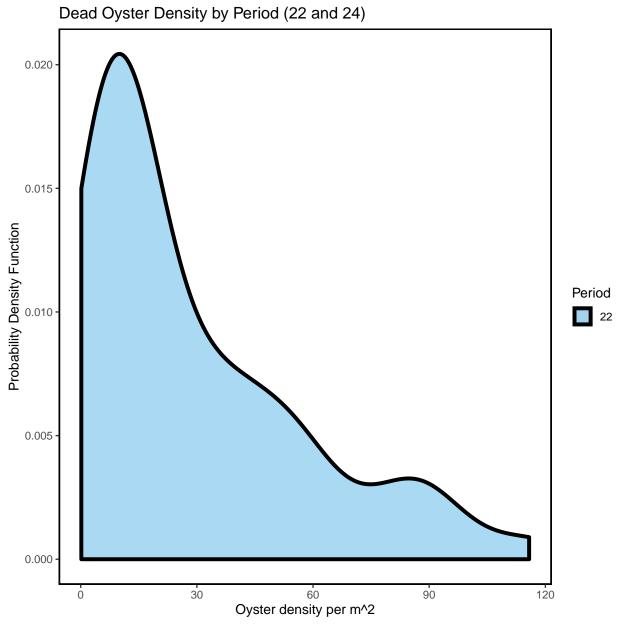


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-02-26.

Live and Dead Oyster Count Comparison for Periods 18, 20, 22, and 24

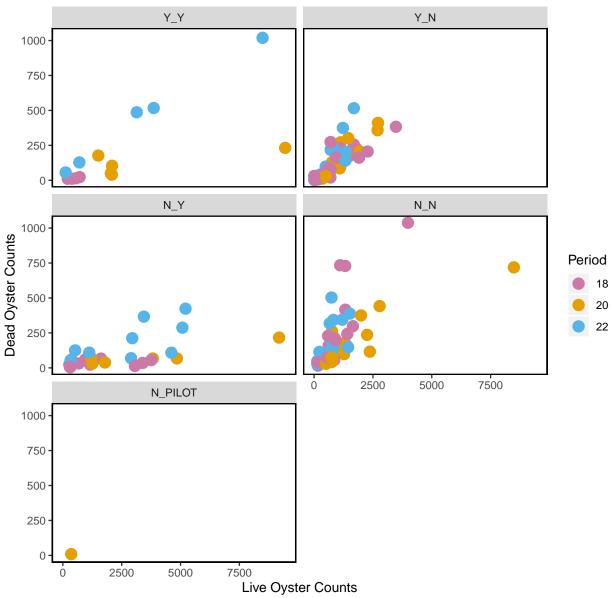


Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021) and 24 (Winter 2021-2022), last sample date of period 24 as 2021-02-26.

Live Counts Double Pass Results

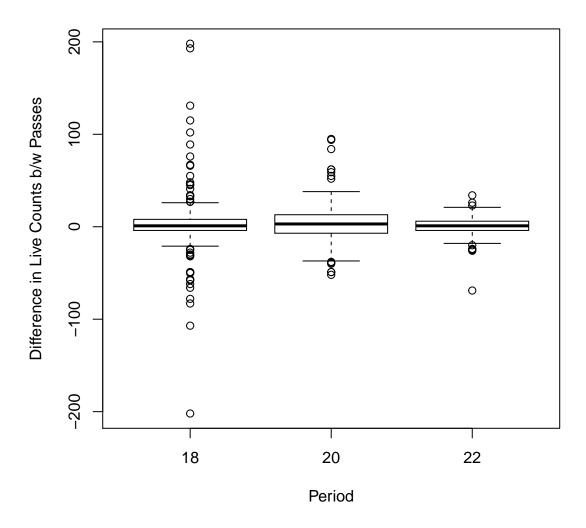


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, and 24

```
locality period CV_1 CV_2
             18 0.82 0.83
      LC
             18 1.34 1.43
             18 0.47 0.63
      NN
      LC
             20 0.83 0.80
      LT
             20 0.61 0.60
      ВТ
             22 0.39 0.52
      LC
             22 0.74 0.76
      LT
             22 0.49 0.50
```

Table- Coefficient variation between pass 1 and pass 2, aggregated by locality and period for live counts

Dead Counts Double Pass Results

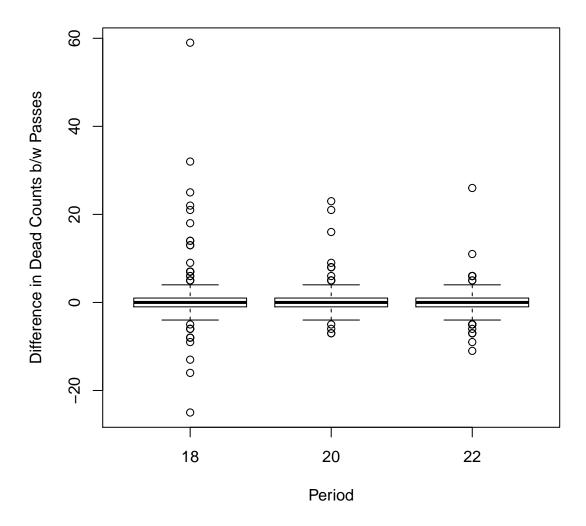


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, and 24

```
locality period CV_1 CV_2
             18 0.78 0.82
      LC
             18 2.35 2.06
             18 0.55 0.73
      NN
      LC
             20 1.93 1.62
      LT
             20 0.76 0.67
      ВТ
             22 0.60 0.66
      LC
             22 1.09 1.07
      LT
             22 0.69 0.66
```

Table- Coefficient variation between pass 1 and pass 2, aggregated by locality and period for dead counts

Sampling for all Periods

Next, we provide summary tables and plots for all transect sampling. These data were collected between 2010-05-27 and 2021-02-26. The following are only for live oysters.

Definitions of Periods

PERIOD	SEASON	YEAR
1	Summer	2010
2	Winter	2010-2011
3	Summer	2011
4	Winter	2011-2012
5	Summer	2012
6	Winter	2012-2013
7	Summer	2013
8	Winter	2013-2014
9	Summer	2014
10	Winter	2014-2015
11	Summer	2015
12	Winter	2015-2016
13	Summer	2016
14	Winter	2016-2017
15	Summer	2017
16	Winter	2017-2018
17	Summer	2018
18	Winter	2018-2019
19	Summer	2019
20	Winter	2019-2020
21	Summer	2020
22	Winter	2020-2021
23	Summer	2021
24	Winter	2021-2022

Summary of Effort for all Periods

These effort summaries show the total number of transects and total number of meters walked per locality, strata, locality per period, and strata per period. These tables contain all data collected on the transects.

Effort by Locality

Locality	Number	of	Transects	Total	Length	(m)
BT			13			466
CK			26			712
CR			46		1	1330
HB			45		1	129
LC			196		10	677
LT			17			450
NN			11			285

Effort by Strata

Strata	Number	of	Transects	Total	Length	(m)
N_N			113		3	3710
N_PILOT			13			799
N_Y			28		3	3173
Y_N			186		5	5400
Y_Y			14		1	1966

Effort by Period

Ellort t	y Perio	a				
Period	Number	of	${\tt Transects}$	${\tt Total}$	Length (m)	
1			42		1086	
2			30		753	
3			25		619	
6			33		874	
7			8		528	
10			8		512	
11			8		511	
16			8		528	
18			61		2632	
19			35		921	
20			47		2556	
22			49		3527	

Effort by Locality and Period

Period	Locality	${\tt Number}$	of	${\tt Transects}$	${\tt Total}$	Length	(m)
1	CK			9			242
1	CR			10			300
1	HB			12			293
1	LC			11			250
10	LC			8			512
11	LC			8			511
16	LC			8			528
18	BT			6			238
18	LC			45			2128
18	LT			6			182
18	NN			4			84
19	CK			9			221
19	CR			9			227
19	HB			9			247

19	LC	8	226
2	CR	9	283
2	HB	11	271
2	LC	10	199
20	BT	2	96
20	LC	34	2163
20	LT	7	171
20	NN	4	126
22	BT	5	132
22	LC	37	3223
22	LT	4	96
22	NN	3	76
3	CR	9	269
3	HB	7	184
3	LC	9	167
6	CK	8	248
6	CR	9	250
6	HB	6	134
6	LC	10	242
7	LC	8	528

Effort	by Strata	a and Pe	erio	od			
Period	Strata	Number	of	Transects	Total	Length	(m)
1	N_N			8			149
1	Y_N			34			937
10	N_N			4			256
10	N_PILOT			4			256
11	N_N			4			255
11	N_PILOT			4			256
16	N_N			4			264
16	N_PILOT			4			264
18	N_N			18			571
18	N_Y			13			962
18	Y_N			26			723
18	Y_Y			4			376
19	N_N			5			80
19	Y_N			30			841
2	N_N			8			148
2	Y_N			22			605
20	N_N			18			590
20	N_PILOT			1			23
20	N_Y			6			888
20	Y_N			17			602
20	Y_Y			5			454
22	_			20			544
22	_			9		-	1324
22	_			15			524
22	_			5		-	1136
3	N_N			8			147
3	_			17			472
6	N_N			8			178
6	Y_N			25			695
7	N_N			8			528

Effort Plot Summaries for all Periods

Total Transect Length Sampled by Locality

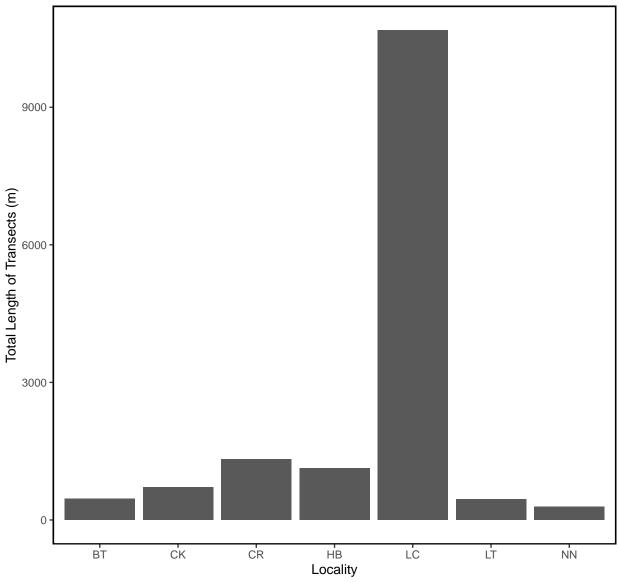


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

Total Transect Length Sampled by Strata

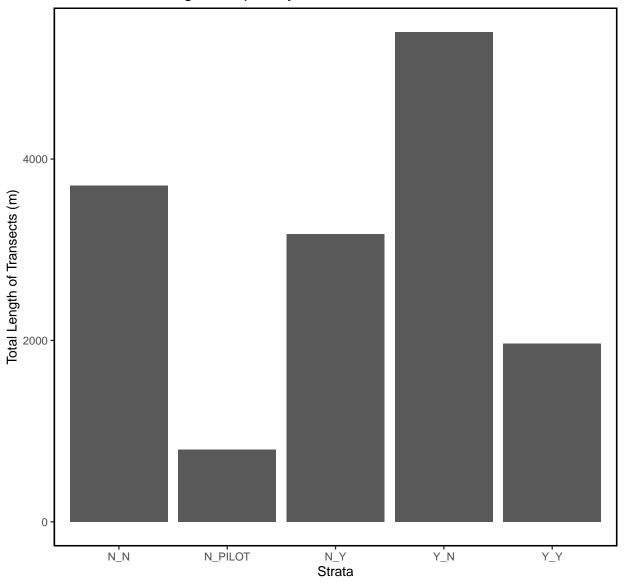


Figure – Bar plot of total transect length in meters sampled by strata for all periods.

Total Transect Length Sampled by Period

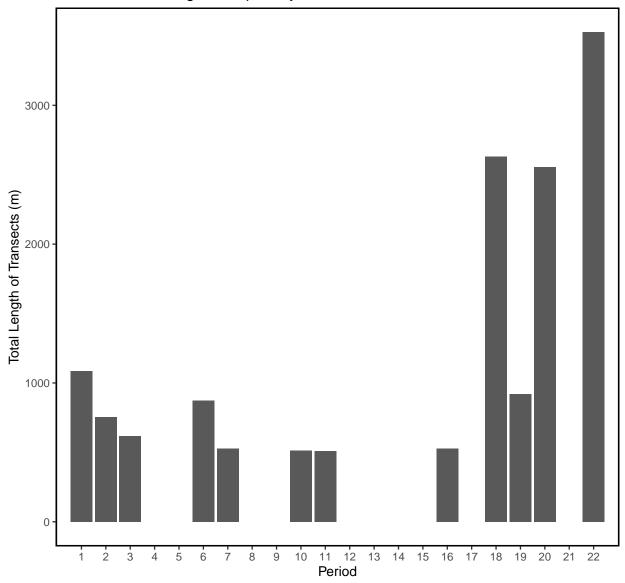


Figure – Bar plot of total transect length in meters sampled by period for all periods.

Summary Tables for all Periods

These summaries display summary statistics of live oysters by locality, strata, and period. These contain all data collected on the oyster transects.

The summary statistics include:

- Locality or Strata or Period Mean
- Median
- Standard Deviation (SD)
- Variance (Var)
- Coefficient of variation (CV)
- Standard Error (SE)
- Lower 95% Confidence Interval assuming normal distribution (L95)
- Upper 95% Confidence Interval assuming normal distribution (U95)
- Bootstrap Mean (Bstrap Mean)
- Lower 95% Confidence Interval from Bootstrap Values (L95 Bstrap)
- Upper 95% Confidence Interval from Bootstrap Values (U95 Bstrap)

Live Count Statistics for all Periods

Live Oyst	er Co	unts b	y Loc	ality							
Locality	Mean	Media	n S	D Va	r C	V S	SE L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	1665	89	7 225	7 509470	8 1.3	6 62	26 438	2892	1730	791	3057
CK	857	44	4 109	1 119093	3 1.2	7 21	.4 438	1277	855	468	1307
CR	. 1026	71	6 103	5 107216	2 1.0	1 15	3 727	1325	1018	748	1303
HB	902	36	4 104	7 109562	2 1.1	6 15	8 592	2 1211	906	623	1213
LC	1094	67	9 144	9 209903	8 1.3	32 10	4 889	1298	1098	902	1314
LT	1051	87	7 60	7 36807	5 0.5	8 14	7 762	1339	1057	804	1361
NN	786	72	7 64	9 42084	7 0.8	3 19	6 403	1169	773	470	1143
I O+	C		C+	_4_							
Live Oyst Strata			-		CI.	, ar	, 105	TIOE	Datasa Masa	IOE Determ	HOE Datas
						SE			Bstrap_Mean		
_	993			1112913				1189		805	1213
N_PILOT			627					1386			1379
_	2337			4529713							
_	780	435									919
Y_Y	2524	1772	2954	8726548	1.17	790	976	4071	2565	1231	4170
Live Oyst	er Co	unts b	y Per	iod							
Period M			SD	Var	CV	SE	L95	U95	Bstrap_Mean 1	L95 Bstrap 1	U95 Bstrap
1 1	404	1018	1288	1657932					1411	1066	1797
2	890	476	945	893727	1.06	176	546	1234	904	565	1258
3	738	296	817	668064	1.11	167	411	1065	736	444	1069
6	433	176	534	284791	1.23	96	245	621	433	262	632
7	50	29	56	3186	1.12	20	11	90	49	17	86
10 1	207	1074	671	449607	0.56	237	743	1672	1191	800	1615
11	886	776	678	459708	0.77	240	416	1356	893	473	1355
16	494	366	467	217855	0.95	165	170	817	493	214	802
18	982	695	935	874733	0.95	120	748	1217	986	780	1233
19	555	329	573	328431	1.03	97	365	745	554	375	745
20 1	844	1253	2125	4517189	1.15	310	1236	2451	1823	1256	2416
22 1	334	702	1693	2867783	1.27	242	860	1808	1332	907	1868

Live Density Statistics for all Periods

Ιiπο	Dengity	hv	Locality
ът∨е	Densit	υv	LUCATILY

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	262	218	190	36278	0.73	53	158	365	263	175	366
CK	241	112	321	102795	1.33	63	118	365	241	137	367
CR	288	181	294	86231	1.02	43	203	373	287	210	371
HB	257	101	303	92052	1.18	46	168	347	257	175	356
LC	152	118	149	22325	0.98	11	131	173	151	131	174
LT	278	249	143	20392	0.51	35	210	346	277	218	344
NN	224	164	224	50174	1.00	68	92	356	224	125	365

Live Dens	Live Density by Strata														
Strata	Mean	${\tt Median}$	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap				
N_N	263	191	256	65472	0.97	24	215	310	263	217	312				
N_PILOT	111	111	60	3604	0.54	17	79	144	111	81	145				
N_Y	142	125	95	9027	0.67	18	106	177	142	108	177				
Y_N	187	111	218	47653	1.17	16	156	219	188	159	220				
Y_Y	116	97	93	8707	0.81	25	67	164	115	70	163				

Live Density by Period

	J	- 3									
Period	Mean	${\tt Median}$	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
1	393	300.8	362.6	131444	0.92	56	283.8	503.1	394.6	283.7	502.4
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	253.1	153.7	357.5
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	232.2	137.2	344.5
6	122	72.2	150.9	22769	1.24	27	68.6	174.9	121.3	71.9	172.2
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5.1	1.8	8.9
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	123.3	81.6	165.1
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	91.1	51.7	136.6
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49.2	20.9	80.2
18	177	154.5	130.8	17117	0.74	17	144.3	210.0	177.3	143.6	208.7
19	160	85.6	171.9	29552	1.08	29	102.9	216.8	162.0	108.5	216.9
20	258	202.8	187.6	35185	0.73	27	204.4	311.7	257.1	207.1	310.7
22	138	120.6	93.1	8671	0.68	13	111.6	163.8	137.3	112.0	162.9

Dead Count Statistics for all Periods

Dead Oyst	er Co	unts by	y Loc	ality										
Locality	Mean	Media	n SD	V	ar	CV	SE	L95	U95	Bstrap_M	lean	L95_Bst	trap	U95_Bstrap
ВТ	313	169	317	1002	40 1	.01	88	140.8	485		308		158	489
CK	78	33	2 106	111	70 1	.36	37	4.3	151		77		18	145
CF	R 60	4	7 38	14	44 0	.63	13	35.2	85		60		39	84
HE	3 44	2:	1 45	20	00 1	.02	15	14.8	73		44		18	72
LC	111	66	3 136	184	27 1	.22	11	90.0	133		112		92	134
LT	240	210	193	370	90 0	.80	47	148.1	. 331		239		158	324
NN	104	74	96	92	16 0	.92	29	47.6	161		104		57	163
Dead Oyst	er Co	unts by	y Str	ata										
Strata	Mean 1	Median	SD	Var	. C	V SE	ΞL	95 U95	Bst	rap_Mean	L95_	Bstrap	U95	_Bstrap
N_N	156	83	190	36091	1.2	2 21	1 1	14 197	•	155		116		200
N_PILOT	82	87	46	2136	0.5	6 13	3	57 108	3	81		60		106
N_Y	96	59	108	11604	1.1	2 20)	56 136	5	96		60		138
Y_N	103	53	114	13070	1.1	1 12	2	79 127	•	103		80		128
Y_Y	205	80	288	82752	1.4	0 77	7	54 356	;	206		79		362
Dead Oyst	er Co	unts by	y Per	iod										
Period M	lean M	edian	SD	Var	CV		SE	L95	U95	Bstrap_Me	an I	195_Bst	rap	U95_Bstrap
7	29	18	30	898	1.03	10.	. 6	8.2	50		29		12	49
10	80	88	65	4245	0.82	23.	. 0	34.5	125		79		41	121
11	50	40	25	620	0.49	8.	. 8	33.2	68		51		36	67
16	44	28	41	1708	0.93	14.	. 6	15.6	73		45		20	72
18	133	55	192 3	6903	1.44	24.	. 6	85.1	182	1	.32		88	183
19	63	44	67	4548	1.08	11.	. 6	40.0	85		63		42	86
20	148	107	140 1	9727	0.95	20.	. 5	107.6	188	1	.47	:	111	186
22	191	128	193 3	7399	1.01	27.	. 6	137.2	245	1	.91	:	144	247

Dead Density Statistics for all Periods

Dead Oyster Density by Localit	Dead	Ovster	Density	by	Locality
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Locality	Mean	Median	SD	Var	CV	SE	L95	U95	<pre>Bstrap_Mean</pre>	L95_Bstrap	U95_Bstrap
BT	52	39.0	34	1162	0.65	9.5	33.9	71	53	35.6	73
CK	21	11.3	28	757	1.29	9.7	2.3	40	21	5.8	39
CR	20	13.8	15	235	0.77	5.1	10.0	30	20	11.9	30
HB	13	8.0	14	201	1.12	4.7	3.4	22	13	5.2	23
LC	17	8.6	20	418	1.21	1.6	13.7	20	17	14.0	20
LT	59	50.5	38	1426	0.64	9.2	41.5	77	60	43.3	78
NN	29	16.7	25	602	0.85	7.4	14.3	43	29	16.6	44

Dead Oyster Density by Strata

Strata	${\tt Mean}$	${\tt Median}$	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	33.6	25.8	32.4	1047	0.96	3.59	26.5	40.6	33.9	27.4	40.9
N_PILOT	8.5	8.7	4.5	20	0.53	1.25	6.1	10.9	8.4	6.3	11.0
N_Y	5.8	4.0	4.6	21	0.80	0.87	4.1	7.4	5.7	4.3	7.5
Y_N	23.0	13.8	24.0	575	1.04	2.57	17.9	28.0	23.0	18.0	27.9
Y_Y	8.4	7.7	6.5	42	0.77	1.73	5.0	11.8	8.3	5.3	11.6

Dead Oyster Density by Period

Period	${\tt Mean}$	${\tt Median}$	SD	Var	CV	SE	L95	U95	${\tt Bstrap_Mean}$	L95_Bstrap	U95_Bstrap
7	2.9	1.8	3.0	8.9	1.03	1.05	0.82	4.9	2.9	1.0	5.0
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.2	4.1	12.9
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.6	6.9
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	2.0	7.3
18	26.4	15.7	31.3	980.1	1.19	4.01	18.54	34.3	26.2	19.2	34.8
19	18.1	13.1	19.3	370.6	1.07	3.30	11.59	24.5	18.1	11.6	24.5
20	27.9	18.4	26.4	697.6	0.95	3.85	20.38	35.5	27.9	20.2	35.8
22	28.6	14.3	28.7	821.7	1.00	4.09	20.62	36.7	28.7	21.0	36.9

Summary Density Plots for all Periods

Live Oyster Density by Locality

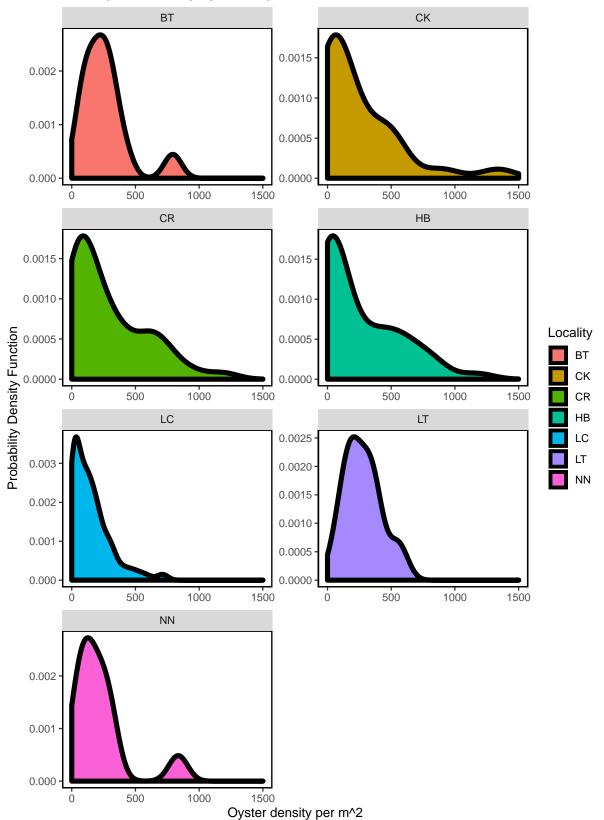


Figure – Calculated live oyster density by locality for all periods including period 22 (current period).

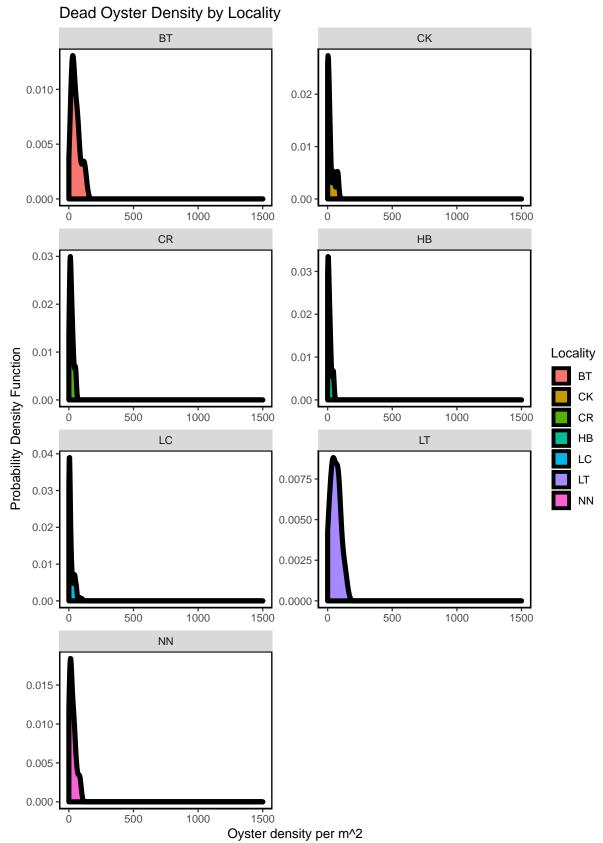


Figure – Calculated dead oyster density by locality for all periods including period 22 (current period).

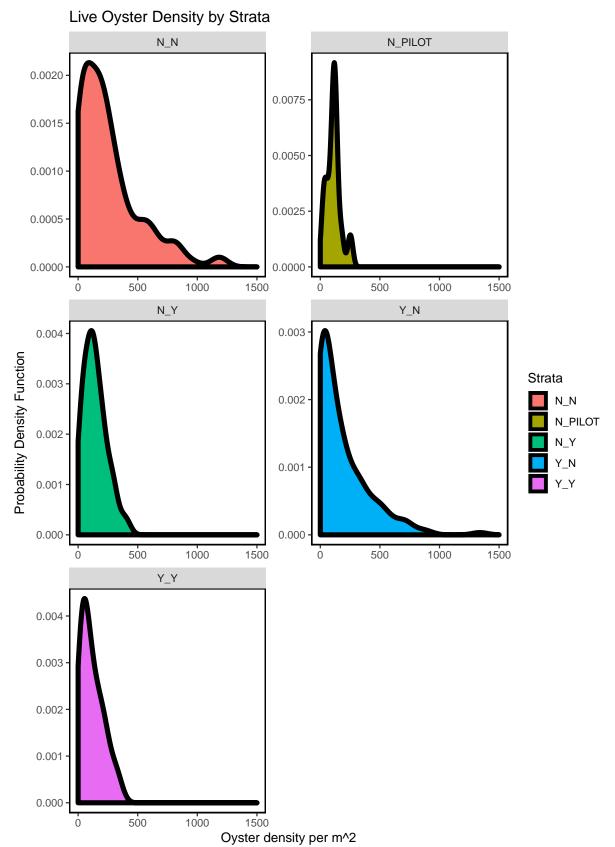


Figure – Calculated live oyster density by strata for all periods including period 22 (current period).

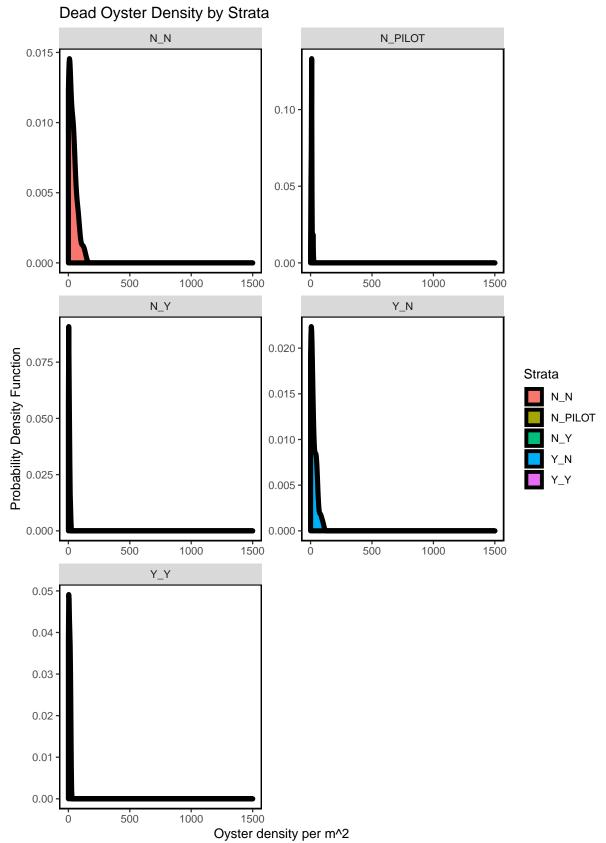


Figure – Calculated dead oyster density by strata for all periods including period 22 (current period).

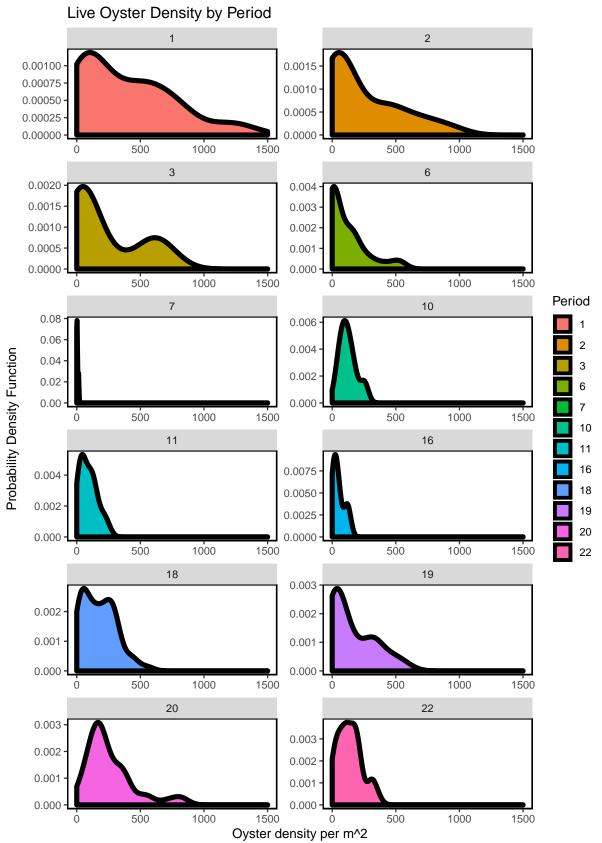


Figure - Calculated live oyster density for all periods including period 22 (current period) using a probability densit

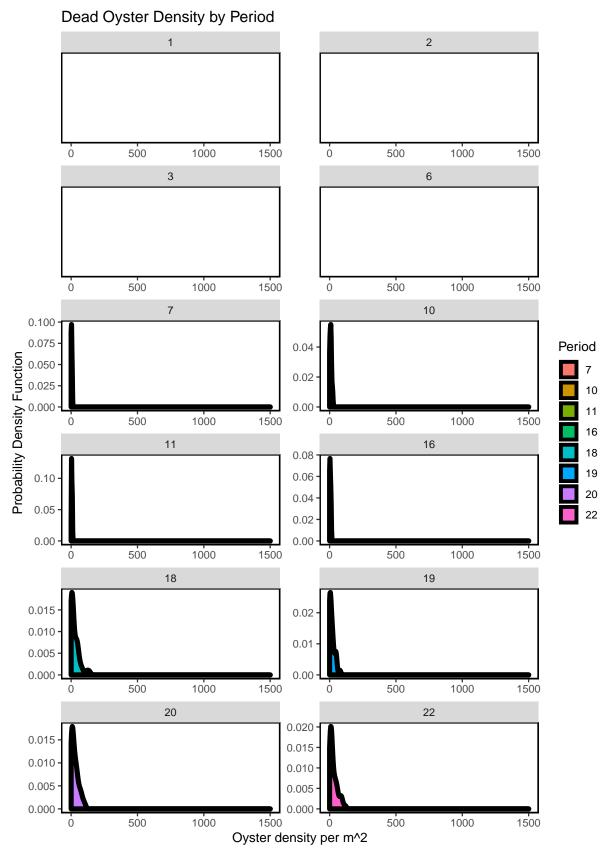


Figure – Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

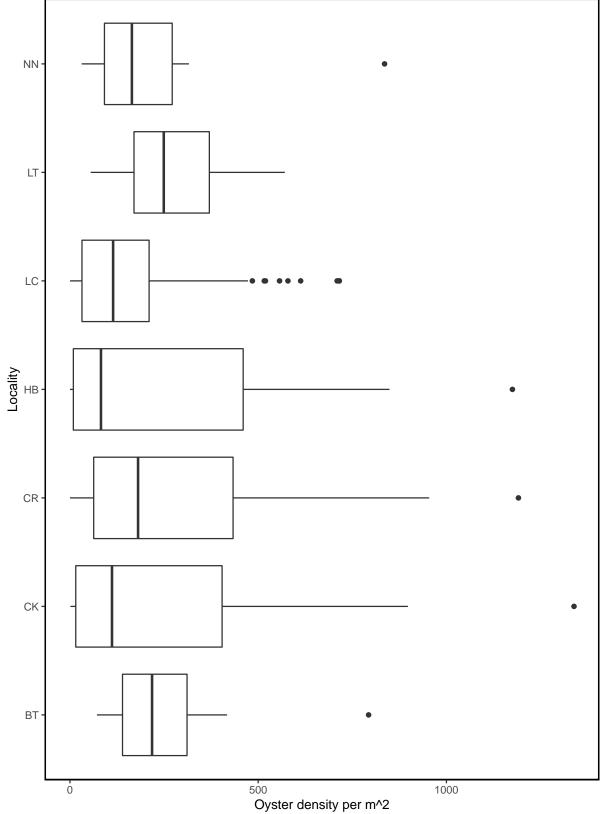


Figure – Box plot depicting live oyster density by locality for all periods including period 22 (current period).

Dead Oyster Density by Locality NN LT LC CR CK ВТ 50 100 Oyster density per m^2

Figure – Box plot depicting dead oyster density by locality for all periods including period 22 (current period).

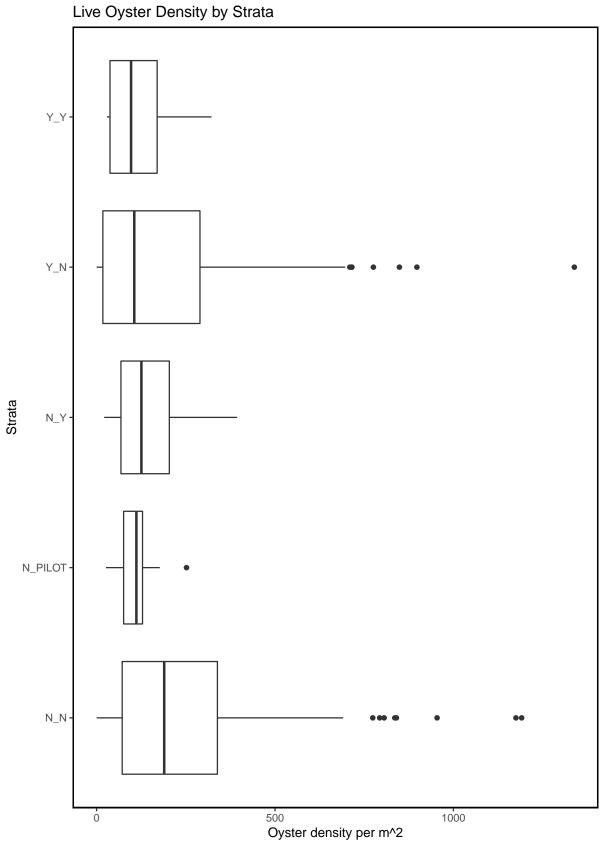


Figure – Box plot depicting live oyster density by strata for all periods including period 22 (current period).

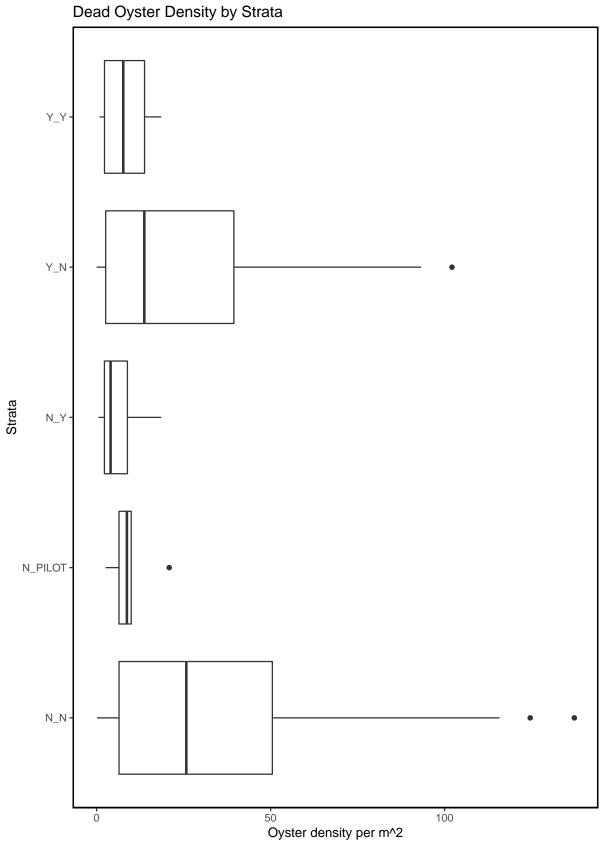


Figure – Box plot depicting dead oyster density by strata for all periods including period 22 (current period).

Live Oyster Density by Period

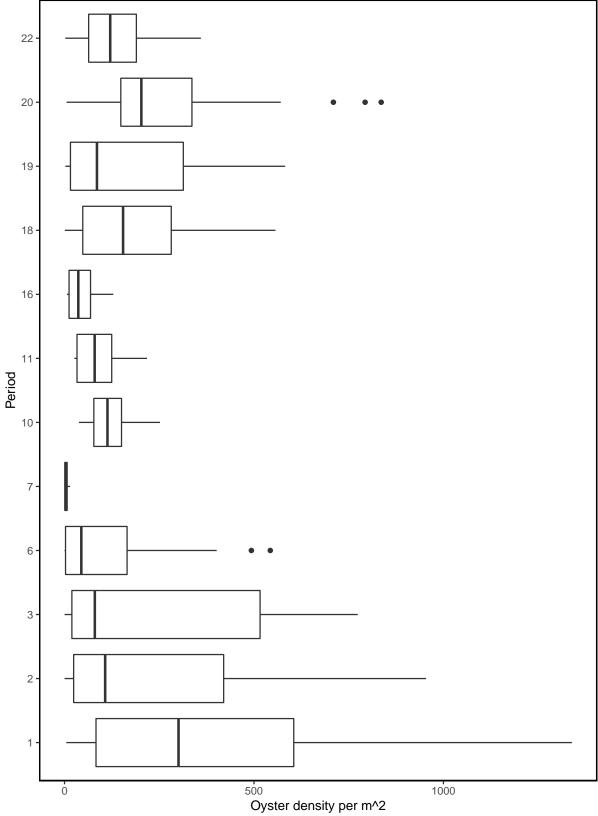


Figure – Box plot depicting live oyster density by period for all periods including period 22 (current period).

Dead Oyster Density by Period Period Oyster density per m^2

Figure – Box plot depicting dead oyster density by period for all periods including period 22 (current period).

Live Oyster Density by Locality and Period

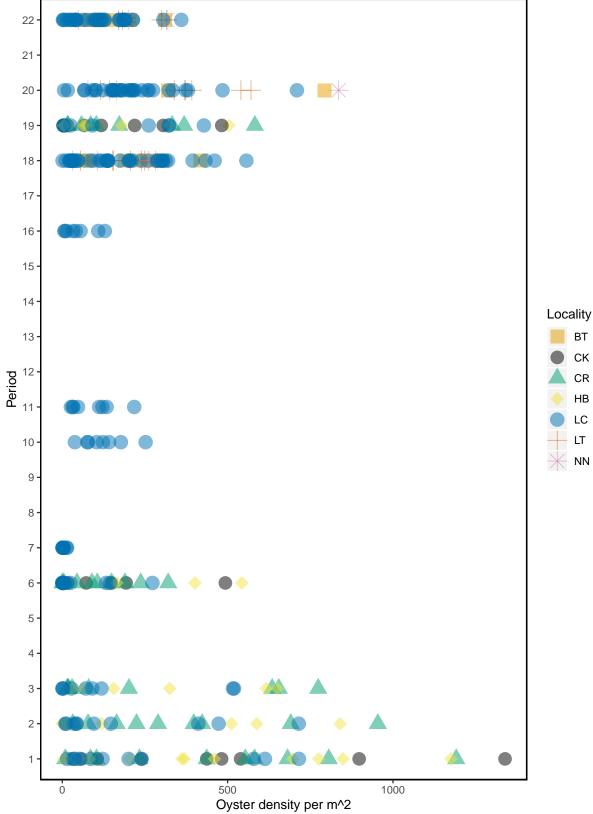


Figure – Live oyster density by locality and period for all periods including period 22 (current period).

Dead Oyster Density by Locality and Period

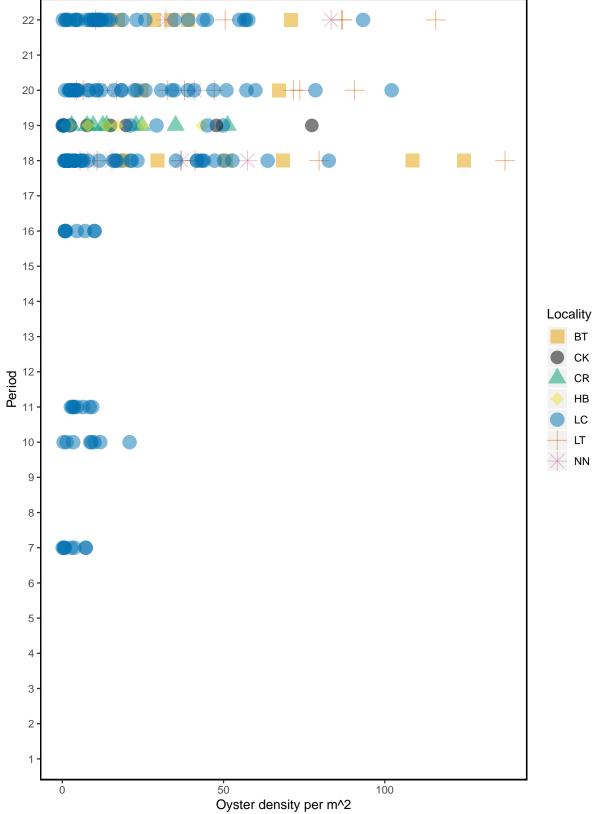


Figure – Dead oyster density by locality and period for all periods including period 22 (current period).

Live Oyster Density by Strata and Period

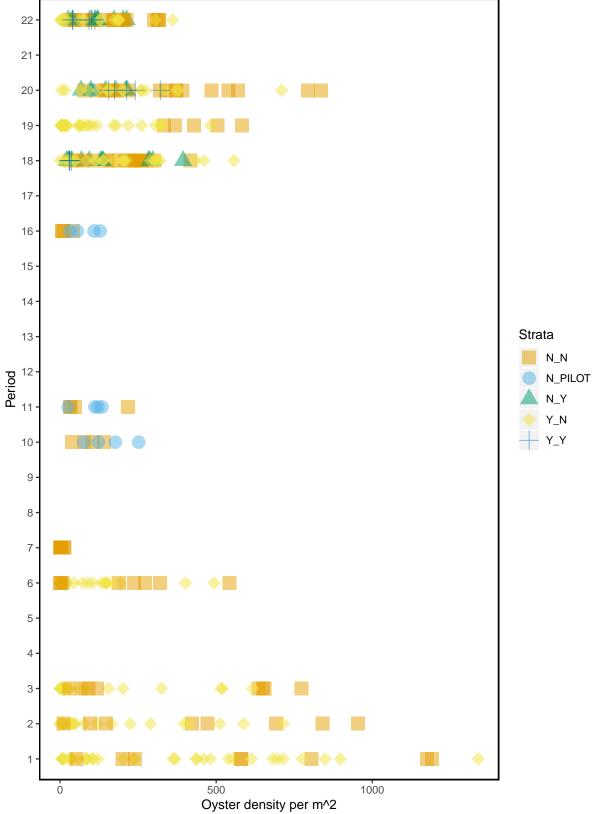


Figure – Live oyster density by strata and period for all periods including period 22 (current period).

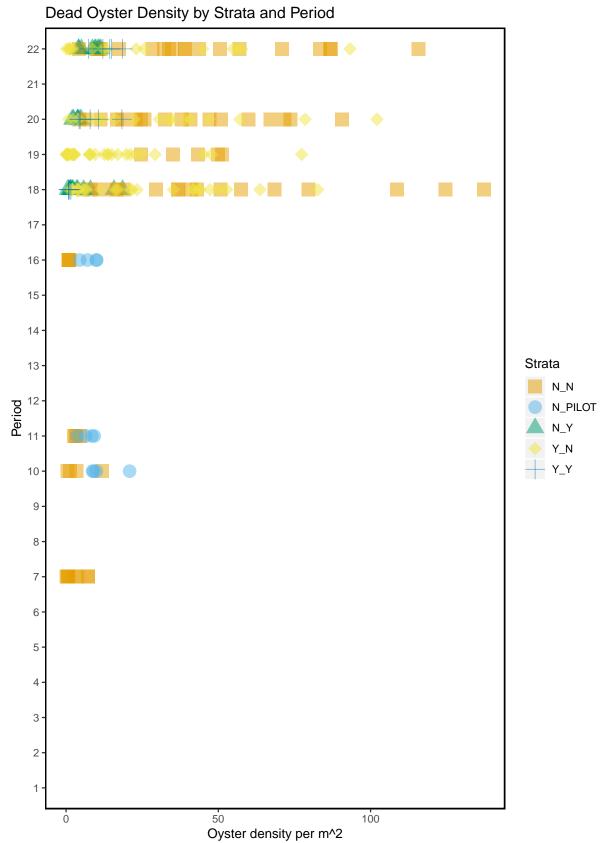


Figure – Dead oyster density by strata and period for all periods including period 22 (current period).

Live and Dead Count Comparison For All Periods

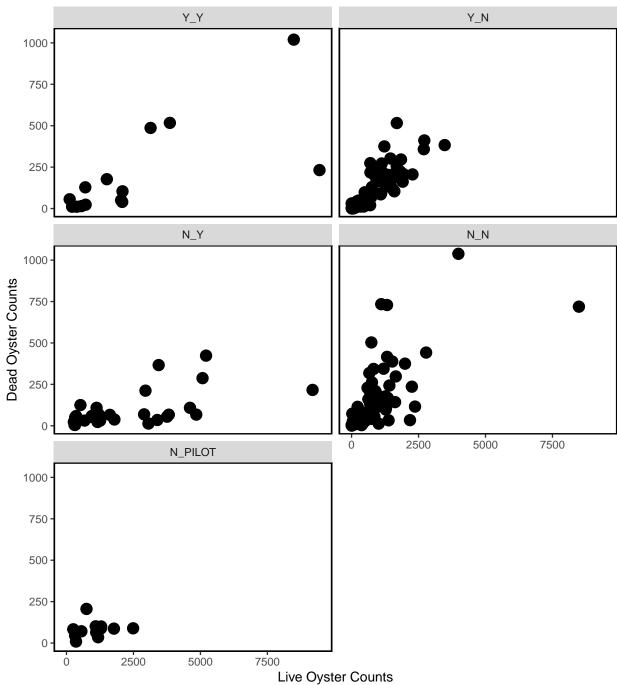


Figure- Live and dead oyster comparison for all periods, last sample date of period 24 is 2021-02-26.

Summary Plots for Pilot Study Sites

A subset of the oyster transect locations were sampled over time for a pilot study. Here we provide plots of live oyster counts and density for these pilot stations with Lone Cabbage (LCO10B, LCO11A, LCO8B, LCO9A).

Average Density by Station and Period

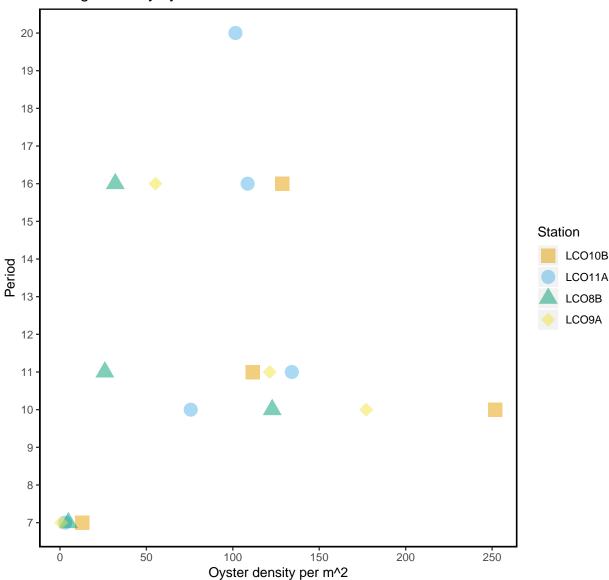


Figure – Average live oyster density comparison by station and period for all stations that were sampled during the pilc

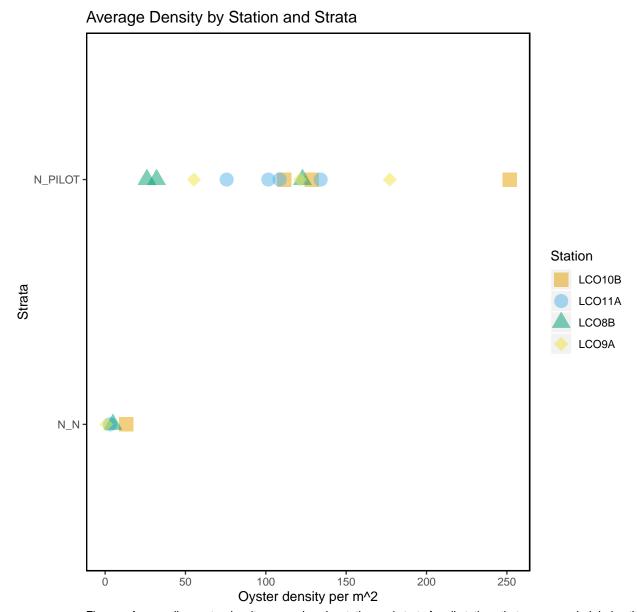


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

Latest Data Entered

Displayed are the entries for the last date of sampling (2021-02-26).

date	station	tran_length	count_live	count_dead	treatment	strata
2021-02-26	LC021	2.5	_ 11	1	rocks	Y_Y
2021-02-26	LC021	5.0	42	5	rocks	Y_Y
2021-02-26	LC021	7.5	50	7	rocks	Y_Y
2021-02-26	LC021	10.0	14	2	rocks	Y_Y
2021-02-26	LC021	12.5	51	9	rocks	Y_Y
2021-02-26	LC021	15.0	61	7	rocks	Y_Y
2021-02-26	LC021	17.5	96	12	rocks	Y_Y
2021-02-26	LC021	20.0	141	11	rocks	Y_Y
2021-02-26	LC021	22.5	35	7	rocks	Y_Y
2021-02-26	LC021	24.4	27	3	rocks	Y_Y
2021-02-26	LC021	2.5	12	2	rocks	Y_Y
2021-02-26	LC021	5.0	32	8	rocks	Y_Y
2021-02-26	LC021	7.5	44	6	rocks	Y_Y
2021-02-26	LC021	10.0	15	2	rocks	Y_Y
2021-02-26	LC021	12.5	51	8	rocks	Y_Y
2021-02-26	LC021	15.0	63	9	rocks	Y_Y
2021-02-26	LC021	17.5	91	13	rocks	Y_Y
2021-02-26	LC021	20.0	139	14	rocks	Y_Y
2021-02-26	LC021	22.5	43	6	rocks	Y_Y
2021-02-26	LC021	24.4	28	4	rocks	Y_Y
2021-02-26	LC021	2.5	59	7	rocks	Y_Y
2021-02-26	LC021	5.0	41	6	rocks	Y_Y
2021-02-26	LC021	7.5	62	8	rocks	Y_Y
2021-02-26	LC021	10.0	71	6	rocks	Y_Y
2021-02-26	LC021	12.5	55	10	rocks	Y_Y
2021-02-26	LC021	15.0	49	5	rocks	Y_Y
2021-02-26	LC021	17.5	58	3	rocks	Y_Y
2021-02-26	LC021	20.0	59	3	rocks	Y_Y
2021-02-26	LC021	22.5	50	7	rocks	Y_Y
2021-02-26	LC021	2.5	57	8	rocks	Y_Y
2021-02-26	LC021	5.0	40	6	rocks	Y_Y
2021-02-26	LC021	7.5	58	8	rocks	Y_Y
2021-02-26	LC021	10.0	69	7	rocks	Y_Y
2021-02-26	LC021	12.5	59	9	rocks	Y_Y
2021-02-26	LC021	15.0	52	8	rocks	Y_Y
2021-02-26	LC021	17.5	54	3	rocks	Y_Y
2021-02-26	LC021	20.0	56	4	rocks	Y_Y
2021-02-26	LC021	22.5	57	7	rocks	Y_Y