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 2020-2021) and how the collected data compare to last year's sampling (Winter 2019-2020). So far 16 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, 109 days have been sampled over this entire project.

Definition of Localities

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

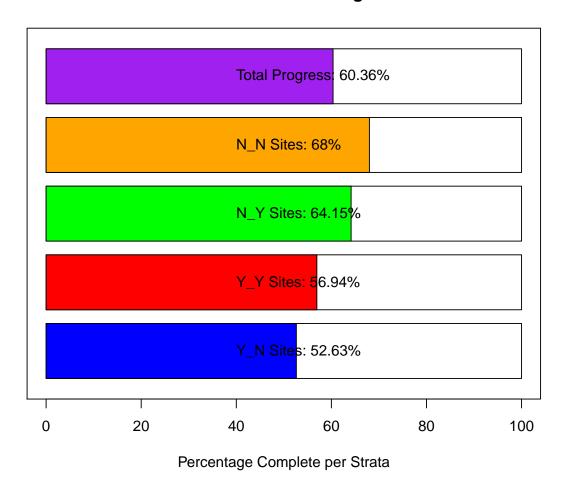
Definition of Strata

STRATA	DEFINITION
<u>Y_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 22, and last year's sampling period is period 20.

Field Sites - Strata Progress



Summary Tables for Periods 18, 20 and 22

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

Summary statistics include:

- Locality or Strata or Period Mean
- Median
- Standard Deviation (SD)
- Variance (Var)
- Coefficient of variation (CV)
- Standard Error (SE)

Y_N 193

- 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 and 22

Live Oyster Counts by Loca	lity						
Locality Mean Median SD	•	L95 U95 Bstrap_Mea	n L95_Bstrap U95_Bstrap				
BT 1691 856 2355	5547854 1.39 680	359 3024 164	2 691 3065				
LC 1417 907 1630	2656516 1.15 157	1109 1724 141	4 1130 1731				
LT 1054 877 645	416505 0.61 167	728 1381 105	3 765 1428				
NN 720 649 644	414522 0.89 204	321 1119 72	7 412 1141				
Live Oyster Counts by Stra							
Strata Mean Median SD		- -	L95_Bstrap U95_Bstrap				
-	1598540 1.15 175	752 1440 1093	814 1464				
N_PILOT 356 356 NA	NA NA NA	NA NA 179	13 348				
N_Y 2364 1619 2201	4846019 0.93 440	1501 3227 2359	1536 3255				
Y_N 889 698 793	629003 0.89 110	673 1104 891	688 1115				
Y_Y 2242 2039 2376	5645351 1.06 613	1039 3444 2248	1252 3596				
	Var CV SE 1 874733 0.95 120 7 517189 1.15 310 13	748 1217 991 236 2451 1840	L95_Bstrap U95_Bstrap 779 1233 1332 2559 907 1842				
Live Density by Locality							
Locality Mean Median SD	Var CV SE L95	U95 Bstrap_Mean L95_	Bstrap U95_Bstrap				
BT 257 212 198	39335 0.77 57 145	370 257	169 379				
LC 171 154 126	15992 0.74 12 147	195 171	149 194				
LT 274 239 152	23145 0.56 39 197	351 274	201 345				
NN 215 154 234	54714 1.09 74 70	360 214	108 361				
Live Density by Strata Strata Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap U95_Bstrap N_N 233 190 170 28981 0.73 24 187 279 233 191 286 N PILOT 102 102 NA NA NA NA NA NA S1 3 99							
_	9545 0.65 20 112 :		115 189				

152

235

193

179 150 22356 0.78 21 152 233

Y_Y 122 112 87 7615 0.71 23 78 167 123 83 167

Live Density by Period

${\tt Period}$	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	210
20	258	203	188	35185	0.73	27	204	312	258	207	314
22	132	127	68	4683	0.52	11	110	154	133	111	155

Summary of Dead Counts for Periods $18,\,20$ and 22

Locality Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap U95_Bstrap BT 325 169 328 107312 1.01 95 140 510 328 166 520	-
BT 325 169 328 107312 1.01 95 140 510 328 166 520	Λ
LC 124 70 126 15901 1.01 12 101 148 124 101 148	
LT 240 210 202 40850 0.84 52 137 342 237 148 336	
NN 100 68 100 10018 1.00 32 38 162 102 52 167	7
Dead Oyster Counts by Strata	
Strata Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap U95_Bstrap	
N_N 207 125 215 46152 1.04 30 148 265 205.4 154 266	
N_PILOT 9 9 NA NA NA NA NA NA 4.9 1 9	
N_Y 79 55 95 9095 1.21 19 41 116 78.4 47 117	
Y_N 132 87 128 16256 0.97 18 97 166 132.2 98 165	
Y_Y 157 104 168 28145 1.07 43 73 242 155.5 79 244	
Dead Oyster Counts by Period Period Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap U95_Bstrap	
18 133 55 192 36903 1.44 25 85 182 134 92 186	
20 148 107 140 19727 0.95 20 108 188 148 112 189	
22 185 108 162 26173 0.87 27 133 237 186 138 238	
Dead Oyster Density by Locality Locality Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap U95_Bstrap	
BT 54 42 35 1250 0.66 10.2 34 74 53 35 74	
LC 20 11 22 489 1.09 2.1 16 24 20 16 24	
LT 58 47 40 1570 0.68 10.2 38 78 58 40 80	
NN 28 16 26 668 0.91 8.2 12 45 29 15 46	
Dead Oyster Density by Strata	
Strata Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap U95_Bstra	ap
N_N 43.3 36.9 33.1 1097 0.77 4.59 34.3 52 43.2 34.2 52.	.5
N_PILOT 2.6 2.6 NA NA NA NA NA NA 1.5 1.0 2.	.0
N_Y 5.2 3.8 4.5 21 0.87 0.91 3.4 7 5.2 3.6 7.	. 1
Y_N 28.4 22.0 25.7 662 0.91 3.57 21.4 35 28.4 22.0 35.	. 4
Y_Y 8.8 8.6 6.6 43 0.75 1.70 5.5 12 8.7 5.6 11.	.9
Dead Oyster Density by Period	
Period Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap U95_Bstrap	
18 26 16 31 980 1.19 4.0 19 34 26 19 34	
20 28 18 26 698 0.95 3.9 20 35 28 21 36	
22 29 15 29 862 1.02 4.8 19 38 29 21 39	

Summary Plots for Periods 18, 20 and 22

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

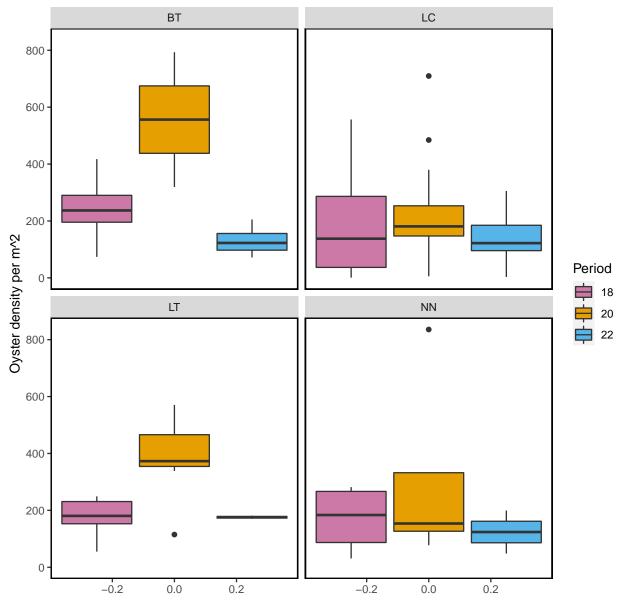


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-01-15.

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

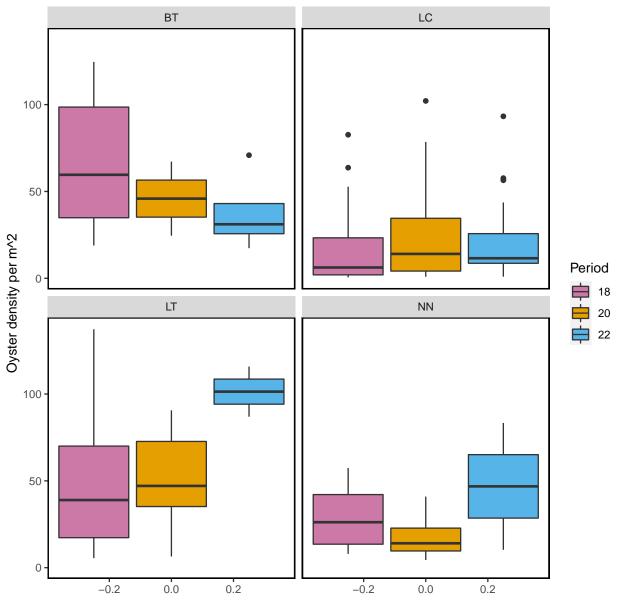


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-01-15.

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

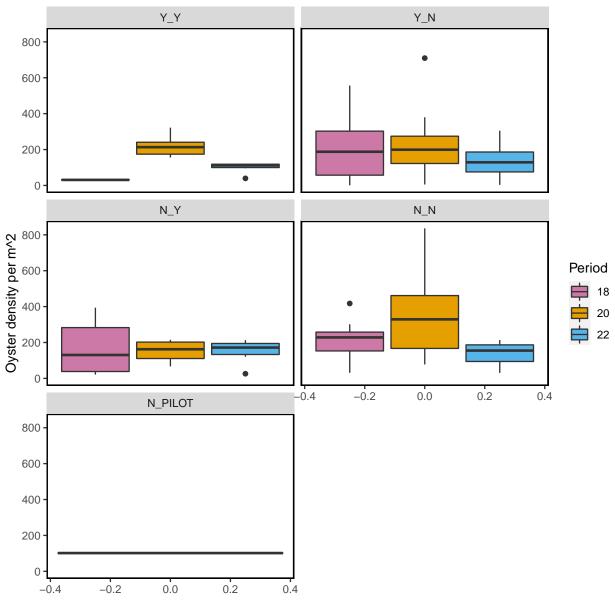


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-01-15.

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

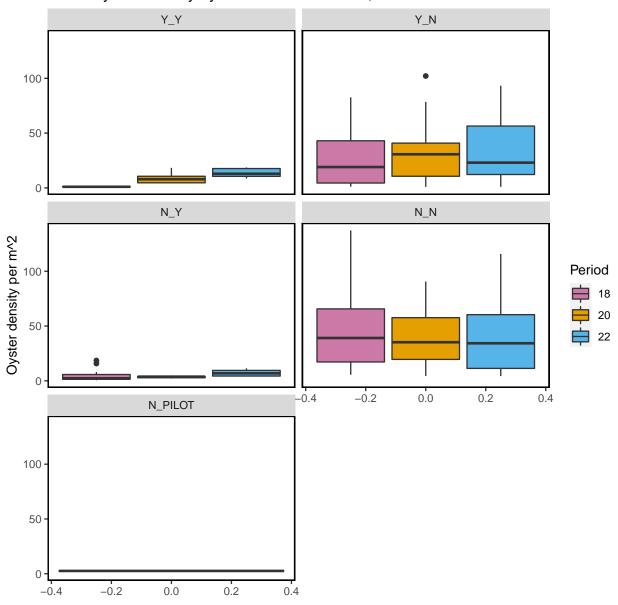


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-01-15.

The following summary plot is calculated in R using the <code>geom_density</code> (https://ggplot2.tidyverse.org/reference/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.

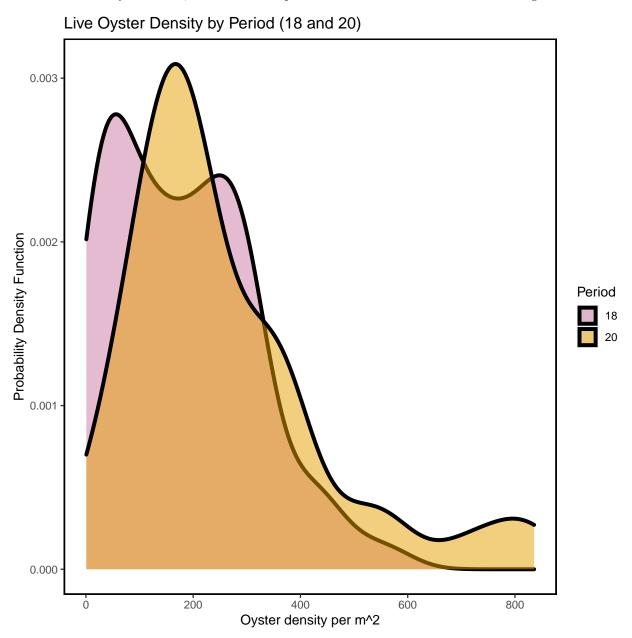


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-01-15.

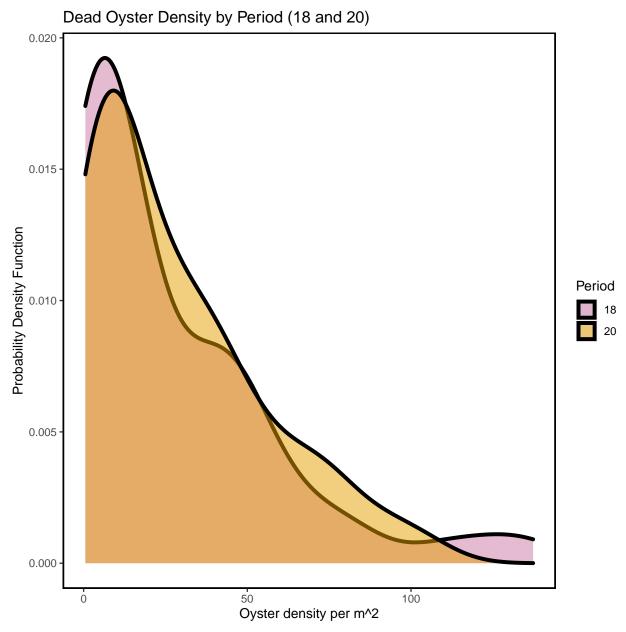


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-01-15.

Live Oyster Density by Period (20 and 22)

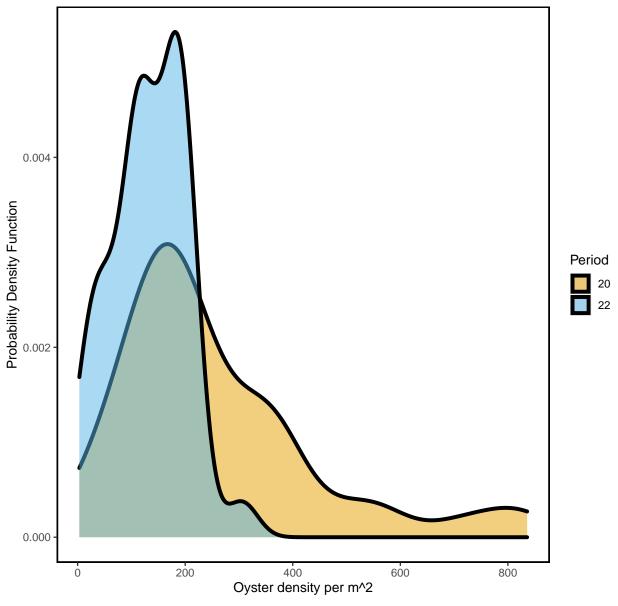


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-01-15.

Dead Oyster Density by Period (20 and 22)

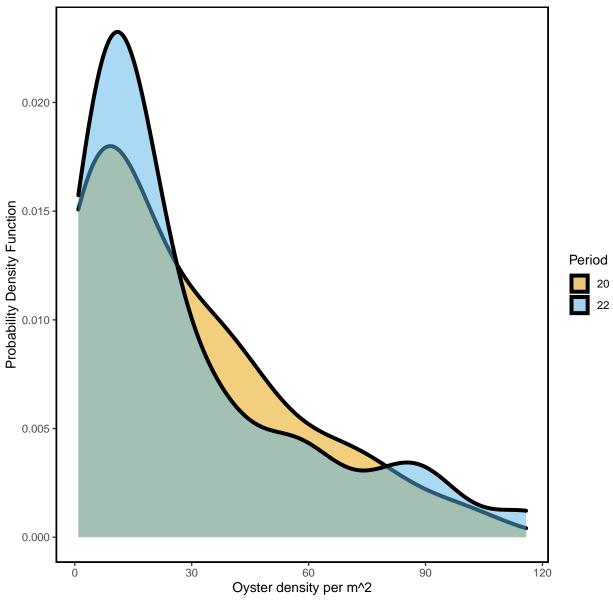


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-01-15.

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

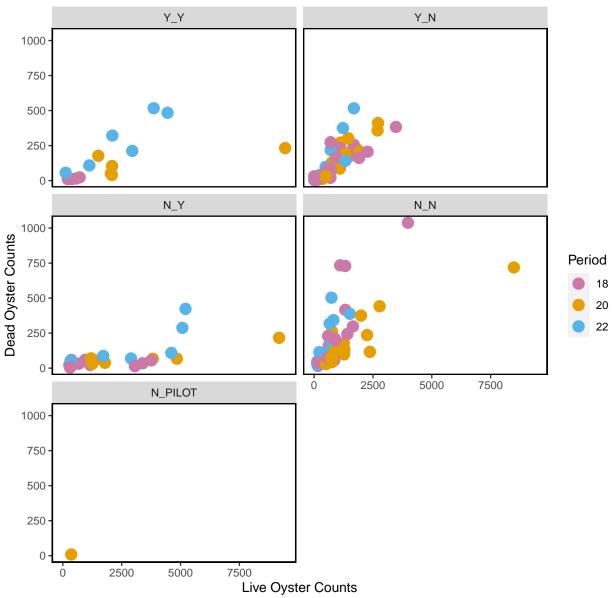


Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021), last sample date of period 22 as 2021-01-15.

Live Counts Double Pass Results

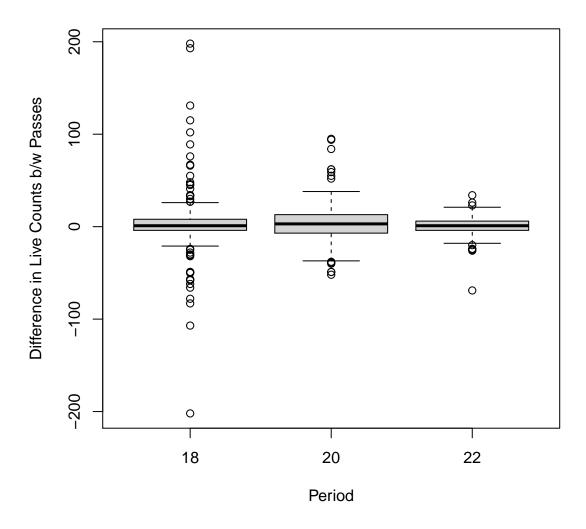


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, and 22

locality	period	CV_1	CV_2
BT	18	0.82	0.83
LC	18	1.34	1.43
NN	18	0.47	0.63
LC	20	0.83	0.80
LT	20	0.61	0.60
BT	22	0.39	0.52
LC	22	0.66	0.70
LT	22	0.47	0.43

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

Dead Counts Double Pass Results

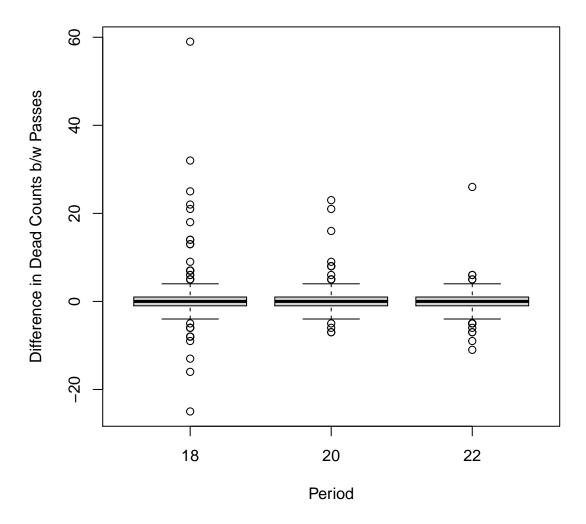


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, and 22

locality	period	CV_1	CV_2
BT	18	0.78	0.82
LC	18	2.35	2.06
NN	18	0.55	0.73
LC	20	1.93	1.62
LT	20	0.76	0.67
BT	22	0.60	0.66
LC	22	0.99	0.96
LT	22	0.79	0.74

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 2021-01-15. 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

Summary of Effort for all Periods

Effort by Locality

NN

CK

 ${\tt CR}$

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.

-								
Number of	Transects Total	L Length (m)						
	12	438						
	26	712						
	46	1330						
	10 255							
Strata								
Number of T	ransects Total	Length (m)						
		3608						
		799						
		2699						
		5163						
	15	1721						
Period								
	ansects Total I	Length (m)						
		1086						
		753						
		619						
		874						
		528						
	8	512						
	8	511						
	8	528						
	61	2632						
	35	921						
		2556						
		2469						
	O1	2 100						
ocality Num	ber of Transect	ts Total Length (m)						
CK		9 242						
CR	1	10 300						
HB	1	12 293						
LC	1	11 250						
	•	8 512						
		8 511						
		6 238						
	4	15 2128						
LT		6 182						
	Strata Number of Transport Period constitution of Transport CK CR HB LC LC LC LC LC LC LC LC LC L	Number of Transects Total 12 26 46 45 188 15 10 Strata Number of Transects Total 109 13 25 180 15 Period umber of Transects Total I 42 30 25 33 8 8 8 8 8 8 61 35 47 37 Locality and Period ocality Number of Transect CK CR HB LC						

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	4	104
22	LC	29	2268
22	LT	2	52
22	NN	2	46
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 and Period Period Strata Number of Transects Total Length (m)

eriod	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	N_N			16			442
22	N_Y			6			850
22	Y_N			9			287
22	Y_Y			6			891
3	N_N			8			147
3	Y_N			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

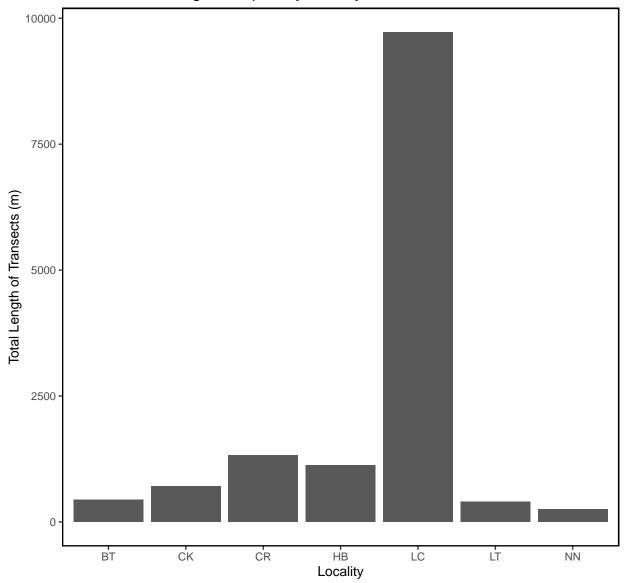


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

Total Transect Length Sampled by Strata

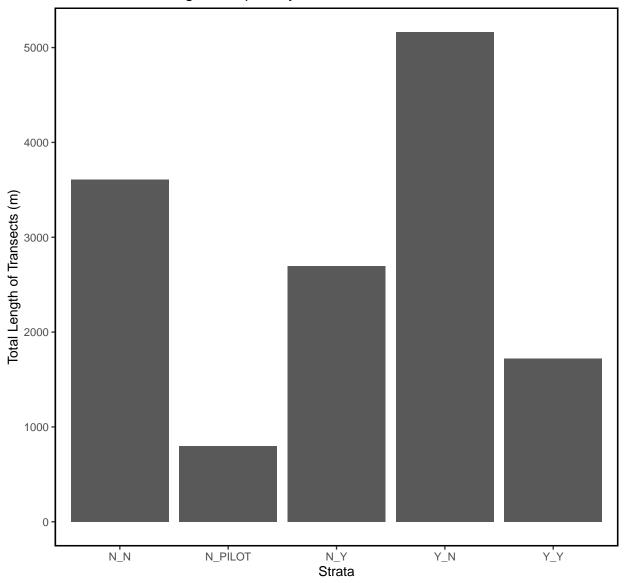


Figure – Bar plot of total transect length in meters sampled by strata for all periods.

Total Transect Length Sampled by Period

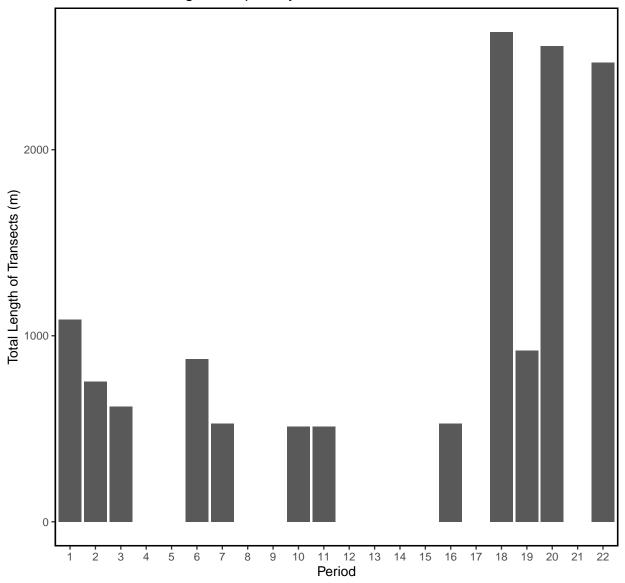


Figure – Bar plot of total transect length in meters sampled by period for all periods.

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 Oyster Co	ounts by Lo	cality						
Locality Mean	Median	SD Var	CV	SE L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT 1691	856 23	55 5547854	1.39 6	880 359	3024	1713	713	3232
CK 857	444 10	91 1190933	1.27 2	214 438	1277	867	478	1303
CR 1026	716 10	35 1072162 :	1.01 1	53 727	1325	1021	759	1325
HB 902	364 10	47 1095622	1.16 1	58 592	1211	907	598	1219
LC 1082	693 13	73 1886301	1.27 1	.01 884	1280	1080	896	1280
LT 1054	877 6	45 416505 (0.61 1	67 728	1381	1055	768	1382
NN 720	649 6	44 414522 (0.89 2	204 321	1119	726	410	1164
I i O Ca	b C+							
Live Oyster Co	•		av o	1P TOE	HOE	D-+ M	I OF D-+	HOE Datas
Strata Mean		D Var		SE L95		Bstrap_Mean		
N_N 985		3 1150831 1			1188	988	797	1208
N_PILOT 1046					1386	1046	742	1391
N_Y 2364		1 4846019 0				2333	1482	3244
Y_N 791				0 654		791	660	935
Y_Y 2242	2039 237	6 5645351 1	.06 61	1039	3444	2247	1254	3540
Live Oyster Co	ounts by Pe	riod						
Period Mean M			CV SF	T.95	1195 1	Bstrap_Mean 1	.95 Bstrap I	195 Bstran
1 1404		1657932 0.9				1400	1031	1783
2 890	476 945				1234	893	577	1233
3 738	296 817					735	435	1057
6 433	176 534				621	434	261	628
7 50	29 56) 11	90	50	18	89
10 1207	1074 671	449607 0.5	56 237	743	1672	1212	816	1638
11 886	776 678				1356	891	516	1355
16 494	366 467				817	500	202	823
18 982	695 935					981	772	1223
19 555	329 573				745	555	372	749
20 1844		4517189 1.:				1844	1291	2513
22 1344		2278098 1.:				1335	878	1847

Live Density Statistics for all Periods

7

10

11

16

18

20

5

124

90

49

177

160

2.9

22 132 126.8 68.4

113.3 67.4

79.5 67.8

36.3 46.4

85.6 171.9

5.6

31 1.12 2

154.5 130.8 17117 0.74 17 144.3 210.0

258 202.8 187.6 35185 0.73 27 204.4 311.7

Live Dens	sitv b	v Local	i t.v									
		•	•	Var	CV	SE	L95	U95	Bstrap_Mean	L95 Bstrap	U95 Bstrap)
-	Γ 257			39335					256	165	365	
CF	241	112	321	102795	1.33	63	118	365	241	139	375	1
CI	R 288	181	294	86231	1.02	43	203	373	288	210	380	1
HI	3 257	101	303	92052	1.18	46	168	347	257	175	343	ì
LO	C 155	122	150	22514	0.97	11	133	177	155	133	178	Ė
L	Γ 274	239	152	23145	0.56	39	197	351	272	204	350	ı
NI	V 215	154	234	54714	1.09	74	70	360	219	108	379	ı
		_										
Live Dens												
									strap_Mean L			
N_N	261	186		57828 1					261	212	314	
N_PILOT	111	111	60	3604 0	.54 17	7	79 14	14	112	83	144	
N_Y		138	98	9545 0	.65 20	1	12 18	39	151	117	191	
Y_N	190	117	220 4	18473 1	.16 17	7 1	58 22	23	191	156	225	
Y_Y	122	112	87	7615 0	.71 23	3 .	78 16	57	122	83	168	
Tirra Dana	.i+ h.	r Domin	a									
Live Dens		•		17	OT I	aп	т.		HOE D		110E D	
Period N			SD						U95 Bstrap_l	_	-	-
1		300.8 3										508.3
2		119.0 2										54.7
3		85.3 20										43.6
6	122	72.2 1	50.9	22769	1.24	27	68.	6 17	74.9	123	77.0 1	76.0

1.1

4536 0.54 24 76.9 170.3

4596 0.75 24 43.4 137.4

2154 0.95 16 16.9 81.2

29552 1.08 29 102.9 216.8

4683 0.52 11 110.2 154.3

8.9

5

124

90

49

177

159

258

132

1.7

83.3

51.6

20.8

144.0

102.7

207.2

110.5

174.5

137.5

82.9

210.8

211.5 310.4

154.1

9.1

Dead Count Statistics for all Periods

Dead Oyste	r Cour	nts by	y Loc	ality										
Locality	Mean N	Media	n SD	Va	ır	CV	SE	L9	5 U	J95	Bstrap_Me	ean L95_l	Bstrap	U95_Bstrap
BT	325	169	328	10731	.2 1	.01	94.6	139.	6 5	510	;	329	171	519
CK	78	33	2 106	1117	0 1	.36	37.4	4.	3 1	.51		76	17	159
CR	60	4	7 38	144	4 0	.63	12.7	35.	2	85		60	40	85
HB	44	2:	1 45	200	0 1	.02	14.9	14.	8	73		43	19	71
LC	106	66	3 115	1324	10 1	.09	9.5	87.	1 1	.24		105	87	124
LT	240	210	202	4085	0 0	.84	52.2	137.	2 3	342		240	149	344
NN	100	68	3 100	1001	.8 1	.00	31.7	38.	1 1	.62	:	100	51	164
D 10 1	a		α.											
Dead Oyste		•	,		a.		T 0 F	1105	D+		. M TOI	- D-+	HOE D	- +
Strata M				Var					BST	rap	Mean L9		095_B	
_	154			37509							153	110		198
N_PILOT	82	87		2136				108			83	61		107
N_Y	79	55		9095				116			79	47		118
_	104			13358				130			104	79		129
Y_Y	157	104	168	28145	1.0	7 43	13	242			157	79		246
Dead Oyste	r Cour	nts by	y Per	iod										
Period Me	an Med	dian .	SD	Var	CV	S	E I	_95 U	195	Bst	rap_Mean	L95_Bst	rap U9	5_Bstrap
7	29	18	30	898 1	.03	10.	6 8	3.2	50		29		12	48
10	80	88	65	4245 (.82	23.	0 34	1.5 1	.25		80		40	121
11	50	40	25	620 (.49	8.	8 33	3.2	68		51		35	69
16	44	28	41	1708 (.93	14.	6 15	5.6	73		45		20	72
18 1	33	55	192 3	6903 1	.44	24.	6 8	5.1 1	.82		133		91	183
19	63	44	67	4548 1	.08	11.	6 40	0.0	85		63		41	86
20 1	48	107	140 1	9727	.95	20.	5 107	7.6 1	.88		148	:	113	190
22 1	85	108	162 2	6173 (.87	26.	6 133	3.1 2	237		185		139	237

Dead Density Statistics for all Periods

Dead Oyster Density by Locality											
Localit	y Mean	Media	an SD	Var	CV	SE	L95	U95 1	Bstrap_Mean	L95_Bstrap U	195_Bstrap
E	3T 54	42.	3 35	1250	0.66	10.2	33.6	74	54	35.3	73
C	CK 21	11.	3 28	757	1.29	9.7	2.3	40	22	6.4	43
C	CR 20	13.	8 15	235	0.77	5.1	10.0	30	20	12.0	30
H	IB 13	8.	0 14	201	1.12	4.7	3.4	22	13	4.9	23
I	LC 17	8.	6 20	420	1.21	1.7	13.6	20	17	13.8	20
I	T 58	47.	1 40	1570	0.68	10.2	38.2	78	58	40.1	78
I.	IN 28	16.	1 26	668	0.91	8.2	12.5	45	29	15.0	45
Dead Oys	ter Do	.ai+	hrr Ct								
•	i Mean 1	•	•) Var	c CV	Q.E.	. 105	IIQE	Bstrap_Mean	IOE Retran	IIQE Ratran
	1 32.6				1.00				32.4		39.6
N PILOT					0.53				8.5		11.2
_	5.2				0.87				5.1		6.9
_	1 23.3								23.3		28.5
_	8.8		6.6		0.75				8.9		12.1
	0.0	0.0		, 10		1	0.0		0.0	0.1	12.1
Dead Oys	ster De	nsity	by Pe	eriod							
Period	Mean Me	edian	SD	Var	c CV	SE	L9	5 U	95 Bstrap_Me	an L95_Bstra	p U95_Bstrap
7	2.9	1.8	3.0	8.9	1.03	1.05	0.8	2 4	.9 2	.9 1.	1 5.1
10	8.2	8.9	6.6	44.0	0.81	2.35	3.5	8 12	.8 8	.2 4.	1 12.9
11	5.2	4.1	2.6	6.6	0.49	0.91	3.4	1 7	.0 5	.2 3.	6 6.9
16	4.4	2.8	4.1	16.9	0.93	1.45	1.5	5 7	.2 4	.4 2.	0 7.3
18	26.4	15.7	31.3	980.1	1.19	4.01	18.5	4 34	.3 26	.6 19.	2 34.5
19	18.1	13.1	19.3	370.6	3 1.07	3.30	11.5	9 24	.5 18	.0 12.	1 25.2
20	27.9	18.4	26.4	697.6	0.95	3.85	20.3	8 35	.5 28	.0 20.	5 35.0
22	28.9	15.0	29.4	862.1	1.02	4.83	19.4	0 38	.3 28	.8 19.	8 38.6

Summary Density Plots for all Periods

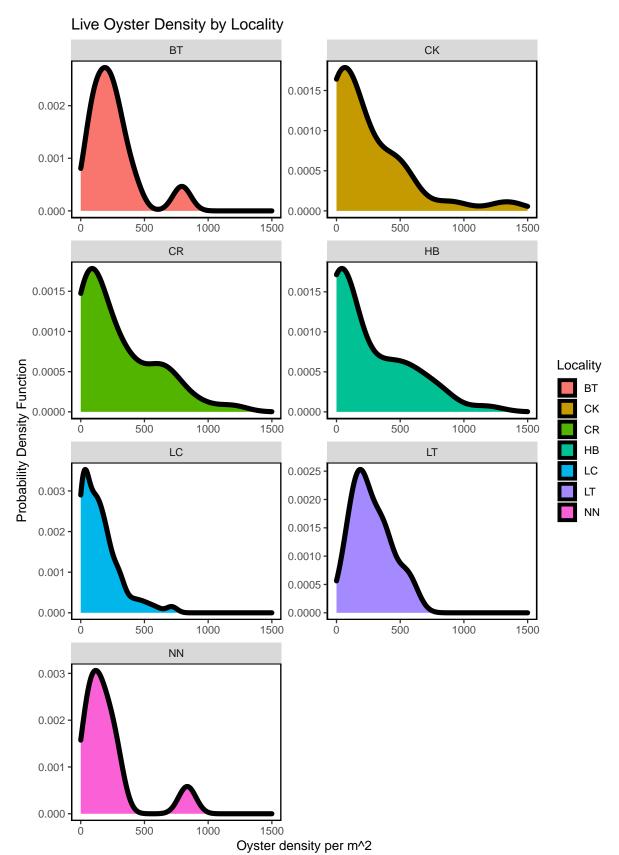


Figure – Calculated live oyster density by locality for all periods including period 22 (current period).

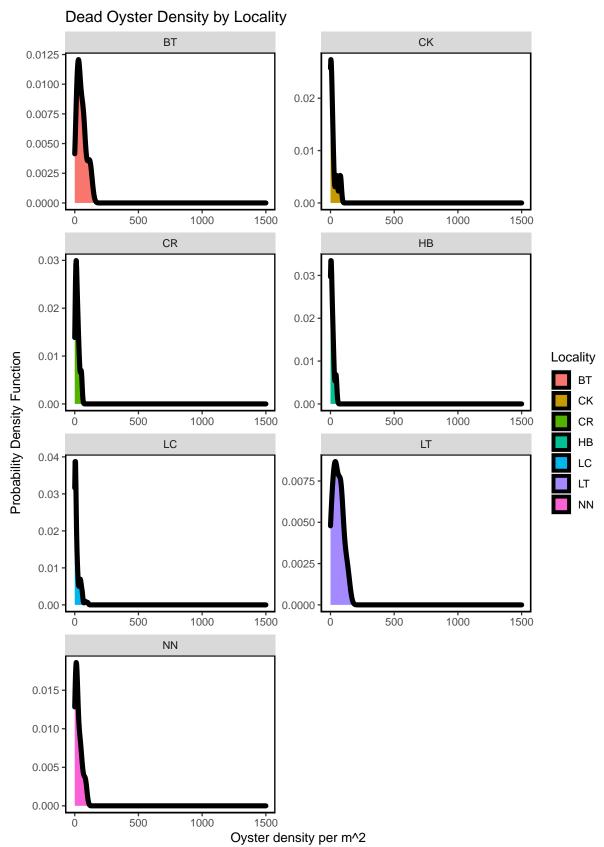


Figure – Calculated dead oyster density by locality for all periods including period 22 (current period).

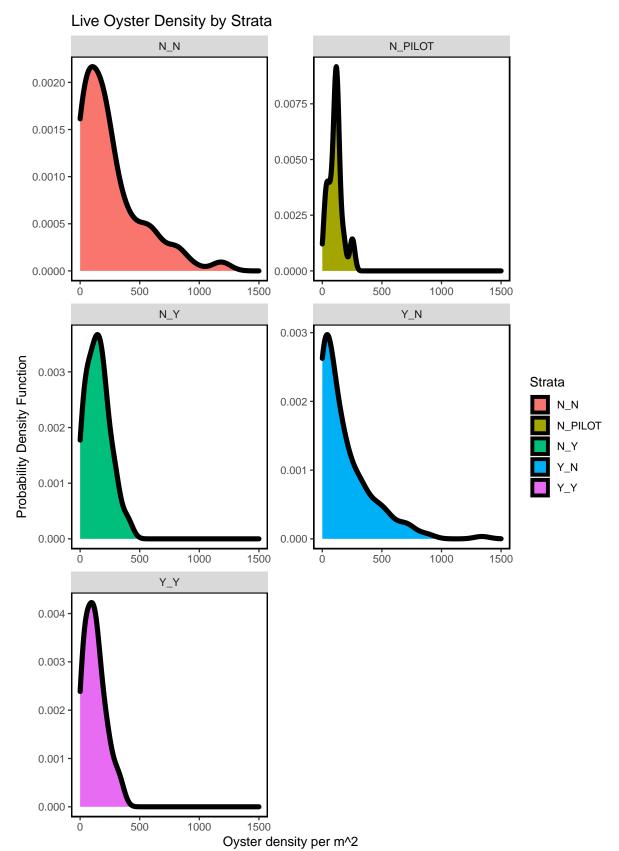


Figure – Calculated live oyster density by strata for all periods including period 22 (current period).

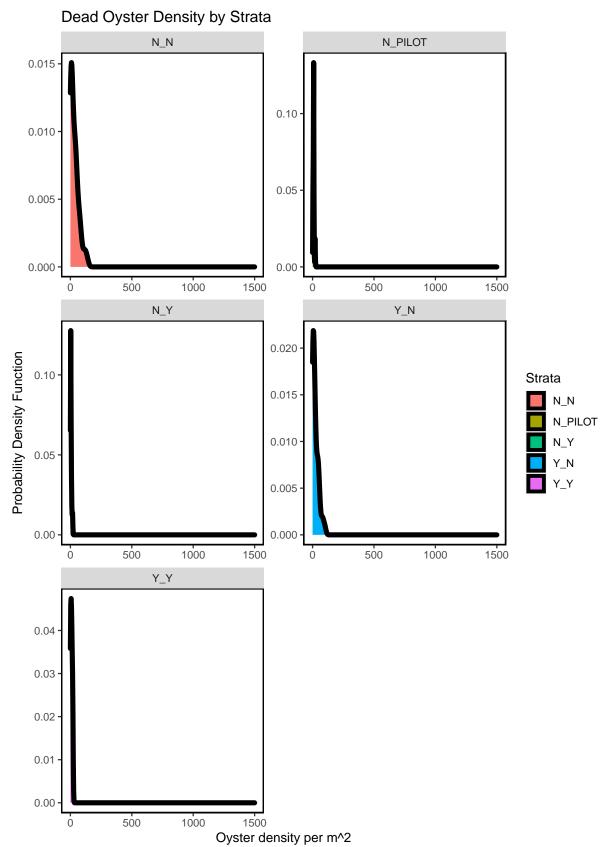


Figure – Calculated dead oyster density by strata for all periods including period 22 (current period).

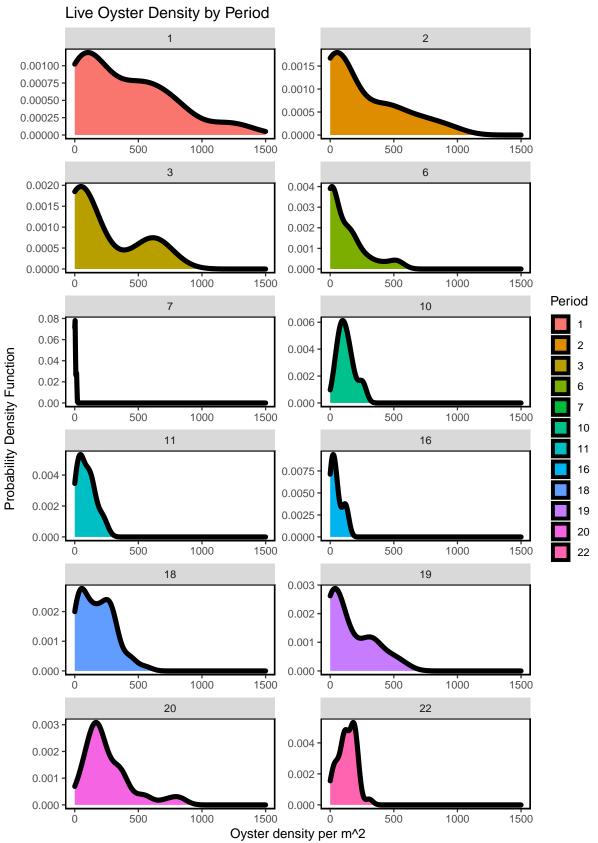


Figure - Calculated live oyster density for all periods including period 22 (current period) using a probability densit

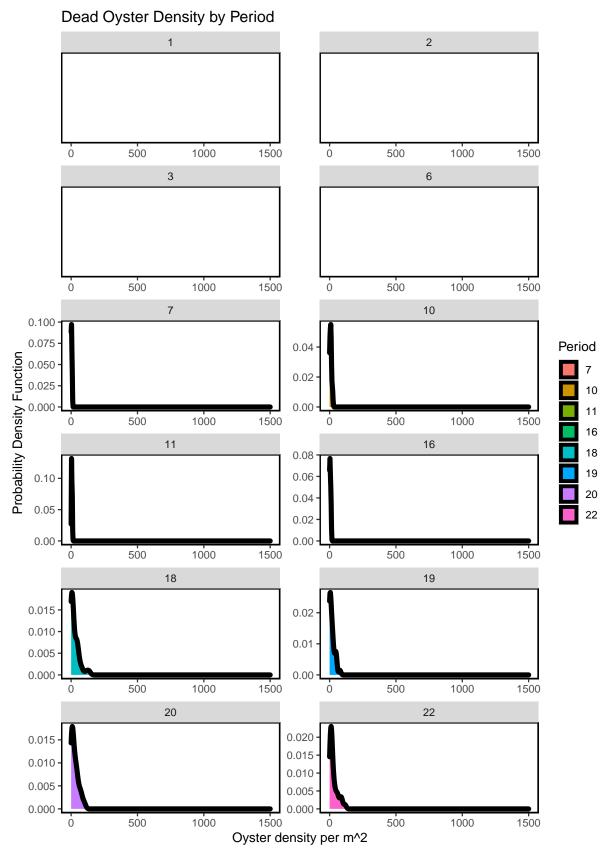


Figure – Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

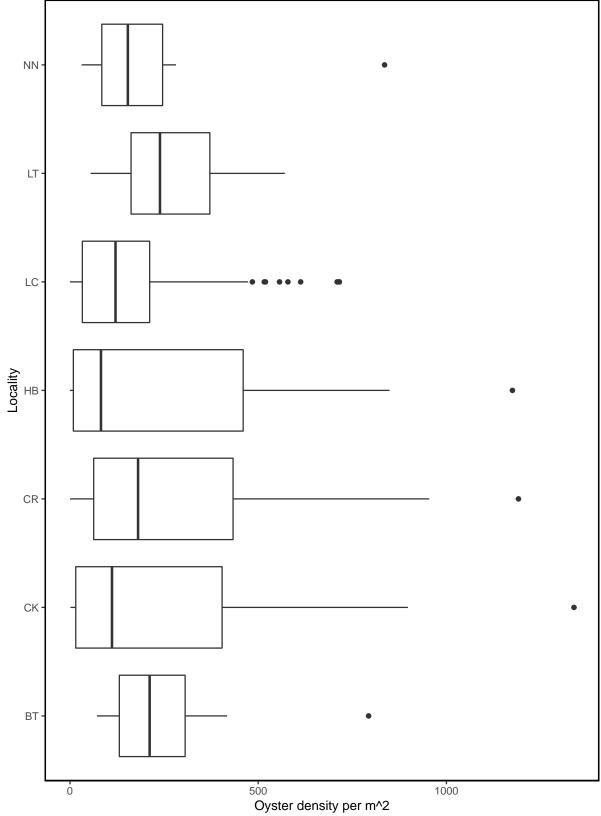


Figure – Box plot depicting live oyster density by locality for all periods including period 22 (current period).

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).

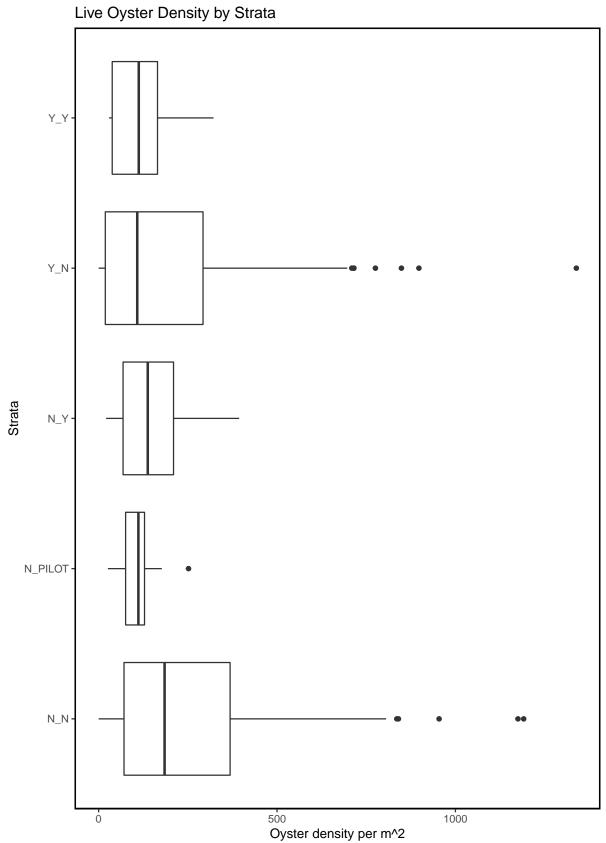


Figure – Box plot depicting live oyster density by strata for all periods including period 22 (current period).

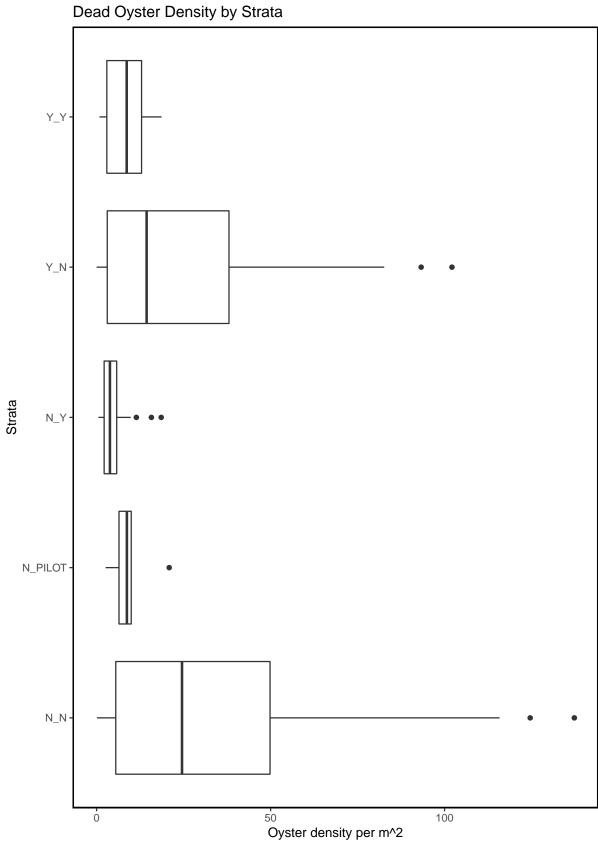


Figure – Box plot depicting dead oyster density by strata for all periods including period 22 (current period).

Live Oyster Density by Period

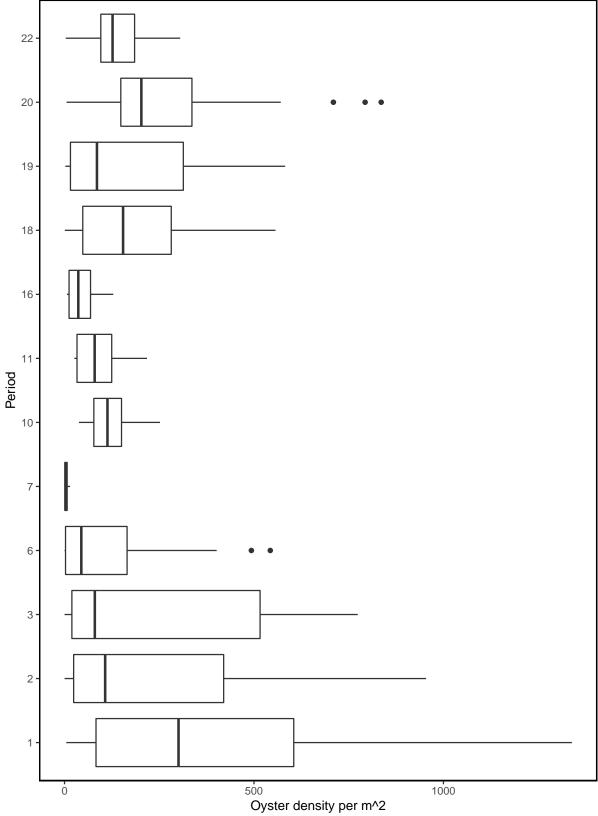


Figure – Box plot depicting live oyster density by period for all periods including period 22 (current period).

Dead Oyster Density by Period Period

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

Oyster density per m^2

Live Oyster Density by Locality and Period

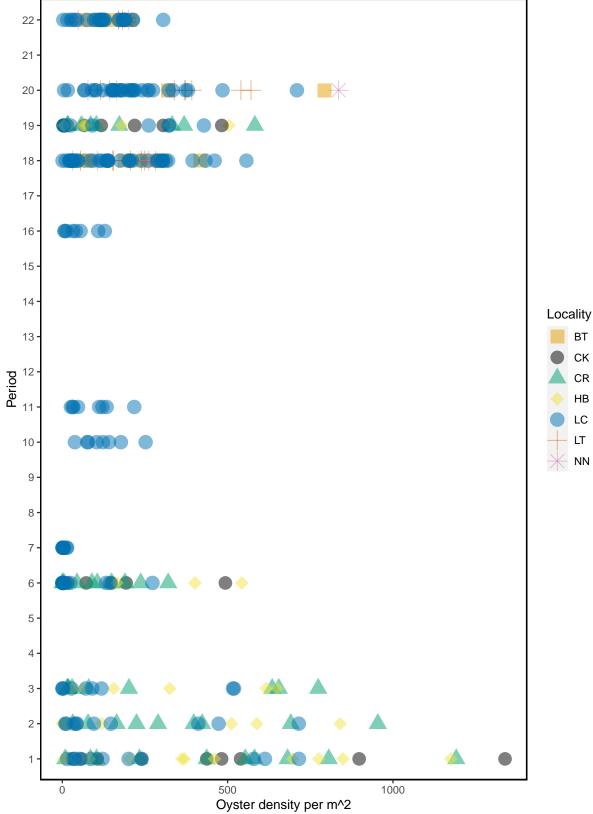


Figure – Live oyster density by locality and period for all periods including period 22 (current period).

Dead Oyster Density by Locality and Period

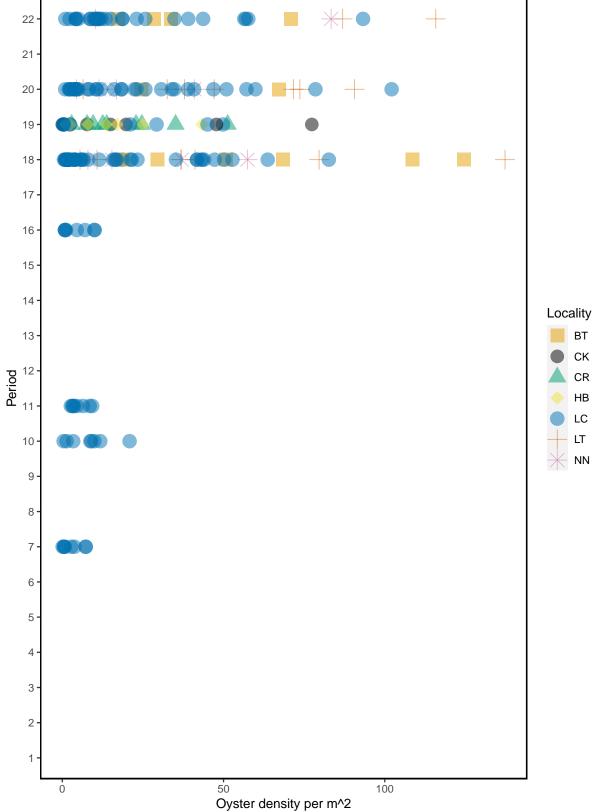


Figure – Dead oyster density by locality and period for all periods including period 22 (current period).

Live Oyster Density by Strata and Period

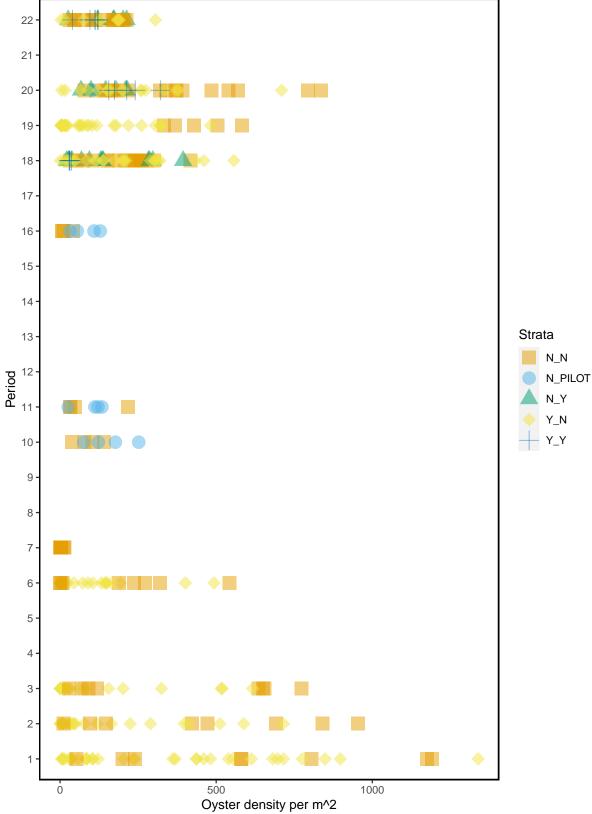


Figure – Live oyster density by strata and period for all periods including period 22 (current period).

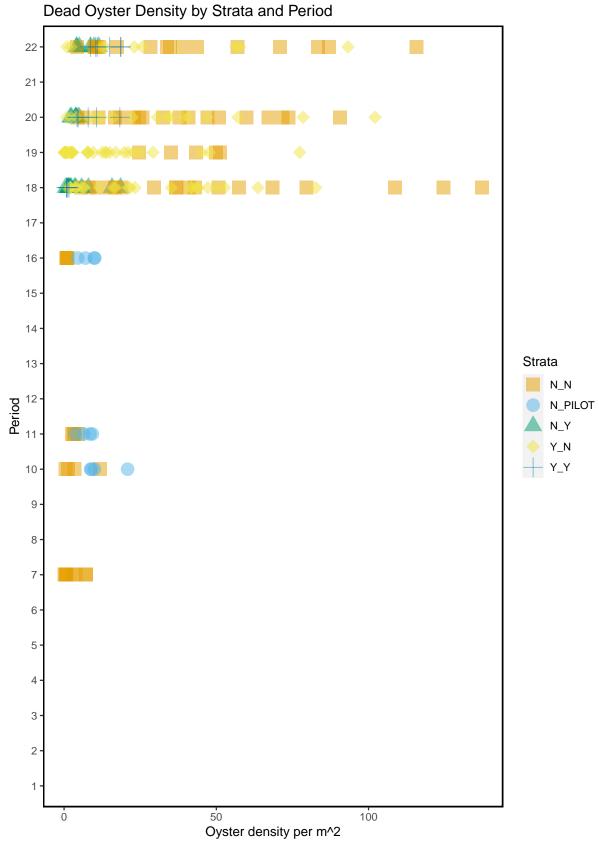


Figure – Dead oyster density by strata and period for all periods including period 22 (current period).

Live and Dead Count Comparison For All Periods

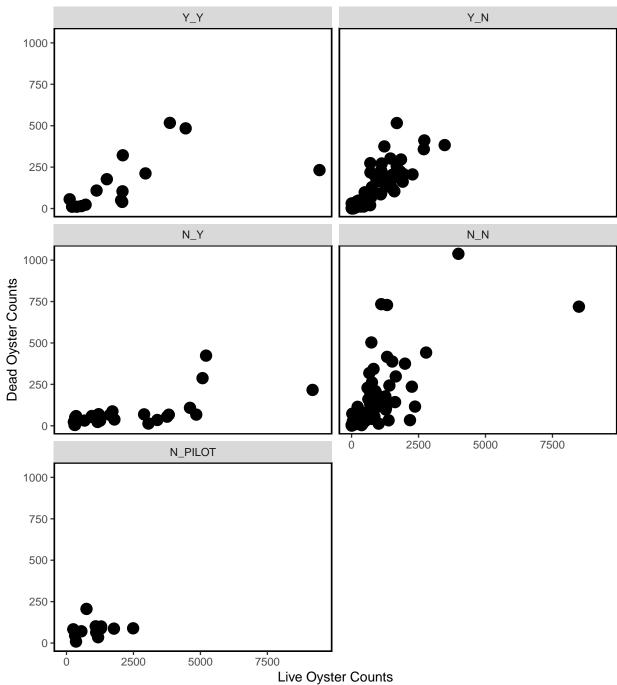


Figure- Live and dead oyster comparison for all periods, last sample date of period 22 is 2021-01-15.

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

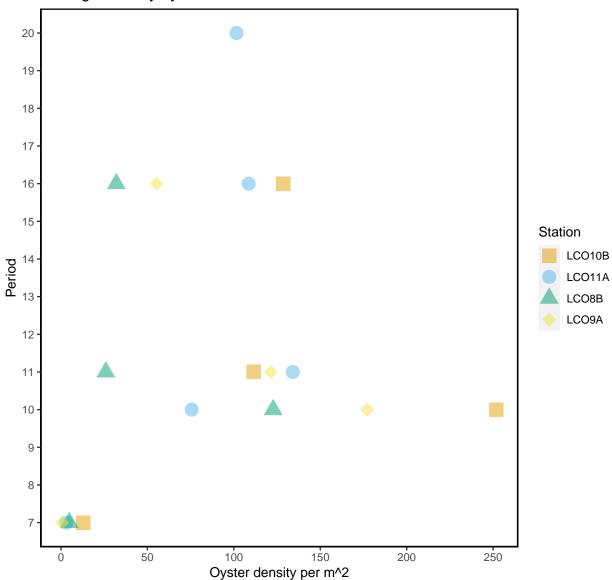


Figure - Average live oyster density comparison by station and period for all stations that were sampled during the pilc

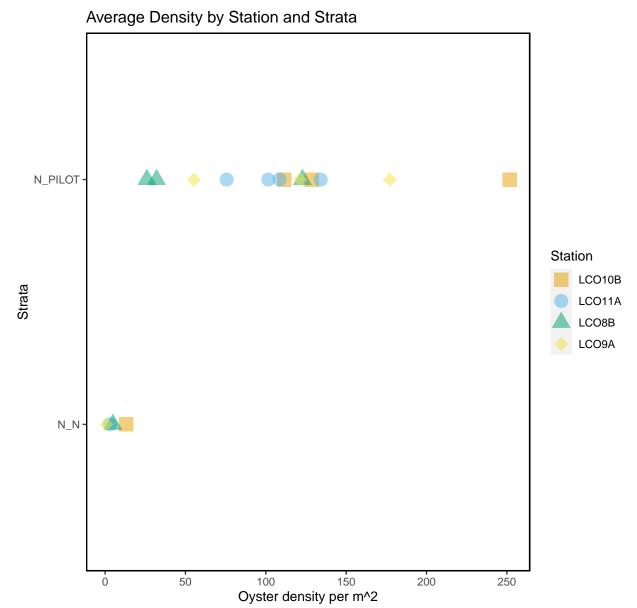


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

Latest Data Entered

Displayed are the entries for the last date of sampling (2021-01-15).

strata	${\tt treatment}$	count_dead	count_live	tran_length	${\tt station}$	date
N_N	control	13	171	2.5	LCI38	2021-01-15
N_N	control	0	0	5.0	LCI38	2021-01-15
N_N	control	0	0	7.5	LCI38	2021-01-15
N_N	control	43	114	10.0	LCI38	2021-01-15
N_N	control	14	107	12.5	LCI38	2021-01-15
N_N	control	9	45	14.9	LCI38	2021-01-15
N_N	control	13	92	2.5	LCI39	2021-01-15
N_N	control	1	110	5.0	LCI39	2021-01-15
N_N	control	3	14	7.5	LCI39	2021-01-15
N_N	control	1	24	10.0	LCI39	2021-01-15
N_N	control	1	44	12.5	LCI39	2021-01-15
N_N	control	1	4	15.0	LCI39	2021-01-15
N_N	control	5	49	17.5	LCI39	2021-01-15
N N	control	2	44	19.8	LCI39	2021-01-15