## 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 4 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, 97 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

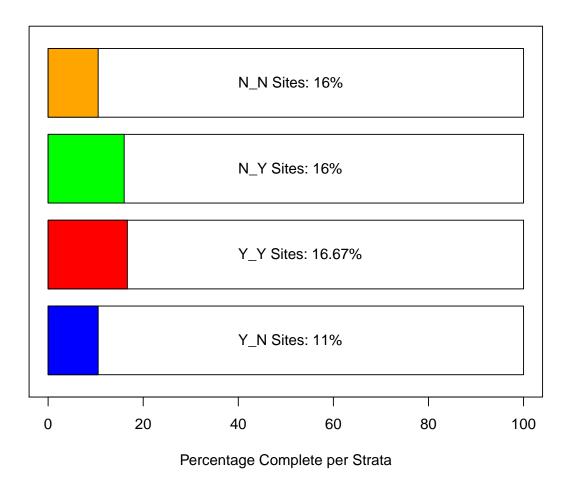
#### **Definition of Strata**

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 20 and 22

These summary tables provide summary statistics on live counts and oyster densities for just periods 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 Y 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 20 and 22

Live Oyster Counts b	y Locality				
Locality Mean Media	n SD Vai	r CV SE	L95 U95 Bstr	ap_Mean L95_Bstra	U95_Bstrap
BT 3368 127	5 4457 1986771	7 1.32 2573 -	1676 8412	3360 343	8487
LC 1854 127	3 2017 4066485	2 1.09 319	1229 2479	1847 1318	3 2539
LT 1191 87	7 737 542939	9 0.62 246	709 1672	1195 798	1725
NN 1030 76	7 757 57233	7 0.73 338	367 1693	1036 614	1720
Live Oyster Counts h	y Strata				
Strata Mean Mediar	SD Var	CV SE L9	5 U95 Bstrap_l	Mean L95_Bstrap U	95_Bstrap
N_N 1473 878	1696 2875596	1.15 362 76	5 2182	1456 929	2282
N_PILOT 356 356	NA NA	NA NA N	A NA	181 9	345
N_Y 3338 2344	2695 7265438 (	0.81 953 147	0 5206	3314 1822	5319
Y_N 971 769	779 607464 (	0.80 179 62	1 1322	968 662	1315
Y_Y 3173 2091	2798 7827570	0.88 1057 110	1 5246	3167 1913	5365
Live Oyster Counts b	y Period				
Period Mean Median	SD Var	CV SE L95	U95 Bstrap_Mea	an L95_Bstrap U95	Bstrap
20 1844 1253	2125 4517189 1	.15 310 1236	2451 18	52 1351	2521
22 1348 758	991 981586 0	.74 313 733	1962 134	16 791	1980
Live Density by Loca	lity				
Locality Mean Media	•	CV SE L95	U95 Bstrap Mea	an L95_Bstrap U95	Bstrap
· ·	9 367 134449 0			94 72	793
	4 127 16139 0			00 163	240
	0 159 25324 0			38 240	431
	4 312 97564 1			35 113	568
Live Density by Stra	.ta				
Strata Mean Mediar	SD Var C	V SE L95 U95	Bstrap_Mean L9	5_Bstrap U95_Bstra	ъp
N_N 312 204	217 47295 0.70	0 46 221 403	312	230 40	)9
N_PILOT 102 102	NA NA NA	A NA NA NA	50	3 9	9
N_Y 157 172	52 2667 0.33	3 18 122 193	157	122 18	39
Y_N 215 190	161 25866 0.7	5 37 143 287	214	145 28	38

145

193

246

174 72 5241 0.38 27 139 246

#### Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mea	n L95	_Bstrap	U95_	Bstrap
20	258	203	188	35185	0.73	27	204	312	25	9	211		313
22	153	170	38	1472	0.25	12	129	176	15	3	131		173

#### Summary of Dead Counts for Periods 20 and 22

Dead Oyster Counts by Locality	105 D
Locality Mean Median SD Var CV SE L95 U95 Bstrap_Med	
	05 83 719 34 102 168
	34 102 168 34 127 346
	22 51 233
NN 125 74 120 13079 1.01 50 14 255 1.	22 51 255
Dead Oyster Counts by Strata	
Strata Mean Median SD Var CV SE L95 U95 Bstrap_Mean L9	95_Bstrap U95_Bstrap
N_N 207 128 177 31426 0.86 38 133 281 207.0	137 287
N_PILOT 9 9 NA NA NA NA NA 5.1	1 9
N_Y 81 68 58 3341 0.72 20 41 121 81.4	51 126
Y_N 142 86 124 15379 0.88 28 86 197 142.4	92 199
Y_Y 162 177 103 10643 0.64 39 86 239 161.1	95 234
Dead Oyster Counts by Period	
Period Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95	5 Bstran II95 Bstran
20 148 107 140 19727 0.95 20 108 188 147	110 186
22 209 150 154 23677 0.73 49 114 305 207	126 300
22 200 100 104 20011 0.10 40 114 000 201	120 000
Dead Oyster Density by Locality	
Locality Mean Median SD Var CV SE L95 U95 Bstrap_Mean	1.95 Bstrap U95 Bstrap
BT 36 25 27 727 0.74 15.6 5.9 67 36	17.3 67
LC 22 14 23 526 1.06 3.6 14.6 29 22	15.3 29
LT 63 72 34 1166 0.55 11.4 40.2 85 62	
NN 31 17 32 1034 1.03 14.4 3.2 60 31	9.7 58
Dead Oyster Density by Strata	
Strata Mean Median SD Var CV SE L95 U95 Bstrap_Me	ean L95_Bstrap U95_Bstrap
N_N 45.8 39.4 31.3 982.6 0.69 6.68 32.7 58.9 48	5.8 32.6 58.5
N_PILOT 2.6 2.6 NA NA NA NA NA NA	1.5 1.0 2.0
N_Y 4.2 3.9 2.0 4.1 0.48 0.71 2.8 5.6	4.2 3.0 5.6
Y_N 30.6 23.0 26.6 707.2 0.87 6.10 18.6 42.5 30	0.7 20.0 42.8
Y_Y 10.4 8.6 5.9 35.2 0.57 2.24 6.0 14.8 10	0.3 6.5 14.4
-	
Dead Oyster Density by Period	- D
Period Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95	
20 28 18 26 698 0.95 3.9 20 35 28	20 36
22 38 18 41 1648 1.06 12.8 13 64 38	16 63

#### Summary Plots for Periods 20 and 22

#### Live Oyster Density by Locality for Periods 20 and 22

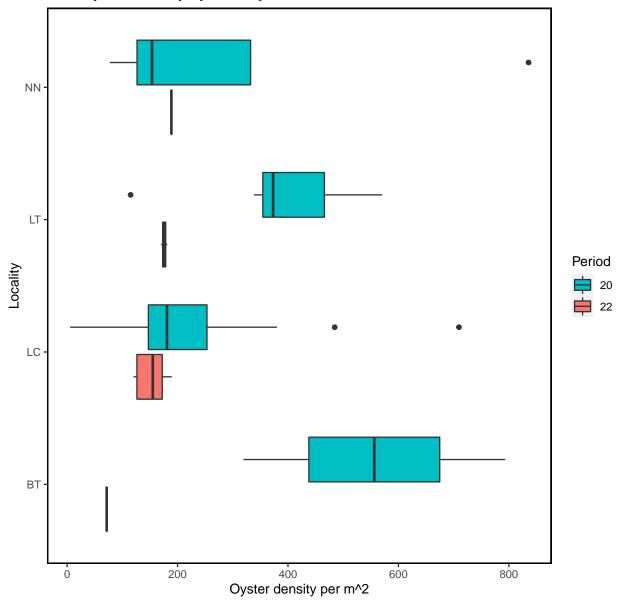


Figure- Calculated live oyster density by locality for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-11-18.

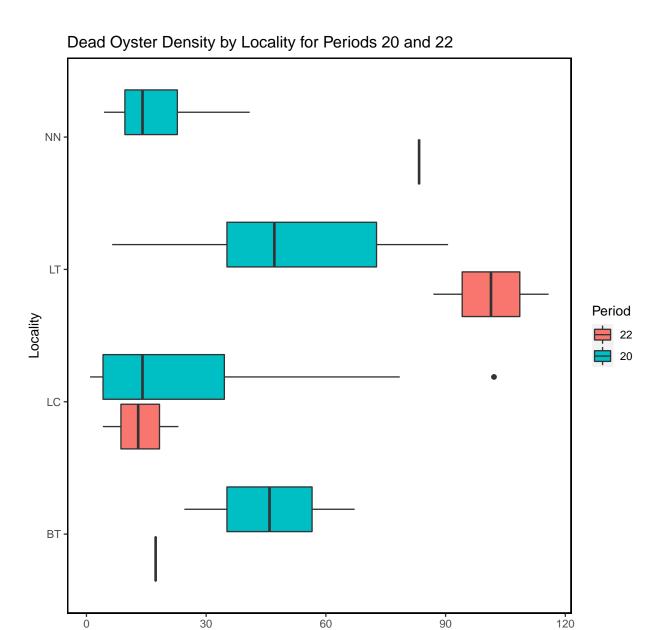


Figure- Calculated dead oyster density by locality for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-11-18.

Oyster density per m^2



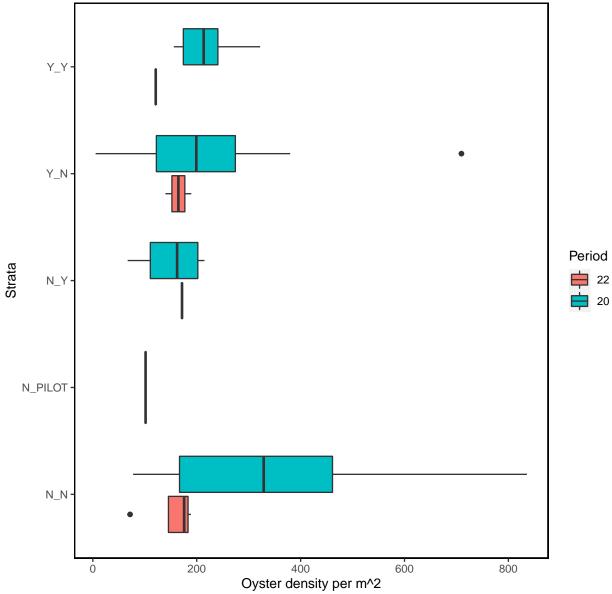


Figure- Calculated live oyster density by strata for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-11-18.

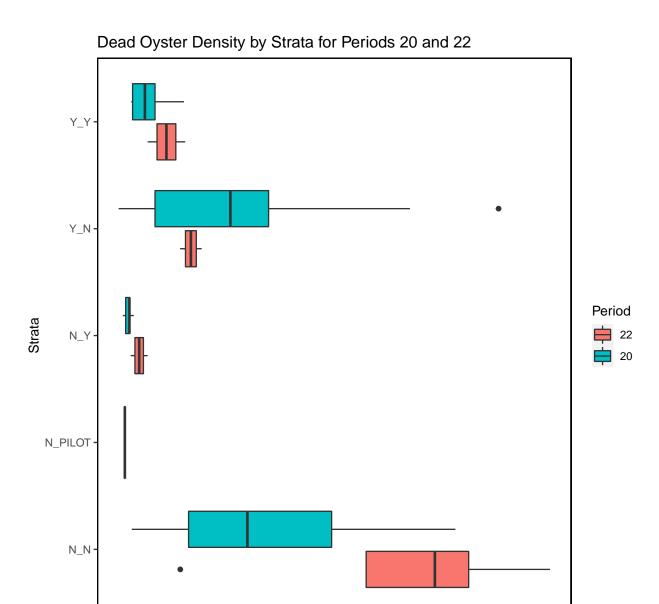


Figure- Calculated dead oyster density by strata for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-11-18.

Oyster density per m^2

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.

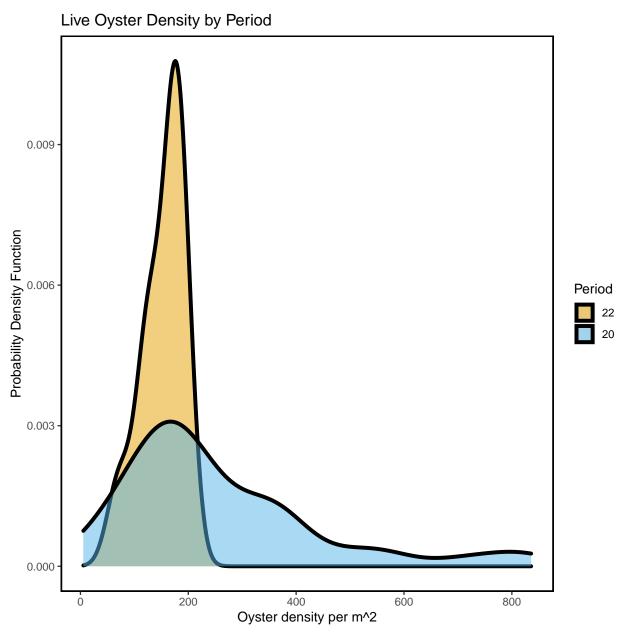


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2020-11-18.

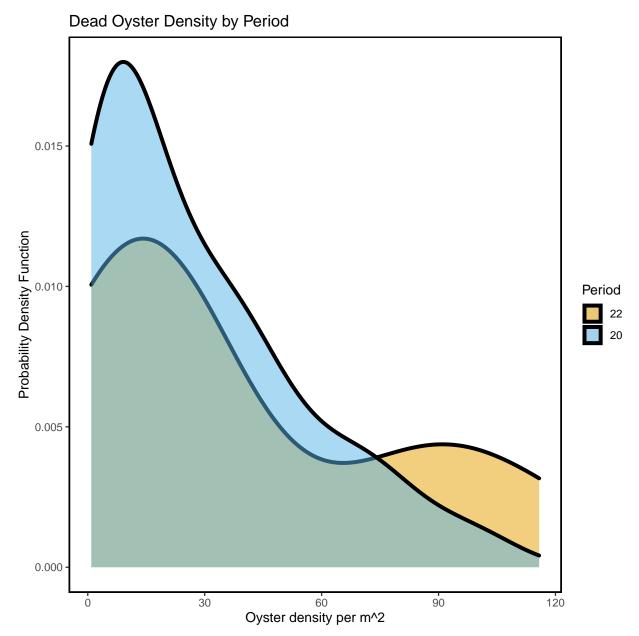


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2020-11-18.

## Sampling for all Periods

Next, we provide summary tables and plots for all transect sampling. These data were collected between 2010-05-27 and 2020-11-18. 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

Locality Number of Transects Total Length (m)

Effort by Locality

LT

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.

BT		9	366					
CK		26	712					
CR		46	1330					
HB		45	1129					
LC		165	7956					
LT		15	406					
NN		9	237					
Efft b	Charata							
Effort by		Tuesday Takal	I					
	Number or	Transects Total	3277					
N_N		97						
N_PILOT		13	799					
N_Y		21 173	2026					
Y_N			4929					
Y_Y		11	1104					
Effort by	Period							
Period N	umber of T	ransects Total L	ength (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		10	614					
Deft l	T 1 - +	and David						
		and Period	- T-+-] [					
Period L	CK CK		s Total Length (m) 9 242					
1								
	CR	1						
1	HB	1						
1	LC	1						
10	LC		8 512					
11	LC		8 511					
16	LC		8 528					
18	BT		6 238					
18	LC	4	5 2128					

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	1	31
22	LC	6	503
22	LT	2	52
22	NN	1	27
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

ETIOL !	by burate	a and re	STIC	Ju			
Period	Strata	${\tt Number}$	of	${\tt Transects}$	${\tt Total}$	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			4			111
22	N_Y			2			176
22	Y_N			2			52
22	Y_Y			2			274
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

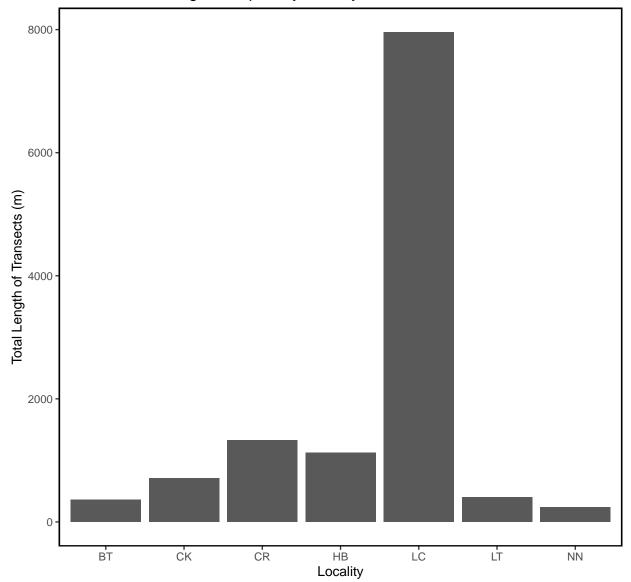


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

## Total Transect Length Sampled by Strata

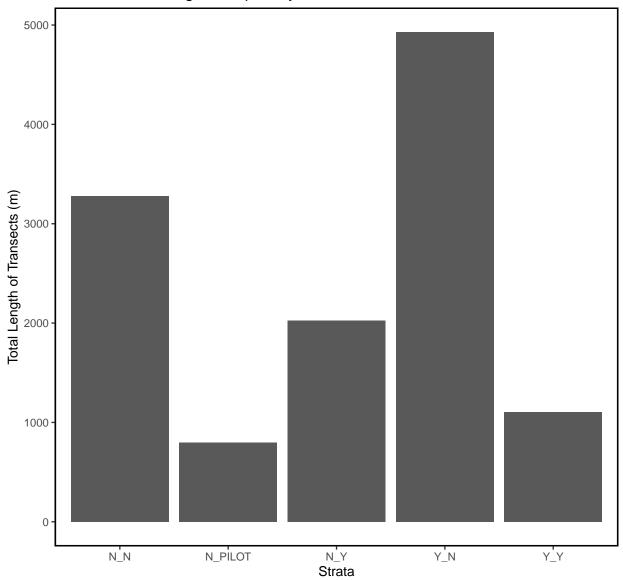


Figure – Bar plot of total transect length in meters sampled by strata for all periods.

## Total Transect Length Sampled by Period

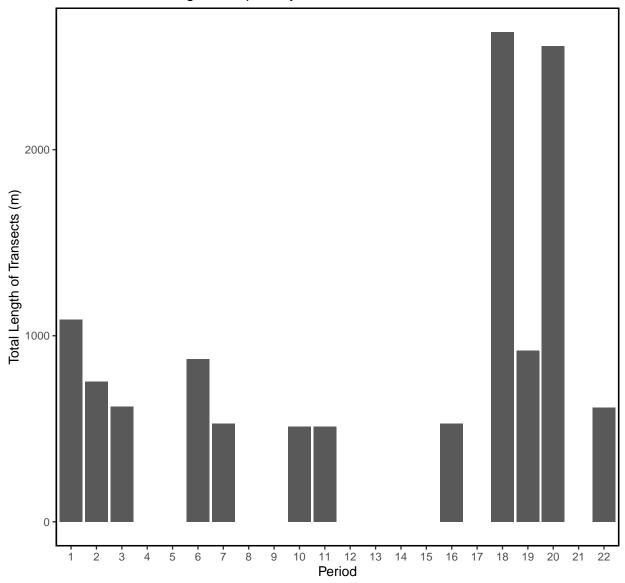


Figure – Bar plot of total transect length in meters sampled by period for all periods.

#### 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	unts by Lo	cality						
Locality Mean	Median	SD Var	CV	SE L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT 2096	1108 26	21 6871801 1	.25 8	74 384	3809	2122	863	3917
CK 857	444 10	91 1190933 1	27 2	14 438	1277	851	461	1316
CR 1026	716 10	35 1072162 1	.01 1	53 727	1325	1028	737	1358
HB 902	364 10	47 1095622 1	16 1	58 592	1211	903	614	1224
LC 1022	684 13	04 1699466 1	28 1	02 822	1223	1025	820	1243
LT 1054	877 6	45 416505 0	61 1	67 728	1381	1050	775	1406
NN 780	727 6	47 418779 0	83 2	16 357	1203	771	456	1193
Live Oyster Co	•							
Strata Mean						Bstrap_Mean		
N_N 1042		3 1249152 1.:			1266	1040	846	1275
N_PILOT 1046					1386	1042	729	1380
N_Y 2089		2 4502453 1.0			2997	2097	1294	3041
Y_N 793	436 93	876585 1.2	2 72	653	934	792	665	938
Y_Y 2189	2039 256	4 6575741 1.2	2 773	673	3704	2201	1043	3856
Live Oyster Co	unta bu Do	riod						
•	•		ı er	TOE	IIOE I	Datasa Masa	TOF D-+	IIOE D-+
Period Mean M						Bstrap_Mean		
1 1404		1657932 0.92				1405	1039	1794
2 890	476 945	893727 1.06			1234	880	561	1219
3 738	296 817	668064 1.13			1065	733	435	1066
6 433	176 534	284791 1.23			621	432	248	626
7 50	29 56	3186 1.12			90	51	18	88
10 1207	1074 671	449607 0.56			1672	1203	799	1656
11 886	776 678	459708 0.77	240	416	1356	880	472	1330
16 494	366 467	217855 0.9	165	170	817	490	212	802
18 982	695 935	874733 0.9	5 120	748	1217	983	767	1243
19 555	329 573	328431 1.03	3 97	365	745	556	374	738
20 1844	1253 2125	4517189 1.19	310	1236	2451	1844	1273	2503
22 1348	758 991	981586 0.74	1 313	733	1962	1347	827	1929

#### Live Density Statistics for all Periods

Live Dens:	ity by	/ Local	ity								
Locality	Mean	Median	SD	Var	. C1	I SI	E L95	5 U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	293	256	218	47695	0.74	1 73	3 151	436	291	175	427
CK	241	112	321	102795	1.33	63	3 118	365	242	139	368
CR	288	181	294	86231	1.02	2 43	3 203	373	287	207	367
HB	257	101	303	92052	1.18	3 46	3 168	347	260	170	353
LC	160	122	157	24735	0.99	12	2 135	5 184	160	137	184
LT	274	239	152	23145	0.56	39	9 197	351	274	203	349
NN	232	164	240	57801	1.04	1 80	75	389	231	121	398
Live Dens:	ity by	y Strat	a								
Strata 1	Mean N	ledian	SD	Var	CV S	SE I	L95 (	J95 E	strap_Mean L	95_Bstrap U	95_Bstrap
N_N	277	195	271	73454 0	.98 2	28 2	223 3	331	277	225	333
N_PILOT	111	111	60	3604 0	.54	.7	79 1	L <b>44</b>	111	81	143
N_Y	152	138	101	10301 0	.67 2	22 :	109 1	196	152	112	196
Y_N	193	114	223	49898 1	.16	17 :	159 2	226	193	160	228
Y_Y	134	122	99	9727 0	.74 3	30	76	192	135	83	192

Live	Density	by	Period
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	J	J									
Period	${\tt Mean}$	${\tt Median}$	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	396.8	291.8	514.1
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	253.3	160.4	362.4
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	234.1	133.3	345.7
6	122	72.2	150.9	22769	1.24	27	68.6	174.9	120.6	72.7	177.6
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5.2	1.8	9.2
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	124.7	83.9	173.2
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	89.1	52.2	127.5
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	47.9	21.2	80.4
18	177	154.5	130.8	17117	0.74	17	144.3	210.0	176.9	146.6	209.8
19	160	85.6	171.9	29552	1.08	29	102.9	216.8	160.7	109.5	217.7
20	258	202.8	187.6	35185	0.73	27	204.4	311.7	257.1	207.4	313.0
22	153	170.3	38.4	1472	0.25	12	128.9	176.5	152.7	129.4	173.4

#### Dead Count Statistics for all Periods

Dead Oyst	er Cou	ints by	Loc	cality												
Locality	Mean	Median	SI	V C	ar	CV		SE	L95	U95	Bstrap_	Mean	L95_Bs	trap	U95_Bst	rap
BT	390	178	357	7 1275	48 0	.92	119	.0	156.3	623		395		186		636
CK	78	32	106	3 111	70 1	.36	37	.4	4.3	151		77		19		150
CR	60	47	38	3 14	44 0	.63	12	.7	35.2	85		60		39		85
HB	44	21	. 45	5 20	00 1	.02	14	.9	14.8	73		44		17		74
LC	90	59	93	87	00 1	.03	8	.3	74.1	107		90		75		108
LT	240	210	202	2 408	50 0	.84	52	.2	137.2	342		241		145		344
NN	108	74	103	3 105	68 0	.95	34	.3	40.8	175		108		55		180
Dead Oyst	Dead Oyster Counts by Strata															
Strata	Mean M	ledian	SD	Var	C	V	SE	L95	U95 1	Bstra	ap_Mean	L95_I	Bstrap	U95_I	Bstrap	
N_N	160	80	206	42308	1.2	8 25	5.5	110	210		159		113		212	
N_PILOT	82	87	46	2136	0.5	6 12	2.8	57	108		83		61		110	
N_Y	52	53	44	1972	0.8	5 9	9.7	33	71		52		35		73	
Y_N	96	58	104	10740	1.0	7 12	2.0	73	120		97		75		121	
Y_Y	109	50	109	11932	1.0	0 32	2.9	44	173		109		51		169	
D 10 1	<b>a</b>		ъ													
Dead Oyst		•			a.	,		T 0	- 110-	ъ.		T 0 F	ъ.	1105	ъ.	
Period M				Var	CV		SE			BSTI	cap_Mean		-			
7	29		30	898					2 50		29		11		50	
10	80		65	4245					5 125		79		38		126	
11	50		25	620				33.			51		35		68	
16	44		41	1708				15.			45		20		74	
	133			36903					1 182		133		92		183	
19	63			4548				40.0			62		42		87	
	148			19727							147		111		189	
22	209	150 1	.54 2	23677	0.73	48.	.7 1	14.	1 305		209		126		304	

#### Dead Density Statistics for all Periods

Dead Oys	ster De	nsity	by Lo	ocality	у										
Localit	y Mean	Media	an SD	Var	CV	SE	L95	U95	Bstra	ap_Mean	L95_I	Bstrap	U95_E	Bstrap	
H	3T 57	50	.8 39	1543 (	0.69 1	3.1 3	31.0	82		57		35.9		81	
(	CK 21	11	.3 28	757	1.29	9.7	2.3	40		21		6.1		39	
(	CR 20	13	.8 15	235 (	0.77	5.1 1	10.0	30		20		11.5		30	
I	IB 13	8	.0 14	201	1.12	4.7	3.4	22		13		4.9		22	
I	LC 16		.3 20			1.8 1				16		12.5		19	
I	LT 58	47	.1 40	1570 (	0.68 1	0.2 3	38.2	78		58		39.2		78	
1	IN 31	16	.7 27	705 (	0.87	8.9 1	13.2	48		30		15.5		48	
D 10															
•	Dead Oyster Density by Strata Strata Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap U95_Bstrap														
											_		_		
_	1 33.2			4 1180						33.0		25.1		41.3	
N_PILOT					0.53					8.5		6.4		10.9	
_	4.8									4.7		3.0		6.7	
Y_1	1 22.2	15.5	5 22.8	3 519	1.03	2.6 1	17.0	27.4	1	22.1		17.0	)	27.6	
Y_Y	7.0	4.6	6.6	6 43	0.93	2.0	3.2	10.9	9	6.9	)	3.5	ò	10.9	
Dead Oys	ster Dei	nsitv	bv Pe	eriod											
Period		•	•		r CV	5	SE	L95	U95	Bstrap	Mean	L95 Bs	trap	U95_Bstrap	,
7	2.9	1.8	3.0	8.9	9 1.03			0.82			2.9	-	1.2	4.9	
10	8.2	8.9	6.6	44.0	0.81	2.3	35	3.58	12.8		8.3		4.4	12.7	
11	5.2	4.1	2.6	6.6	6 0.49	0.9	91	3.41	7.0		5.2		3.7	6.9	)
16	4.4	2.8	4.1	16.9	9 0.93	1.4	45	1.55	7.2		4.4		2.0	7.3	;
18	26.4	15.7	31.3	980.	1 1.19	4.0	01 1	8.54	34.3		26.4		18.8	35.0	)
19	18.1	13.1	19.3	370.6	6 1.07	3.3	30 1	1.59	24.5		18.0		12.2	25.1	
20	27.9	18.4	26.4	697.6	6 0.95	3.8	35 2	0.38	35.5		28.0		20.6	35.7	
	38.4			1647.9							38.2		15.4	63.6	;

#### Summary Density Plots for all Periods

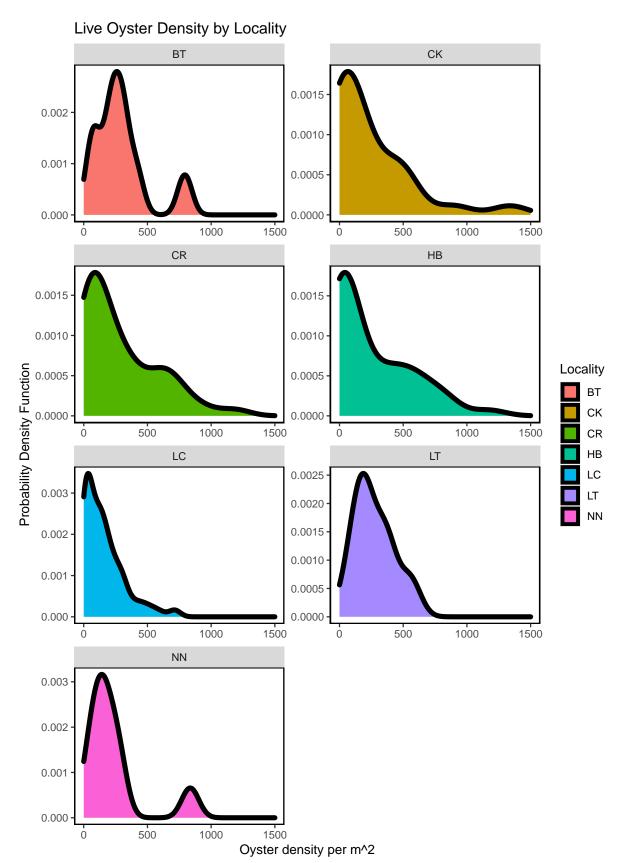


Figure – Calculated live oyster density by locality for all periods including period 22 (current period).

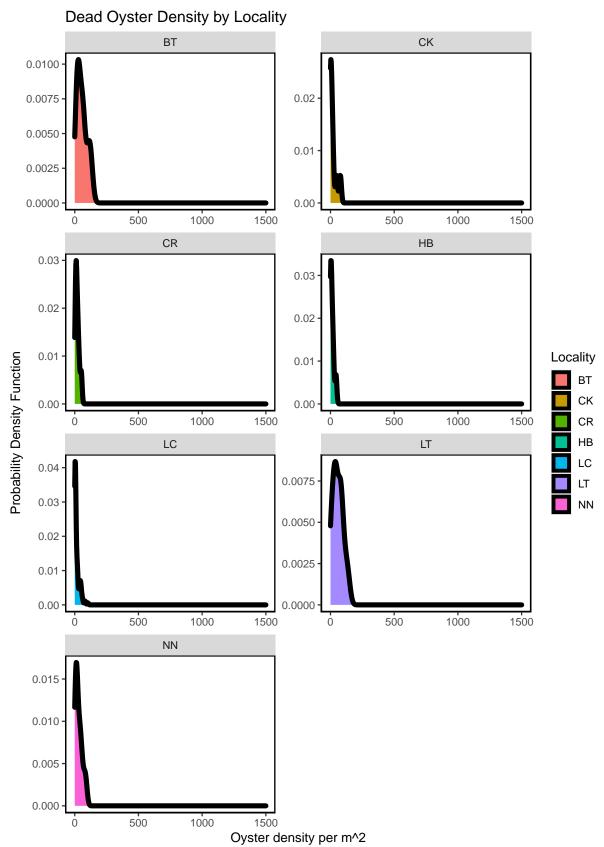


Figure - Calculated dead oyster density by locality for all periods including period 22 (current period).

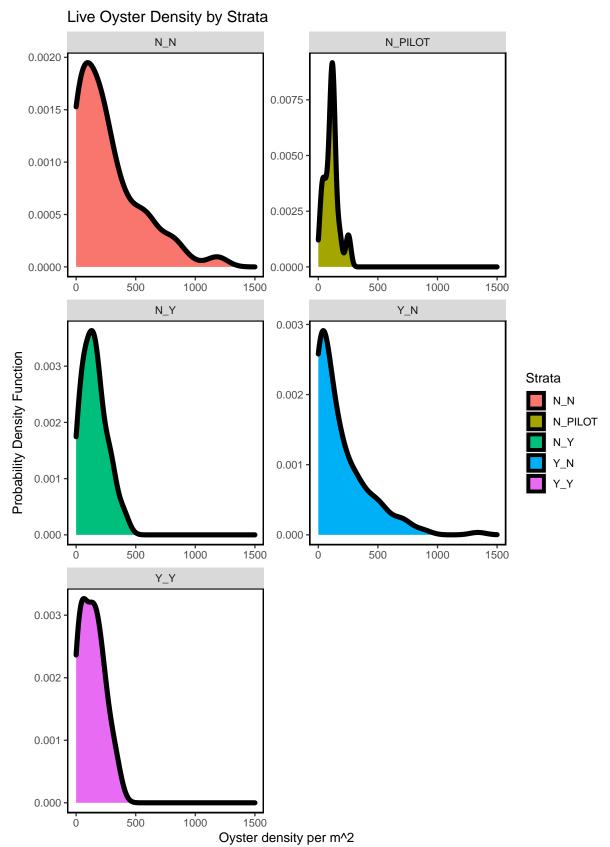


Figure – Calculated live oyster density by strata for all periods including period 22 (current period).

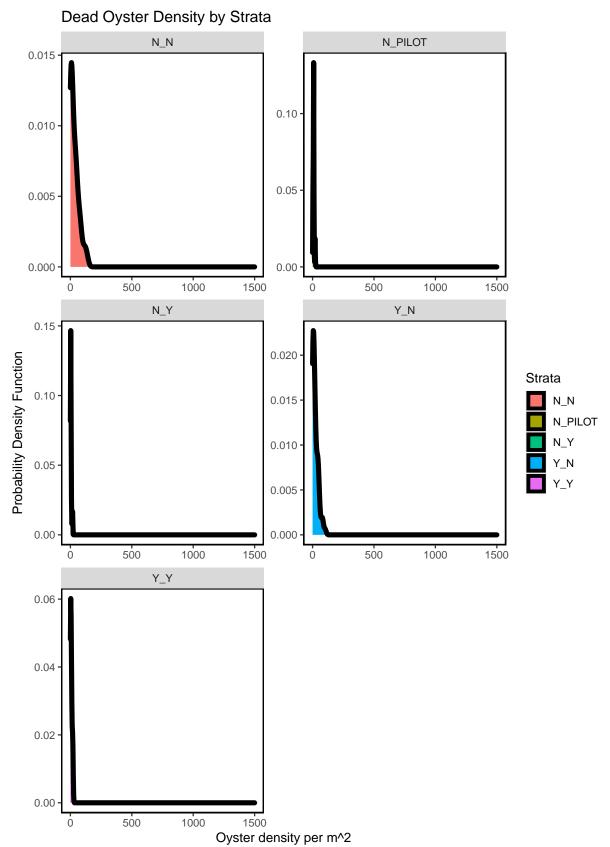


Figure – Calculated dead oyster density by strata for all periods including period 22 (current period).

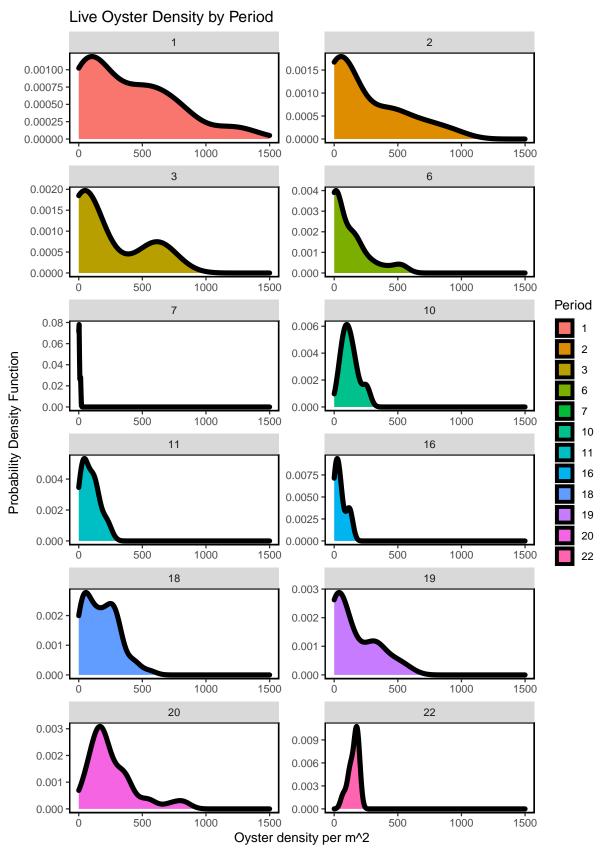


Figure – Calculated live oyster density for all periods including period 22 (current period) using a probability densit

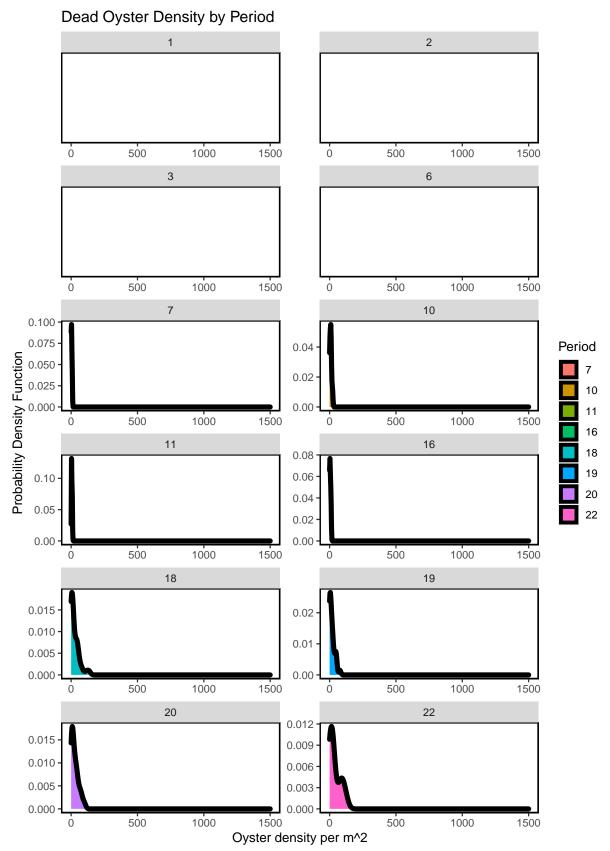


Figure – Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

#### Live Oyster Density by Locality

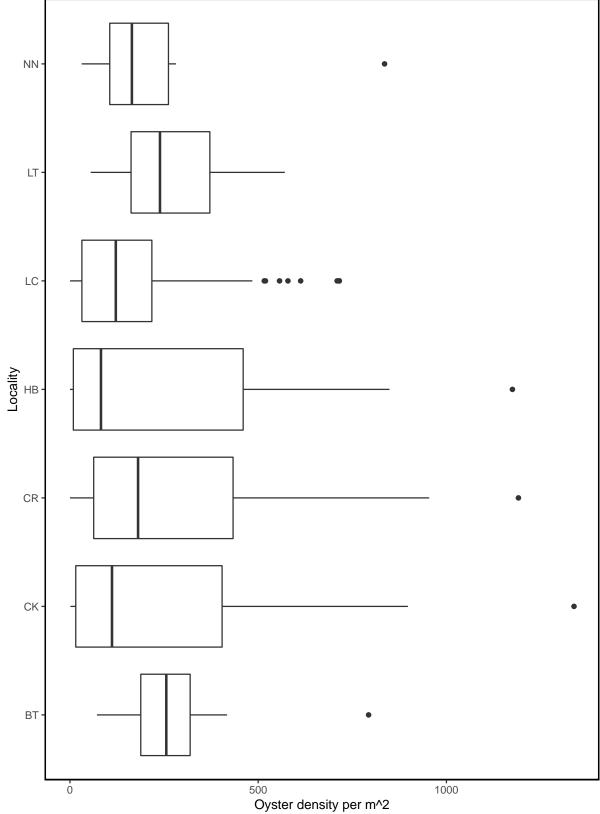


Figure – Box plot depicting live oyster density by locality for all periods including period 22 (current period).

# 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).

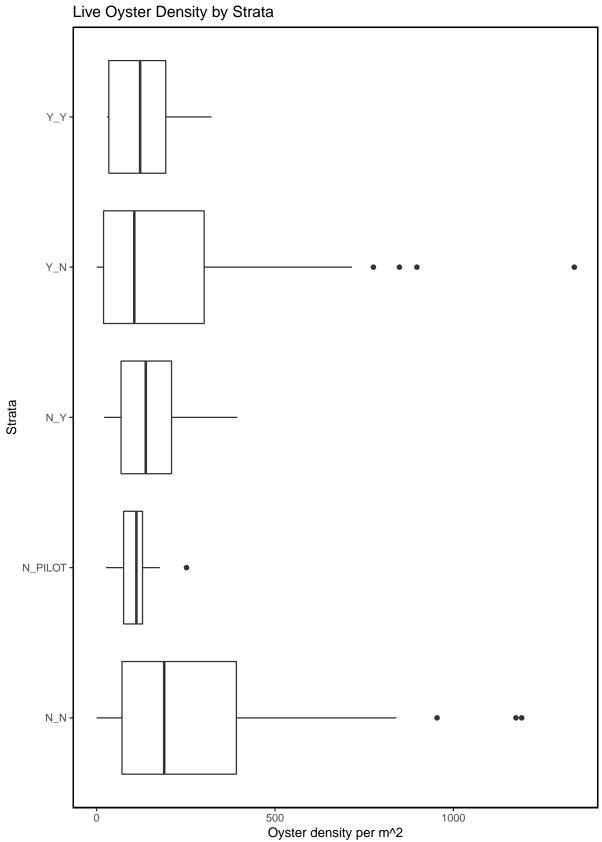


Figure – Box plot depicting live oyster density by strata for all periods including period 22 (current period).

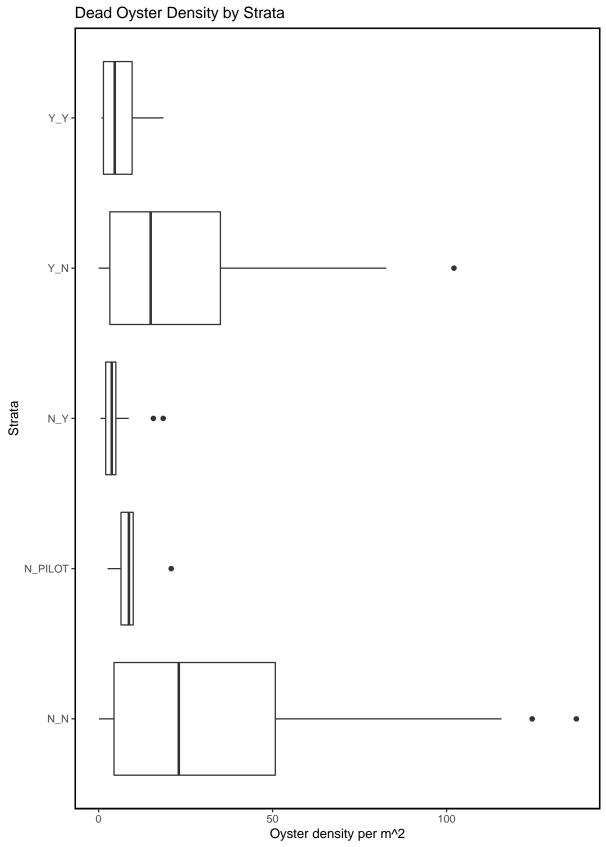


Figure – Box plot depicting dead oyster density by strata for all periods including period 22 (current period).

## Live Oyster Density by Period

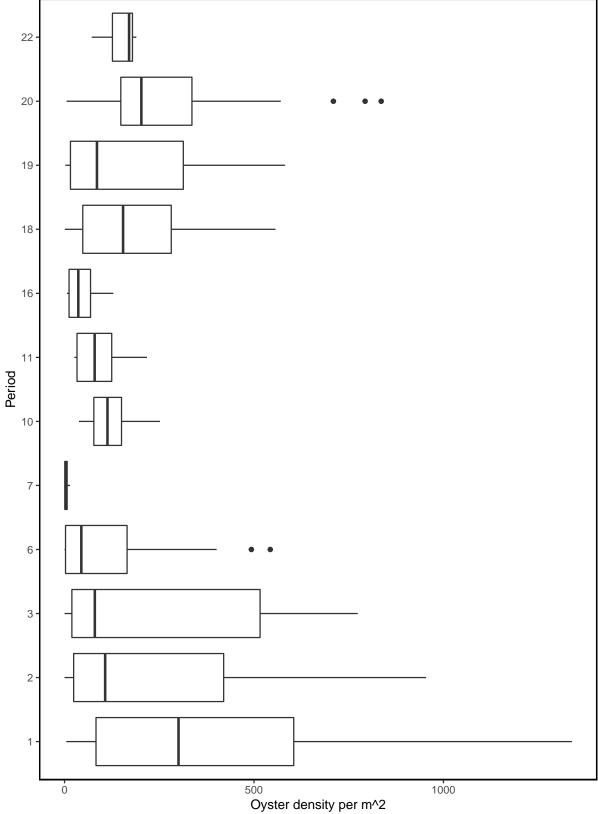


Figure – Box plot depicting live oyster density by period for all periods including period 22 (current period).

## 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

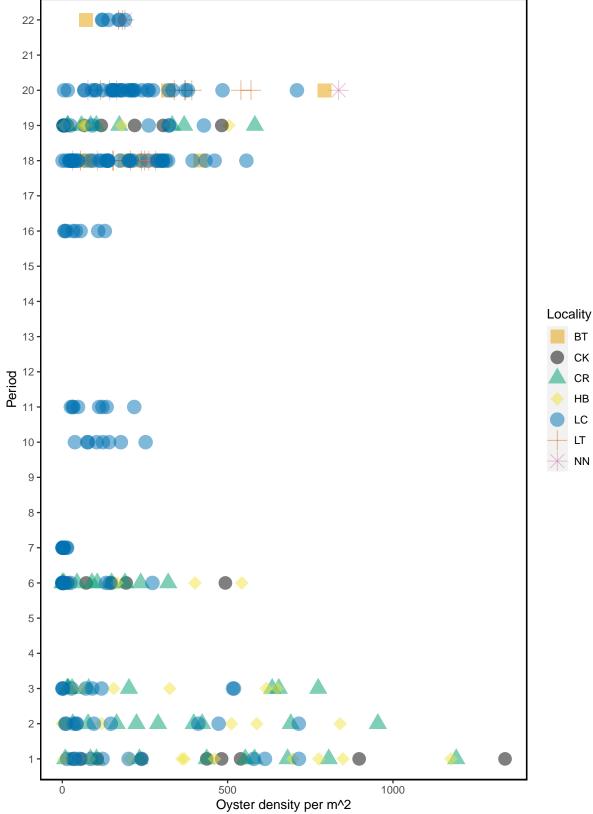


Figure – Oyster density by locality and period for all periods including period 22 (current period).

#### Dead Oyster Density by Locality and Period

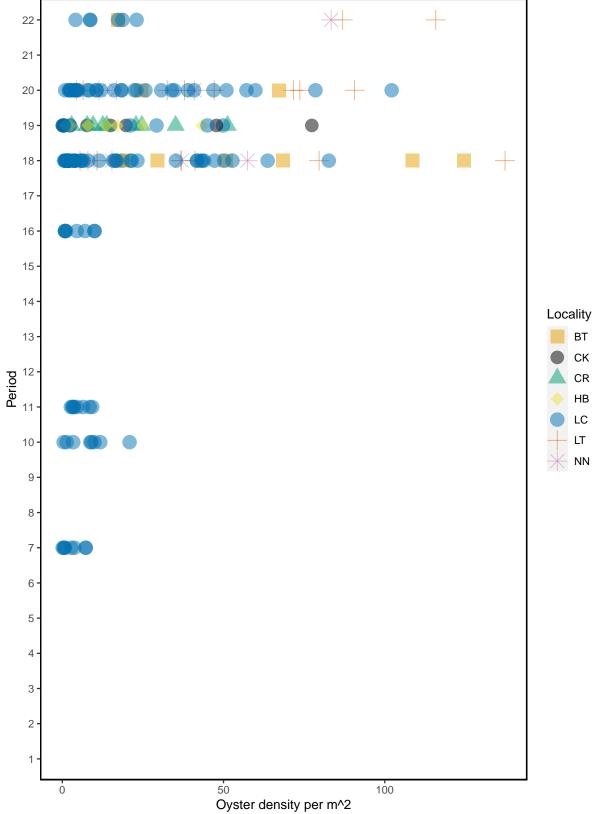


Figure – Dead oyster density by locality and period for all periods including period 22 (current period).

#### Live Oyster Density by Strata and Period

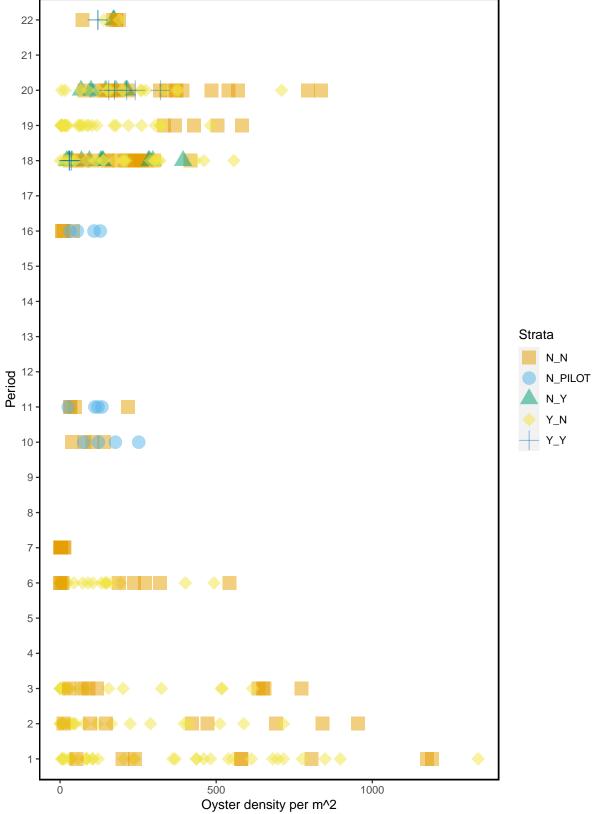


Figure – Live oyster density by strata and period for all periods including period 22 (current period).

## Dead Oyster Density by Strata and Period Strata $N_N$ Period 11 N\_PILOT N\_Y Y\_N \_\_\_\_ Y\_Y Oyster density per m^2

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

#### 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

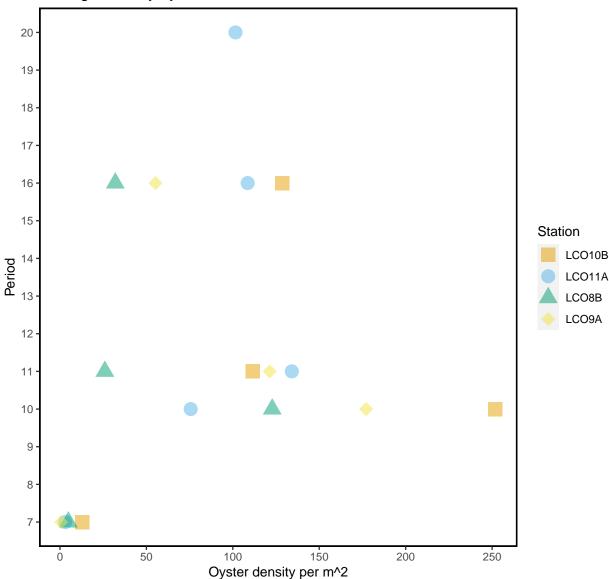


Figure – Average density comparison by period for all stations that were sampled during the pilot study.

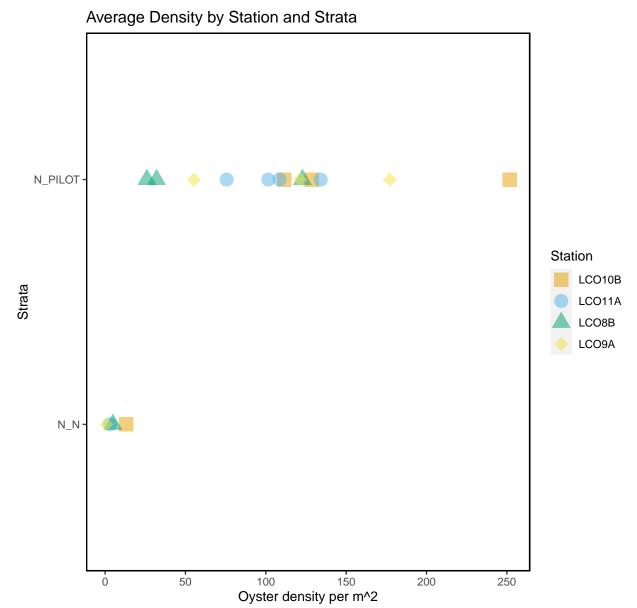


Figure – Average density comparison by strata and period for all stations that were sampled during the pilot stuc

#### Latest Data Entered

Displayed are the entries for the last date of sampling (2020-11-18).

date	station	tran_length	count live	count dead	treatment	strata
2020-11-18	LC020	2.5	96	15	rocks	Y Y
2020-11-18	LC020	5.0	119	17	rocks	Y_Y
2020-11-18	LC020	7.5	119	12	rocks	Y_Y
2020-11-18	LC020	10.0	111	7	rocks	Y_Y
2020-11-18	LC020	12.5	35	8	rocks	Y_Y
2020-11-18	LC020	15.0	59	4	rocks	Y_Y
2020-11-18	LC020	17.5	72	8	rocks	Y_Y
2020-11-18	LC020	20.0	79	10	rocks	Y_Y
2020-11-18	LC020	22.5	44	7	rocks	Y_Y
2020-11-18	LC020	23.3	23	6	rocks	Y_Y
2020-11-18	LC020	2.5	5	0	rocks	Y_Y
2020-11-18	LC020	5.0	11	3	rocks	Y_Y
2020-11-18	LC020	7.5	20	8	rocks	Y_Y
2020-11-18	LC020	10.0	26	3	rocks	Y_Y
2020-11-18	LC020	12.5	31	2	rocks	Y_Y
2020-11-18	LC020	15.0	3	0	rocks	Y_Y
2020-11-18	LC020	17.5	95	12	rocks	Y_Y
2020-11-18	LC020	20.0	26	6	rocks	Y_Y
2020 11 18	LC020	22.5	6	1	rocks	Y_Y
2020 11 18	LC020	22.8	4	1	rocks	Y_Y
2020-11-18	LC020	2.5	72	10	rocks	Y_Y
2020-11-18	LC020	5.0	32	6	rocks	Y_Y
2020-11-18	LC020	7.5	26	3	rocks	Y_Y
2020-11-18	LC020	10.0	25	10	rocks	Y_Y
2020-11-18	LC020	12.5	46	13	rocks	Y_Y
2020-11-18	LC020	15.0	40	9	rocks	Y_Y
2020-11-18	LC020	17.5	42	7	rocks	Y_Y
2020-11-18	LC020	20.0	48	9	rocks	Y_Y
2020-11-18	LC020	22.5	32	5	rocks	Y_Y
2020-11-18	LC020	23.0	7	3	rocks	Y_Y
2020-11-18	LC020	2.5	4	0	rocks	Y_Y
2020-11-18	LC020	5.0	18	0	rocks	Y_Y
2020-11-18	LC020	7.5	5	2	rocks	Y_Y
2020-11-18	LC020	10.0	7	2	rocks	Y_Y
2020-11-18	LC020	12.5	4	2	rocks	Y_Y
2020-11-18	LC020	15.0	2	3	rocks	Y_Y
2020-11-18	LC020	17.5	20	0	rocks	Y_Y
2020-11-18	LC020	20.0	34	3	rocks	Y_Y
2020-11-18	LC020	22.5	19	3	rocks	Y_Y
2020-11-18	LC020	23.3	10	2	rocks	Y_Y
2020-11-18	LC020	2.5	51	7	rocks	Y_Y
2020-11-18	LC020	5.0	76	11	rocks	Y_Y
2020-11-18	LC020	7.5	59	13	rocks	Y_Y
2020-11-18	LC020	10.0	57	11	rocks	Y_Y
2020-11-18	LC020	12.5	88	9	rocks	Y_Y
2020-11-18	LC020	15.0	92	19	rocks	Y_Y
2020-11-18	LC020	17.5	77	5	rocks	Y_Y
2020 11 18	LC020	20.0	89	17	rocks	Y_Y
2020 11 18	LC020	20.7	23	4	rocks	Y_Y
2020 11 10	10020	20.1	20	7	TOOKS	

2020-11-18	LC020	2.5	46	7	rocks	$Y_Y$
2020-11-18	LC020	5.0	100	12	rocks	$Y_Y$
2020-11-18	LC020	7.5	71	17	rocks	$Y_Y$
2020-11-18	LC020	10.0	59	9	rocks	$Y_Y$
2020-11-18	LC020	12.5	76	8	rocks	$Y_Y$
2020-11-18	LC020	15.0	106	17	rocks	$Y_Y$
2020-11-18	LC020	17.5	69	10	rocks	$Y_Y$
2020-11-18	LC020	20.0	86	19	rocks	$Y_Y$
2020-11-18	LC020	20.7	25	4	rocks	$Y_Y$
2020-11-18	NNI6	2.5	18	3	control	$N_N$
2020-11-18	NNI6	5.0	71	7	control	$N_N$
2020-11-18	NNI6	7.5	159	25	control	$N_N$
2020-11-18	NNI6	10.0	110	30	control	$N_N$
2020-11-18	NNI6	12.5	79	19	control	$N_N$
2020-11-18	NNI6	15.0	17	10	control	$N_N$
2020-11-18	NNI6	17.5	65	68	control	$N_N$
2020-11-18	NNI6	22.5	21	102	control	$N_N$
2020-11-18	NNI6	25.0	43	31	control	$N_N$
2020-11-18	NNI6	27.5	96	26	control	$N_N$
2020-11-18	NNI6	29.5	98	22	control	$N_N$