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 11 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, 104 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
НВ	Horseshoe Beach
LC	Lone Cabbage
LT	Little Trout
NN	No Name

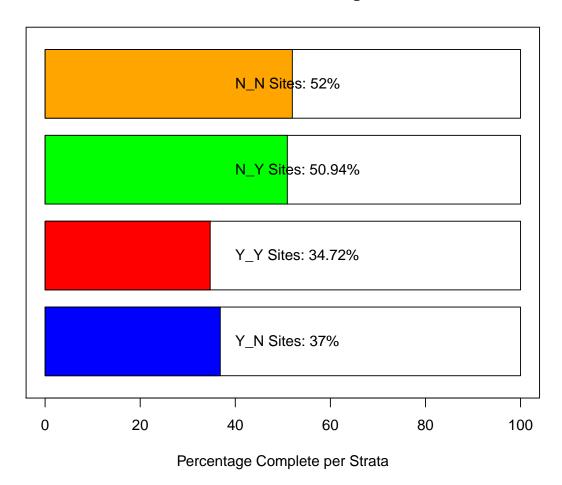
Definition of Strata

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 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 175

- 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 by Lo	ocality		
Locality Mean Median	SD Var CV SE	L95 U95 Bstrap_Mean	L95_Bstrap U95_Bstrap
BT 2219 766 3	528 12445897 1.59 1578	-873 5312 2228	404 5399
LC 1698 1212 18	891 3575291 1.11 253	1202 2193 1703	1269 2261
LT 1191 877	737 542939 0.62 246	709 1672 1187	791 1691
NN 888 747	768 589511 0.86 313	274 1503 903	436 1561
Live Oyster Counts by S	trata		
Strata Mean Median	SD Var CV SE L	95 U95 Bstrap_Mean L9	5_Bstrap U95_Bstrap
N N 1187 766 150	09 2276206 1.27 271 69	<u>-</u> –	770 1806
_		IA NA 181	10 348
_	16 6330343 0.78 759 173	38 4712 3203	1922 4639
Y N 932 764 74	49 561550 0.80 153 6	32 1232 932	649 1213
Y_Y 3022 2091 253	36 6429117 0.84 845 130	55 4678	1851 4822
Live Oyster Counts by Pe	eriod		
Period Mean Median SI	D Var CV SE L95	U95 Bstrap_Mean L95_1	Bstrap U95_Bstrap
20 1844 1253 212	5 4517189 1.2 310 1236	2451 1854	1318 2494
22 1226 704 1283	3 1645076 1.0 238 759	1692 1218	787 1715
Live Density by Locality	v		
Locality Mean Median	J	U95 Bstrap_Mean L95_1	Bstrap U95 Bstrap
•		5 548 285	99 561
LC 178 171 1	20 14376 0.67 16 146.	5 209 178	149 213
LT 339 370 1	59 25324 0.47 53 235.0	443 336	246 430
NN 245 154 29	95 86939 1.20 120 8.8	3 481 242	92 481
Live Density by Strata			
Strata Mean Median Sl	D Var CV SE L95 U9	Bstrap_Mean L95_Bstr	ap U95_Bstrap
N_N 251 174 208	8 43233 0.83 37 178 324	252 18	33 328
N_PILOT 102 102 NA	A NA NA NA NA	50	3 99
N_Y 145 170 6:	1 3695 0.42 18 109 18	. 145 10	7 178
Y_N 202 185 153	2 23092 0.75 31 141 263	3 203 14	18 262

175

135

225

156 72 5191 0.41 24 128 222

Live Density by Period

Period	Mean	${\tt Median}$	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	258	203	188	35185	0.73	27	204	312	260	210	314
22	131	122	65	4277	0.50	12	107	154	131	107	154

Summary of Dead Counts for Periods 20 and 22

BT LC LT	ean Median 244 114 154 106 235 141	•	.11 121 .88 18 .75 58	L95 7.6 118.3 120.2 13.2	481 189 349	Mean L95_Bs 244 153 235 110	trap U95_Bstrap 96 489 118 187 131 344 42 208
N_N 1 N_PILOT N_Y 1 Y_N 1	an Median 82 116 1 9 9 20 69 1 60 108 1	SD Var 66 27687 O.	91 30 12 NA NA N 98 36 5 92 30 10	24 241 IA NA 51 190 22 219	Bstrap_Mear 183 8 119 160	63 104 104	244 9 190 223
Dead Oyster Period Mea 20 14 22 19	n Median S 8 107 14		5 20 108	188	strap_Mean 147 196	L95_Bstrap 108 139	U95_Bstrap 189 257
Dead Oyster Locality M BT LC LT NN	ean Median 42 28 23 12 63 72	SD Var C	1 11.3 1 5 3.2 1 5 11.4 4	9.5 6 6.6 2 0.2 8	5 Bstrap_Me 4 9 5	41 22 23 16 63 42	ap U95_Bstrap .4 61 .9 29 .4 84 .5 51
Dead Oyster Strata Me N_N 40 N_PILOT 2 N_Y 5 Y_N 33 Y_Y 11	an Median .5 32.5 3 .6 2.6 .4 4.1 .4 26.9 2	SD Var C 0.2 913 0.7 NA NA N	5 5.43 2 A NA 0 0.98 6 5.87 2	9.8 51 NA 3.5 7	.1 4 NA .3 .9 3	10.5 3 1.5 5.4 33.5 2	rap U95_Bstrap 0.1 51.2 1.0 2.0 3.8 7.5 2.3 44.6 7.8 14.3
Dead Oyster Density by Period Period Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap U95_Bstrap 20 28 18 26 698 0.95 3.9 20 35 28 21 36 22 31 15 32 1026 1.03 5.9 20 43 31 20 44							

Summary Plots for Periods 20 and 22

Live Oyster Density by Locality for Periods 20 and 22

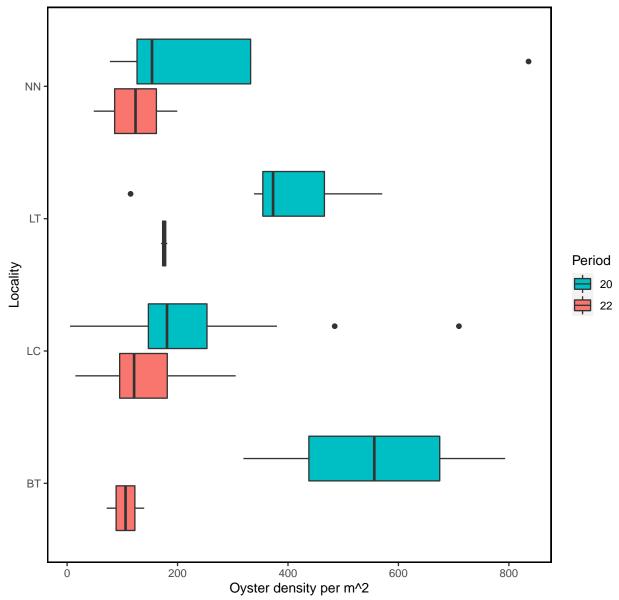


Figure- Calculated live oyster density by locality for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-12-18.

Dead Oyster Density by Locality for Periods 20 and 22

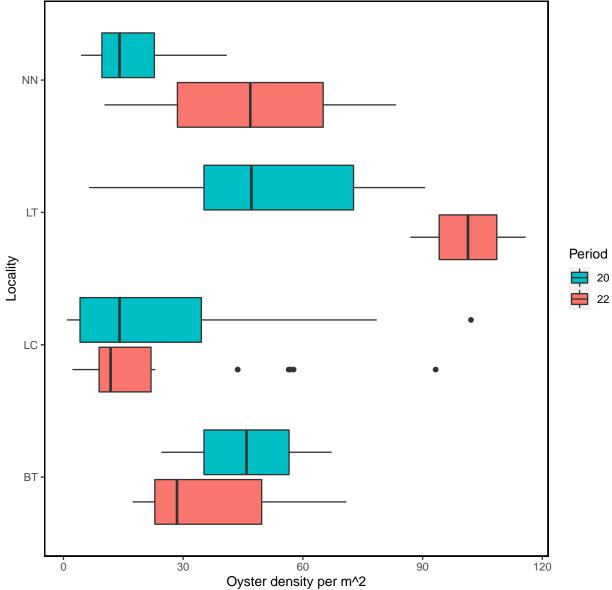


Figure- Calculated dead oyster density by locality for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-12-18.

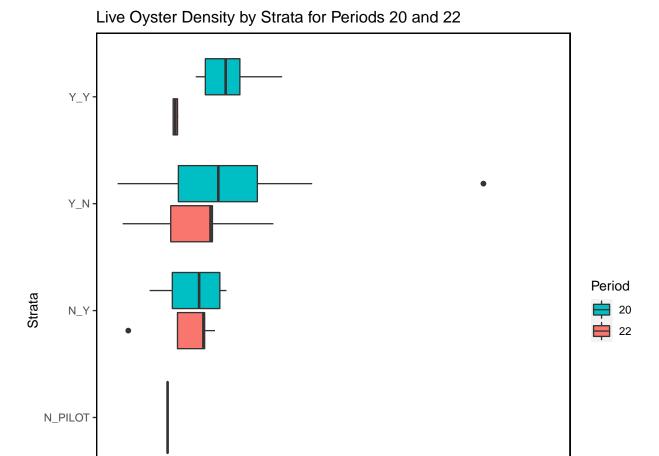
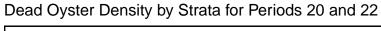


Figure- Calculated live oyster density by strata for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-12-18.

Oyster density per m^2

 N_N



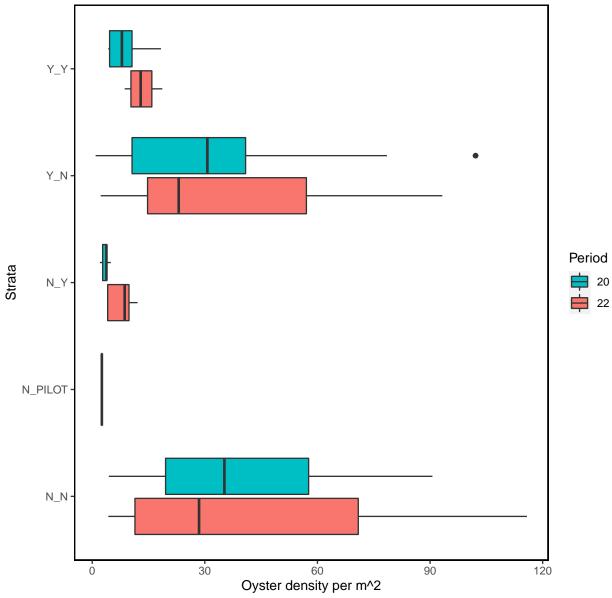


Figure- Calculated dead oyster density by strata for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-12-18.

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.

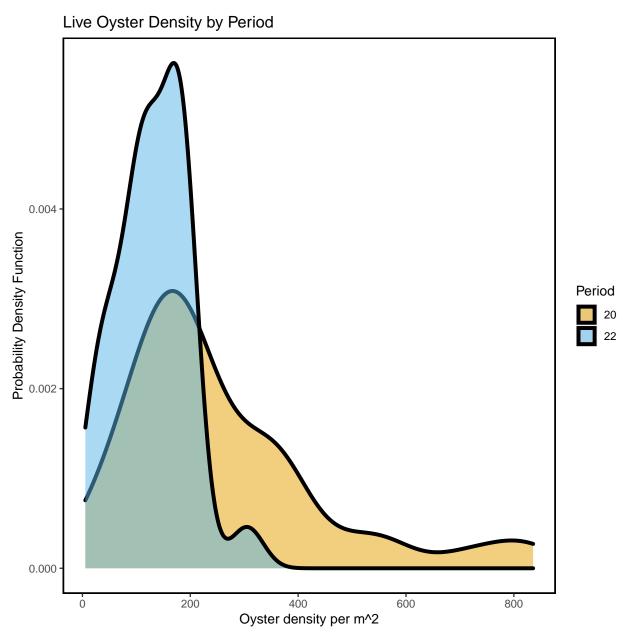


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2020-12-18.

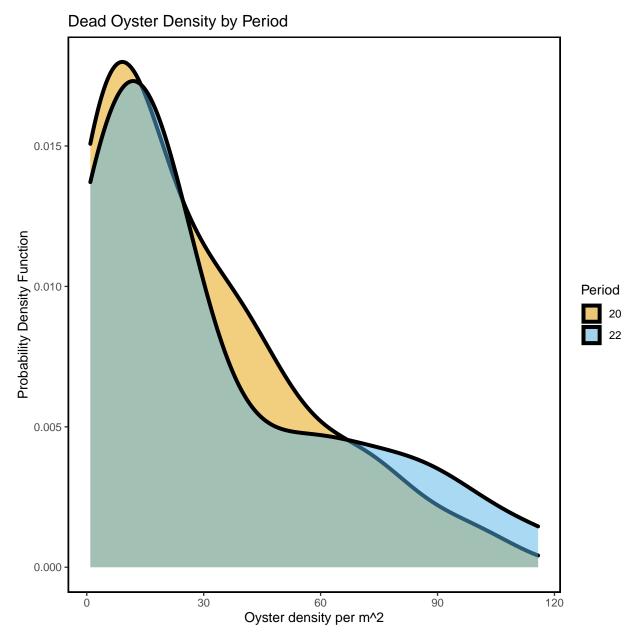


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2020-12-18.

Live and Dead Oyster Count Comparison of Periods 20 and 22

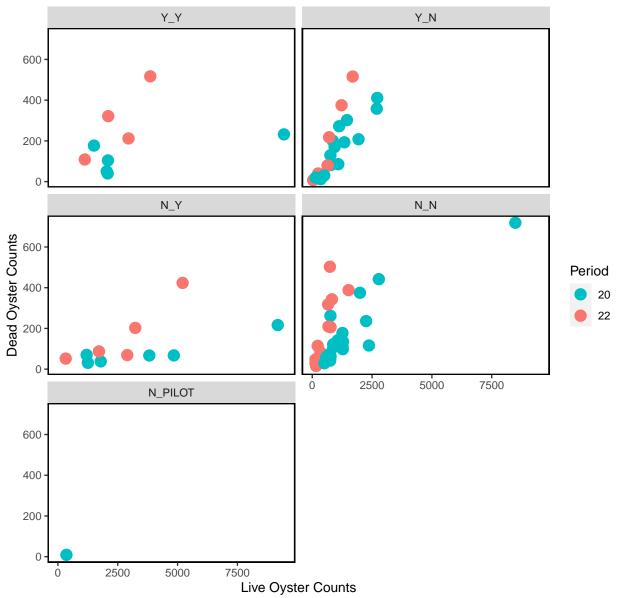


Figure- Live and dead oyster count comparison by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021), last sample date of period 22 as 2020-12-18.

Live Counts Double Pass Results

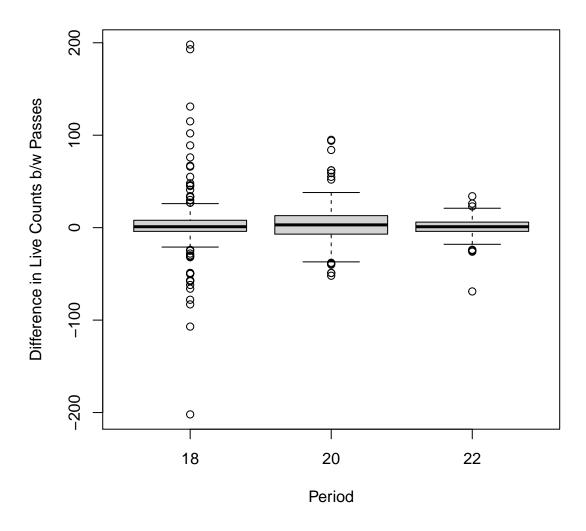


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, and 22

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	0.69	0.73
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

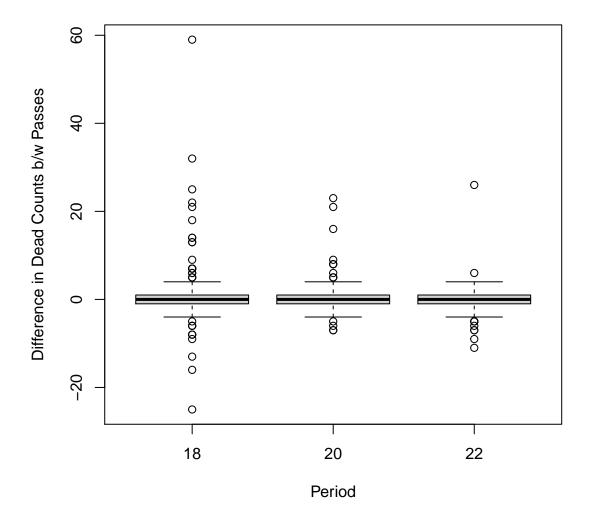


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, and 22

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	0.75	0.78
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 2020-12-18. 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

Effort by Locality

19

19

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 ${\bf transects.}$

Effort by	Locality		
Locality	Number of Transects	s Total Length	(m)
BT	1:	L	424
CK	26	3	712
CR	46	3	1330
НВ	45		1129
LC	18:		9058
LT	15.		406
NN	10)	255
Effort by	Strata		
Strata 1	Number of Transects	Total Length	(m)
N_N	106	3	537
N_PILOT	13		799
_ N_Y	24	2	502
Y_N	178		078
Y_Y	13		396
Effort by			
Period Nu	umber of Transects 7	ſotal Length (m)
1	42	10	86
2	30	7	53
3	25	6	19
6	33		74
7	8		28
10			
	8		12
11	8		11
16	8		28
18	61	26	32
19	35	9	21
20	47	25	56
22	29	17	92
Eff b	I lit l Di	3	
-	Locality and Period		
	ocality Number of Ti		_
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
4.0	OT Z	^	001

9

9

221

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	3	90
22	LC	22	1605
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)

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	N_N			13			372
22	N_Y			5			652
22	Y_N			7			202
22	Y_Y			4			566
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

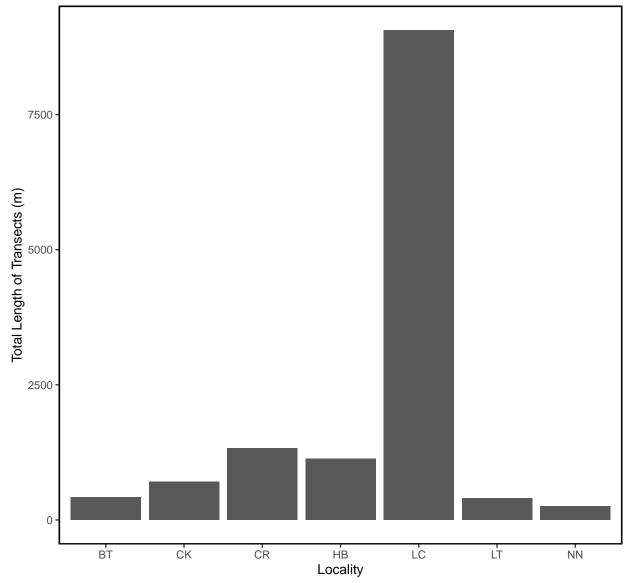


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

Total Transect Length Sampled by Strata

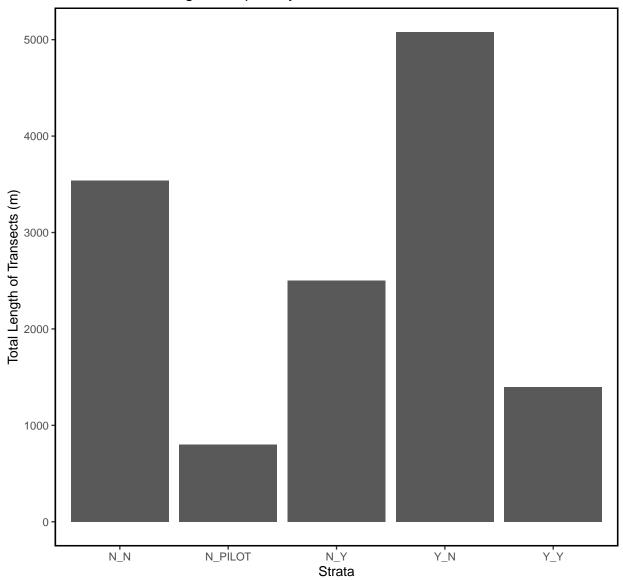


Figure – Bar plot of total transect length in meters sampled by strata for all periods.

Total Transect Length Sampled by Period

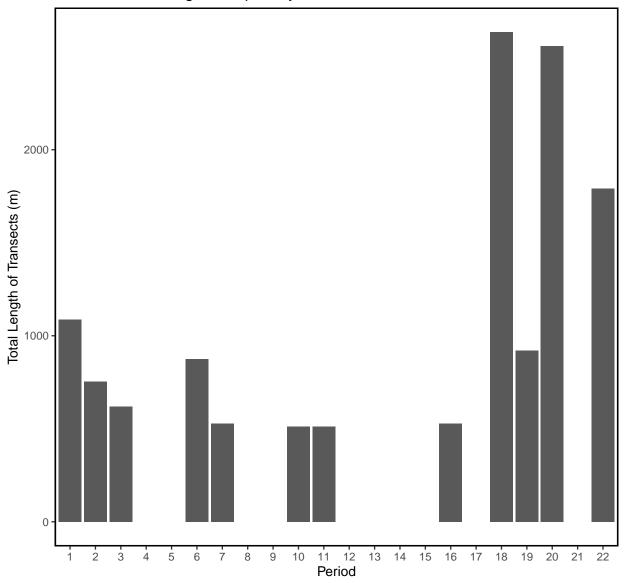


Figure – Bar plot of total transect length in meters sampled by period for all periods.

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 1805	897 24	35 5931263	1.35	734	366	3245	1801	752	3439
CK 857	444 10	91 1190933	1.27	214	438	1277	854	470	1294
CR 1026	716 10	35 1072162	1.01	153	727	1325	1008	733	1327
HB 902	364 10	1095622	1.16	158	592	1211	900	608	1217
LC 1048	686 13	322 1748026	1.26	99	854	1242	1047	878	1240
LT 1054	877 6	416505	0.61	167	728	1381	1054	766	1390
NN 720	649	344 414522	0.89	204	321	1119	724	415	1138
Live Oyster Co									
Strata Mean		SD Var	CV		L95		Bstrap_Mean	_	_
N_N 995		37 1181711 1				1203	991	808	1208
N_PILOT 1046						1386	1049	743	1376
N_Y 2194	1436 212	26 4519300 (0.97 4	434 1	1343	3044	2185	1413	3143
Y_N 793	436 92	28 861984 3	1.17	70	656	931	792	666	924
Y_Y 2235	2039 240	9 5804697	1.08 6	668	926	3545	2232	1253	3644
Time Oraton Co.	unta bu Da	and a d							
Live Oyster Cor Period Mean M			CV C	er r	OE	IIOE I	Patman Maan I	OF Batman I	IOE Datmon
							Bstrap_Mean I	_	_
1 1404		3 1657932 0					1399	1016	1785
2 890	476 945					1234	893	570	1258
3 738	296 817					1065	733	428	1044
6 433	176 534				245	621	435	275	621
7 50	29 56			20	11	90	51	16	90
10 1207	1074 671					1672	1201	785	1656
11 886	776 678					1356	885	462	1361
16 494	366 467				170	817	502	220	793
18 982	695 935	874733 0	.95 12	20 7	748	1217	989	760	1223
19 555	329 573	328431 1	.03	97 3	365	745	551	358	753
20 1844	1253 2125	4517189 1	.15 33	10 12	236 :	2451	1844	1332	2512
22 1226	704 1283	3 1645076 1	.05 23	38 7	759	1692	1218	806	1672

Live Density Statistics for all Periods

Live Densi	ity b	y Loca	lity													
Locality	Mean	Media	ın SD	Var	(CV	SE	L95	U95	Bst	rap_Mean	L95_	Bstrap	U95_	Bstrap	
BT	262	21	.8 207	42972	0.	79	63	140	385		262		164		402	
CK	241	11	.2 321	102795	1.3	33	63	118	365		241		127		371	
CR	288	18	1 294	86231	1.	02	43	203	373		287		205		381	
HB	257	10	1 303	92052	1.	18	46	168	347		258		171		345	
LC	156	12	2 152	23131	0.9	97	11	134	178		157		136		180	
LT	274	23	9 152	23145	0.	56	39	197	351		271		203		347	
NN	215	15	4 234	54714	1.	09	74	70	360		212		108		367	
		_														
Live Densi	•	•														
Strata N				Var						strap	p_Mean L	95_Bs	-	95_Bs	-	
N_N	262			69745 1							262		213		313	
N_PILOT	111	111		3604 0							111		80		142	
N_Y		136		9743 0							147		111		186	
Y_N	192			48797 1							192		161		225	
Y_Y	131	120	90	8175 0	. 69	25	8	32 18	0		131		87		183	
Live Densi	itv b	v Peri	od													
Period Me	•	•	SD	Var	(CV	SE	L9	5	U95	Bstrap_l	Mean	L95 Bs	trap	U95 Bst	rap
				131444								392	_	92.7	_	8.5
2 2		119.0										255	1	56.6		7.5
3 2	234	85.3	269.3									233	13	31.0	34	1.9
6 1	122	72.2	150.9	22769	1.5	24	27	68.	6 1	74.9		121		74.4	17	3.1
7	5	2.9	5.6	31	1.	12	2	1.	1	8.9		5		1.7		9.1
10 1	124	113.3	67.4	4536	0.	54	24	76.	9 1	70.3		123	;	82.7	17	1.0
11	90	79.5	67.8	4596	0.	75	24	43.	4 1	37.4		90		48.1	13	6.1
16	49	36.3	46.4	2154	0.9	95	16	16.	9	81.2		49	:	22.5	7	9.9
18 1	177	154.5	130.8	17117	0.	74	17	144.	3 2	10.0		177	1	46.4	21	1.7
19 1	160	85.6	171.9	29552	1.	80	29	102.	9 2	16.8		160	1	03.3	21	5.9

257

130

210.1

107.2

314.3

152.6

20 258 202.8 187.6 35185 0.73 27 204.4 311.7

22 131 122.1 65.4 4277 0.50 12 106.8 154.4

Dead Count Statistics for all Periods

22 195

Dead Oyst	er Cou	unts b	y Lo	cality									
Locality	Mean	Media	n S	D Var	CV	SE	L95	U95	Bstrap_M	ean L95	_Bstrap	U95_Bstra	ıр
BT	348	17	8 33	3 111065	0.96	100.5	151.0	545	;	349	180	54	1 5
CK	78	3:	2 10	6 11170	1.36	37.4	4.3	151		76	19	15	52
CR	60	4	7 3	8 1444	0.63	12.7	35.2	85		60	38	8	35
HB	44	2	1 4	5 2000	1.02	14.9	14.8	73		45	19	7	74
LC	103	6-	4 11	2 12623	1.09	9.5	84.3	121		103	84	12	23
LT	240	21	0 20	2 40850	0.84	52.2	137.2	342	:	240	142	34	1 5
NN	100	6	8 10	0 10018	1.00	31.7	38.1	162		100	52	16	32
Dead Oyst	er Cou	unts b	y St	rata									
Strata	Mean N	Median	SD	Var	CV SI	E L95 T	J95 Bs	trap_	Mean L95	_Bstrap	U95_Bs1	trap	
N_N	156	78	197	38955 1	27 23	3 111 2	201		156	113		204	
N_PILOT	82	87	46	2136 0	56 13	3 57 :	108		82	60		108	
N_Y	74	54	91	8199 1	23 18	38 :	110		73	44		109	
Y_N	105	64	116	13559 1	11 13	3 79 :	131		106	82		132	
Y_Y	140	104	151	22766 1	08 42	2 58 2	222		138	65		220	
Dead Oyst	er Cou	unts b	у Ре	riod									
Period M	ean Me	edian	SD	Var (ev s	SE L	95 U95	Bsti	rap_Mean :	L95_Bst	rap U95 _.	_Bstrap	
7	29	18	30	898 1.0	3 10	.6 8	.2 50		29		10	50	
10	80	88	65	4245 0.8	32 23	.0 34	.5 125		80		40	126	
11	50	40	25	620 0.4	9 8	.8 33	.2 68		51		36	67	
16	44	28	41	1708 0.9	3 14	.6 15	.6 73		44		18	71	
18	133	55	192	36903 1.4	4 24	.6 85	.1 182		133		93	184	
19	63	44	67	4548 1.0	8 11	.6 40	.0 85		62		43	86	
20	148	107	140	19727 0.9	5 20	.5 107	.6 188		148		109	192	

196

141

253

114 165 27378 0.85 30.7 134.6 255

Dead Density Statistics for all Periods

Dead Oyster D	ensity by L	ocality					
Locality Mea			SE L95	U95 Bst	rap Mean L95	Bstrap U95	Bstrap
BT 5		1332 0.66 1			55	36.1	76
CK 2	1 11.3 28	757 1.29	9.7 2.3	3 40	21	5.4	42
CR 2	0 13.8 15	235 0.77	5.1 10.0	30	20	11.9	30
HB 1	3 8.0 14	201 1.12	4.7 3.4	1 22	13	5.0	22
LC 1	7 8.5 21	431 1.23	1.7 13.4	1 20	17	13.5	21
LT 5	8 47.1 40	1570 0.68 1	0.2 38.2	2 78	58	39.7	78
NN 2	8 16.1 26	668 0.91	8.2 12.5	5 45	28	14.9	45
Dead Oyster D							
Strata Mean		D Var CV			strap_Mean L9		
N_N 32.5		2 1102 1.02			32.4	25.4	40.0
N_PILOT 8.5				1 10.9	8.4	6.4	11.1
N_Y 5.2	3.8 4.			4 7.1	5.3	3.5	7.2
Y_N 23.6	16.1 24.	2 586 1.03	2.72 18.	2 28.9	23.5	18.7	28.9
Y_Y 7.9	7.9 6.	5 42 0.81	1.79 4.	4 11.5	8.0	4.5	11.5
Dead Oyster D	ongity by D	oriod					
Period Mean			SE	L95 U95	Bstrap_Mean	IQE Betran	IIQ5 Betran
7 2.9	1.8 3.0				2.9	1.2	5.0
10 8.2	8.9 6.6					4.0	12.6
11 5.2	4.1 2.6			3.41 7.0		3.6	7.0
16 4.4	2.8 4.1			1.55 7.2			7.1
18 26.4		980.1 1.19					35.1
19 18.1		370.6 1.07				12.1	24.6
20 27.9		697.6 0.95				21.1	35.4
20 27.9		1026.0 1.03			31.0	21.1	42.6
22 31.2	15.0 52.0	1020.0 1.03	0.90 18	7.01 42.9	31.0	21.2	42.0

Summary Density Plots for all Periods

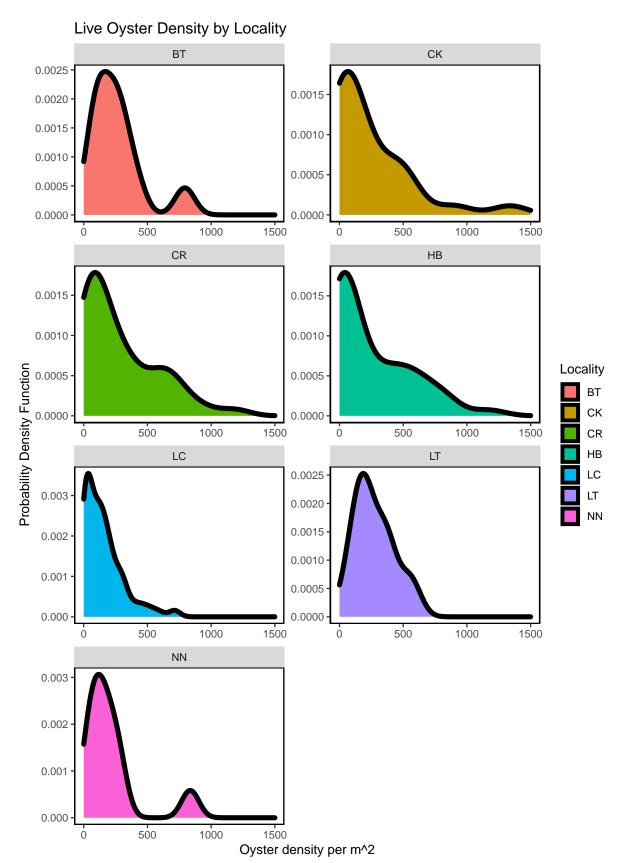


Figure – Calculated live oyster density by locality for all periods including period 22 (current period).

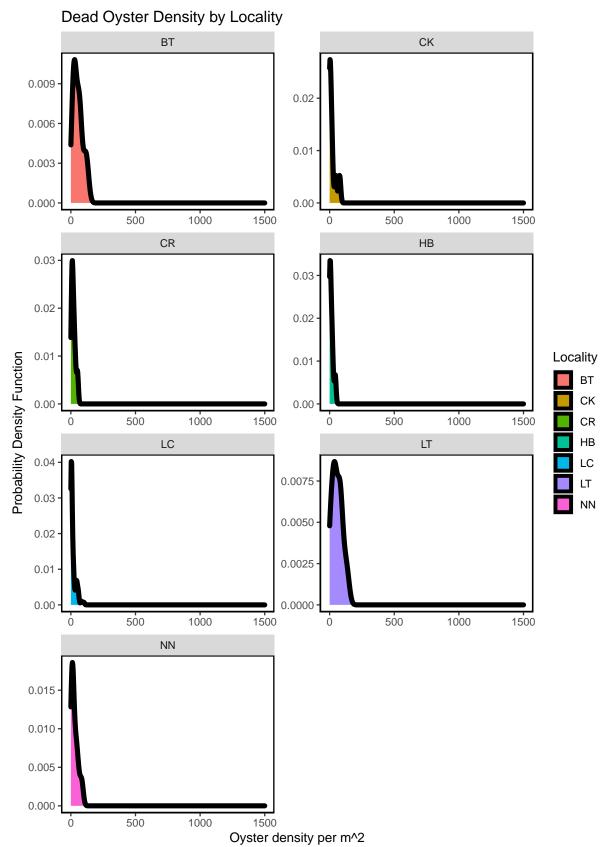


Figure – Calculated dead oyster density by locality for all periods including period 22 (current period).

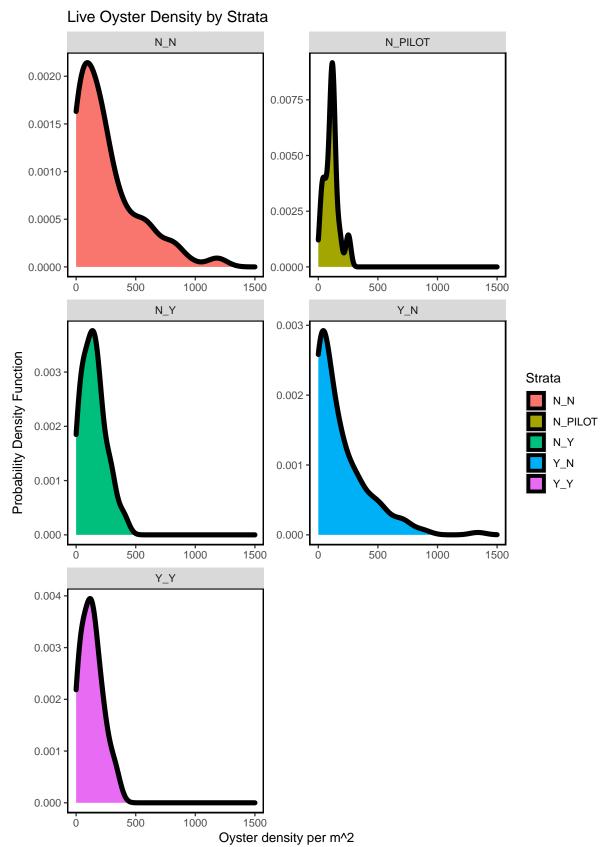


Figure – Calculated live oyster density by strata for all periods including period 22 (current period).

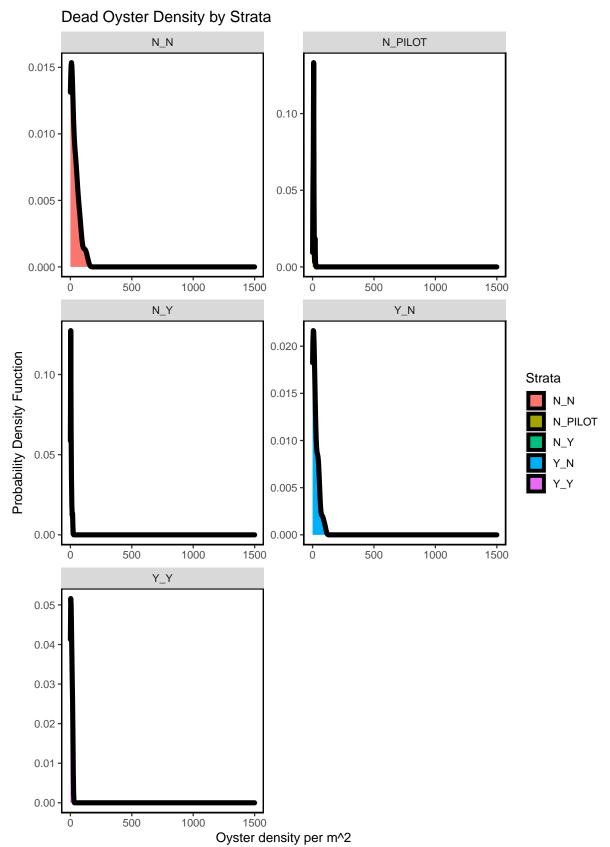


Figure – Calculated dead oyster density by strata for all periods including period 22 (current period).

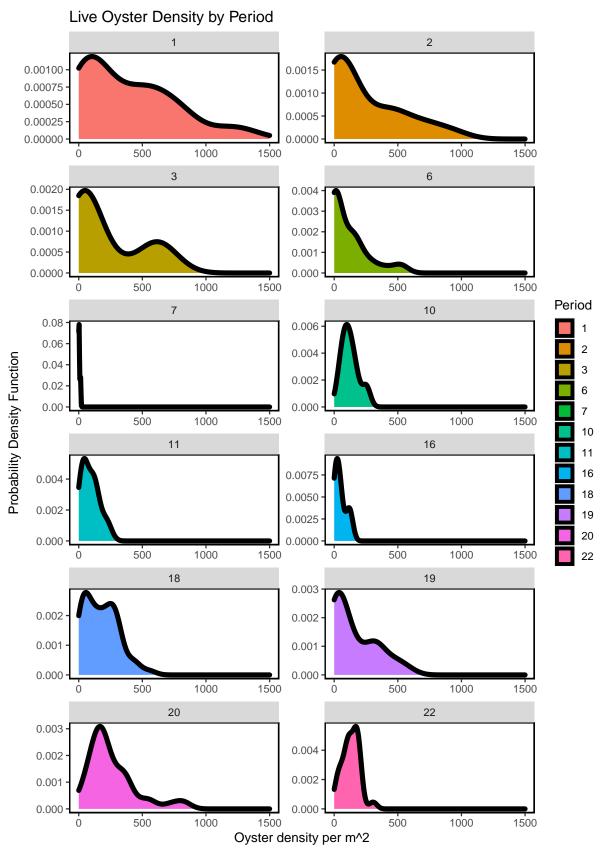


Figure – Calculated live oyster density for all periods including period 22 (current period) using a probability densit

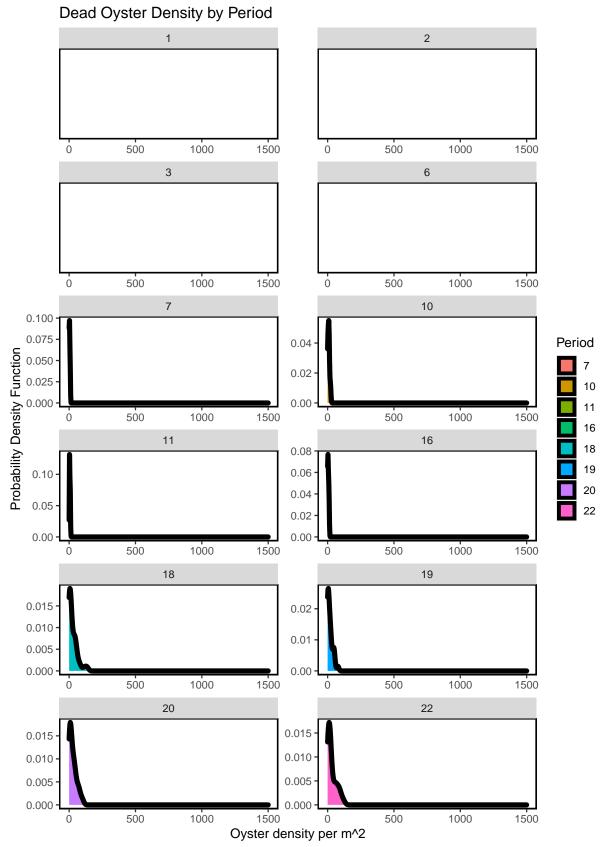


Figure – Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

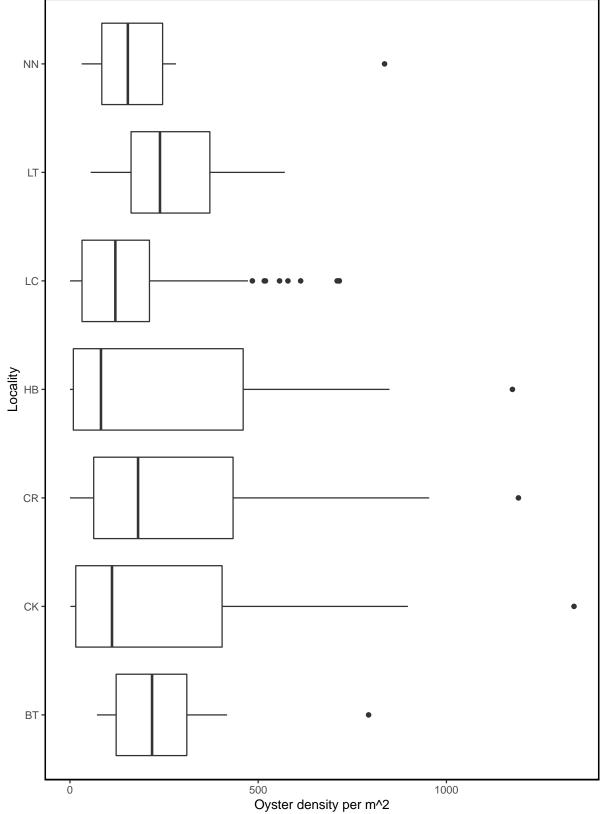


Figure – Box plot depicting live oyster density by locality for all periods including period 22 (current period).

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).

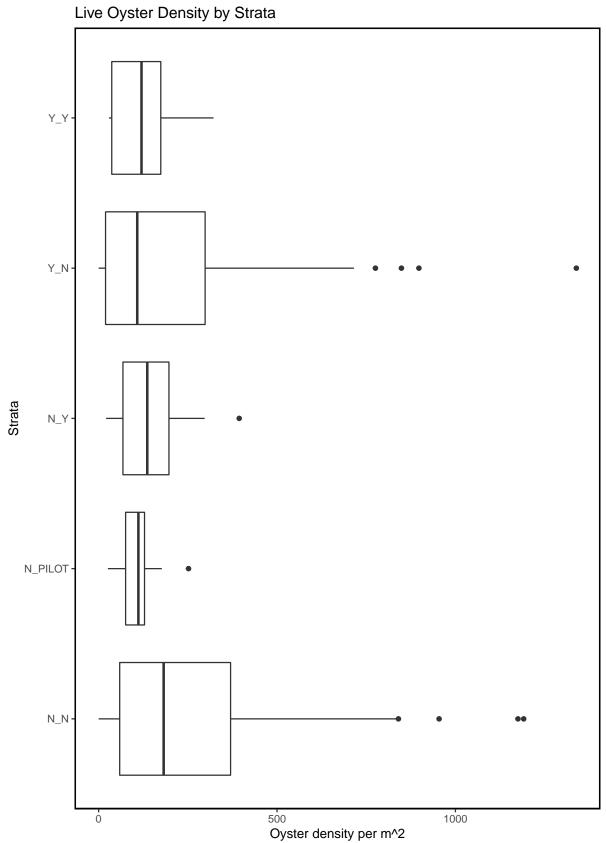


Figure – Box plot depicting live oyster density by strata for all periods including period 22 (current period).

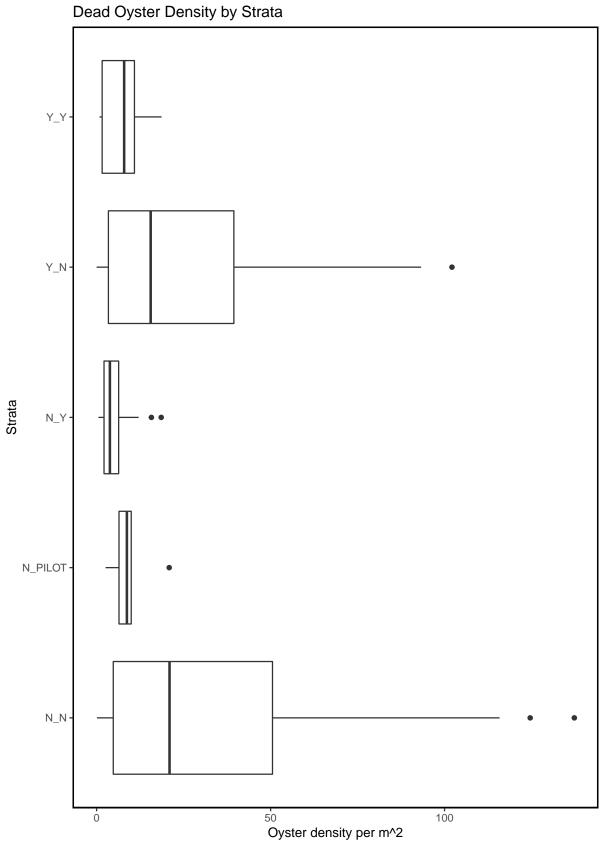


Figure – Box plot depicting dead oyster density by strata for all periods including period 22 (current period).

Live Oyster Density by Period

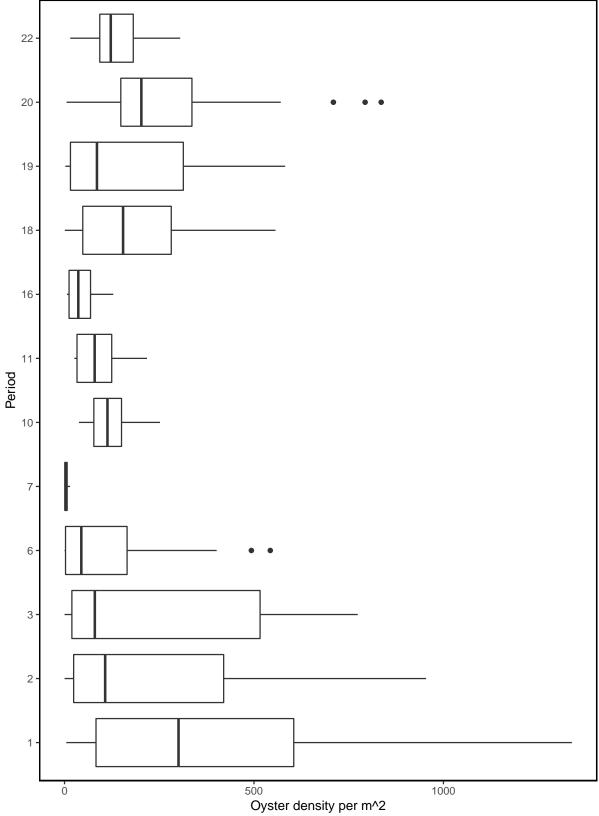


Figure – Box plot depicting live oyster density by period for all periods including period 22 (current period).

Dead Oyster Density by Period Period 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

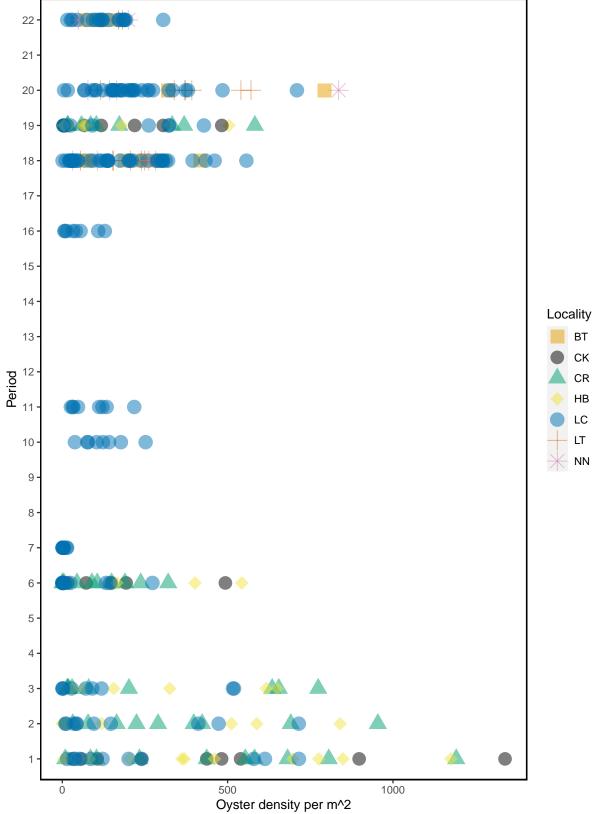


Figure – Live oyster density by locality and period for all periods including period 22 (current period).

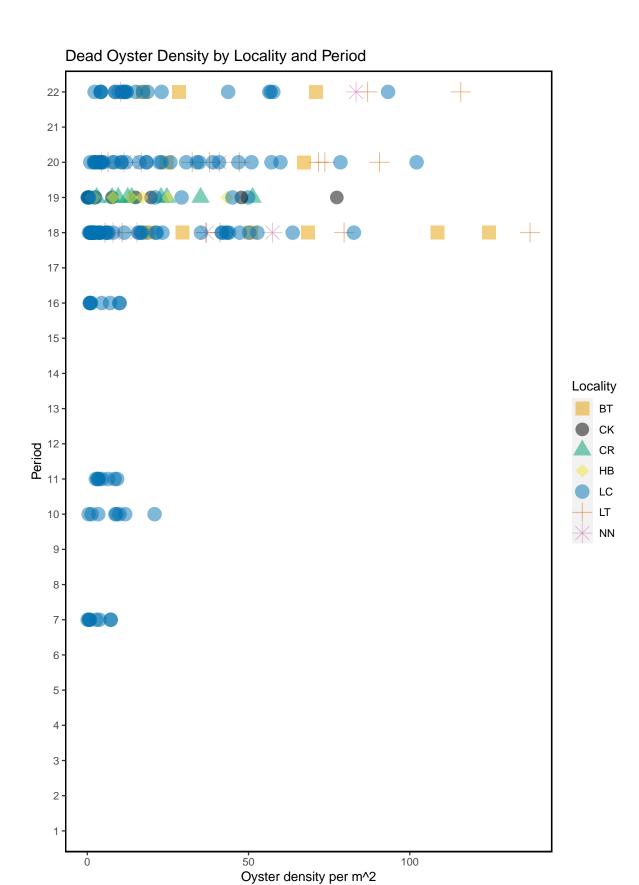


Figure – Dead oyster density by locality and period for all periods including period 22 (current period).

Live Oyster Density by Strata and Period

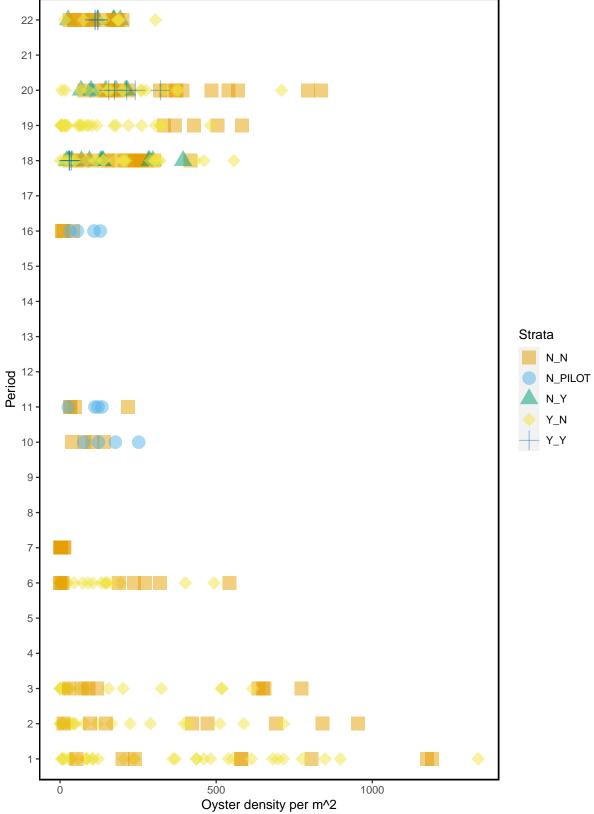


Figure – Live oyster density by strata and period for all periods including period 22 (current period).

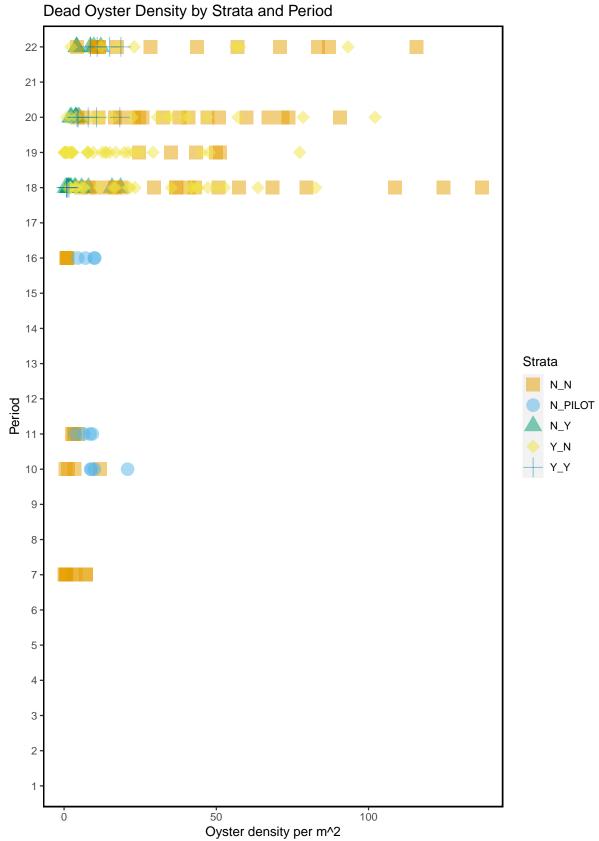


Figure – Dead oyster density by strata and period for all periods including period 22 (current period).

Live and Dead Count Comparison For All Periods

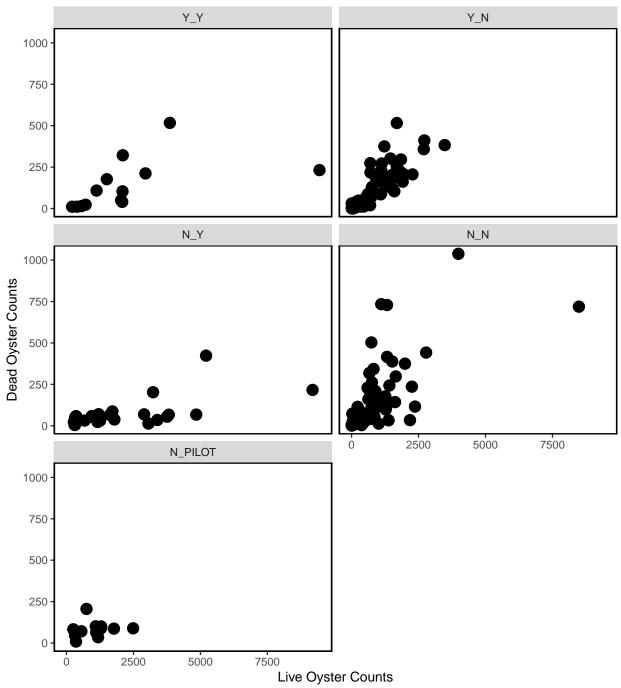


Figure- Live and dead oyster comparison for all periods, last sample date of period 22 is 2020-12-18.

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

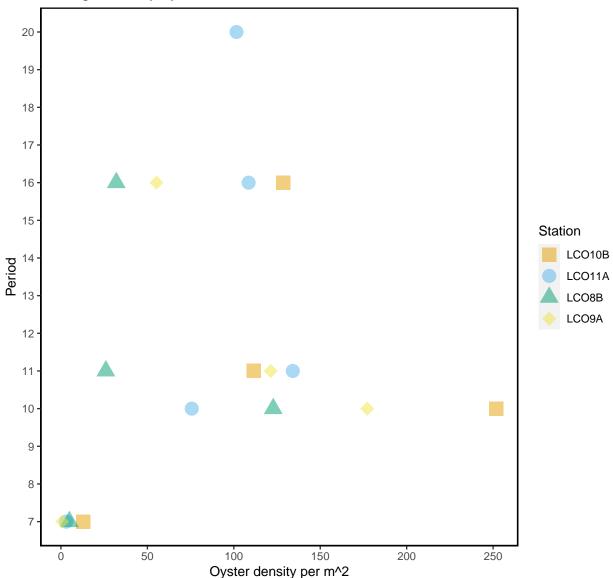


Figure - Average live oyster density comparison by station and period for all stations that were sampled during the pilc

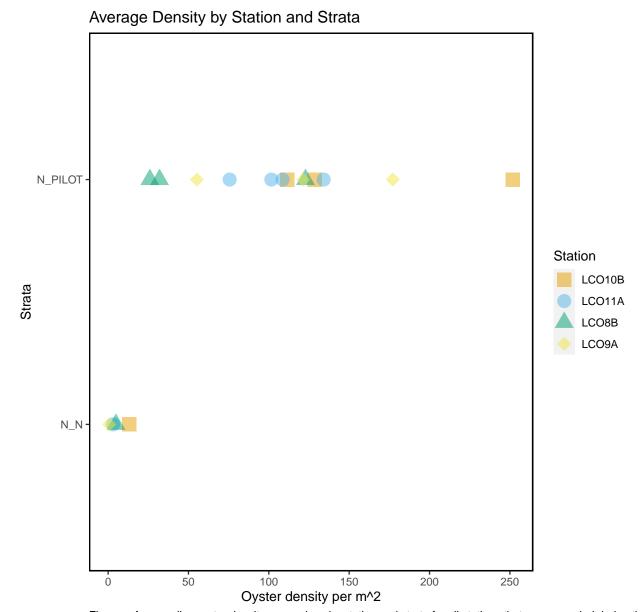


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

Latest Data Entered

Displayed are the entries for the last date of sampling (2020-12-18).

date	station	tran_length	count live	count dead	treatment	strata
2020-12-18	LCO9B	2.5	0	1	rocks	N_Y
2020-12-18	LCO9B	5.0	0	0	rocks	N_Y
2020-12-18	LCO9B	7.5	0	0	rocks	N_Y
2020-12-18	LCO9B	10.0	1	0	rocks	N_Y
2020-12-18	LC09B	12.5	0	1	rocks	N_Y
2020-12-18	LCO9B	15.0	0	0	rocks	N_Y
2020 12 18	LC09B	17.5	0	0	rocks	N_Y
2020 12 18	LC09B	20.0	10	0	rocks	N_Y
2020 12 18	LC09B	22.5	15	1	rocks	N_Y
2020-12-18	LC09B	25.0	23	3	rocks	_
				2		N_Y
2020-12-18	LCO9B	27.2	16 4	0	rocks	N_Y
2020-12-18	LCO9B	2.5			rocks	N_Y
2020-12-18	LCO9B	5.0	0	0	rocks	N_Y
2020-12-18	LCO9B	7.5	0	0	rocks	N_Y
2020-12-18	LCO9B	10.0	0	0	rocks	N_Y
2020-12-18	LC09B	12.5	0	0	rocks	N_Y
2020-12-18	LC09B	15.0	0	0	rocks	N_Y
2020-12-18	LC09B	17.5	3	0	rocks	N_Y
2020-12-18	LC09B	20.0	14	0	rocks	N_Y
2020-12-18	LC09B	22.5	42	7	rocks	N_Y
2020-12-18	LC09B	25.0	16	4	rocks	N_Y
2020-12-18	LC09B	27.5	10	1	rocks	N_Y
2020-12-18	LC09B	27.9	0	0	rocks	N_Y
2020-12-18	LC09B	2.5	0	0	rocks	N_Y
2020-12-18	LC09B	5.0	0	0	rocks	N_Y
2020-12-18	LC09B	7.5	2	0	rocks	N_Y
2020-12-18	LC09B	10.0	0	0	rocks	N_Y
2020-12-18	LC09B	12.5	0	0	rocks	N_Y
2020-12-18	LC09B	15.0	17	2	rocks	N_Y
2020-12-18	LC09B	17.5	58	17	rocks	N_Y
2020-12-18	LC09B	20.0	28	10	rocks	N_Y
2020-12-18	LC09B	22.5	25	1	rocks	N_Y
2020-12-18	LC09B	25.0	22	2	rocks	N_Y
2020-12-18	LC09B	27.5	21	0	rocks	N_Y
2020-12-18	LC09B	27.8	0	0	rocks	N_Y
2020-12-18	LC019	2.5	96	13	rocks	Y_Y
2020-12-18	LC019	5.0	28	3	rocks	Y_Y
2020-12-18	LC019	7.5	72	15	rocks	Y_Y
2020-12-18	LC019	10.0	73	14	rocks	Y_Y
2020-12-18	LC019	12.5	34	9	rocks	Y_Y
2020-12-18	LC019	15.0	78	14	rocks	Y_Y
2020-12-18	LC019	17.5	67	5	rocks	Y_Y
2020-12-18	LC019	20.0	44	2	rocks	Y_Y
2020-12-18	LC019	22.5	39	2	rocks	Y_Y
2020-12-18	LC019	23.4	19	3	rocks	Y_Y
2020-12-18	LC019	2.5	37	11	rocks	Y_Y
2020-12-18	LC019	5.0	47	7	rocks	Y_Y
2020-12-18	LC019	7.5	35	2	rocks	Y_Y
2020-12-18	LC019	10.0	47	5	rocks	Y_Y
10	_5510	10.0		U	_ 0 0110	

2020-12-18	LC019	12.5	65	6	rocks	Y_Y
2020-12-18	LC019	15.0	24	2	rocks	Y_Y
2020-12-18	LC019	17.5	52	6	rocks	Y_Y
2020-12-18	LC019	20.0	57	5	rocks	Y_Y
2020-12-18	LC019	21.7	49	2	rocks	Y_Y
2020-12-18	LC019	2.5	41	11	rocks	Y_Y
2020-12-18	LC019	5.0	8	3	rocks	Y_Y
2020-12-18	LC019	7.5	16	5	rocks	Y_Y
2020-12-18	LC019	10.0	12	8	rocks	Y_Y
2020-12-18	LC019	12.5	23	4	rocks	Y_Y
2020-12-18	LC019	15.0	43	5	rocks	Y_Y
2020-12-18	LC019	17.5	26	4	rocks	Y_Y
2020-12-18	LC019	20.0	38	8	rocks	Y Y
2020-12-18	LC019	22.5	24	7	rocks	Y Y
2020-12-18	LC019	23.3	16	2	rocks	Y_Y
2020-12-18	LC019	2.5	34	10	rocks	Y_Y
2020-12-18	LC019	5.0	8	2	rocks	Y_Y
2020-12-18	LC019	7.5	16	5	rocks	Y_Y
2020-12-18	LC019	10.0	10	12	rocks	Y_Y
2020-12-18	LC019	12.5	22	3	rocks	Y_Y
2020-12-18	LC019	15.0	37	10	rocks	Y_Y
2020-12-18	LC019	17.5	24	5	rocks	Y_Y
2020-12-18	LC019	20.0	28	8	rocks	Y_Y
2020-12-18	LC019	22.5	30	9	rocks	Y_Y
2020-12-18	LC019	23.3	17	2	rocks	Y_Y
2020-12-18	LC019	2.5	74	7	rocks	Y_Y
2020-12-18	LC019	5.0	37	8	rocks	Y_Y
2020-12-18	LC019	7.5	51	5	rocks	Y_Y
2020-12-18	LC019	10.0	54	7	rocks	Y_Y
2020-12-18	LC019	12.5	34	6	rocks	Y_Y
2020 12 18	LC019	15.0	30	5	rocks	Y_Y
2020-12-18	LC019	17.5	41	14		_
2020-12-18					rocks	Y_Y V_V
	LC019	20.0	39	12	rocks	Y_Y V_V
2020-12-18	LC019	22.5	25	9	rocks	Y_Y
2020-12-18	LC019	23.1	8	0	rocks	Y_Y
2020-12-18	LC019	2.5	78	8	rocks	Y_Y V_V
2020-12-18	LC019	5.0	44	8	rocks	Y_Y
2020-12-18	LC019	7.5	53	8	rocks	Y_Y V_ V
2020-12-18	LC019	10.0	42	12	rocks	Y_Y
2020-12-18	LC019	12.5	32	6	rocks	Y_Y
2020-12-18	LC019	15.0	37	4	rocks	Y_Y
2020-12-18	LC019	17.5	36	12	rocks	Y_Y
2020-12-18	LC019	20.0	37	13	rocks	Y_Y
2020-12-18	LC019	22.5	32	11	rocks	Y_Y
2020-12-18	LC019	23.1	8	2	rocks	Y_Y
2020-12-18	LC019	2.5	28	0	rocks	Y_Y
2020-12-18	LC019	5.0	48	5	rocks	Y_Y
2020-12-18	LC019	7.5	43	6	rocks	Y_Y
2020-12-18	LC019	10.0	34	4	rocks	Y_Y
2020-12-18	LC019	12.5	30	4	rocks	Y_Y
2020-12-18	LC019	15.0	51	2	rocks	Y_Y
2020-12-18	LC019	17.5	46	5	rocks	Y_Y
2020-12-18	LC019	20.0	66	4	rocks	Y_Y
2020-12-18	LC019	22.2	46	1	rocks	Y_Y

2020-12-18	LC019	2.5	69	5	rocks	Y_Y
2020-12-18	LC019	5.0	71	11	rocks	Y_Y
2020-12-18	LC019	7.5	51	4	rocks	Y_Y
2020-12-18	LC019	10.0	40	5	rocks	Y_Y
2020-12-18	LC019	12.5	36	10	rocks	Y_Y
2020-12-18	LC019	15.0	40	12	rocks	Y_Y
2020-12-18	LC019	17.5	63	6	rocks	Y_Y
2020-12-18	LC019	20.0	35	6	rocks	Y_Y
2020-12-18	LC019	22.3	33	2	rocks	Y_Y
2020-12-18	LC019	2.5	7	6	rocks	Y_Y
2020-12-18	LC019	5.0	68	11	rocks	Y_Y
2020-12-18	LC019	7.5	57	8	rocks	Y_Y
2020-12-18	LC019	10.0	47	5	rocks	Y _ Y
2020-12-18	LC019	12.5	85	12	rocks	Y_Y
2020-12-18	LC019	15.0	59	8	rocks	Y_Y
2020-12-18	LC019	17.5	39	6	rocks	Y_Y
2020-12-18	LC019	20.0	19	4	rocks	Y_Y
2020-12-18	LC019	22.5	23	3	rocks	Y_Y
2020-12-18	LC019	24.3	12	2	rocks	Y_Y
2020-12-18	LC019	2.5	9	8	rocks	Y_Y
2020-12-18	LC019	5.0	64	12	rocks	Y_Y
2020-12-18	LC019	7.5	52	12	rocks	Y_Y
2020-12-18	LC019	10.0	41	4	rocks	Y_Y
2020-12-18	LC019	12.5	96	12	rocks	Y_Y
2020-12-18	LC019	15.0	70	8	rocks	Y_Y
2020-12-18	LC019	17.5	47	6	rocks	Y_Y
2020-12-18	LC019	20.0	20	4	rocks	Y_Y
2020-12-18	LC019	22.5	24	4	rocks	Y_Y
2020-12-18	LC019	24.3	11	1	rocks	Y_Y
2020-12-18	LC019	2.5	5	0	rocks	Y_Y
2020 12 18	LC019	5.0	7	0	rocks	Y_Y
2020-12-18	LC019		5	7		
2020-12-18		7.5			rocks	Y_Y V_V
	LC019	10.0 12.5	59	1	rocks	Y_Y V_V
2020-12-18 2020-12-18	LC019		96	15	rocks	Y_Y V_V
	LC019	15.0	26	1	rocks	Y_Y V_V
2020-12-18	LC019	17.5	30	1	rocks	Y_Y V_V
2020-12-18	LC019	20.0	71	2	rocks	Y_Y V_V
2020-12-18	LC019	22.5	109	4	rocks	Y_Y
2020-12-18	LC019	22.8	14	0	rocks	Y_Y
2020-12-18	LC019	2.5	15	1	rocks	Y_Y
2020-12-18	LC019	5.0	31	1	rocks	Y_Y
2020-12-18	LC019	7.5	22	4	rocks	Y_Y
2020-12-18	LC019	10.0	56	6	rocks	Y_Y
2020-12-18	LC019	12.5	85	7	rocks	Y_Y
2020-12-18	LC019	15.0	23	1	rocks	Y_Y
2020-12-18	LC019	17.5	29	5	rocks	Y_Y
2020-12-18	LC019	20.0	22	1	rocks	Y_Y
2020-12-18	LC019	22.1	6	1	rocks	Y_Y
2020-12-18	LC019	2.5	27	2	rocks	Y_Y
2020-12-18	LC019	5.0	56	2	rocks	Y_Y
2020-12-18	LC019	7.5	46	8	rocks	Y_Y
2020-12-18	LC019	10.0	64	7	rocks	Y_Y
2020-12-18	LC019	12.5	16	2	rocks	Y_Y
2020-12-18	LC019	15.0	17	4	rocks	Y_Y

2020-12-18	LC019	17.5	39	6	rocks	Y_Y
2020-12-18	LC019	20.0	12	0	rocks	Y_Y
2020-12-18	LCO19	21.6	21	2	rocks	ΥΥ