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 25 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
$\overline{\mathrm{BT}}$	Big Trout
CK	Cedar Key
CR	Corrigan's Reef
НВ	Horseshoe Beach
LC	Lone Cabbage
LT	Little Trout
NN	No Name

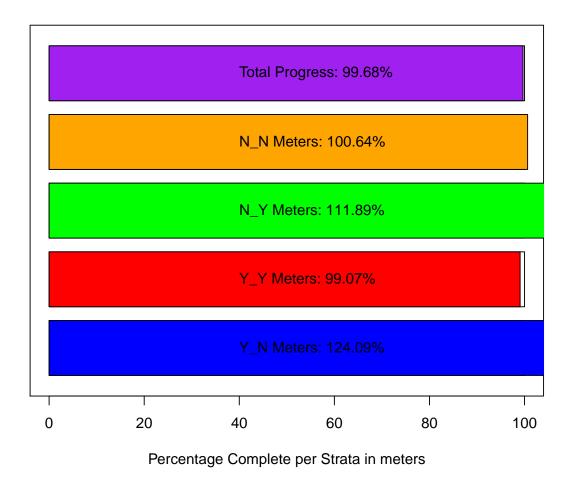
Definition of Strata

STRATA	DEFINITION
<u>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)
- 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 Cou	nts by Locality					
Locality Mean	Median SD	Var CV SE	L95 U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT 1665	897 2257 509	4708 1.36 626	438 2892	1670	745	3021
LC 1412	854 1719 295	3527 1.22 160	1099 1725	1420	1130	1779
LT 1051	877 607 36	8075 0.58 147	762 1339	1058	788	1375
NN 786	727 649 42	0847 0.83 196	403 1169	783	459	1170
Live Orator Com	ota hu Ctroto					
Live Oyster Cour Strata Mean Me	•	Var CV SE	10E 110E E	Oatman Maan I	OE Batman II	OF Patmon
N N 1104			785 1424	Bstrap_Mean L 1112	95_выгар с 847	1478
-	818 1219 1486 356 NA	NA NA NA	765 1424 NA NA	178	11	346
N_PILOT 356	1436 2128 4529			2345	1675	3148
N_Y 2337 Y N 845		969 0.92 102	645 1045	2345 851	654	1045
Y Y 2524	1772 2954 8726			2532	1225	4235
1_1 2524	1772 2904 0720	540 1.11 190	910 4011	2002	1225	4233
Live Oyster Cou	nts by Period					
Period Mean Me	•	ar CV SE	L95 U95 Bs	strap_Mean L9	5 Bstrap U9	5 Bstrap
18 982	695 935 8747		748 1217	982	757	1212
20 1844	1253 2125 45171	89 1.15 310 1	236 2451	1845	1314	2528
22 1334	702 1693 28677	83 1.27 242	860 1808	1333	885	1814
Live Density by	Locality					
Locality Mean	•	r CV SE L95	U95 Bstrap	Mean L95 Bs	trap U95 Bs	trap
BT 262		8 0.73 53 158	-	261	174	372
LC 165	148 128 1629	8 0.78 12 141	188	164	142	188
LT 278	249 143 2039	2 0.51 35 210	346	279	213	344
NN 224	164 224 5017	4 1.00 68 92	356	222	119	372
Live Density by	Strata					
Strata Mean M	edian SD Var	CV SE L95	U95 Bstrap_	Mean L95_Bst	rap U95_Bst	rap
N_N 238	202 165 27289	0.69 22 195	282	238	200	281
N_PILOT 102	102 NA NA	NA NA NA	NA	51	3	99
N_Y 142	125 95 9027	0.67 18 106	177	142	110	178
Y_N 184	167 150 22472	0.82 20 145	222	184	146	223

Y_Y 116 97 93 8707 0.81 25 67 164 115 73 167

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
18	177	155	131	17117	0.74	17	144	210	177	145	211
20	258	203	188	35185	0.73	27	204	312	259	208	315
22	138	121	93	8671	0.68	13	112	164	138	114	165

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

Dead Oyster Counts by Locality									
Locality Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bs									
BT 313 169 317 100240 1.01 88 141 485 311	169 483								
LC 131 70 150 22448 1.15 14 103 158 131	105 161								
LT 240 210 193 37090 0.80 47 148 331 238	156 337								
NN 104 74 96 9216 0.92 29 48 161 104	58 163								
Dead Oyster Counts by Strata									
Strata Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstr									
	57 261								
N_PILOT 9 9 NA NA NA NA NA 5	1 9								
N_Y 96 59 108 11604 1.12 20 56 136 96	59 139								
Y_N 127 83 125 15698 0.99 16 94 159 126	95 159								
Y_Y 205 80 288 82752 1.40 77 54 356 200	80 346								
Dead Oyster Counts by Period Period Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap									
18 133 55 192 36903 1.44 25 85 182 134 9e	0 185								
20 148 107 140 19727 0.95 20 108 188 148 11	1 191								
22 191 128 193 37399 1.01 28 137 245 192 14	6 243								
	35 71								
	16 24								
	42 78								
NN 29 17 25 602 0.85 7.4 14 43 29	16 44								
Dead Oyster Density by Strata									
Strata Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_1	= =								
N_N 43.9 37.5 32.5 1054 0.74 4.34 35.4 52.4 44.0	36.5 52.6								
N_PILOT 2.6 2.6 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								
Y_N 27.4 21.4 25.6 655 0.94 3.36 20.8 33.9 27.6	21.2 33.9								
Y_Y 8.4 7.7 6.5 42 0.77 1.73 5.0 11.8 8.4	5.0 11.7								
Dead Oyster Density by Period									
Period Mean Median SD Var CV SE L95 U95 Bstrap_Mean L95_Bstrap	IIQE Ratran								
1 1									
	34								
20 28 18 26 698 0.95 3.9 20 35 28 21	35								
22 29 14 29 822 1.00 4.1 21 37 29 21	37								

Summary Plots for Periods 18, 20 and 22

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

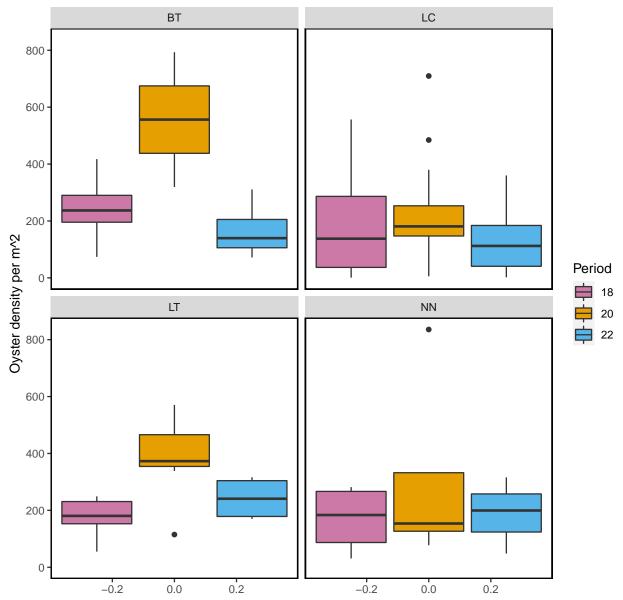


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-02-26.

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

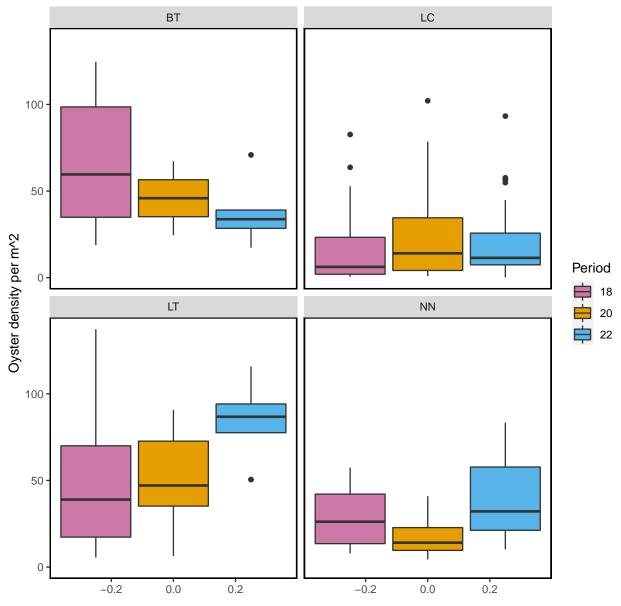


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-02-26.

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

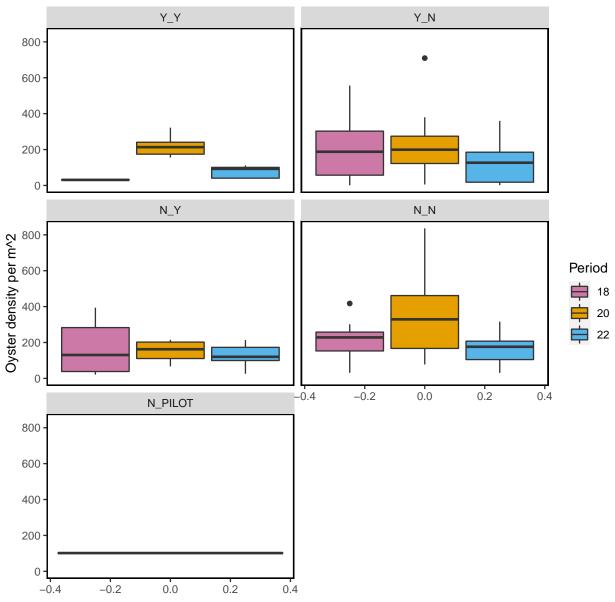


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-02-26.

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

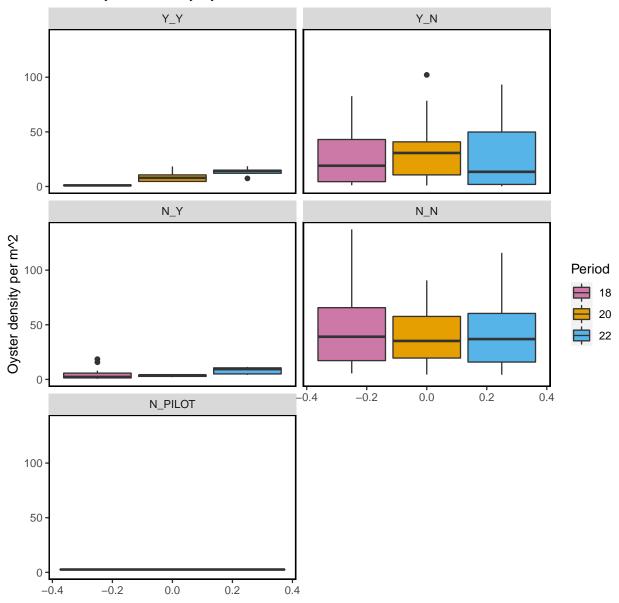


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-02-26.

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.

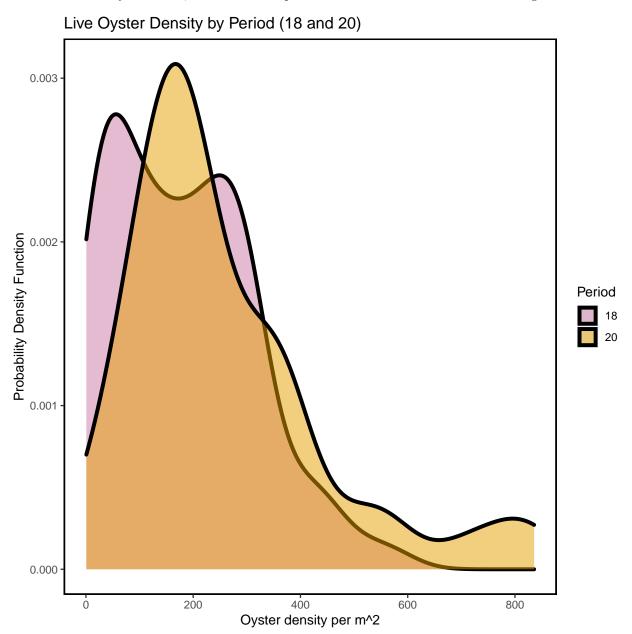


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-02-26.

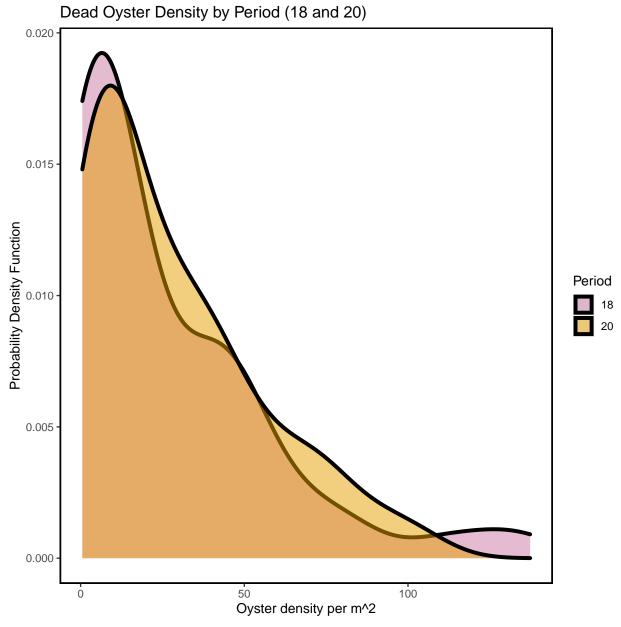


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-02-26.

Live Oyster Density by Period (20 and 22)

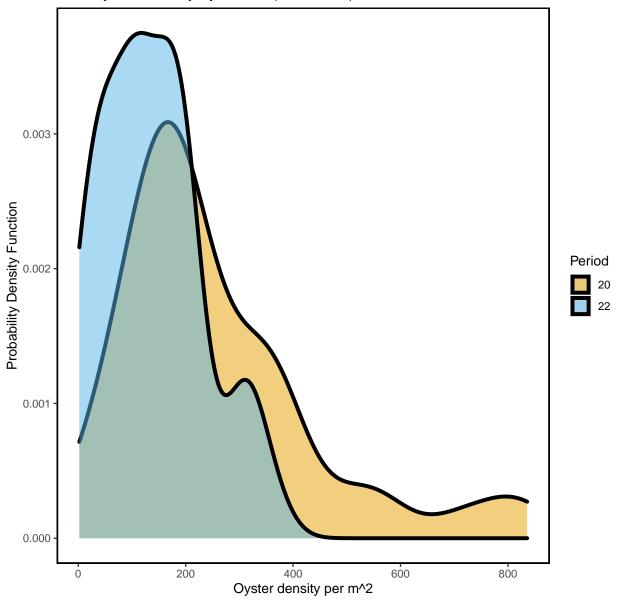


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-02-26.

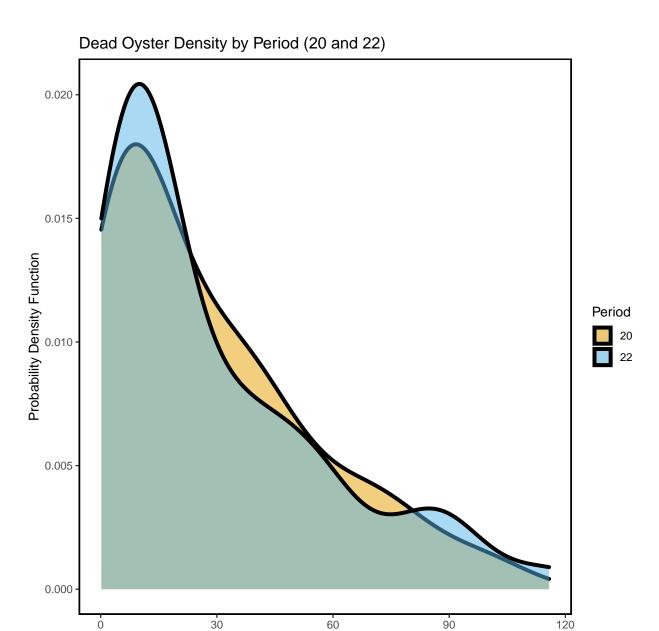


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-02-26.

Oyster density per m^2

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

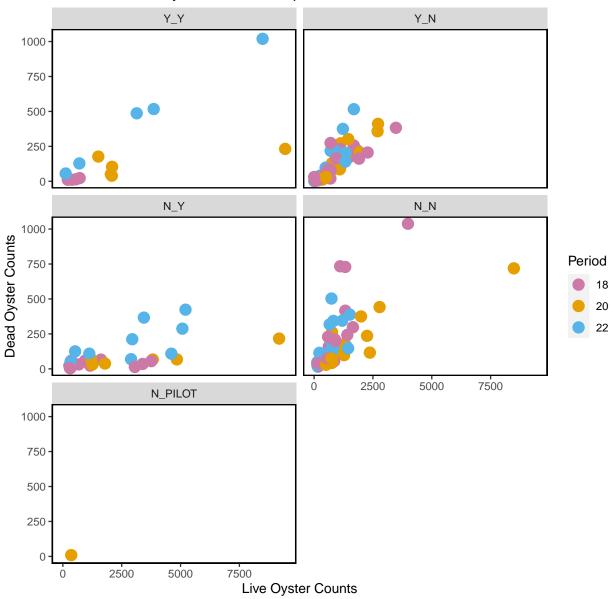


Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021), last sample date of period 22 as 2021-02-26.

Live Counts Double Pass Results

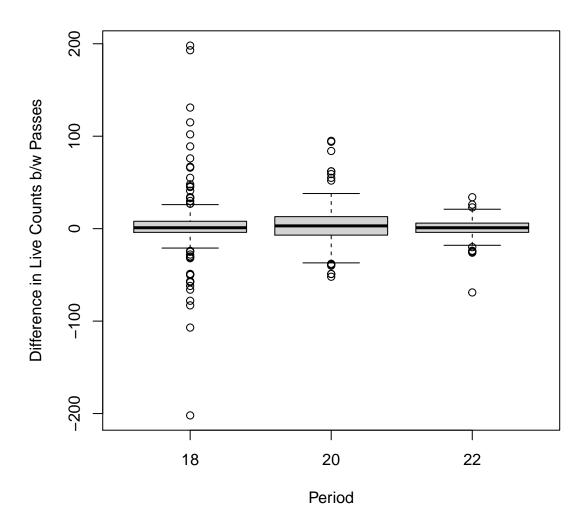


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, and 22

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	0.74	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

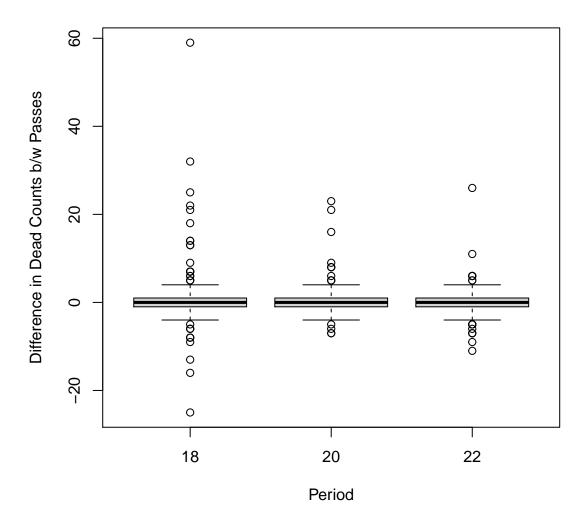


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, and 22

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	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

Summary of Effort for all Periods

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.

•	Locality							
	Number of Tra		Total I					
BT		13		466				
CK		26		712				
CR		46 1330						
HB		45		1129				
LC		196		10677				
LT		17		450				
NN		11		285				
Effort by	Strata							
Strata 1	Number of Tran	sects :	Γotal Le	ength (m)				
N_N		113		3710				
N_PILOT		13		799				
_ N_Y		28		3173				
Y_N		186		5400				
Y_Y		14		1966				
Efft b	Daniad							
Effort by			. 4 - 7 T					
	umber of Trans		otal Ler	•				
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						
-	ocality Number		ansects	Total Leng	t.h (m)			
1	CK	VI 11.	9	10001 20116	242			
1	CR		10		300			
1	HB		12		293			
1	LC		11		250			
10	LC		8		512			
10	LC				512			
16	LC		8		528			
18	BT		6		238			
18	LC		45		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	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 and Period

ETIOL	by Strate	and re	STIC	Ju			
Period	Strata	${\tt Number}$	of	${\tt Transects}$	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			20			544
22	N_Y			9		1	1324
22	Y_N			15			524
22	Y_Y			5		1	1136
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

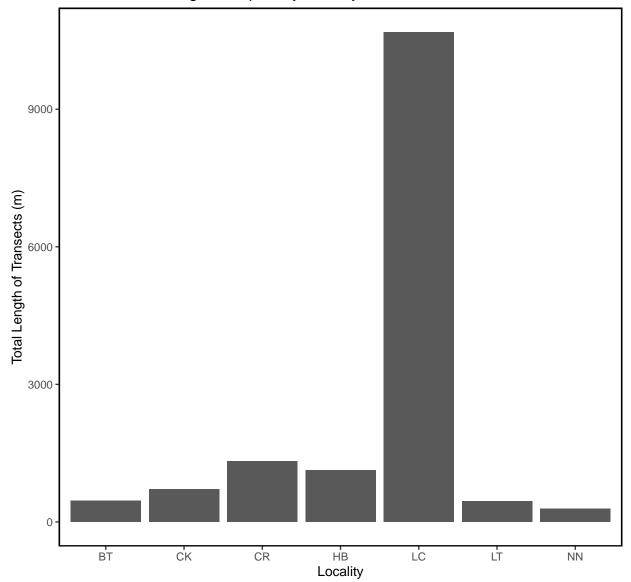


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

Total Transect Length Sampled by Strata

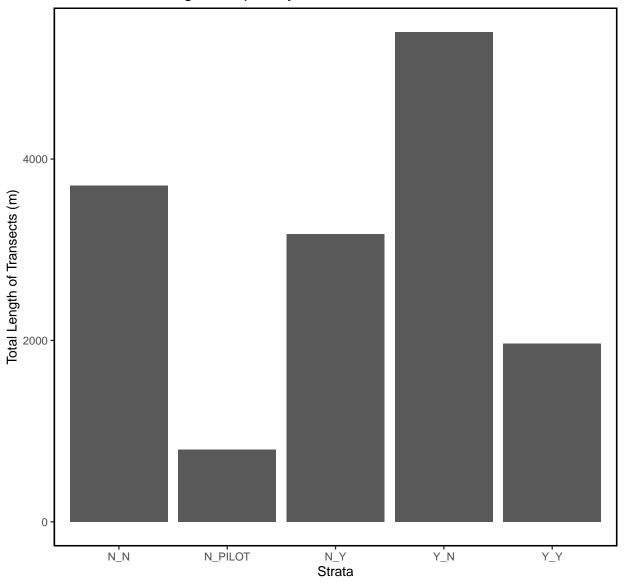


Figure – Bar plot of total transect length in meters sampled by strata for all periods.

Total Transect Length Sampled by Period

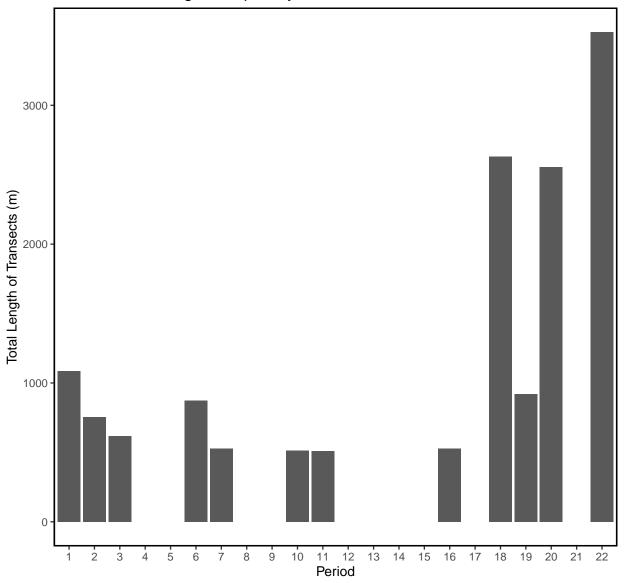


Figure – Bar plot of total transect length in meters sampled by period for all periods.

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 L9	5 U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT 1665	897 22	257 5094708	1.36	626 438	3 2892	1652	741	3022
CK 857	444 10	91 1190933	1.27	214 438	3 1277	859	461	1302
CR 1026	716 10	35 1072162	1.01	153 72	1325	1035	753	1349
HB 902	364 10	47 1095622	1.16	158 593	2 1211	897	606	1217
LC 1094	679 14	49 2099038	1.32	104 889	1298	1092	904	1312
LT 1051	877	368075	0.58	147 765	1339	1053	802	1361
NN 786	727	420847	0.83	196 403	3 1169	782	475	1179
Live Oyster Co								
Strata Mean		SD Var		SE L9		Bstrap_Mean	_	_
N_N 993		55 1112913			3 1189	991	809	1204
N_PILOT 1046					1386	1047	731	1372
N_Y 2337	1436 213	28 4529713	0.91 4	102 1548	3 3125	2322	1615	3152
Y_N 780	435 9:	.7 840395	1.18	68 64	913	779	650	921
Y_Y 2524	1772 29	4 8726548	1.17 7	790 970	3 4071	2490	1221	4042
Time Orgton Co.	unta hu D	and a d						
Live Oyster Co Period Mean M			CVI C	TE TOE	TIOE I	Datasa Masa 1	OF Det I	IOE Determ
						Bstrap_Mean l	_	=
1 1404		3 1657932 0				1421	1076	1820
2 890	476 94!				1234	880	560	1224
3 738	296 81				1065	732	452	1049
6 433	176 534			96 245	621	429	256	626
7 50	29 56			20 11	90	52	18	90
10 1207	1074 67				1672	1212	815	1684
11 886	776 678				1356	897	506	1372
16 494	366 46	217855 0	.95 16	55 170	817	490	208	822
18 982	695 93	874733 0	.95 12	20 748	1217	986	778	1236
19 555	329 573	328431 1	.03 9	97 365	745	551	395	727
20 1844	1253 212	4517189 1	.15 31	1236	2451	1832	1294	2462
22 1334	702 1693	3 2867783 1	.27 24	12 860	1808	1330	875	1828

Live Density Statistics for all Periods

Live Density by Locality													
		-	_	Var	CV	SE	L95	U95	Bstrap_Mean	L95_	Bstrap	U95_	Bstrap
вт			3 190						262		179		367
CK	241	11:	2 321	102795	1.33	63	118	365	240)	137		360
CR	288	18	1 294	86231	1.02	43	203	373	288	}	211		376
HB	257	10	1 303	92052	1.18	46	168	347	260)	175		351
LC	152	118	3 149	22325	0.98	11	131	173	151		130		172
LT	278	249	9 143	20392	0.51	35	210	346	278	3	212		344
NN	224	16	4 224	50174	1.00	68	92	356	224	:	124		357
Live Deng	i++ h	C+200	L o										
Live Dens				Von	CV C	- T (חב זוח	E Da	rtman Maan I	OE Da	+ man IIC)E Da	+
									strap_Mean I	.90_DE		,5_DS	
N_N	263			65472 0					263		215		314
N_PILOT	111			3604 0					112		82		145
N_Y	142			9027 0					141		108		177
Y_N				47653 1					187		158		218
Y_Y	116	97	93	8707 0	.81 2	5 6	67 16	4	116		73		166
Live Dens	sity by	y Peri	od										
Period M	lean Me	edian	SD	Var	CV	SE	L9	5	U95 Bstrap_	Mean	L95_Bst	rap	U95_Bstrap
1	393	300.8	362.6	131444	0.92	56	283.			395	_	92.8	506.3
2				81348						254	16	30.0	358.3
3	234	85.3	269.3	72523	1.15	55	126.	1 34	l1.6	231	13	32.8	332.1
6	122	72.2	150.9	22769	1.24	27	68.	6 17	74.9	120	7	73.8	171.9
7	5	2.9	5.6	31	1.12	2	1.	1	8.9	5		1.7	8.5

123

91

49

177

160

258

137

81.6

47.6

20.4

145.2

107.4

208.2

112.2

171.0

136.4

80.6

213.2

214.9

312.8

162.7

10 124 113.3 67.4 4536 0.54 24 76.9 170.3

18 177 154.5 130.8 17117 0.74 17 144.3 210.0

20 258 202.8 187.6 35185 0.73 27 204.4 311.7

36.3 46.4

79.5 67.8 4596 0.75 24 43.4 137.4

85.6 171.9 29552 1.08 29 102.9 216.8

2154 0.95 16 16.9 81.2

8671 0.68 13 111.6 163.8

90

49

160

22 138 120.6 93.1

11

16

Dead Count Statistics for all Periods

Dead Oyst	er Co	unts by	7 Loc	ality									
Locality	Mean	Mediar	n SD	V	ar	${\tt CV}$	SE	L95	U95	Bstrap_Mea	n L95_Bstr	ap	U95_Bstrap
ВТ	313	169	317	1002	40 1	.01	88	140.8	485	31	4 1	l51	485
CK	78	32	2 106	111	70 1	.36	37	4.3	151	. 7	7	17	150
CR	60	47	7 38	14	44 0	. 63	13	35.2	85	5 6	0	39	87
HE	44	21	L 45	20	00 1	.02	15	14.8	73	3 4	.4	19	72
LC	111	66	3 136	184	27 1	. 22	11	90.0	133	3 11	2	91	134
LT	240	210	193		90 0	.80	47	148.1	. 331	. 24	2 1	L56	336
NN	104	74	96	92	16 0	.92	29	47.6	161	. 10	4	59	162
D 10 .	~		a .										
Dead Oyst		•			~			05 1105					5 .
										rap_Mean L9		195_	-
N_N	156							14 197		155	117		196
N_PILOT	82			2136				57 108		82	61		106
N_Y	96			11604				56 136		96	57		136
Y_N	103			13070				79 127		102	79		128
Y_Y	205	80	288	82752	1.4	0 77	7	54 356	5	209	82		385
Dead Oyst	er Co	unts by	7 Per	iod									
Period M	lean M	edian	SD	Var	CV	5	SE	L95	U95	Bstrap_Mean	L95_Bstra	ıp U	195_Bstrap
7	29	18	30	898	1.03	10	. 6	8.2	50	29	1	LO	51
10	80	88	65	4245	0.82	23	.0	34.5	125	80	4	12	120
11	50	40	25	620	0.49	8	.8	33.2	68	50	9	35	67
16	44	28	41	1708	0.93	14	. 6	15.6	73	44	. 1	L8	72
18	133	55 1	192 3	6903	1.44	24	. 6	85.1	182	133	8	39	184
19	63	44	67	4548	1.08	11.	. 6	40.0	85	62	. 4	11	86
20	148	107 1	140 1	9727	0.95	20	. 5	107.6	188	148	11	١4	188
22	191	128 1	193 3	7399	1.01	27	. 6	137.2	245	190	14	ŧ0	251

Dead Density Statistics for all Periods

Dead Oyster Density by Locality														
Locali	ty Mean	Media	n SD	Var	CV	SE	L95	U95	Bst	rap_Mean	L95	_Bstrap U9	5_Bstra	ар
I	BT 52	39.	0 34	1162	0.65	9.5	33.9	71		53		35.7	7	71
(CK 21	11.	3 28	757	1.29	9.7	2.3	40)	21		6.8	4	10
(CR 20	13.	8 15	235	0.77	5.1	10.0	30)	20		11.4	3	30
I	HB 13	8.	0 14	201	1.12	4.7	3.4	22	2	13		4.9	2	22
]	LC 17	8.	6 20	418	1.21	1.6	13.7	20)	17		13.9	2	20
]	LT 59	50.	5 38	1426	0.64	9.2	41.5	77	•	60		42.8	7	77
I	NN 29	16.	7 25	602	0.85	7.4	14.3	43	}	29		15.8	4	1 5
Dead Oys	ster De	nsity	by St	trata										
Strata	a Mean	Median	SI) Var	CV	s SI	E L9	5	U95	Bstrap_M	ean 1	L95_Bstrap	U95_B	strap
N_I	N 33.6	25.8	32.4	1047	0.96	3.59	9 26.	5 4	0.6	33	3.5	26.6		40.5
N_PILO	Г 8.5	8.7	4.5	5 20	0.53	1.2	5 6.	1 1	0.9	;	3.6	6.5		11.0
N_	Y 5.8	4.0	4.6	3 21	0.80	0.8	7 4.	1	7.4	!	5.7	4.1		7.6
Y_I	N 23.0	13.8	24.0	575	1.04	2.5	7 17.	9 2	8.0	23	3.0	18.3		28.0
Y_Y	Y 8.4	7.7	6.5	5 42	0.77	1.73	3 5.	0 1	1.8	;	3.4	5.4		11.4
Dead Oys	ster De	nsitv	bv Pe	eriod										
Period		•	•		CV	si Si	E L	95	U95	Bstrap 1	Mean	L95_Bstra	n U95 I	Bstrap
7	2.9	1.8	3.0	8.9					4.9		2.9	1.	-	4.9
10	8.2	8.9	6.6	44.0					12.8		8.1	4.	0	12.8
11	5.2		2.6	6.6				41	7.0		5.2	3.	7	6.9
16	4.4	2.8	4.1	16.9	0.93	1.4	5 1.	55	7.2		4.4	2.	0	7.0
18	26.4	15.7	31.3	980.1	1.19	4.0	1 18.	54	34.3		26.5	18.	9	34.1
	18.1			370.6							18.1			24.7
20	27.9	18.4	26.4	697.6	0.95	3.8	5 20.	38	35.5		27.9	20.	8	35.4

36.3

21.4

28.7

22 28.6 14.3 28.7 821.7 1.00 4.09 20.62 36.7

Summary Density Plots for all Periods

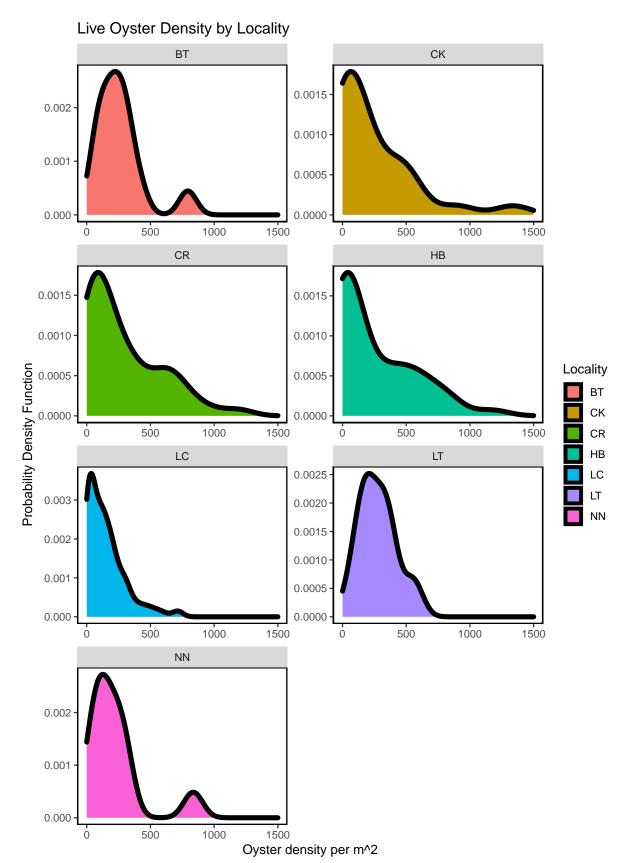


Figure - Calculated live oyster density by locality for all periods including period 22 (current period).

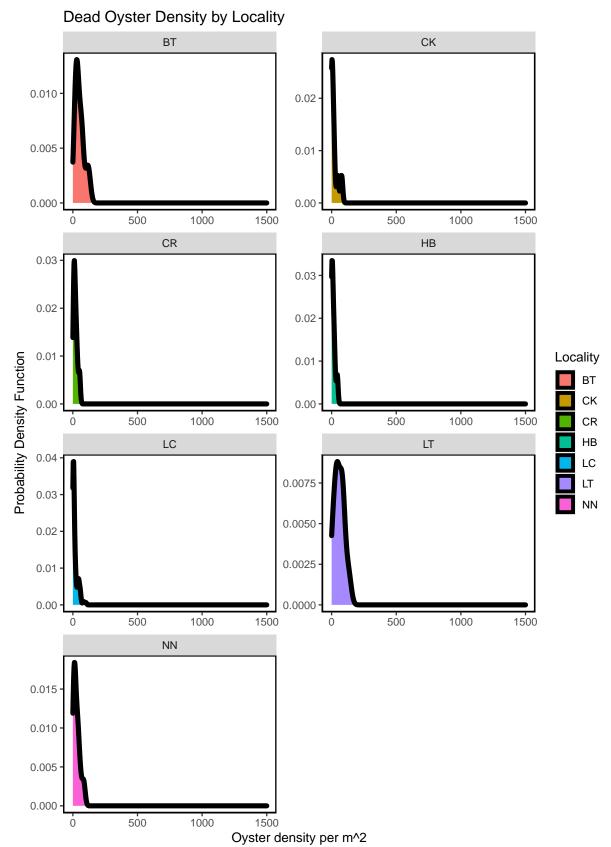


Figure – Calculated dead oyster density by locality for all periods including period 22 (current period).

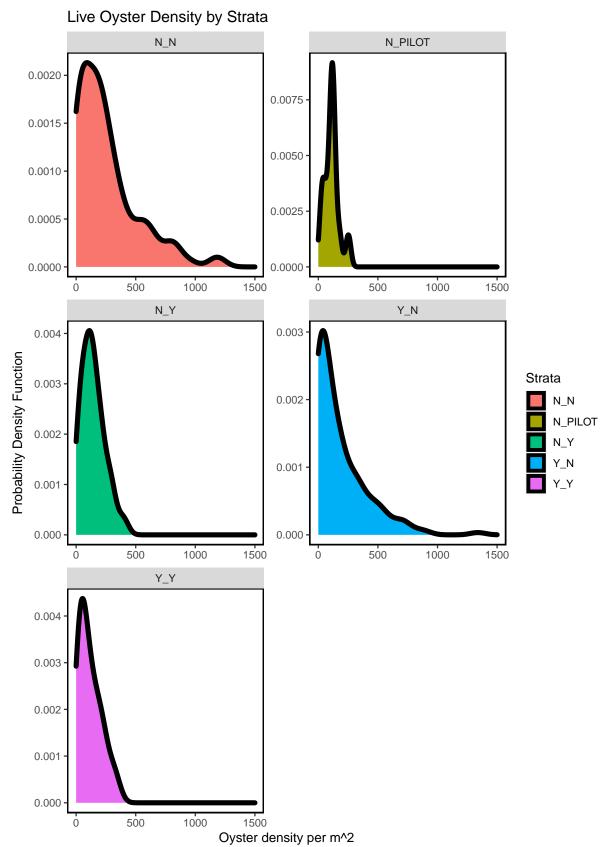


Figure – Calculated live oyster density by strata for all periods including period 22 (current period).

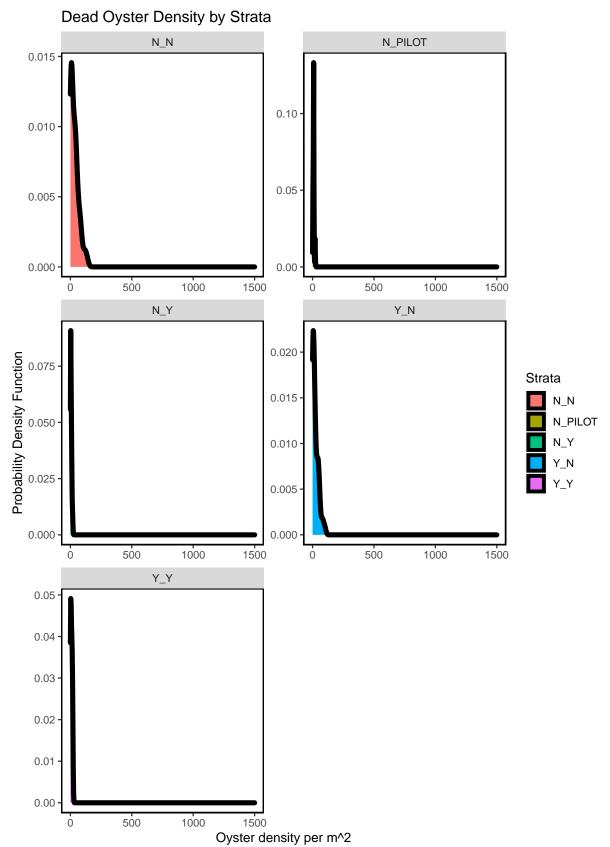


Figure – Calculated dead oyster density by strata for all periods including period 22 (current period).

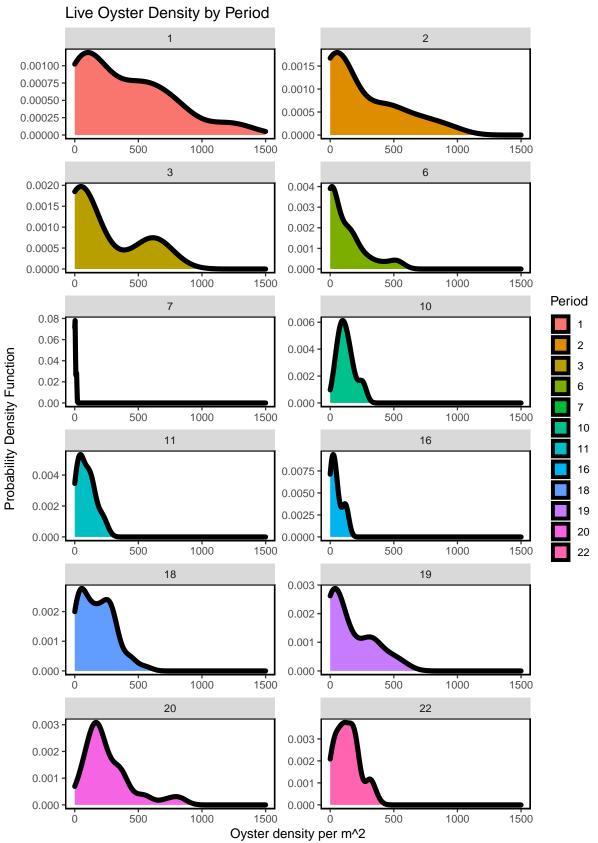


Figure - Calculated live oyster density for all periods including period 22 (current period) using a probability densit

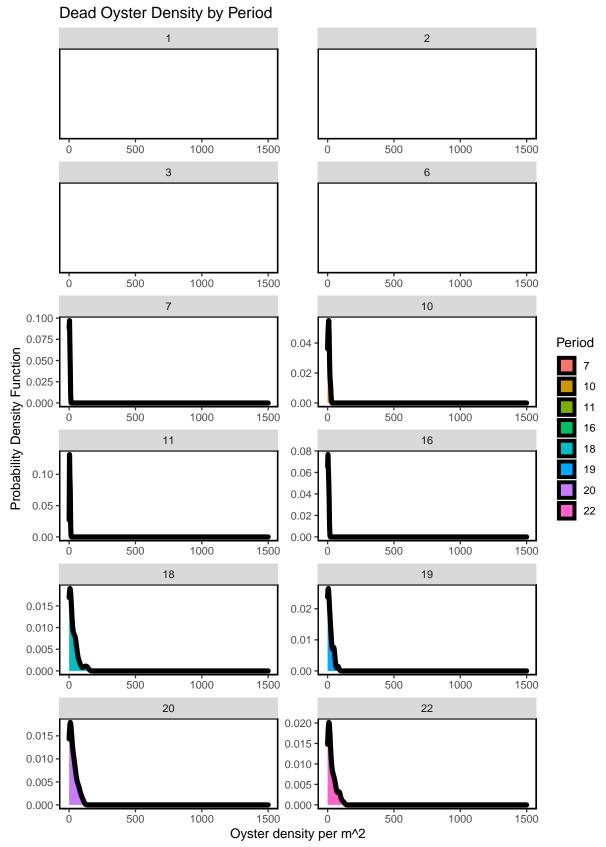


Figure – Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

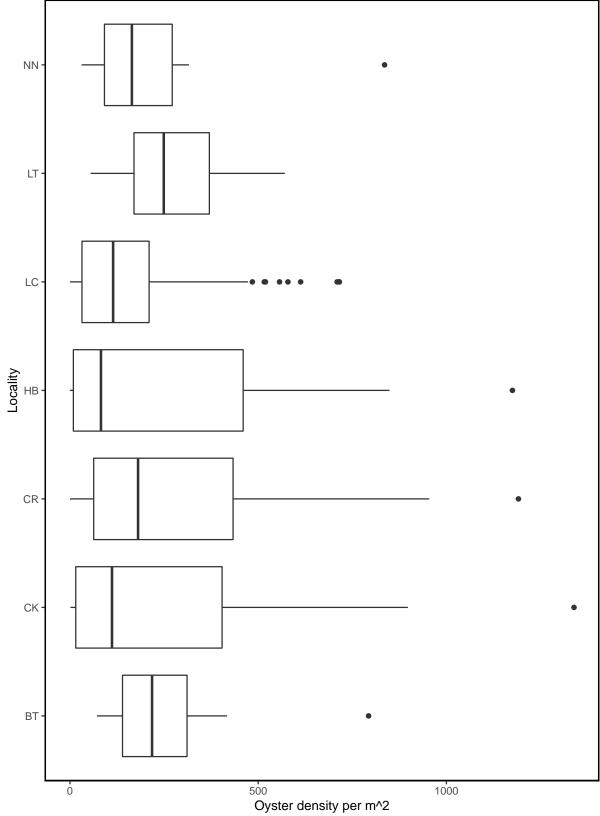


Figure – Box plot depicting live oyster density by locality for all periods including period 22 (current period).

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).

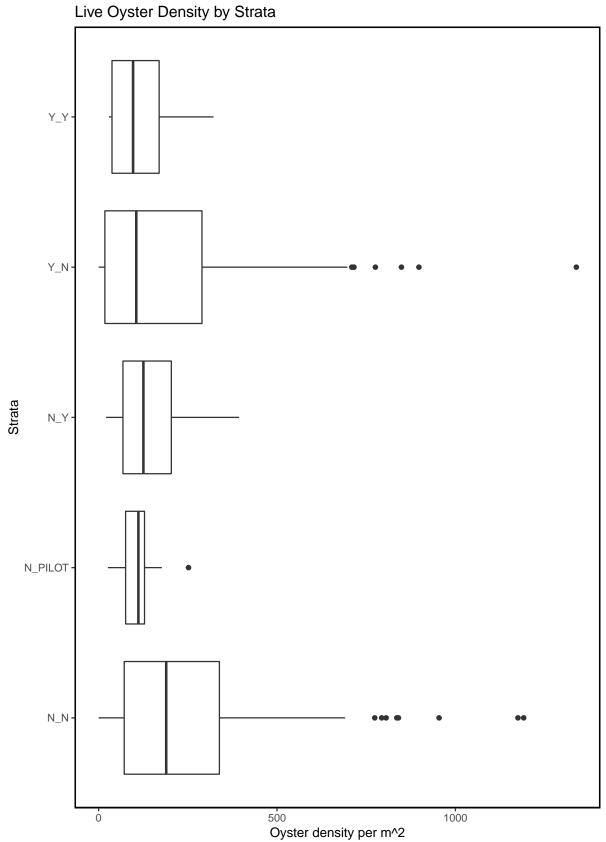


Figure – Box plot depicting live oyster density by strata for all periods including period 22 (current period).

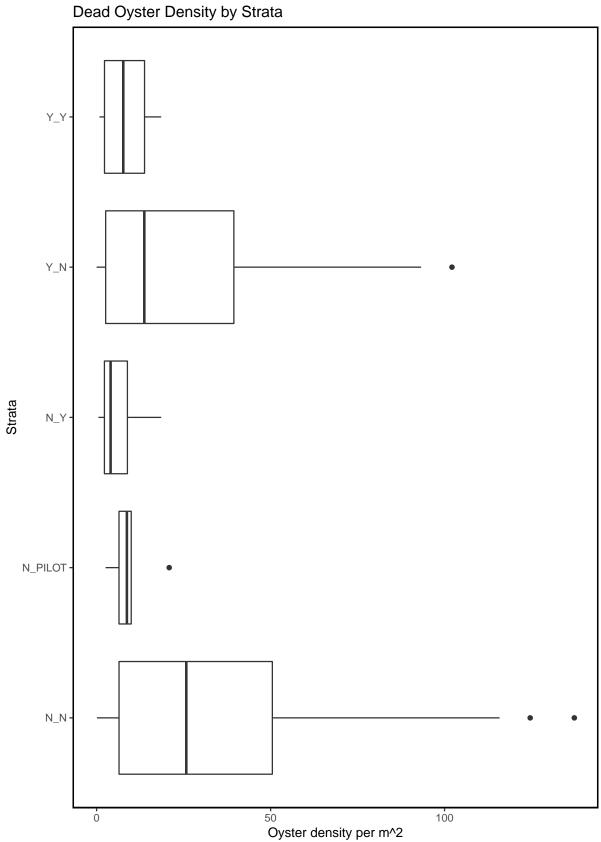


Figure – Box plot depicting dead oyster density by strata for all periods including period 22 (current period).

Live Oyster Density by Period

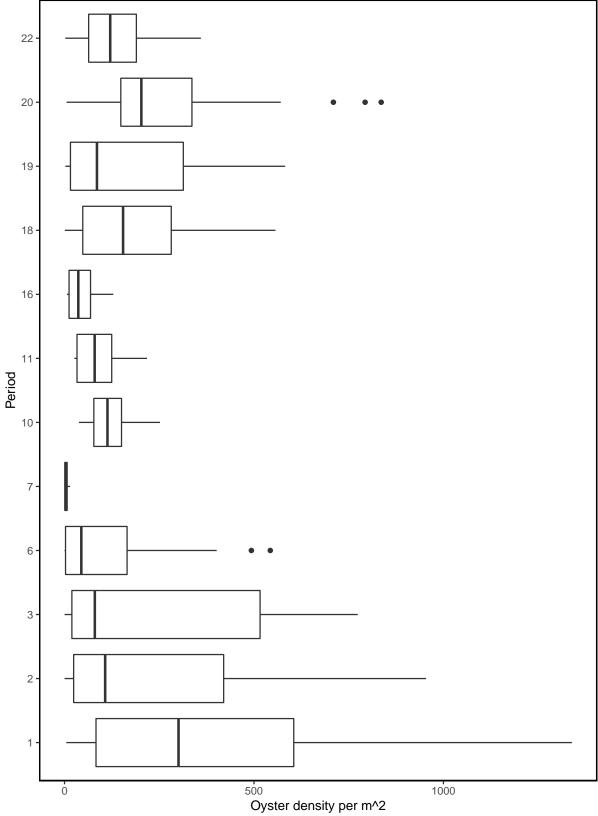


Figure – Box plot depicting live oyster density by period for all periods including period 22 (current period).

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

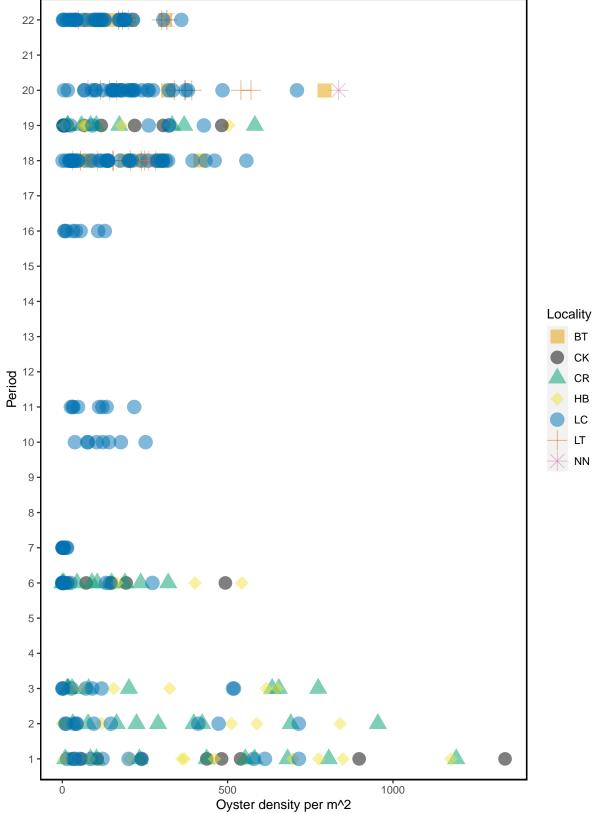


Figure – Live oyster density by locality and period for all periods including period 22 (current period).

Dead Oyster Density by Locality and Period

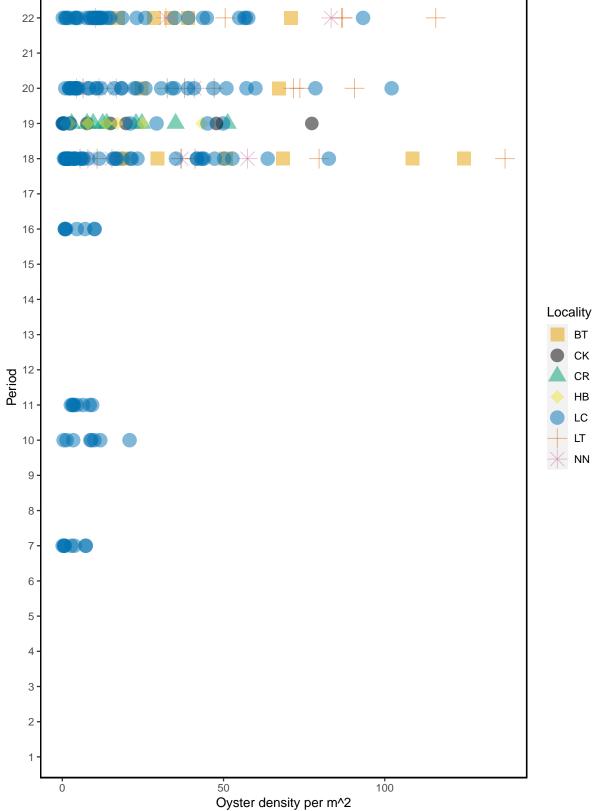


Figure – Dead oyster density by locality and period for all periods including period 22 (current period).

Live Oyster Density by Strata and Period

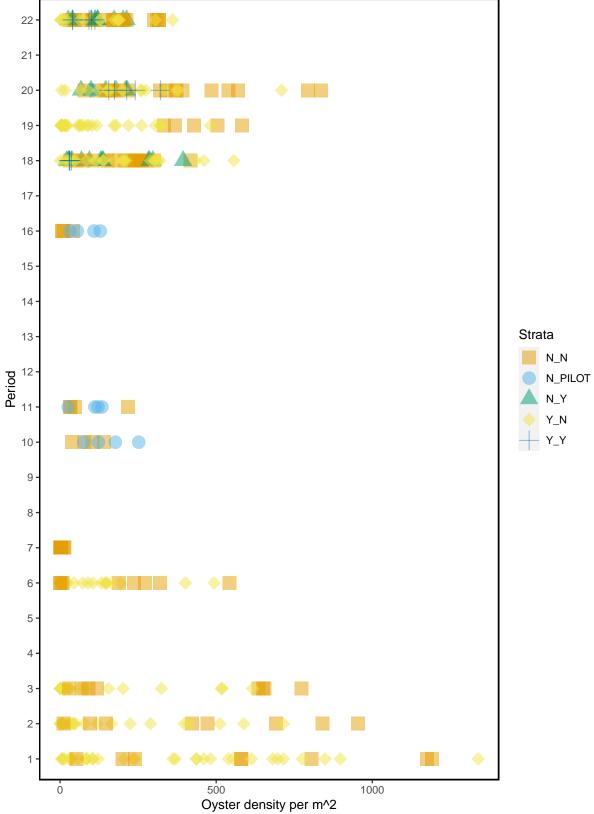


Figure – Live oyster density by strata and period for all periods including period 22 (current period).

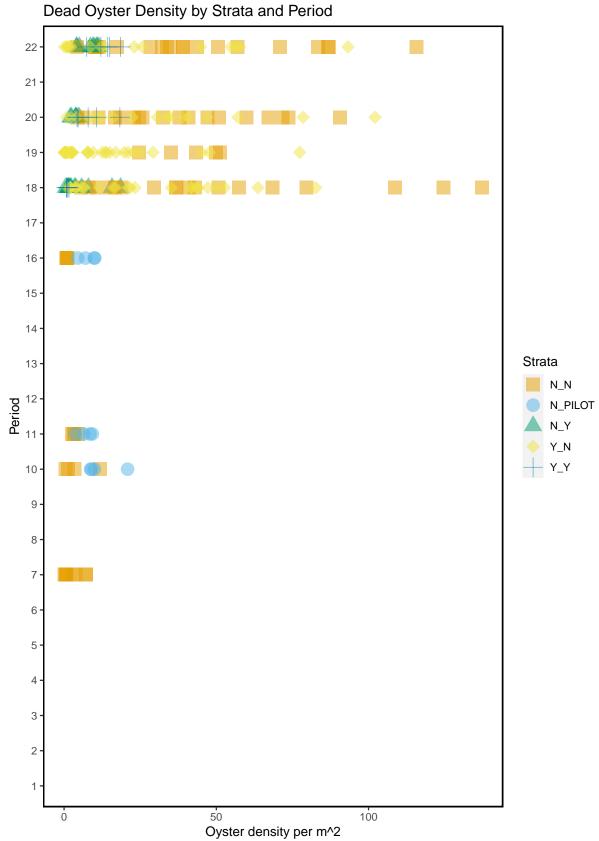


Figure – Dead oyster density by strata and period for all periods including period 22 (current period).

Live and Dead Count Comparison For All Periods

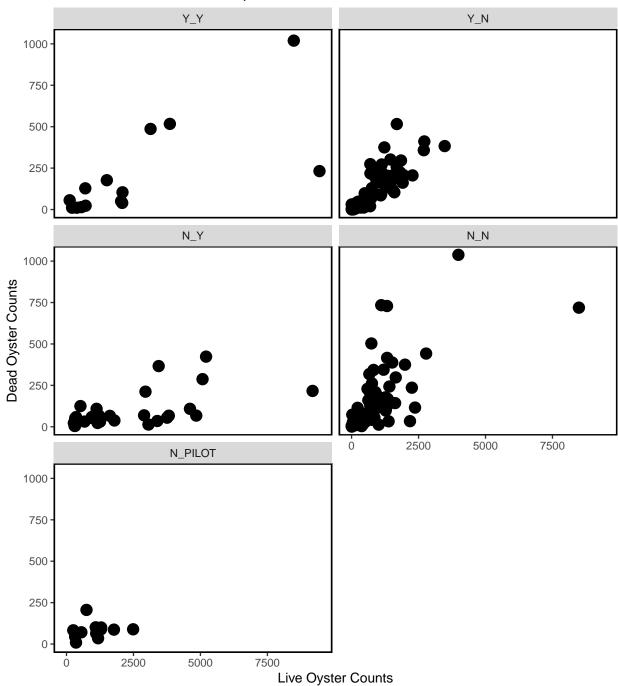


Figure- Live and dead oyster comparison for all periods, last sample date of period 22 is 2021-02-26.

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

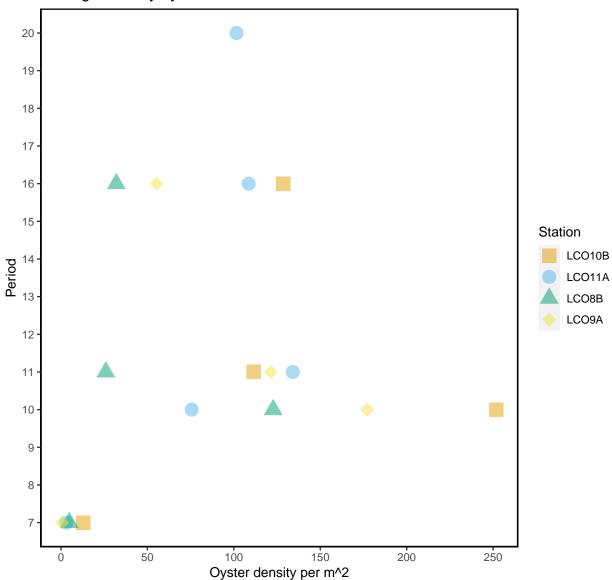


Figure - Average live oyster density comparison by station and period for all stations that were sampled during the pilc

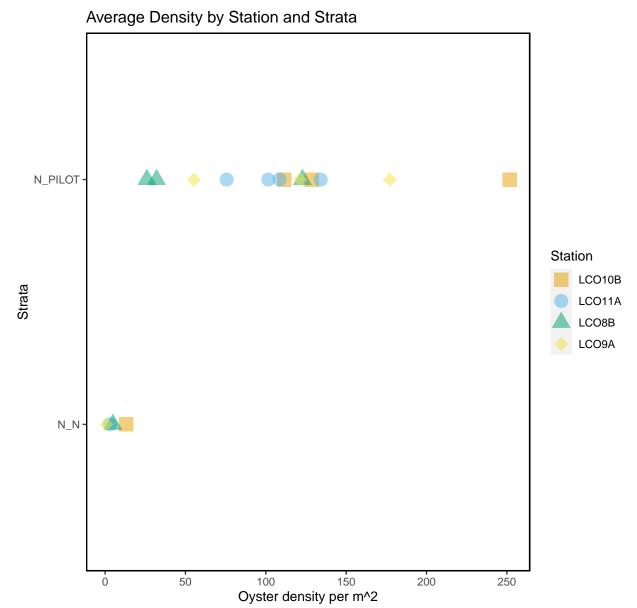


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

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