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 23 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, 116 days have been sampled over this entire project.

Definition of Localities

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

Definition of Strata

STRATA	DEFINITION
Y_N	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

Percentage Complete per Strata in meters
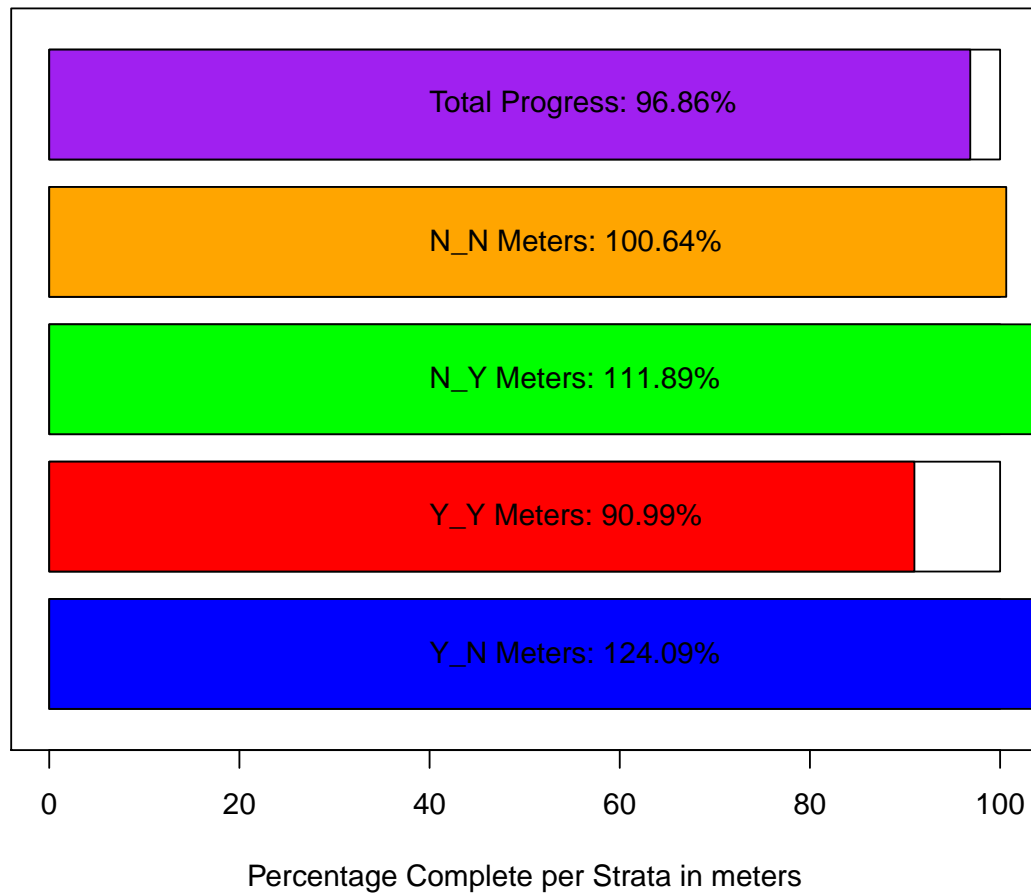
Summary Tables for Periods 18, 20 and 22

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 Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	1665	897	2257	5094708	1.36	626	438	2892	1664	743	3109
LC	1399	854	1680	2822698	1.20	156	1093	1704	1392	1126	1691
LT	1051	877	607	368075	0.58	147	762	1339	1040	786	1330
NN	786	727	649	420847	0.83	196	403	1169	784	457	1172

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1104	818	1219	1486772	1.10	163	785	1424	1104	846	1459
N_PILOT	356	356	NA	NA	NA	NA	NA	NA	177	11	345
N_Y	2337	1436	2128	4529713	0.91	402	1548	3125	2354	1643	3132
Y_N	845	694	777	603969	0.92	102	645	1045	845	653	1047
Y_Y	2412	1772	2797	7824385	1.16	748	947	3877	2420	1137	4010

Live Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
18	982	695	935	874733	0.95	120	748	1217	983	760	1236
20	1844	1253	2125	4517189	1.15	310	1236	2451	1851	1320	2502
22	1302	702	1596	2548674	1.23	228	855	1749	1302	898	1783

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	262	218	190	36278	0.73	53	158	365	262	173	381
LC	165	148	128	16299	0.78	12	141	188	165	143	187
LT	278	249	143	20392	0.51	35	210	346	277	213	346
NN	224	164	224	50174	1.00	68	92	356	225	117	360

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	238	202	165	27289	0.69	22	195	282	238	199	282
N_PILOT	102	102	NA	NA	NA	NA	NA	NA	52	4	99
N_Y	142	125	95	9027	0.67	18	106	177	141	109	179
Y_N	184	167	150	22472	0.82	20	145	222	185	146	225

	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
Y_Y	116	96	93	8708	0.81	25	67	164	116	72	165

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	146	210
20	258	203	188	35185	0.73	27	204	312	258	207	316
22	138	121	93	8672	0.68	13	112	164	137	112	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_Bstrap	U95_Bstrap
BT	313	169	317	100240	1.01	88	141	485	310	163	482
LC	129	70	142	20266	1.10	13	103	155	129	106	154
LT	240	210	193	37090	0.80	47	148	331	238	157	333
NN	104	74	96	9216	0.92	29	48	161	106	57	165

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	206	136	208	43319	1.01	28	152	261	205.2	158	265
N_PILOT	9	9	NA	NA	NA	NA	NA	NA	5.2	1	9
N_Y	96	59	108	11604	1.12	20	56	136	95.5	58	138
Y_N	127	83	125	15698	0.99	16	94	159	126.7	96	158
Y_Y	191	80	256	65477	1.34	68	57	325	188.8	81	325

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	93	187
20	148	107	140	19727	0.95	20	108	188	148	109	188
22	187	128	181	32650	0.96	26	137	238	189	142	244

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	52	39	34	1162	0.65	9.5	34	71	52	35	69
LC	20	11	22	484	1.10	2.0	16	24	20	16	24
LT	59	50	38	1426	0.64	9.2	42	77	59	43	77
NN	29	17	25	602	0.85	7.4	14	43	29	16	43

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	43.9	37.5	32.5	1054	0.74	4.34	35.4	52.4	44.1	36.1	53.0
N_PILOT	2.6	2.6	NA	NA	NA	NA	NA	NA	1.5	1.0	2.0
N_Y	5.8	4.0	4.6	21	0.80	0.87	4.1	7.4	5.7	4.1	7.6
Y_N	27.4	21.4	25.6	655	0.94	3.36	20.8	33.9	27.3	21.0	33.6
Y_Y	8.4	7.7	6.5	43	0.77	1.74	5.0	11.8	8.4	5.4	11.7

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	27	20	35
20	28	18	26	698	0.95	3.9	20	35	28	21	36
22	29	15	29	821	1.00	4.1	21	37	29	22	37

Summary Plots for Periods 18, 20 and 22

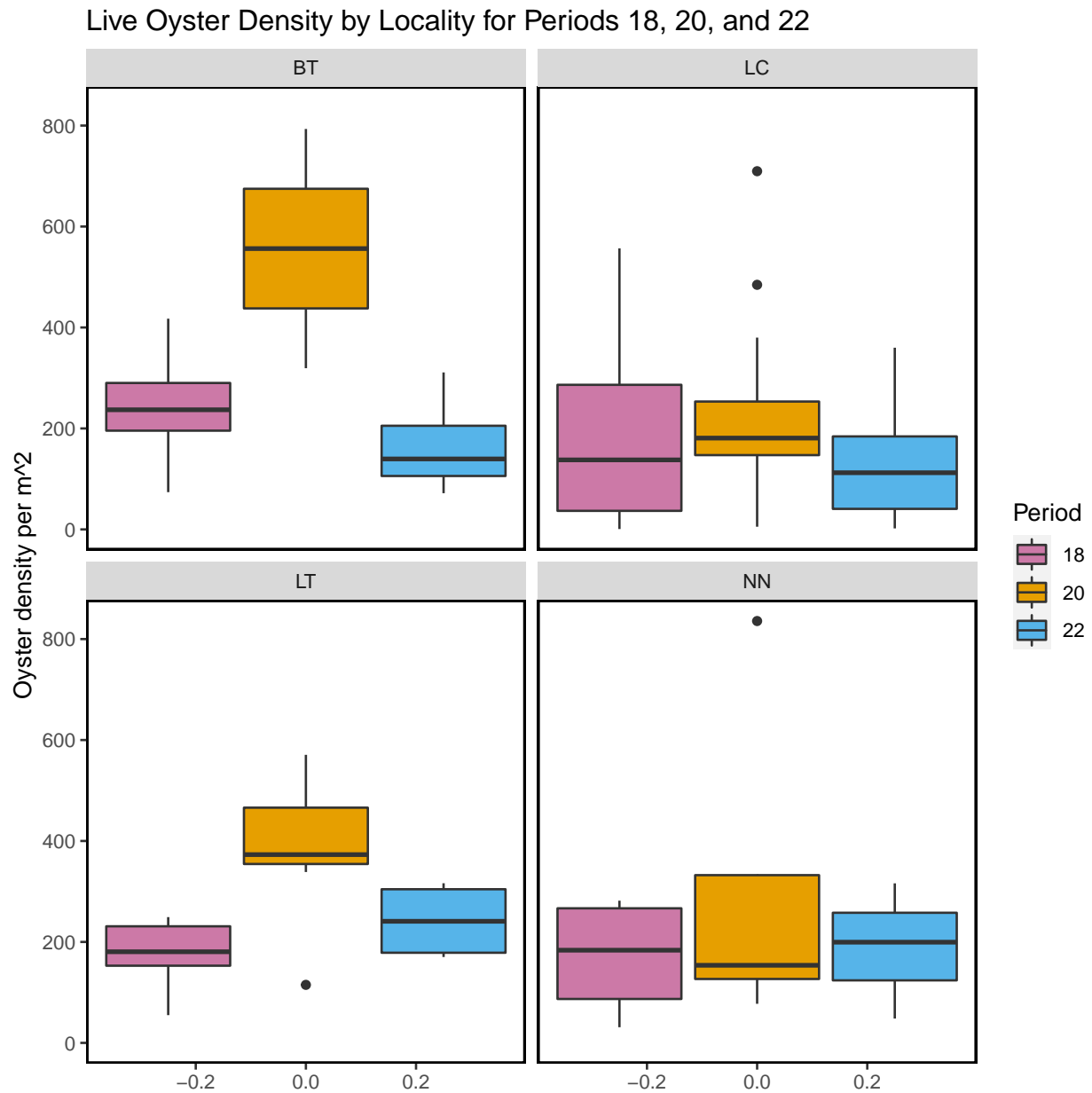Live Oyster Density by Locality for Periods 18, 20, and 22

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 2021-02-12.
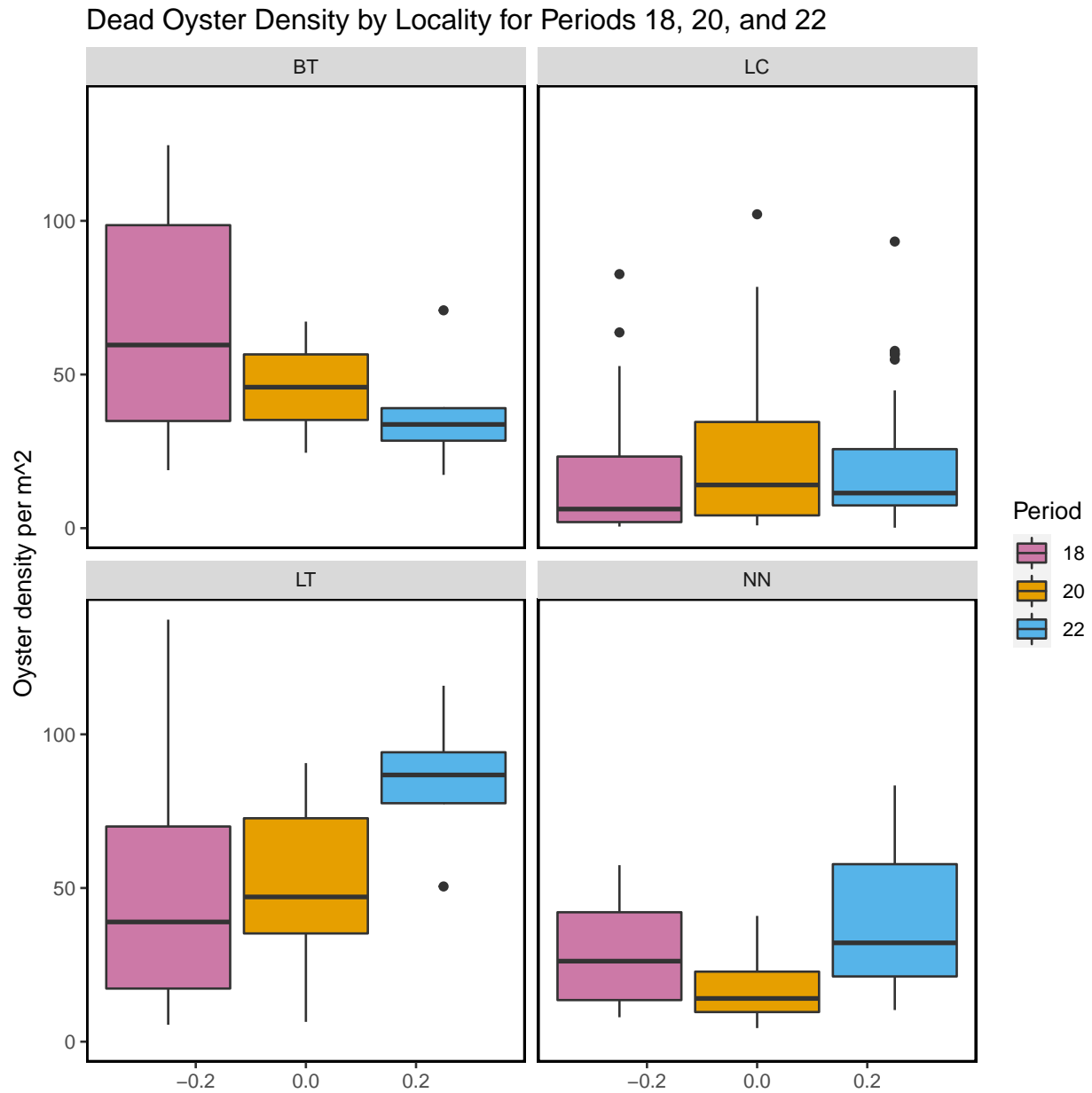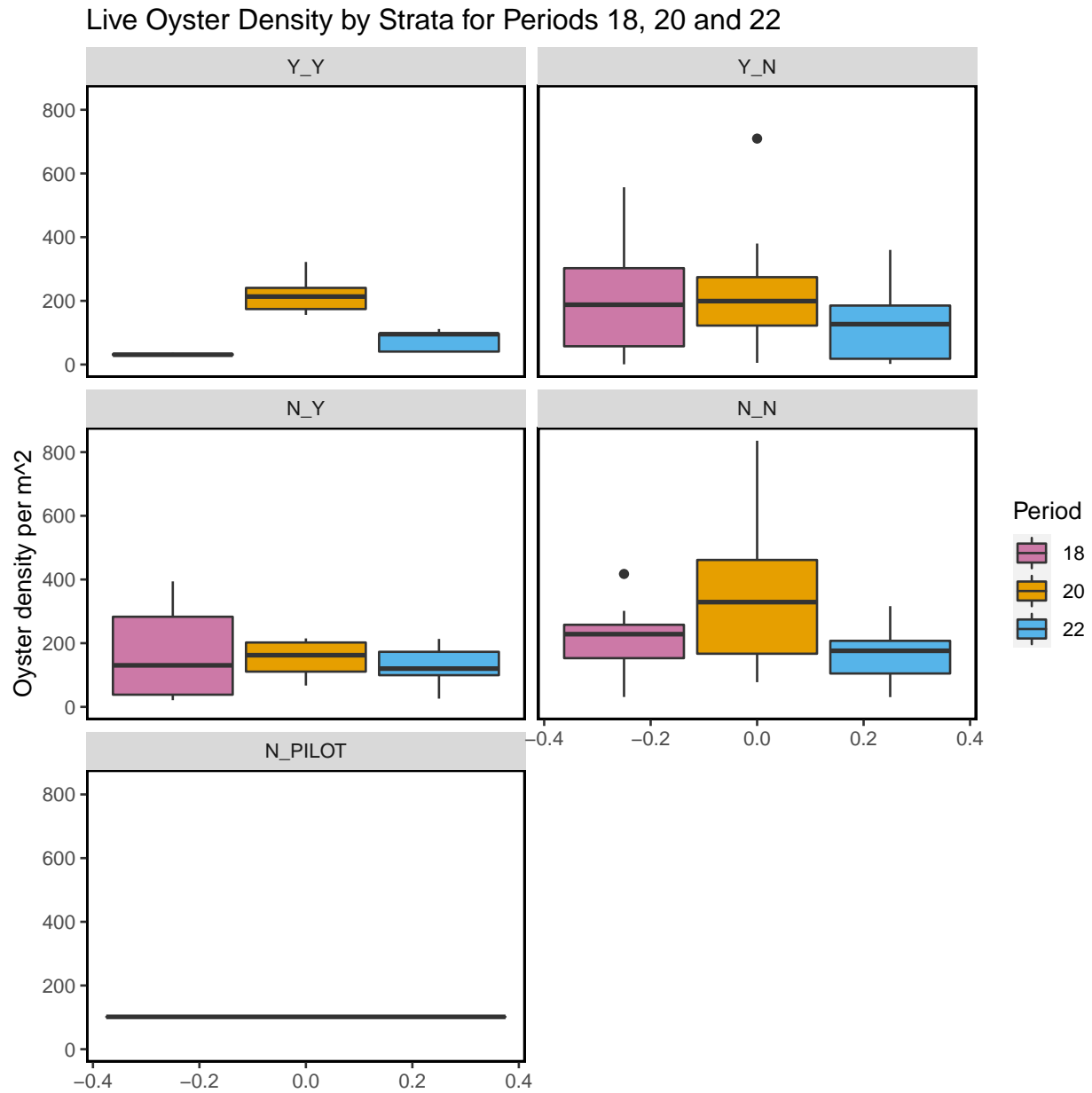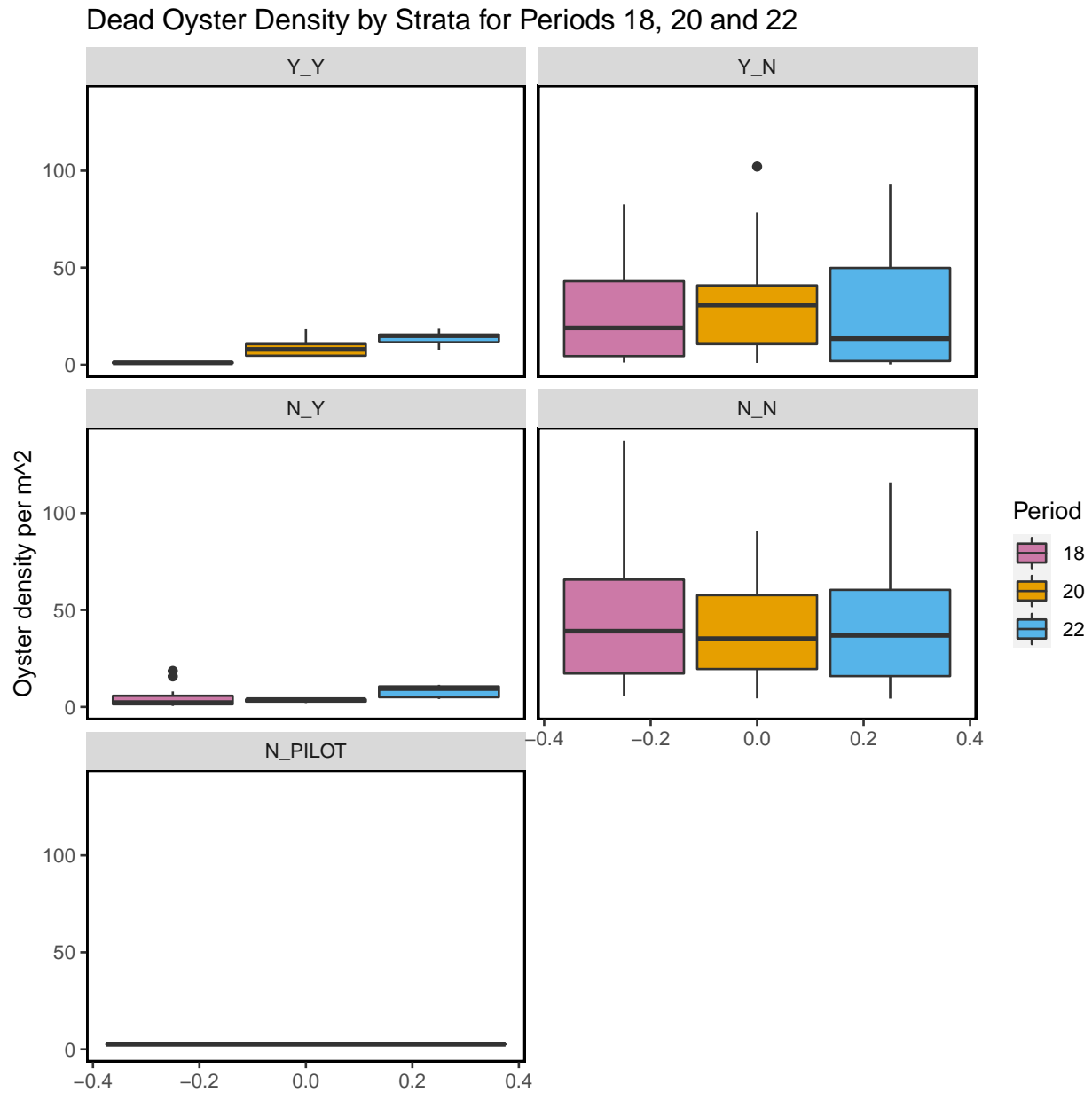
Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-02-12.

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 2021-02-12.

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 2021-02-12.

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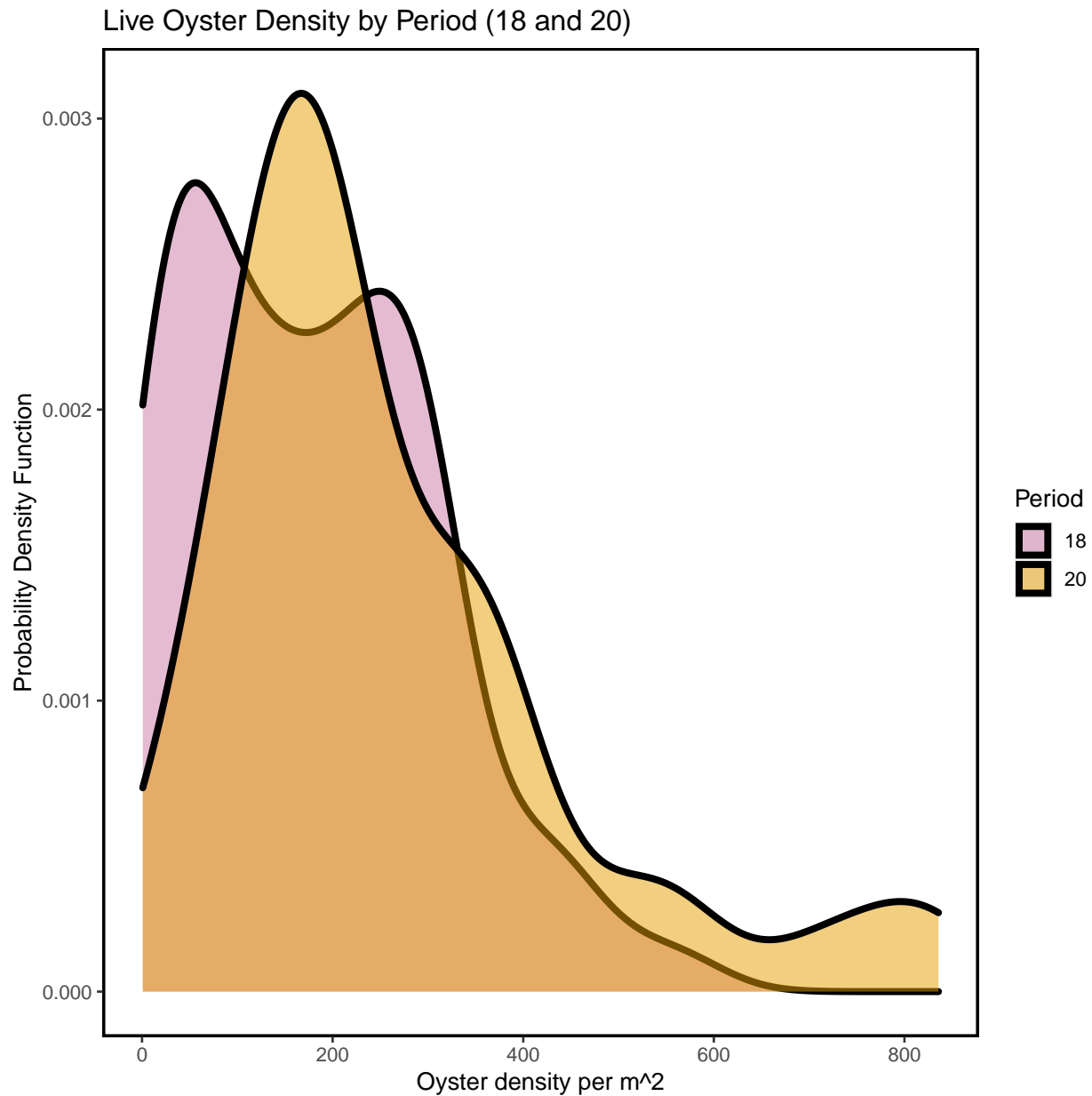

Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-02-12.
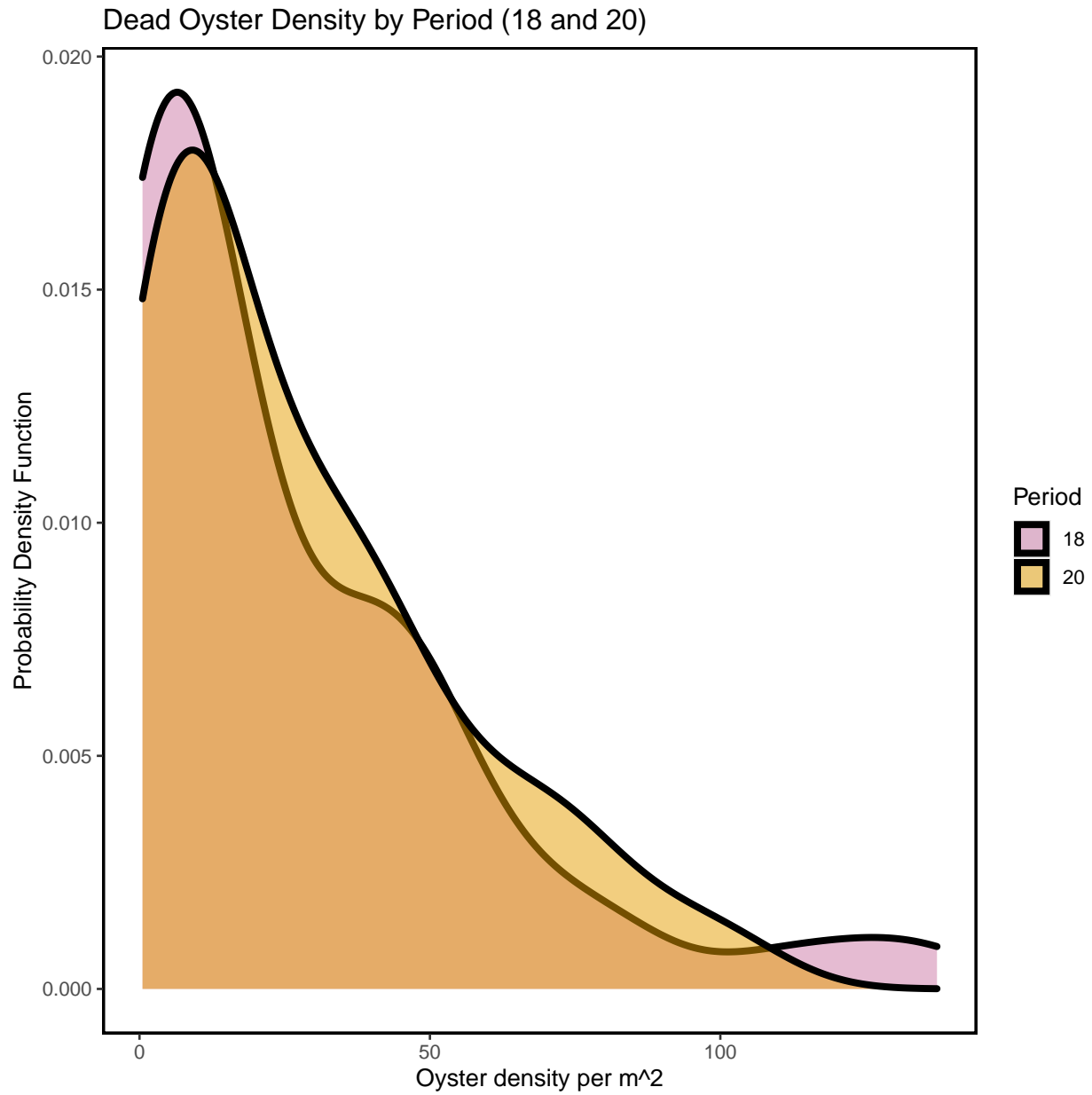
Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-02-12.
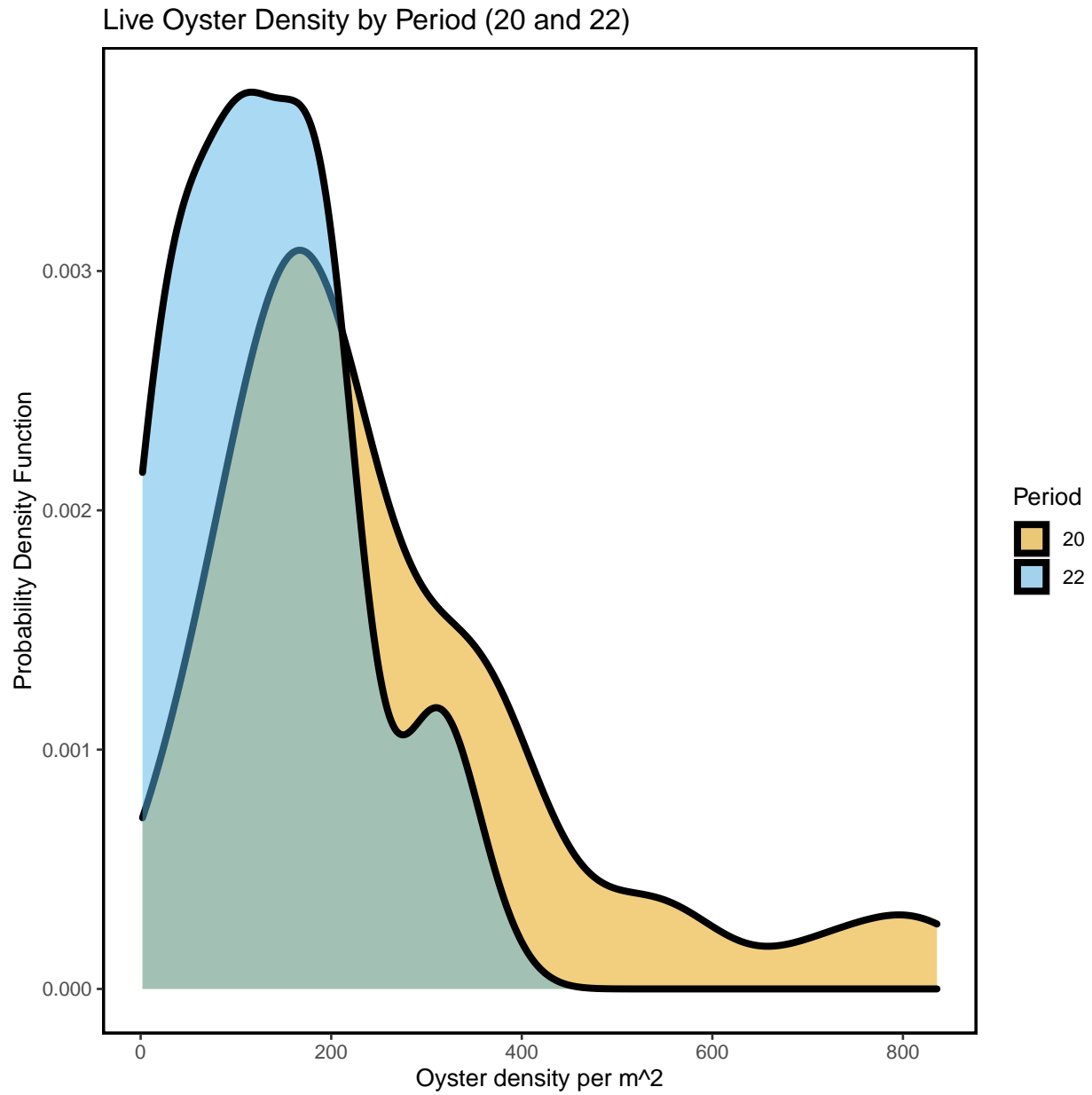
Live Oyster Density by Period (20 and 22)

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 2021-02-12.
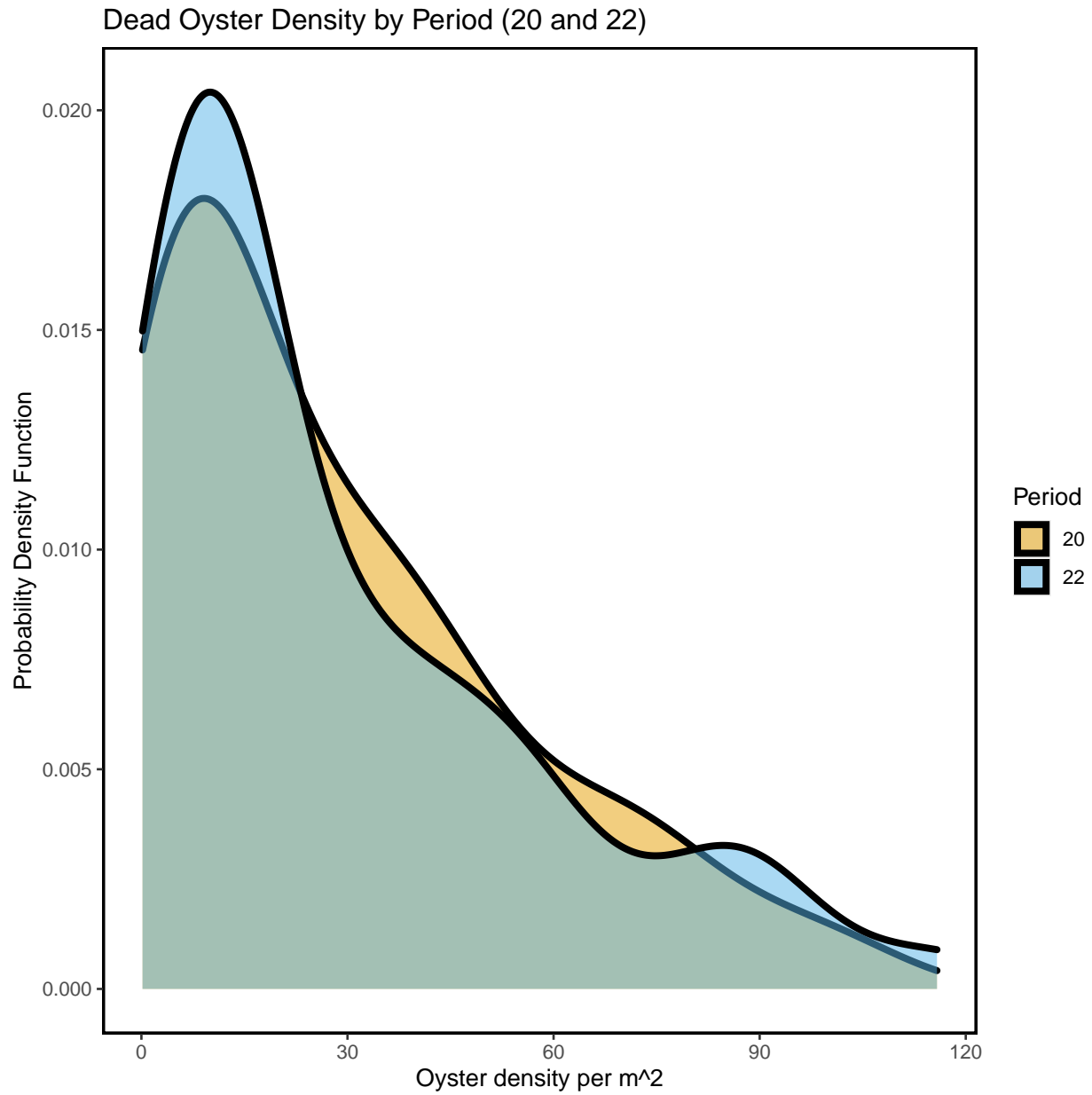
Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-02-12.
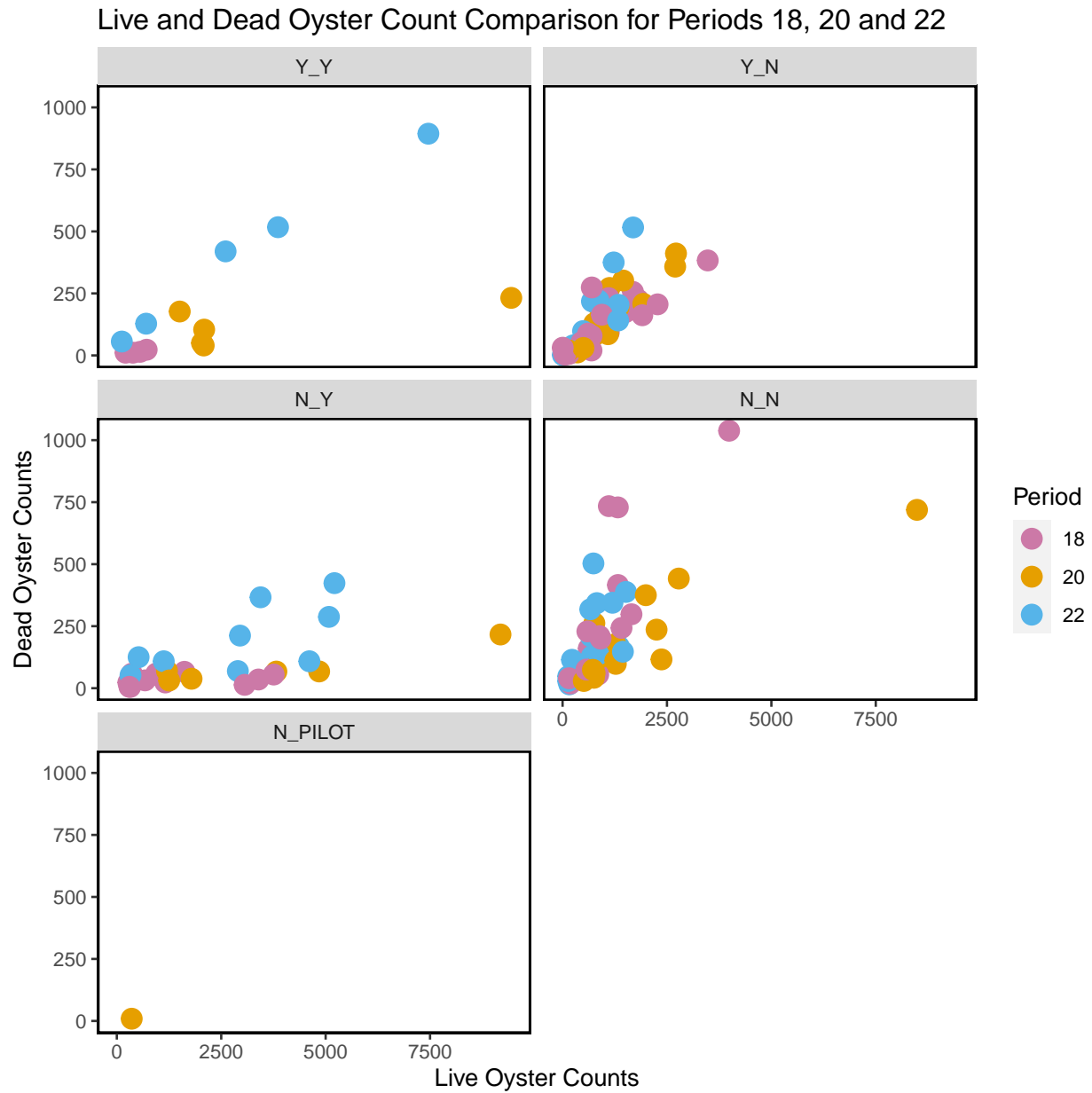
Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021), last sample date of period 22 as 2021-02-12.

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 0.76 0.78
      LT     22 0.49 0.50
```

Table- Coefficient variation between pass 1 and pass 2, aggregated by locality and period for live counts
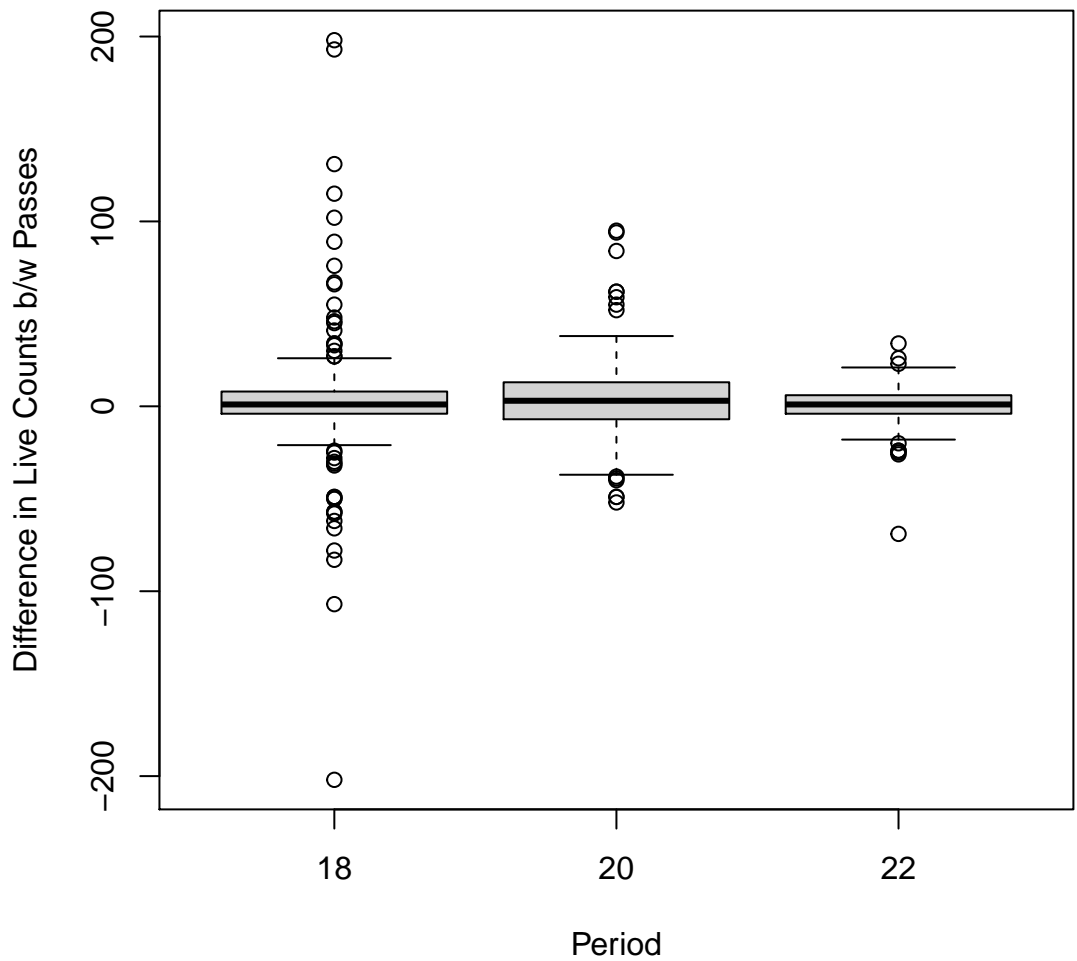
Dead Counts Double Pass Results
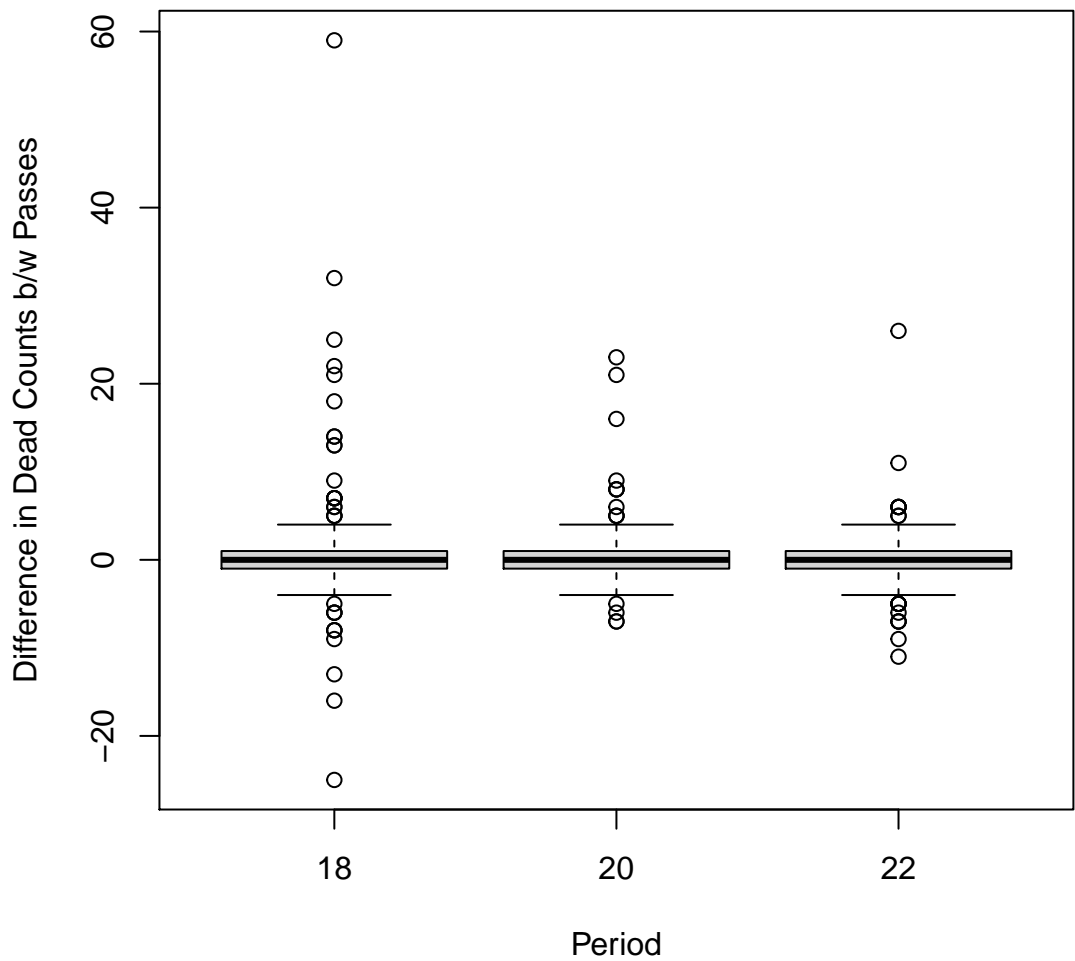
Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, and 22

```
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 1.13 1.12
      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 2021-02-12. 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

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

```
Effort by Locality
 Locality Number of Transects Total Length (m)
      BT                   13               466
      CK                   26               712
      CR                   46              1330
      HB                   45              1129
      LC                  196             10587
      LT                   17               450
      NN                   11               285


Effort by Strata
   Strata Number of Transects Total Length (m)
     N_N                  113              3710
  N_PILOT                  13               799
     N_Y                   28              3173
     Y_N                  186              5400
     Y_Y                   14              1875


Effort by Period
 Period Number of Transects Total Length (m)
       1                  42              1086
       2                  30               753
       3                  25               619
       6                  33               874
       7                   8               528
      10                   8               512
      11                   8               511
      16                   8               528
      18                  61              2632
      19                  35               921
      20                  47              2556
      22                  49              3437


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

19	HB	9	247
19	LC	8	226
2	CR	9	283
2	HB	11	271
2	LC	10	199
20	BT	2	96
20	LC	34	2163
20	LT	7	171
20	NN	4	126
22	BT	5	132
22	LC	37	3133
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

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	20	544
22	N_Y	9	1324
22	Y_N	15	524
22	Y_Y	5	1045
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
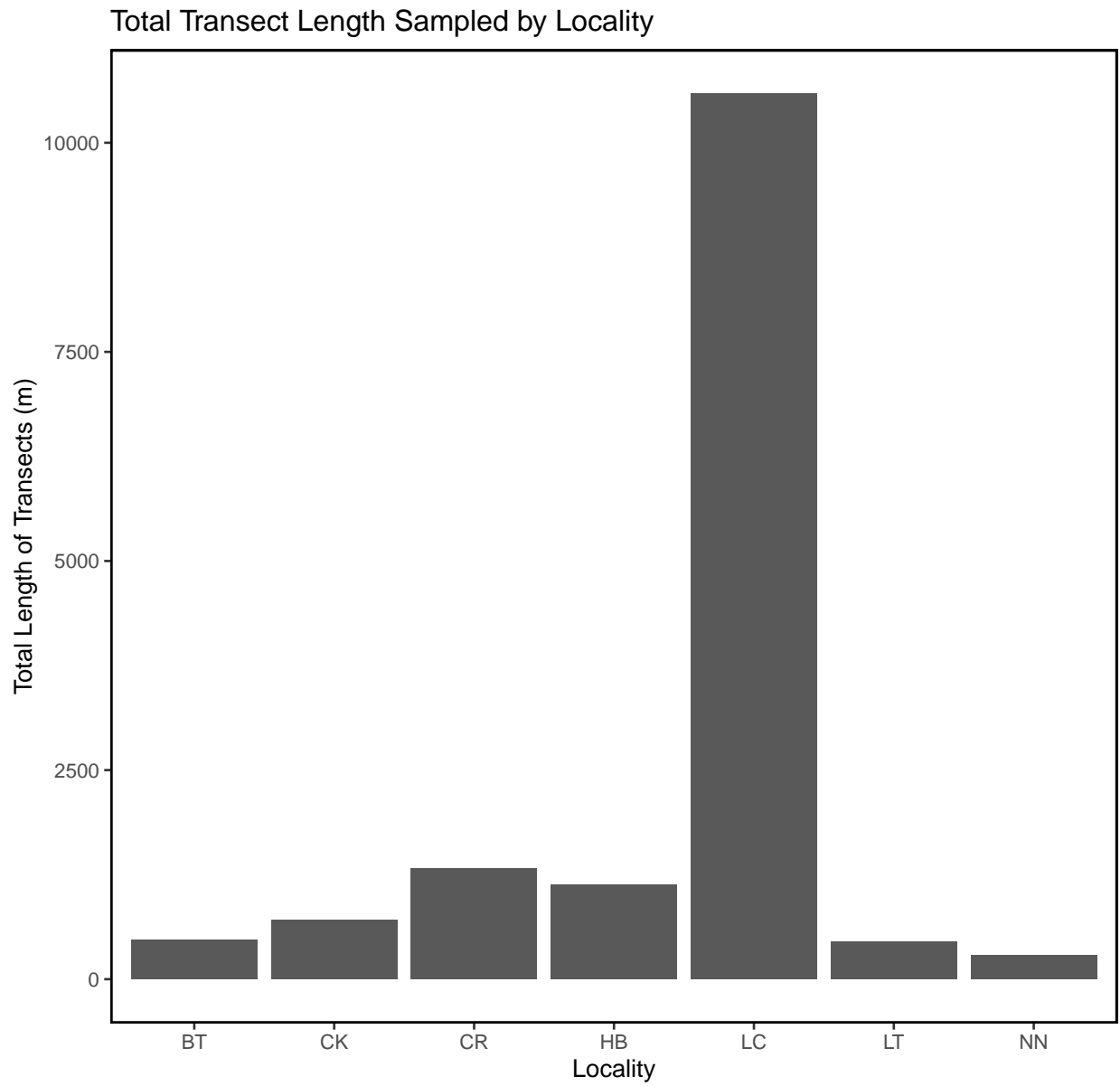

Figure – Bar plot of total transect length in meters sampled by locality for all periods.
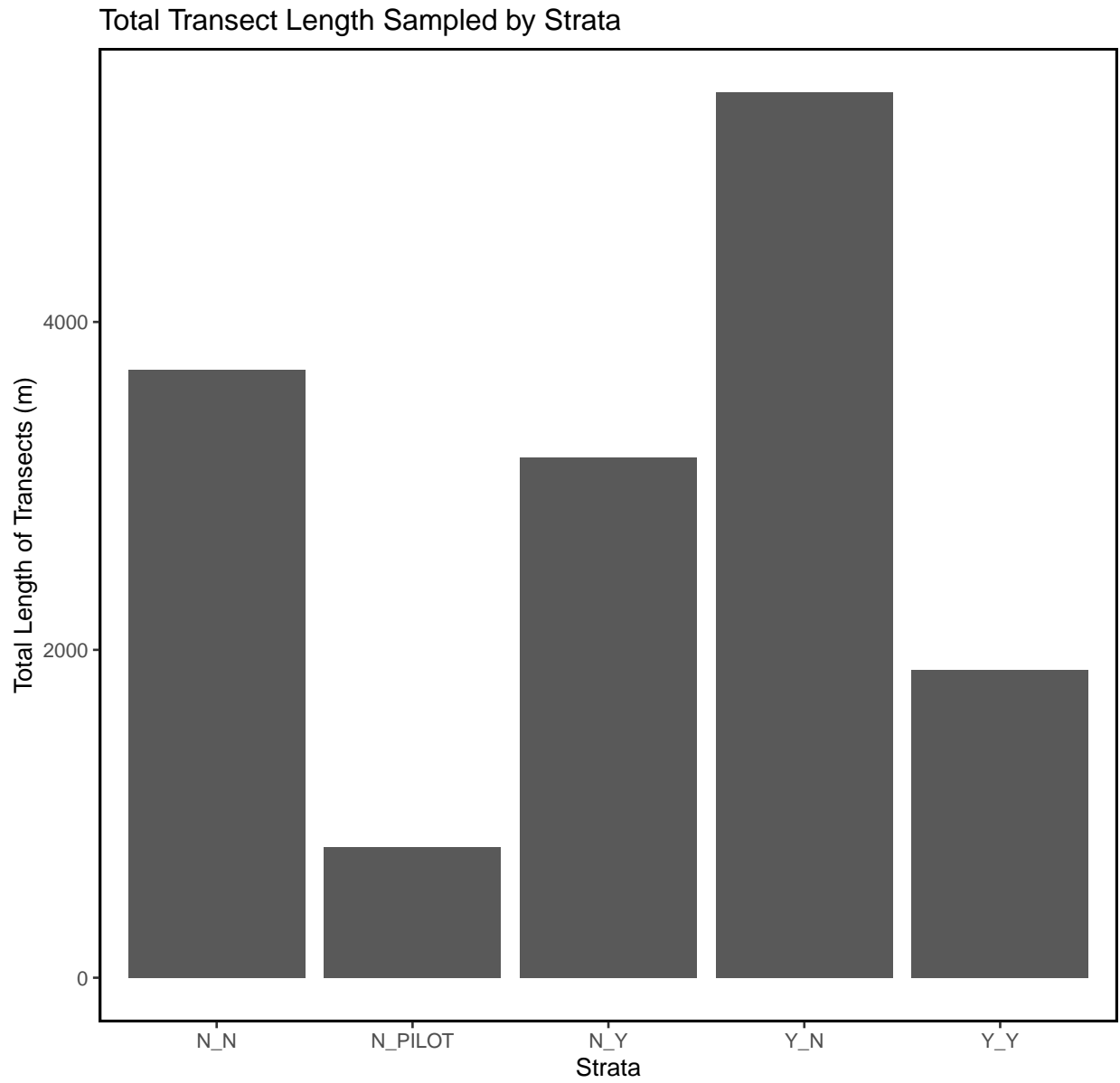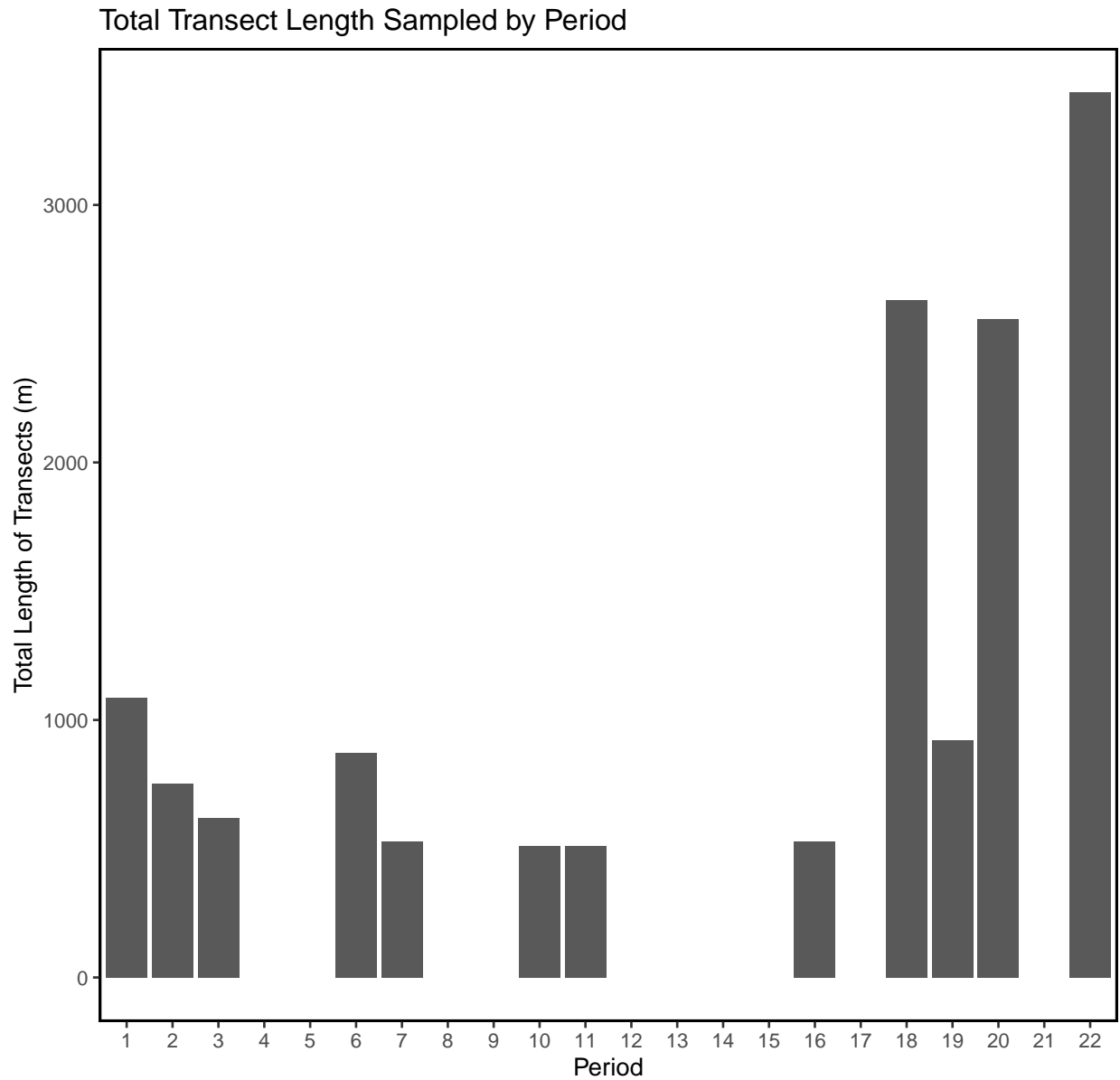
Total Transect Length Sampled by Strata

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 Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	1665	897	2257	5094708	1.36	626	438	2892	1661	753	3068
CK	857	444	1091	1190933	1.27	214	438	1277	867	491	1319
CR	1026	716	1035	1072162	1.01	153	727	1325	1029	743	1347
HB	902	364	1047	1095622	1.16	158	592	1211	896	598	1233
LC	1085	679	1420	2015540	1.31	102	885	1286	1083	893	1292
LT	1051	877	607	368075	0.58	147	762	1339	1044	786	1336
NN	786	727	649	420847	0.83	196	403	1169	782	468	1182

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	993	764	1055	1112913	1.06	100	798	1189	993	827	1204
N_PILOT	1046	1109	627	392853	0.60	174	705	1386	1038	740	1386
N_Y	2337	1436	2128	4529713	0.91	402	1548	3125	2341	1618	3102
Y_N	780	435	917	840395	1.18	68	647	913	781	659	903
Y_Y	2412	1772	2797	7824385	1.16	748	947	3877	2428	1199	3928

Live Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
1	1404	1018	1288	1657932	0.92	199	1014	1793	1400	1022	1799
2	890	476	945	893727	1.06	176	546	1234	877	556	1236
3	738	296	817	668064	1.11	167	411	1065	741	420	1082
6	433	176	534	284791	1.23	96	245	621	429	264	625
7	50	29	56	3186	1.12	20	11	90	50	17	89
10	1207	1074	671	449607	0.56	237	743	1672	1208	815	1691
11	886	776	678	459708	0.77	240	416	1356	894	523	1362
16	494	366	467	217855	0.95	165	170	817	501	218	827
18	982	695	935	874733	0.95	120	748	1217	981	764	1235
19	555	329	573	328431	1.03	97	365	745	560	378	743
20	1844	1253	2125	4517189	1.15	310	1236	2451	1838	1288	2470
22	1302	702	1596	2548674	1.23	228	855	1749	1299	891	1777

Live Density Statistics for all Periods

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	262	218	190	36278	0.73	53	158	365	262	177	377
CK	241	112	321	102795	1.33	63	118	365	242	133	371
CR	288	181	294	86231	1.02	43	203	373	286	198	364
HB	257	101	303	92052	1.18	46	168	347	257	170	346
LC	152	118	149	22325	0.98	11	131	173	152	133	173
LT	278	249	143	20392	0.51	35	210	346	278	218	338
NN	224	164	224	50174	1.00	68	92	356	227	117	368

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	263	191	256	65472	0.97	24	215	310	262	219	310
N_PILOT	111	111	60	3604	0.54	17	79	144	112	82	143
N_Y	142	125	95	9027	0.67	18	106	177	142	111	176
Y_N	187	111	218	47653	1.17	16	156	219	188	156	221
Y_Y	116	96	93	8708	0.81	25	67	164	116	73	164

Live Density by Period

Period	Mean	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	391.4	286.7	501.5
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	255.1	157.0	357.7
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	238.1	141.6	345.2
6	122	72.2	150.9	22769	1.24	27	68.6	174.9	121.4	73.1	181.4
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5.1	1.7	9.4
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	123.4	83.8	169.1
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	90.4	50.4	137.2
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	48.8	20.7	83.8
18	177	154.5	130.8	17117	0.74	17	144.3	210.0	177.0	145.3	208.9
19	160	85.6	171.9	29552	1.08	29	102.9	216.8	160.2	109.0	219.1
20	258	202.8	187.6	35185	0.73	27	204.4	311.7	256.5	207.6	315.8
22	138	120.6	93.1	8672	0.68	13	111.6	163.8	138.4	113.3	162.3

Dead Count Statistics for all Periods

```
Dead Oyster Counts by Locality
```

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	313	169	317	100240	1.01	88	140.8	485	310	166	491
CK	78	32	106	11170	1.36	37	4.3	151	79	18	156
CR	60	47	38	1444	0.63	13	35.2	85	60	40	86
HB	44	21	45	2000	1.02	15	14.8	73	44	19	73
LC	110	66	129	16761	1.18	10	89.8	130	110	92	131
LT	240	210	193	37090	0.80	47	148.1	331	239	153	336
NN	104	74	96	9216	0.92	29	47.6	161	105	56	167

```
Dead Oyster Counts by Strata
```

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	156	83	190	36091	1.22	21	114	197	155	115	201
N_PILOT	82	87	46	2136	0.56	13	57	108	82	61	108
N_Y	96	59	108	11604	1.12	20	56	136	96	62	136
Y_N	103	53	114	13070	1.11	12	79	127	103	80	126
Y_Y	191	80	256	65477	1.34	68	57	325	195	77	339

```
Dead Oyster Counts by Period
```

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
7	29	18	30	898	1.03	10.6	8.2	50	29	11	49
10	80	88	65	4245	0.82	23.0	34.5	125	79	39	122
11	50	40	25	620	0.49	8.8	33.2	68	51	36	67
16	44	28	41	1708	0.93	14.6	15.6	73	45	20	72
18	133	55	192	36903	1.44	24.6	85.1	182	134	89	185
19	63	44	67	4548	1.08	11.6	40.0	85	63	42	87
20	148	107	140	19727	0.95	20.5	107.6	188	148	111	188
22	187	128	181	32650	0.96	25.8	136.8	238	187	143	239

Dead Density Statistics for all Periods

```
Dead Oyster Density by Locality
```

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	52	39.0	34	1162	0.65	9.5	33.9	71	53	36.3	71
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	10.0	30	20	12.2	30
HB	13	8.0	14	201	1.12	4.7	3.4	22	13	4.8	23
LC	17	8.6	20	418	1.21	1.6	13.7	20	17	13.9	20
LT	59	50.5	38	1426	0.64	9.2	41.5	77	60	42.6	78
NN	29	16.7	25	602	0.85	7.4	14.3	43	29	16.8	44

```
Dead Oyster Density by Strata
```

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	33.6	25.8	32.4	1047	0.96	3.59	26.5	40.6	33.6	26.7	40.8
N_PILOT	8.5	8.7	4.5	20	0.53	1.25	6.1	10.9	8.5	6.3	11.1
N_Y	5.8	4.0	4.6	21	0.80	0.87	4.1	7.4	5.8	4.2	7.5
Y_N	23.0	13.8	24.0	575	1.04	2.57	17.9	28.0	22.9	18.0	28.2
Y_Y	8.4	7.7	6.5	43	0.77	1.74	5.0	11.8	8.4	5.4	11.8

```
Dead Oyster Density by Period
```

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
7	2.9	1.8	3.0	8.9	1.03	1.05	0.82	4.9	2.9	1.2	5.0
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.1	4.2	12.4
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.7	6.9
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.3	1.8	7.0
18	26.4	15.7	31.3	980.1	1.19	4.01	18.54	34.3	26.5	19.3	35.4
19	18.1	13.1	19.3	370.6	1.07	3.30	11.59	24.5	18.1	12.6	24.5
20	27.9	18.4	26.4	697.6	0.95	3.85	20.38	35.5	27.6	20.2	34.9
22	28.7	15.0	28.7	821.4	1.00	4.09	20.63	36.7	28.6	20.9	37.0

Summary Density Plots for all Periods
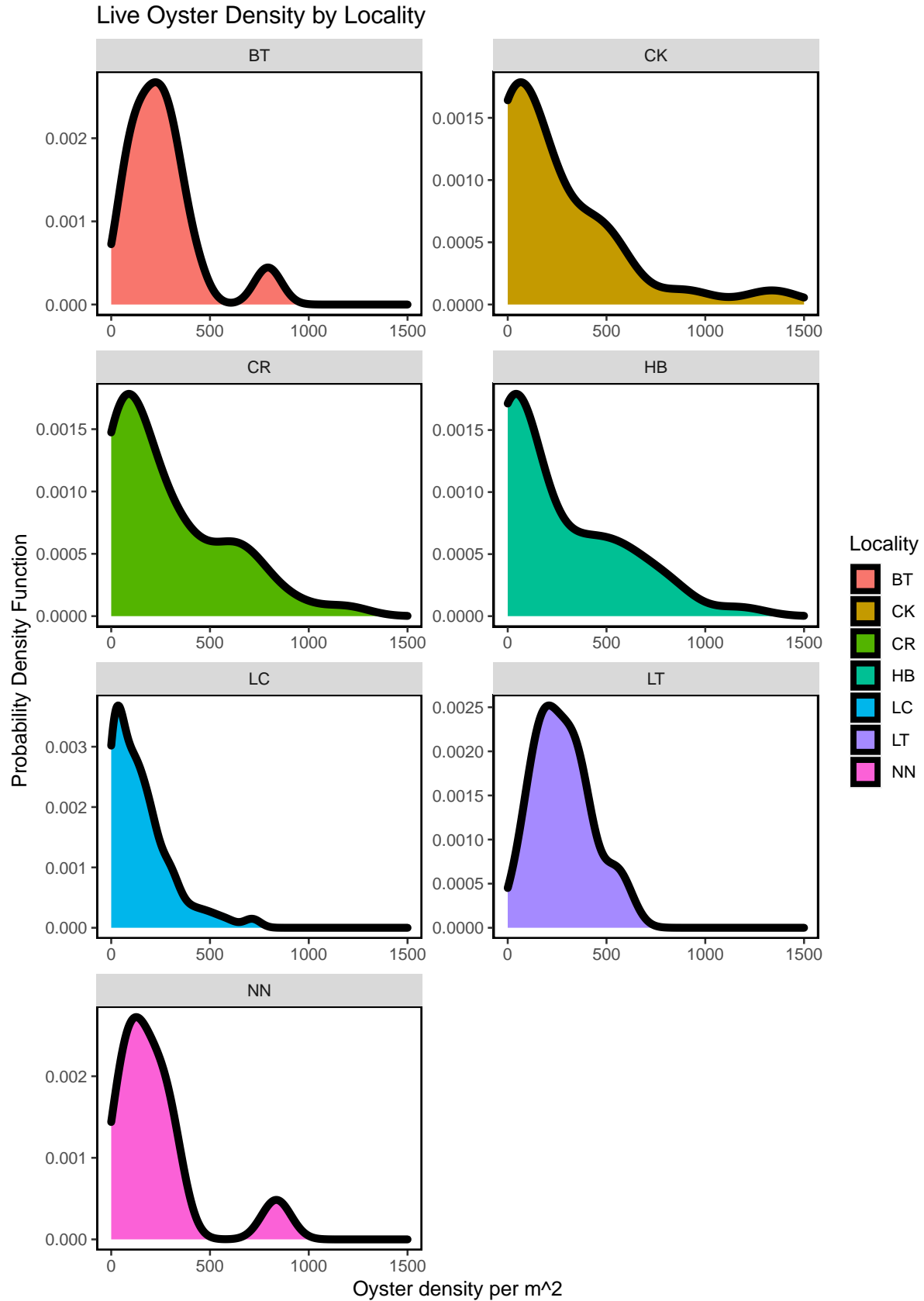
Live Oyster Density by Locality

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

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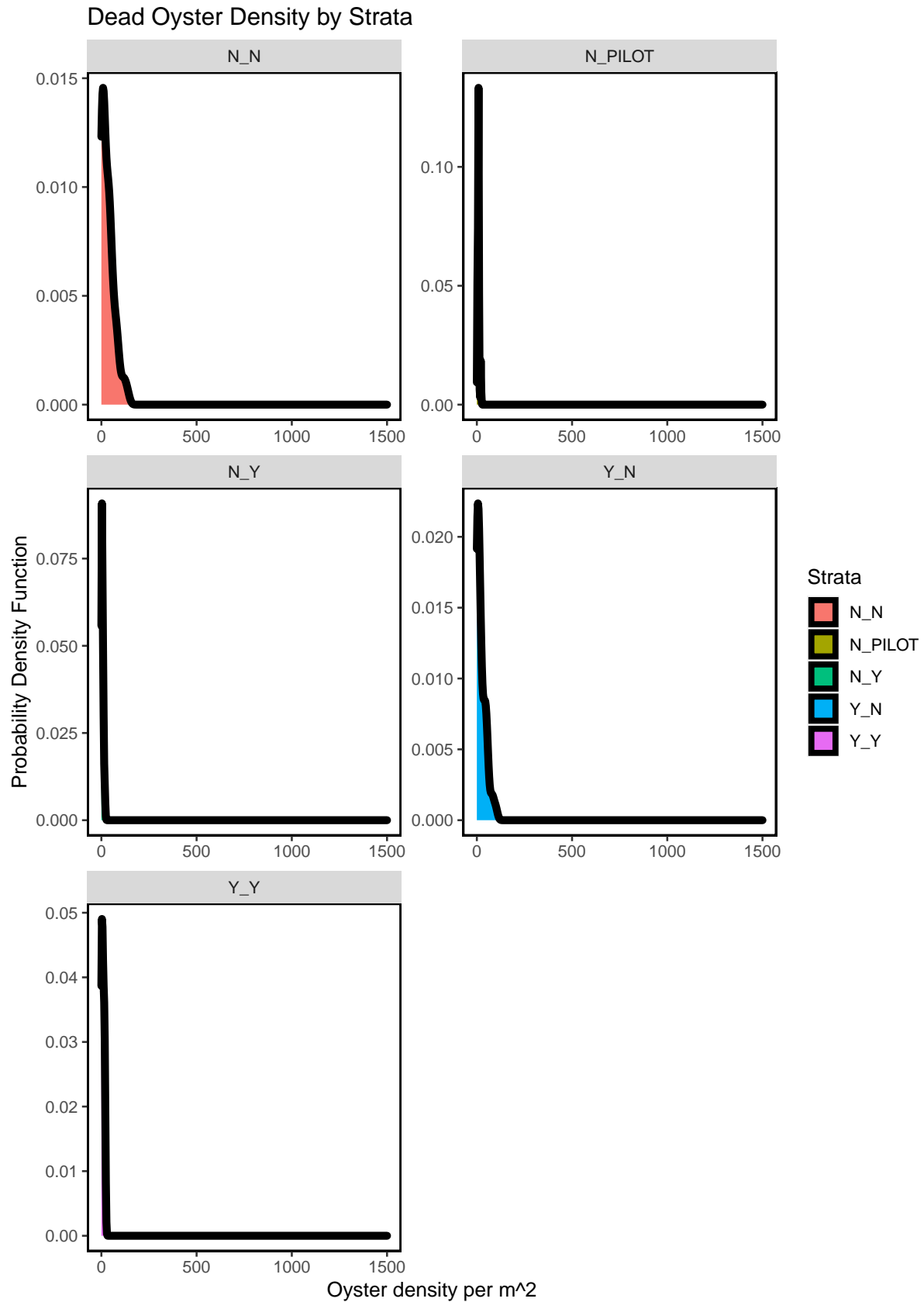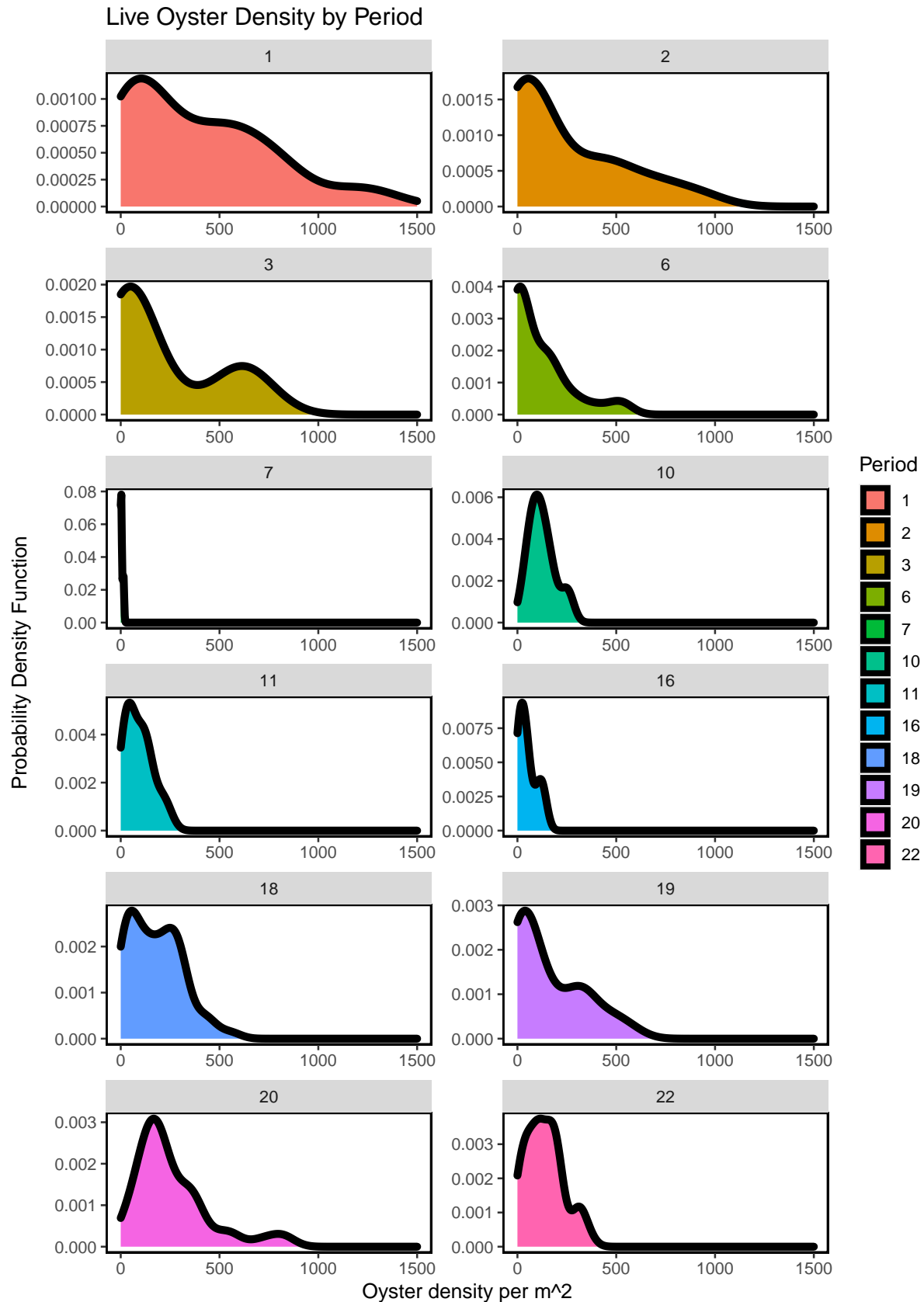
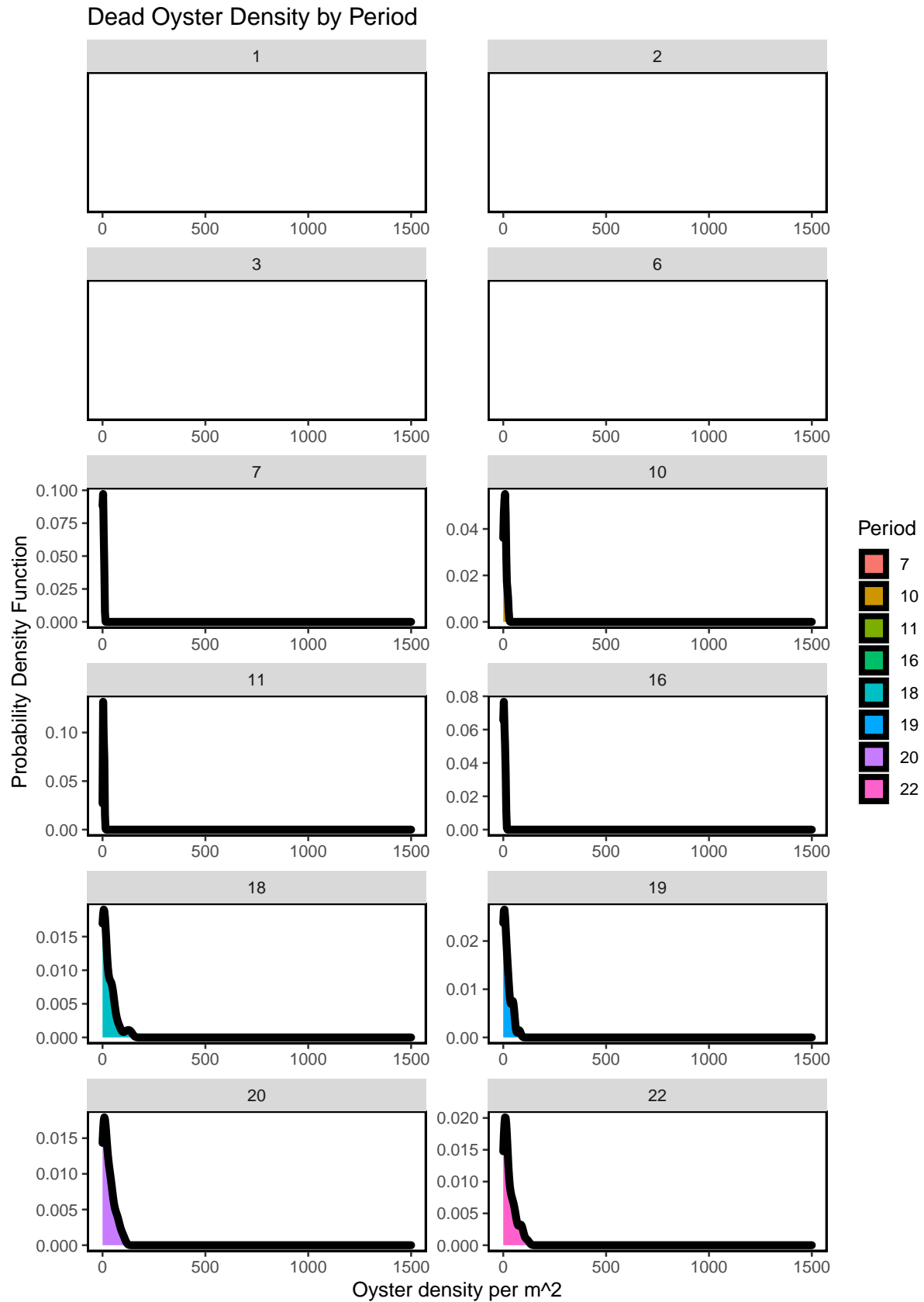Figure– Calculated dead oyster density by locality for all periods including period 22 (current period).

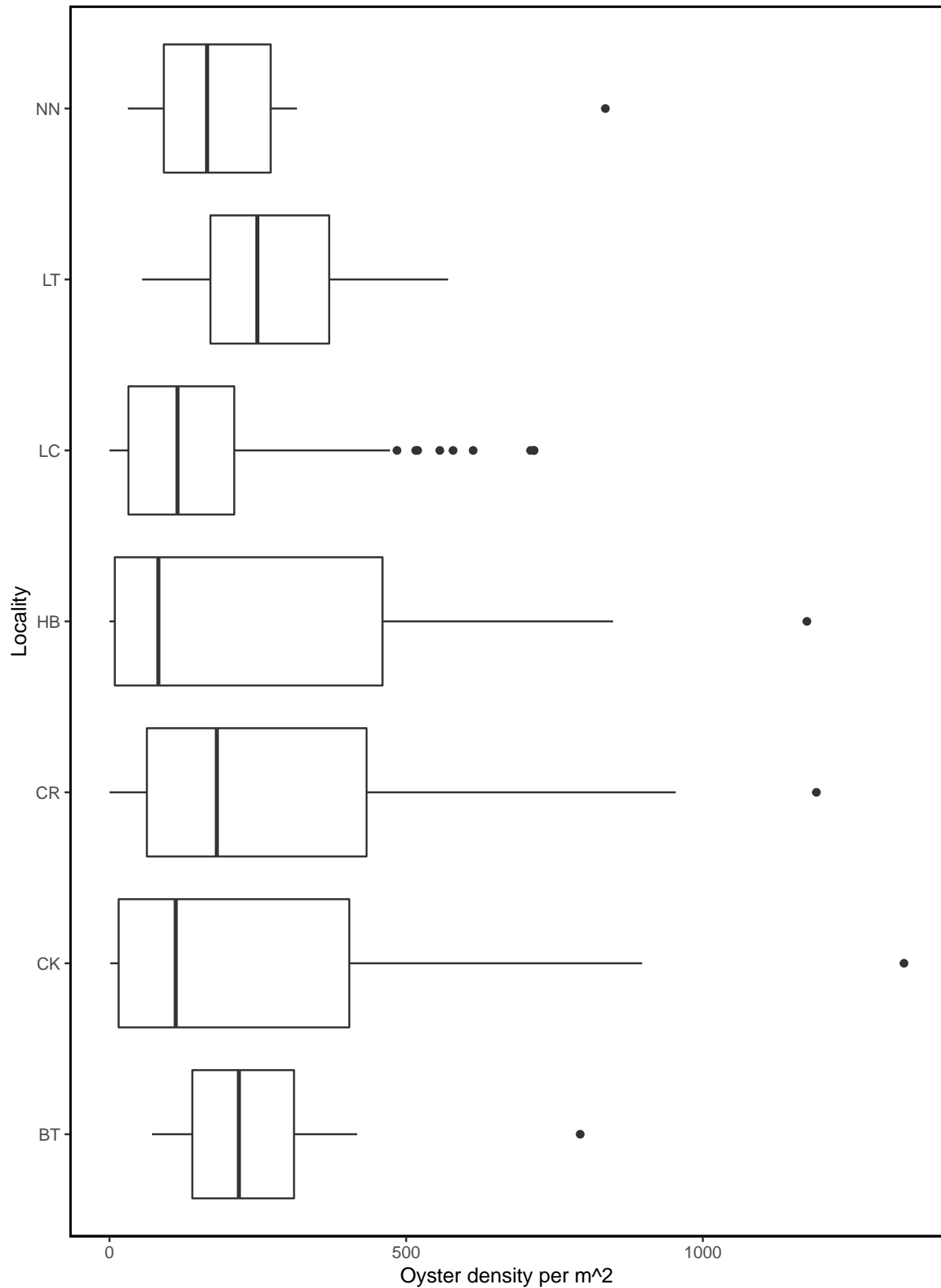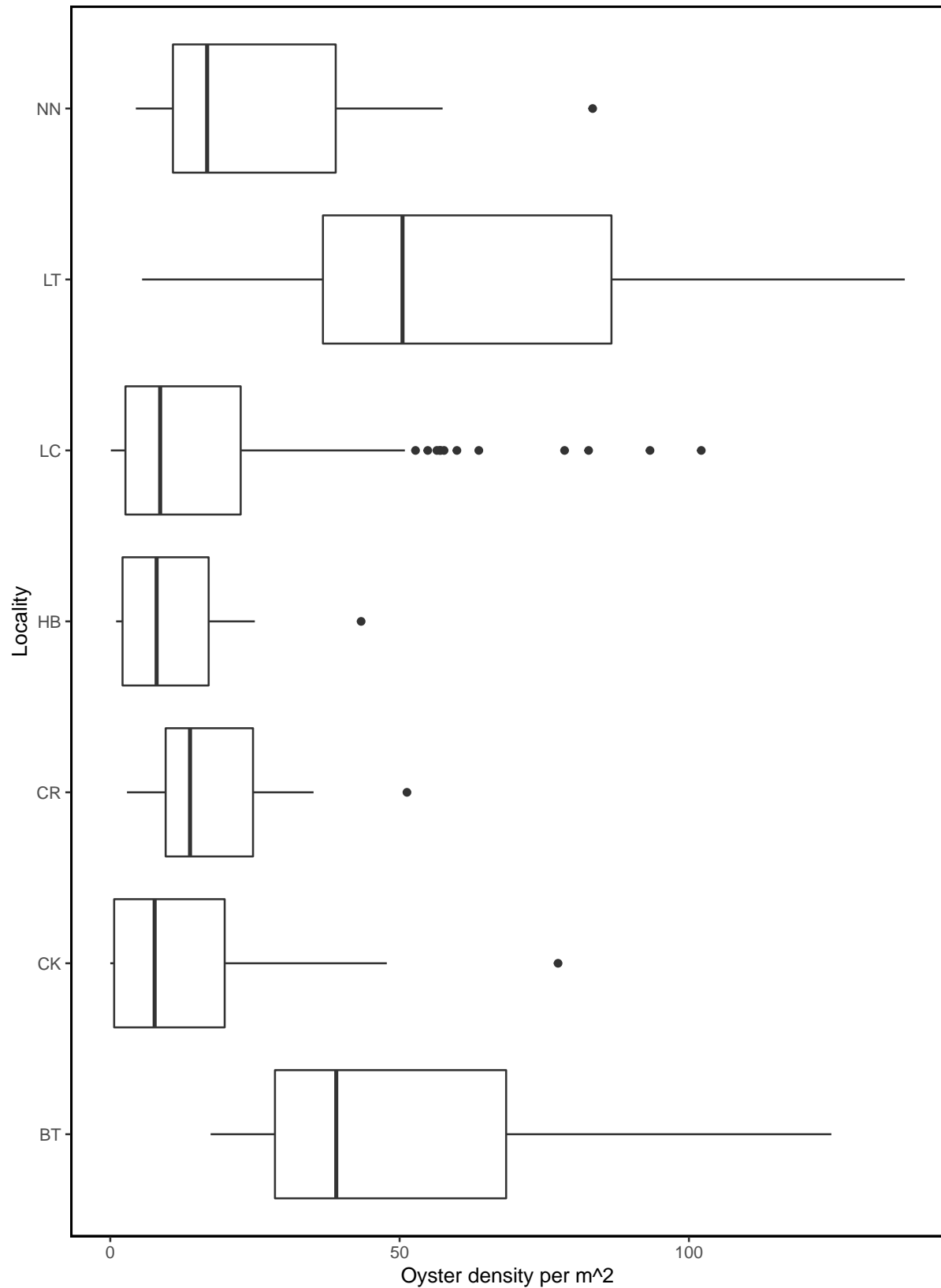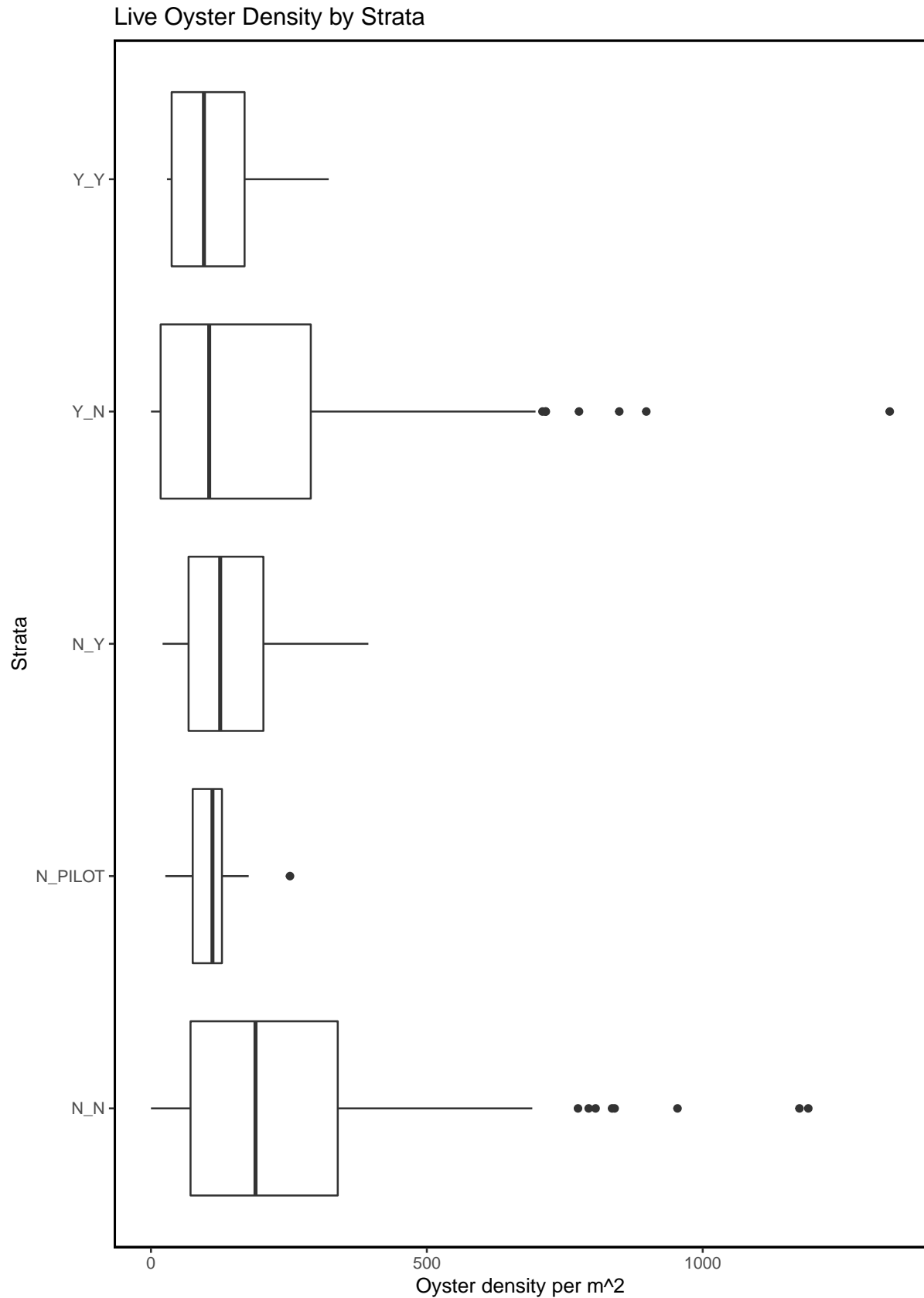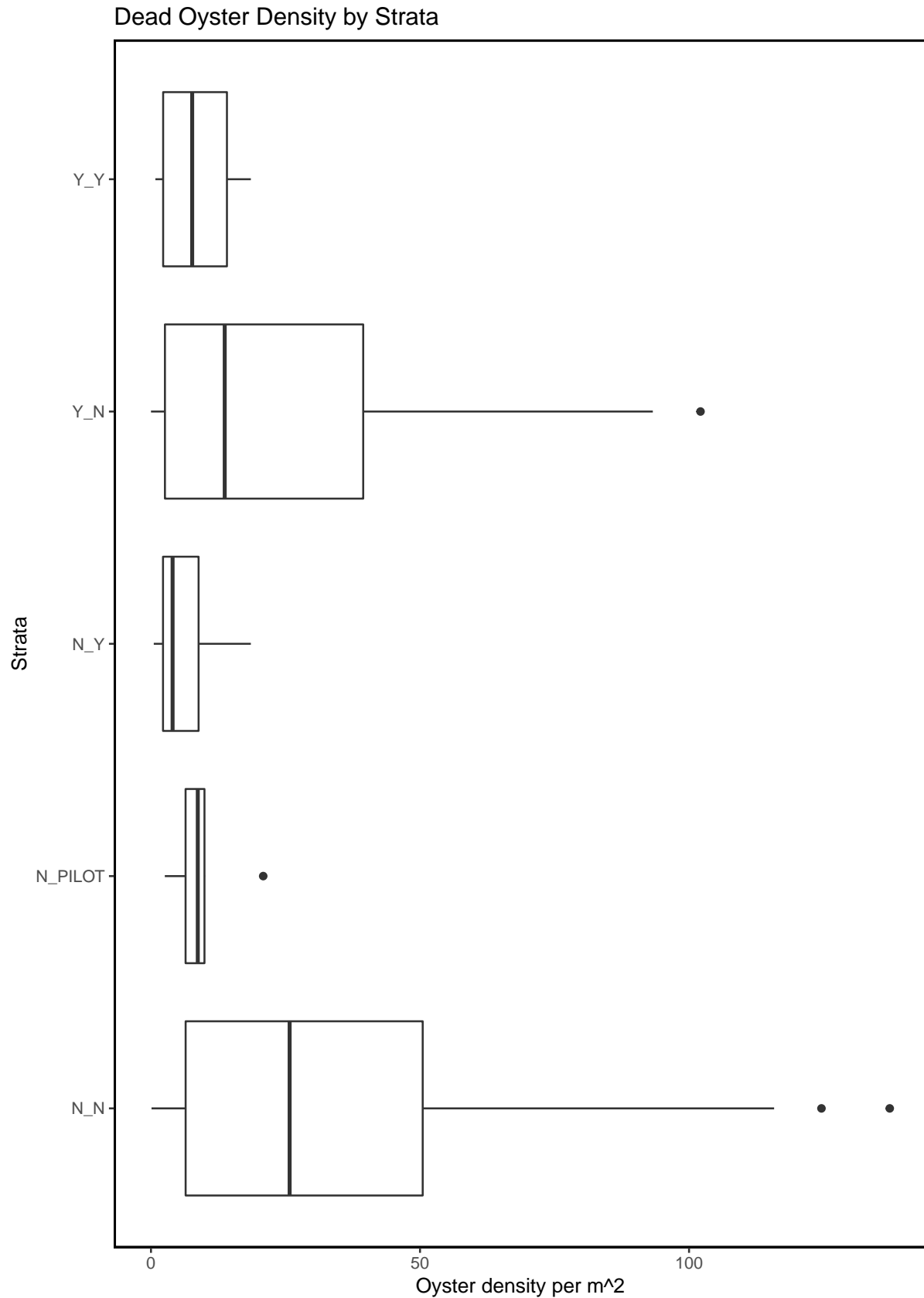Figure– Calculated live oyster density by strata for all periods including period 22 (current period).
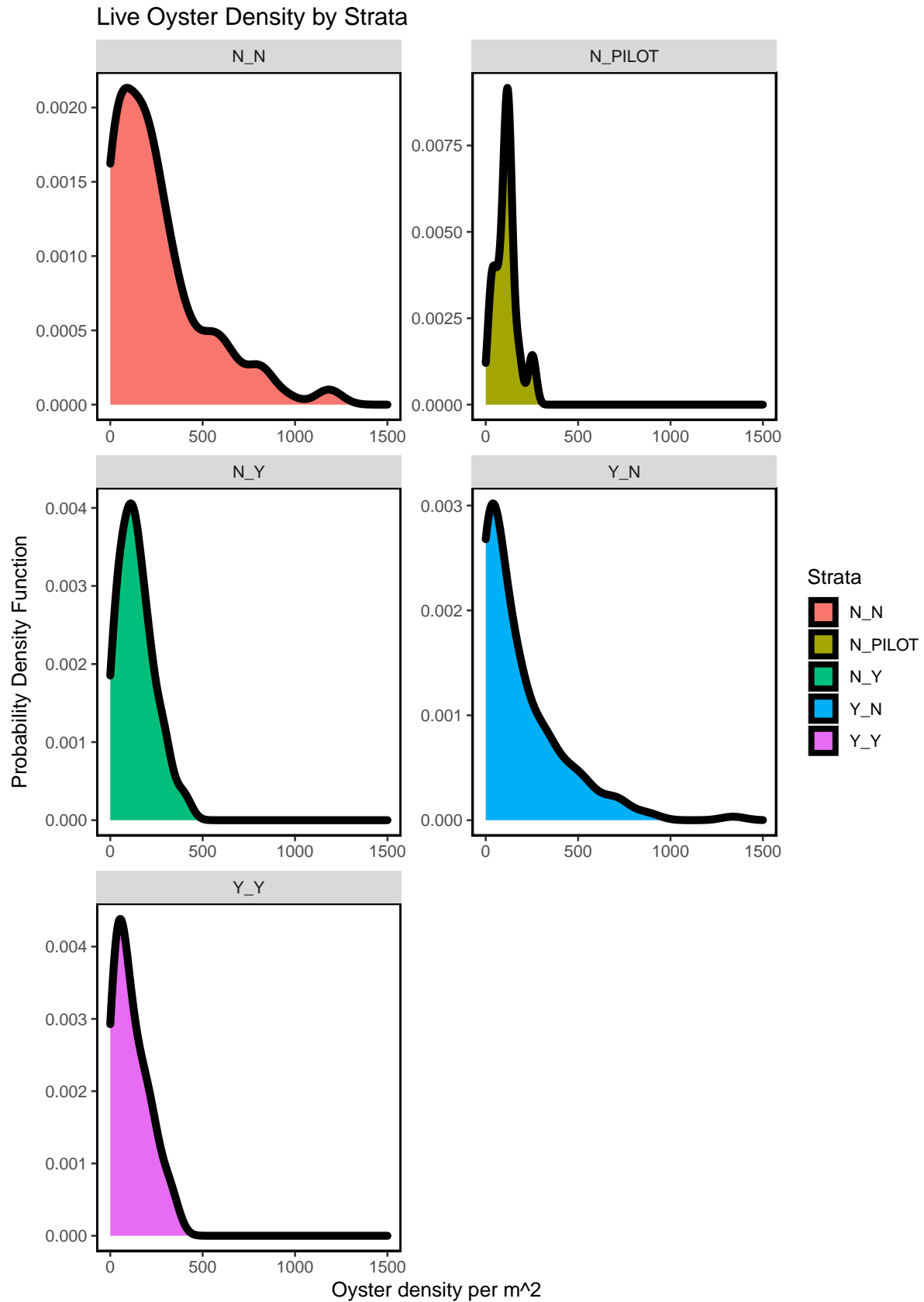
Figure– Calculated dead oyster density by strata for all periods including period 22 (current period).

Live Oyster Density by Period

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

Dead Oyster Density by Period

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

Live Oyster Density by Locality

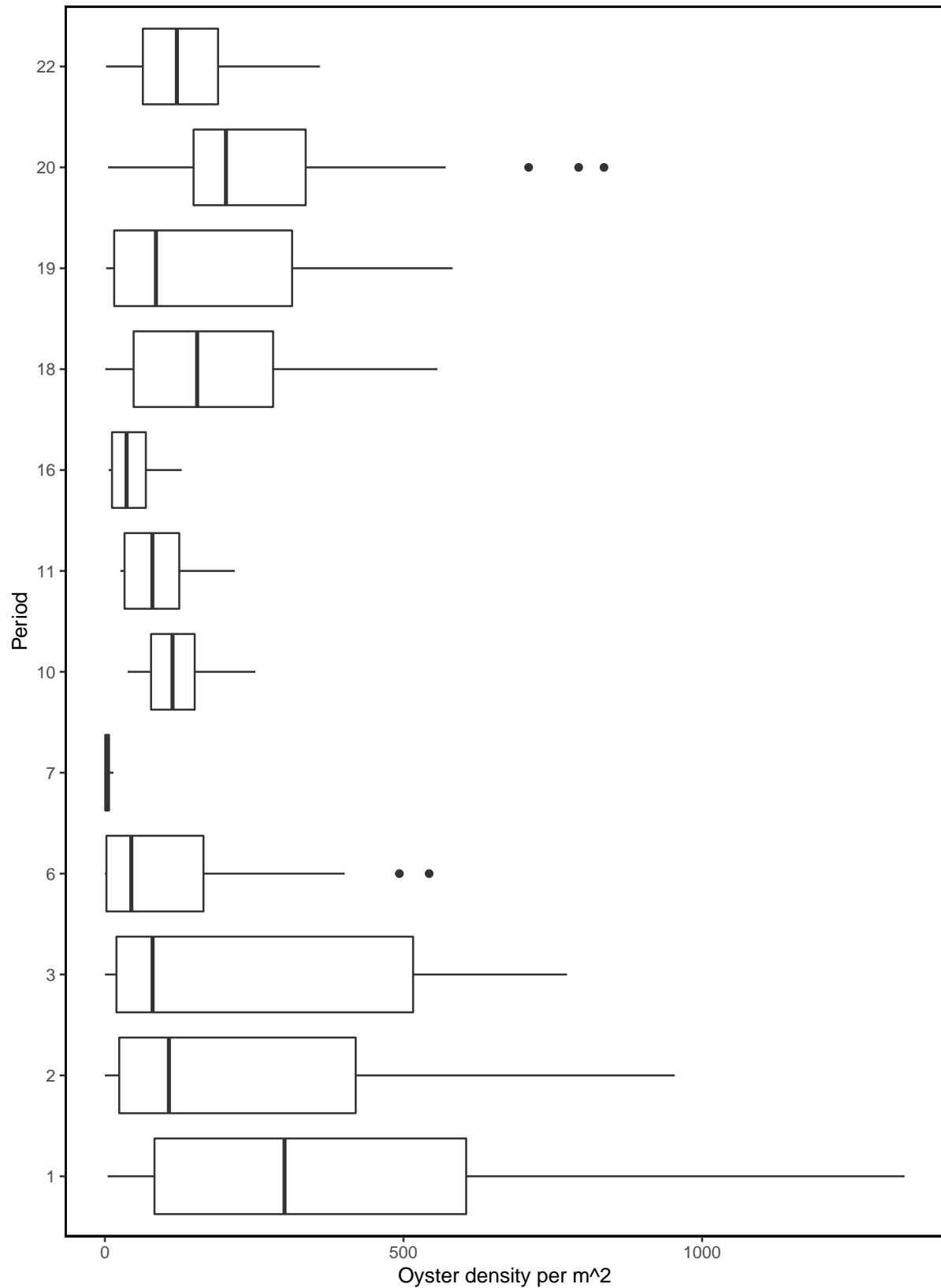Figure– Box plot depicting live oyster density by locality for all periods including period 22 (current period).
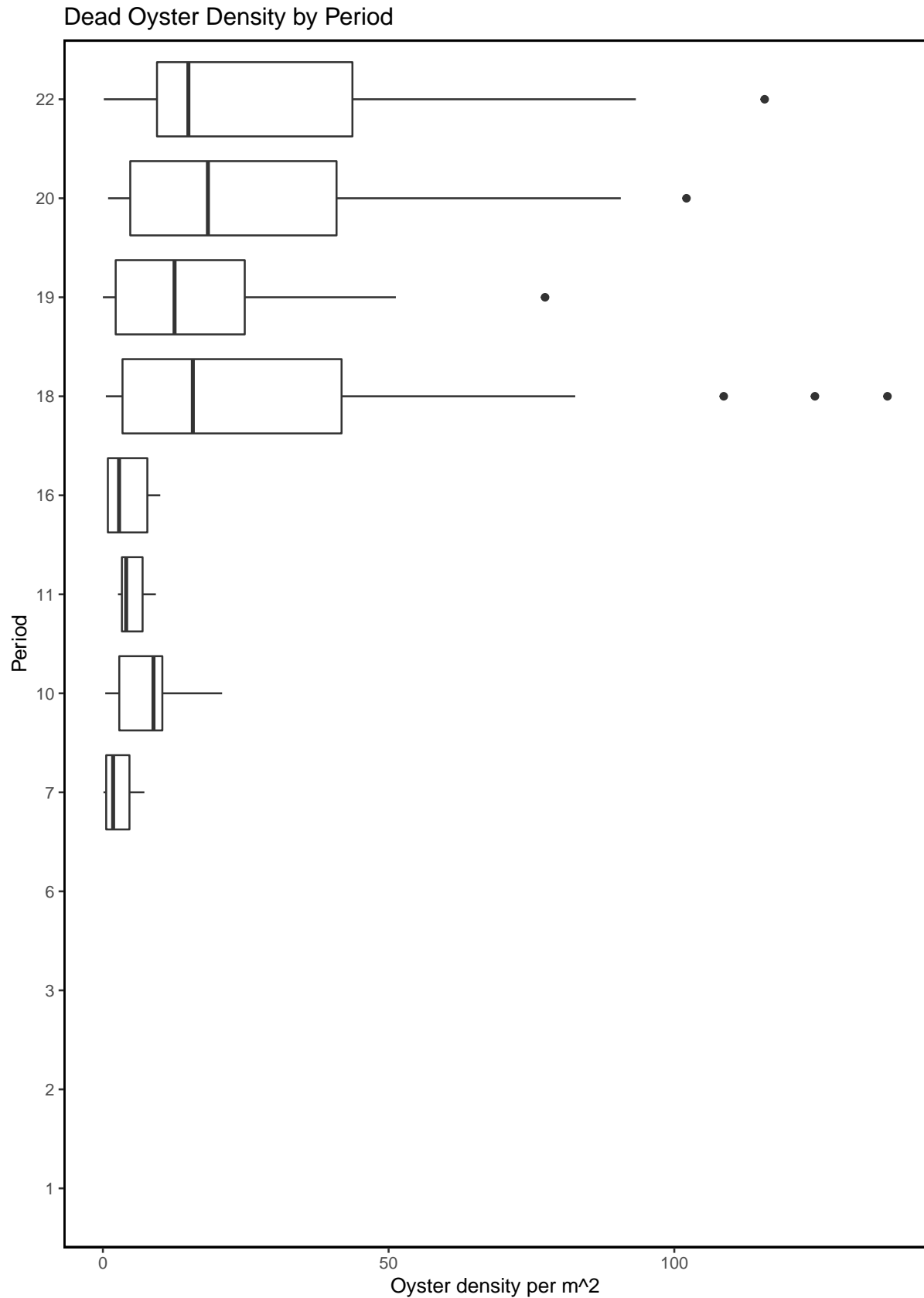
Dead Oyster Density by Locality

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

Live Oyster Density by Strata

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

Dead Oyster Density by Strata

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

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).
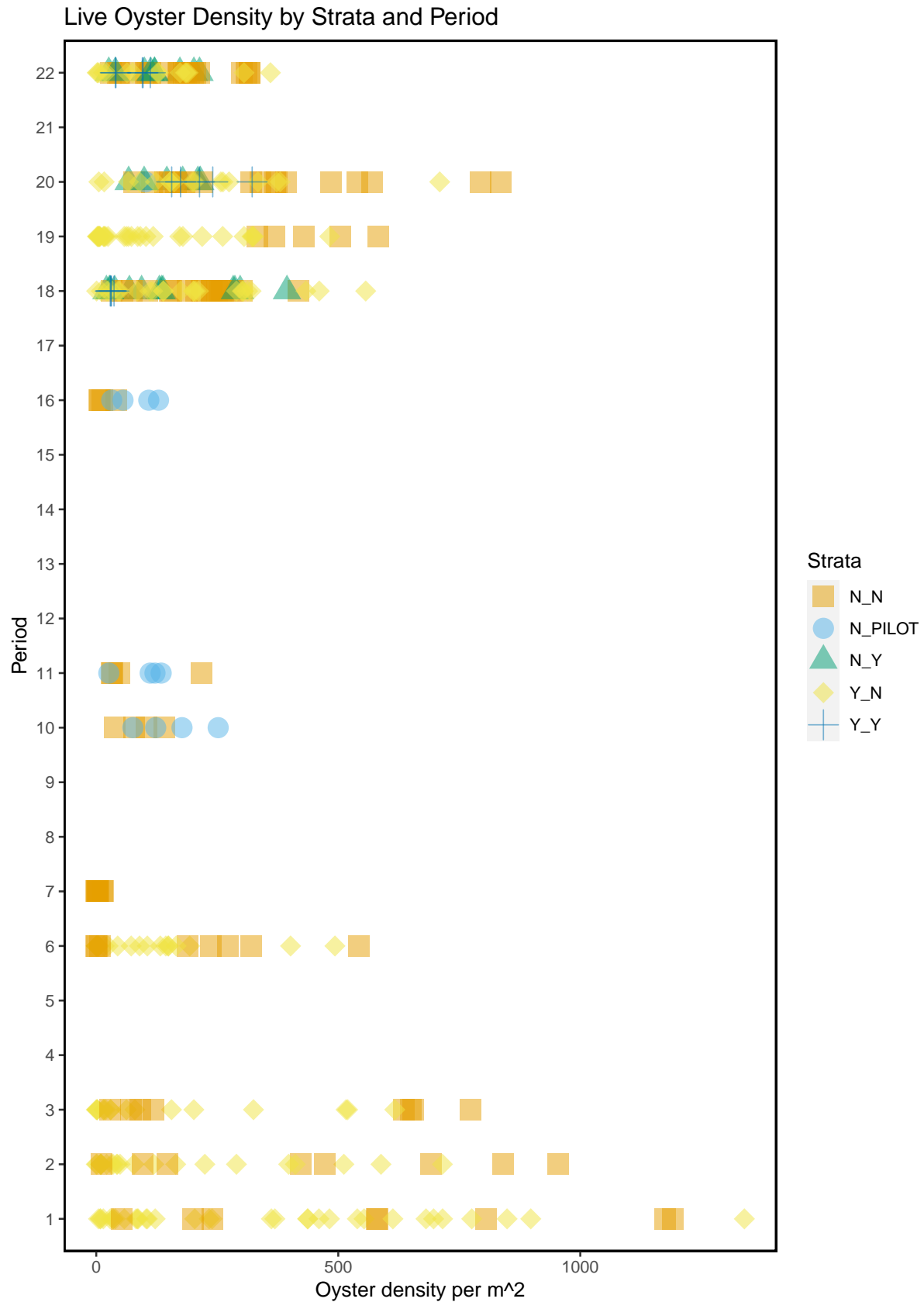
Figure – Live oyster density by strata and period for all periods including period 22 (current period).
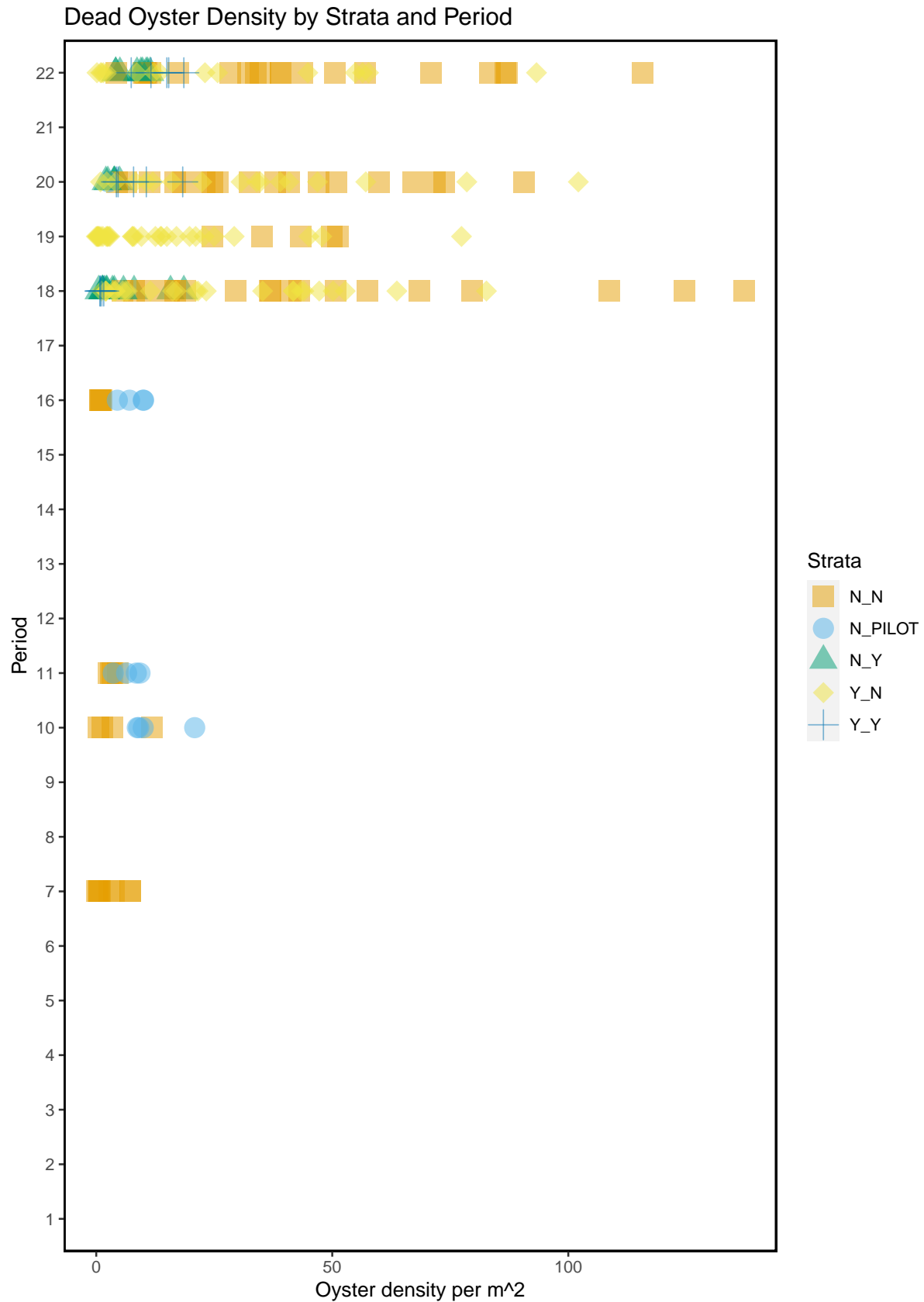
Dead Oyster Density by Strata and Period

Figure – Dead oyster density by strata and period for all periods including period 22 (current period).
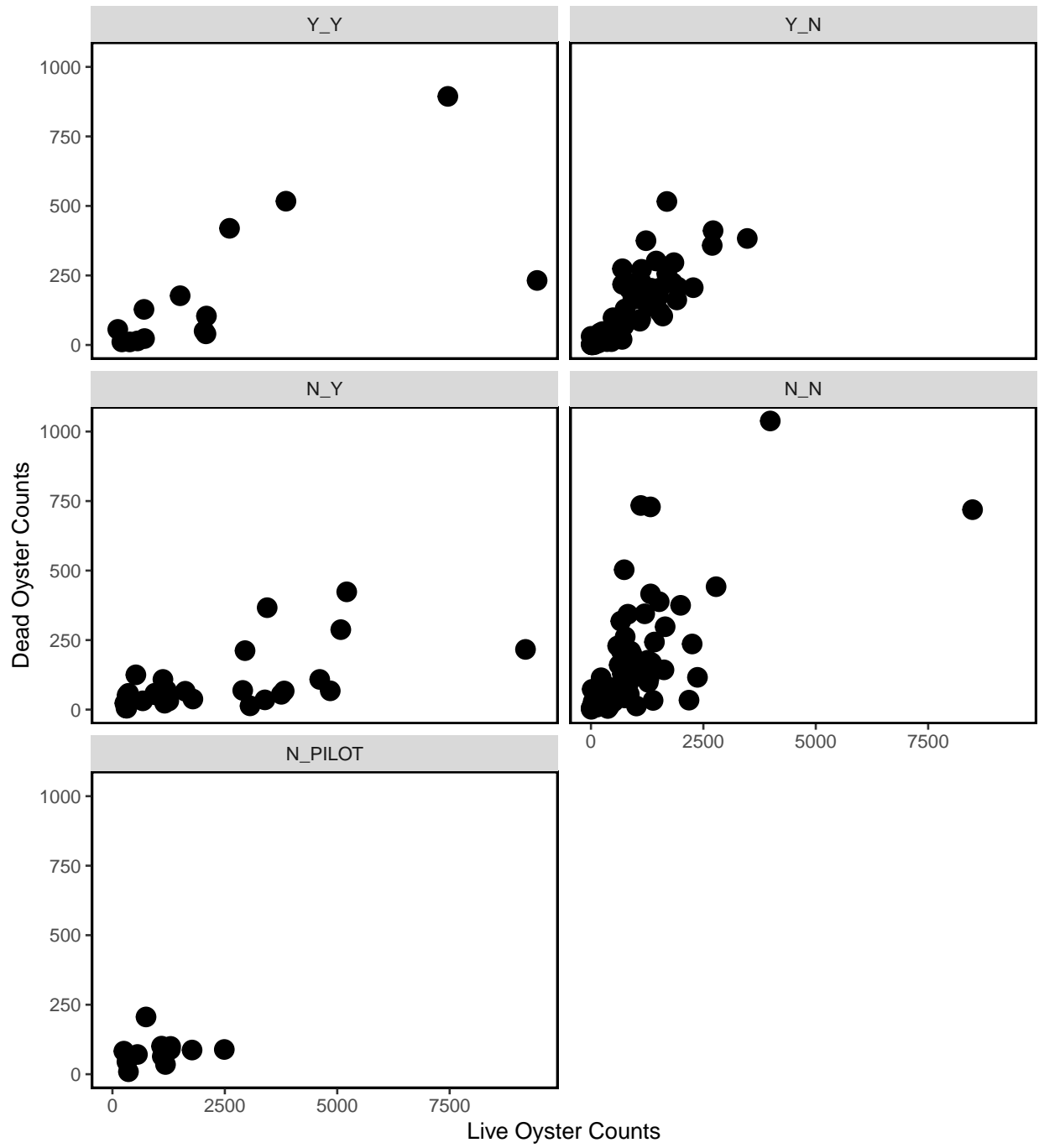
Live and Dead Count Comparison For All Periods

Figure- Live and dead oyster comparison for all periods, last sample date of period 22 is 2021-02-12.

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).
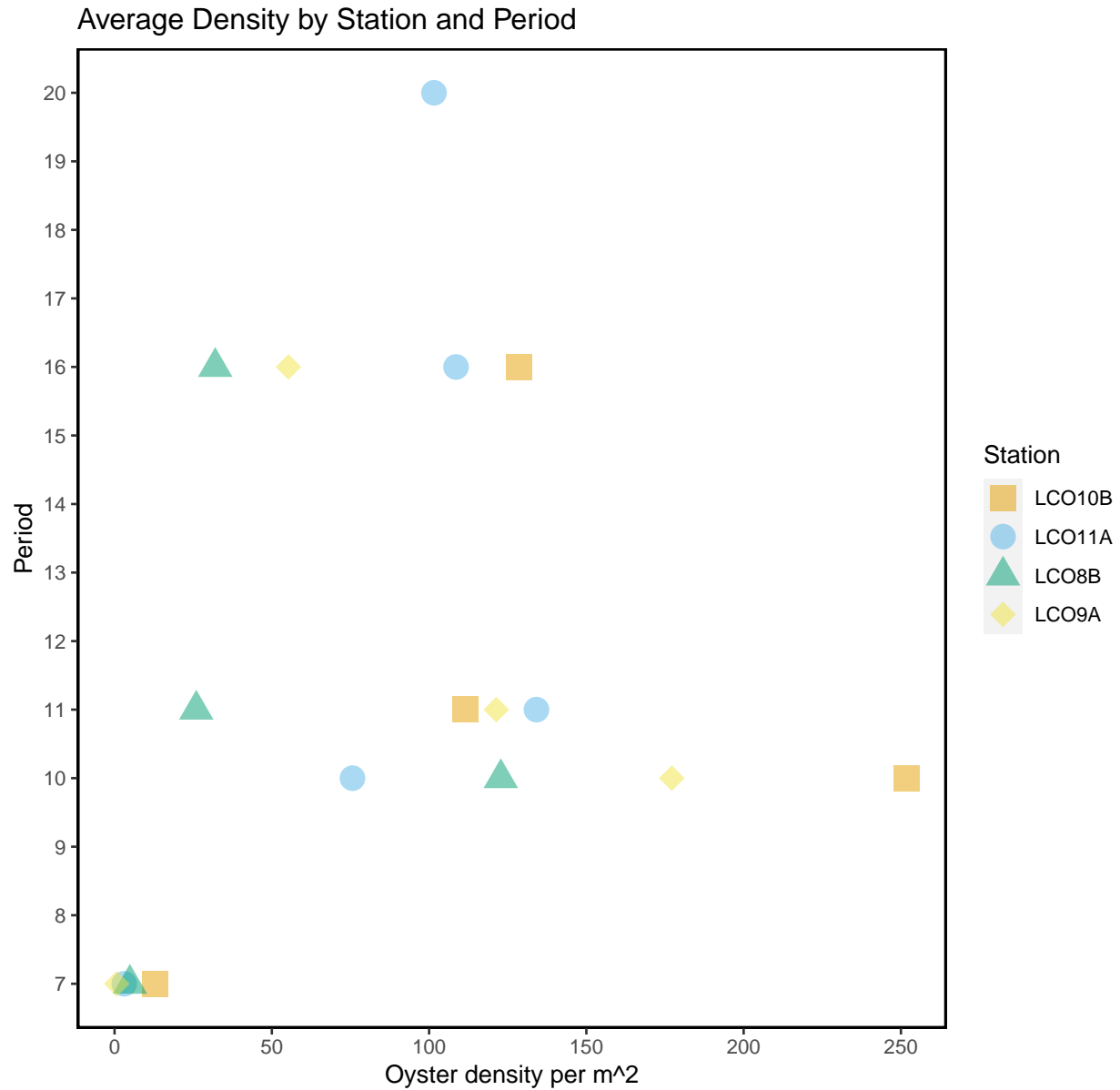
Average Density by Station and Period

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

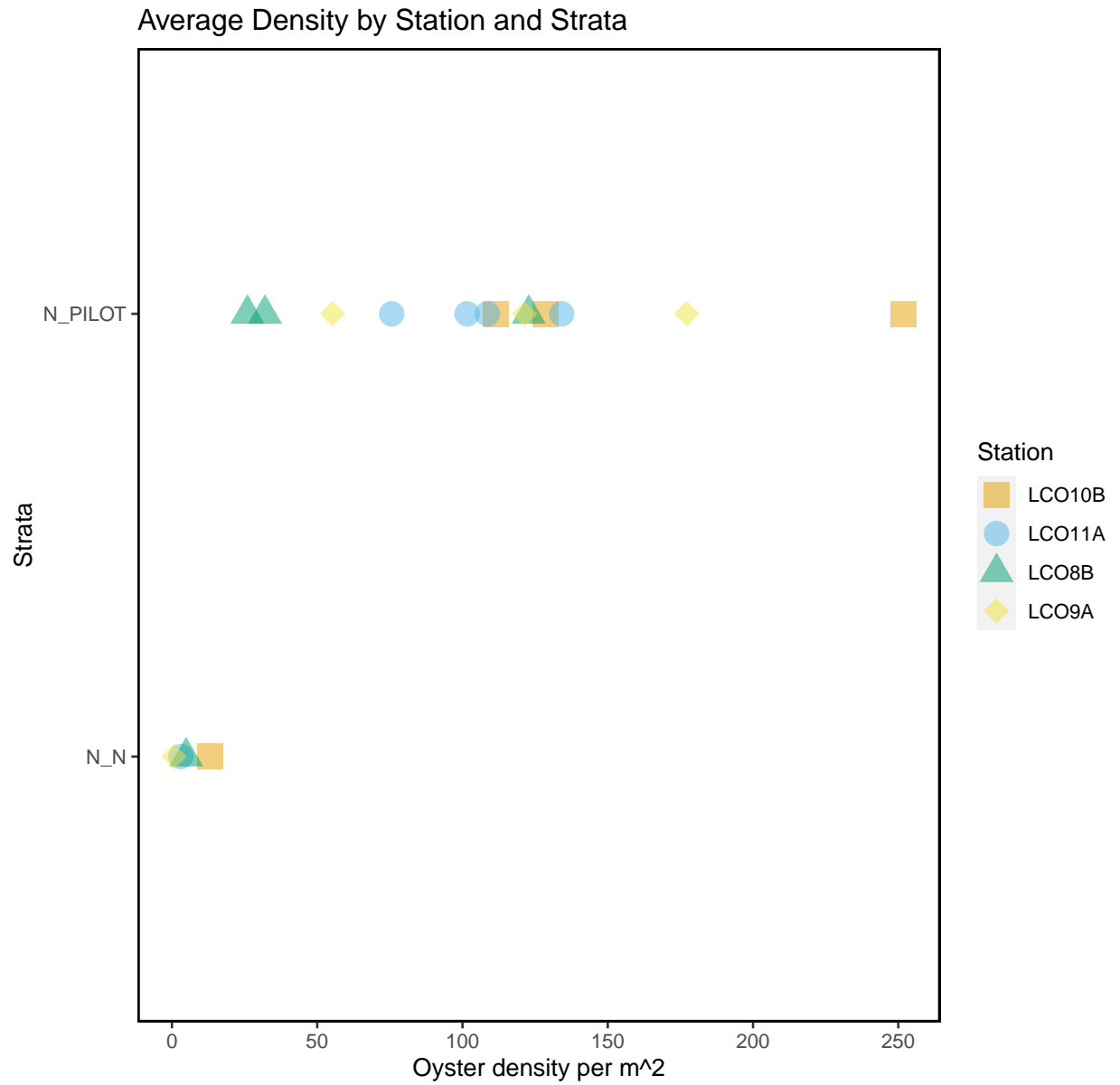# Average Density by Station and Strata

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

Latest Data Entered

Displayed are the entries for the last date of sampling (2021-02-12).

date	station	tran_length	count_live	count_dead	treatment	strata
2021-02-12	LC017	2.5	3	0	rocks	Y_Y
2021-02-12	LC017	5.0	6	3	rocks	Y_Y
2021-02-12	LC017	7.5	5	1	rocks	Y_Y
2021-02-12	LC017	10.0	16	5	rocks	Y_Y
2021-02-12	LC017	12.5	7	4	rocks	Y_Y
2021-02-12	LC017	15.0	6	3	rocks	Y_Y
2021-02-12	LC017	17.5	7	2	rocks	Y_Y
2021-02-12	LC017	20.0	7	0	rocks	Y_Y
2021-02-12	LC017	22.5	10	4	rocks	Y_Y
2021-02-12	LC017	22.7	0	0	rocks	Y_Y
2021-02-12	LC017	2.5	8	3	rocks	Y_Y
2021-02-12	LC017	5.0	16	5	rocks	Y_Y
2021-02-12	LC017	7.5	2	0	rocks	Y_Y
2021-02-12	LC017	10.0	9	4	rocks	Y_Y
2021-02-12	LC017	12.5	4	0	rocks	Y_Y
2021-02-12	LC017	15.0	2	0	rocks	Y_Y
2021-02-12	LC017	17.5	5	0	rocks	Y_Y
2021-02-12	LC017	20.0	21	1	rocks	Y_Y
2021-02-12	LC017	22.3	9	1	rocks	Y_Y
2021-02-12	LC017	2.5	13	3	rocks	Y_Y
2021-02-12	LC017	5.0	10	1	rocks	Y_Y
2021-02-12	LC017	7.5	9	2	rocks	Y_Y
2021-02-12	LC017	10.0	2	0	rocks	Y_Y
2021-02-12	LC017	12.5	8	2	rocks	Y_Y
2021-02-12	LC017	15.0	1	0	rocks	Y_Y
2021-02-12	LC017	17.5	16	3	rocks	Y_Y
2021-02-12	LC017	20.0	3	4	rocks	Y_Y
2021-02-12	LC017	22.5	6	2	rocks	Y_Y
2021-02-12	LC017	22.8	2	0	rocks	Y_Y
2021-02-12	LC017	2.5	27	3	rocks	Y_Y
2021-02-12	LC017	5.0	12	2	rocks	Y_Y
2021-02-12	LC017	7.5	6	3	rocks	Y_Y
2021-02-12	LC017	10.0	8	3	rocks	Y_Y
2021-02-12	LC017	12.5	18	5	rocks	Y_Y
2021-02-12	LC017	15.0	16	3	rocks	Y_Y
2021-02-12	LC017	17.5	20	8	rocks	Y_Y
2021-02-12	LC017	20.0	12	0	rocks	Y_Y
2021-02-12	LC017	22.3	11	2	rocks	Y_Y
2021-02-12	LC017	2.5	43	3	rocks	Y_Y
2021-02-12	LC017	5.0	60	2	rocks	Y_Y
2021-02-12	LC017	7.5	41	4	rocks	Y_Y
2021-02-12	LC017	10.0	59	2	rocks	Y_Y
2021-02-12	LC017	12.5	30	2	rocks	Y_Y
2021-02-12	LC017	15.0	26	6	rocks	Y_Y
2021-02-12	LC017	17.5	57	10	rocks	Y_Y
2021-02-12	LC017	20.0	30	5	rocks	Y_Y
2021-02-12	LC017	22.5	9	11	rocks	Y_Y
2021-02-12	LC017	23.2	4	1	rocks	Y_Y