

# 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 8 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, 101 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

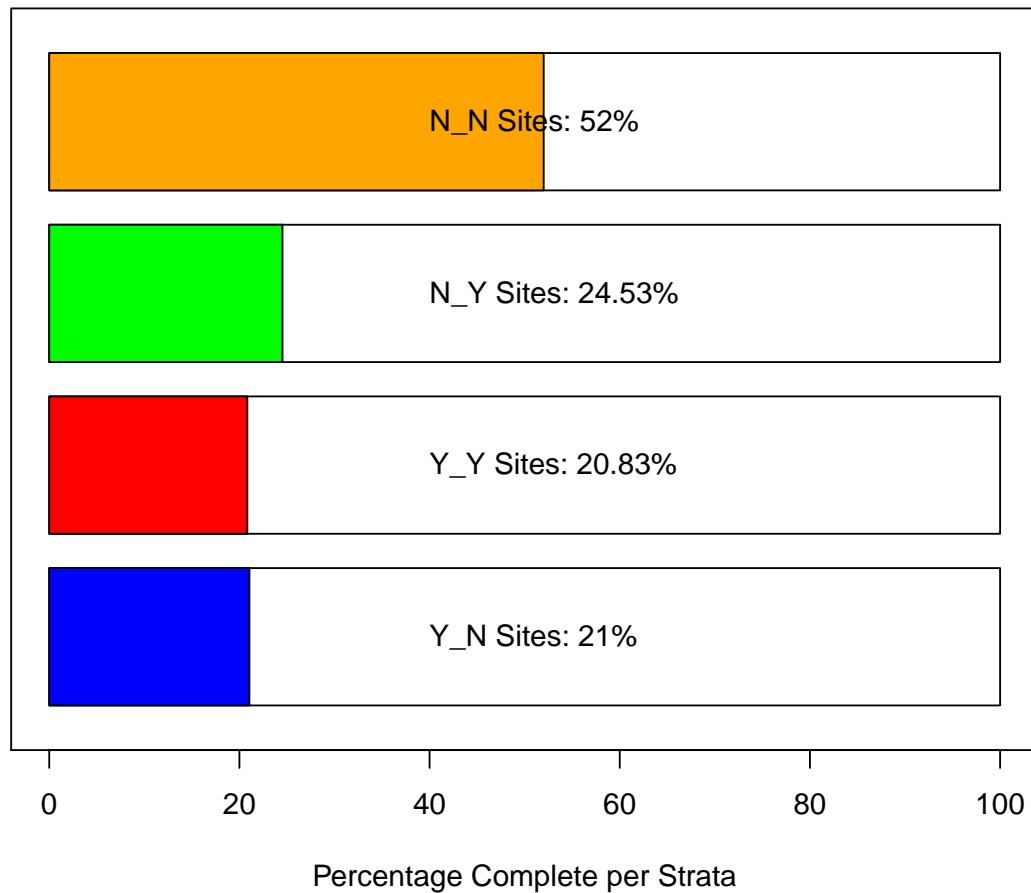
## Definition of Strata

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



## 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)
- 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 Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	2219	766	3528	12445897	1.59	1578	-873	5312	2286	381	5416
LC	1660	1212	1888	3562943	1.14	267	1137	2184	1677	1210	2271
LT	1191	877	737	542939	0.62	246	709	1672	1192	794	1670
NN	888	747	768	589511	0.86	313	274	1503	883	436	1527

#### Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1187	766	1509	2276206	1.27	271	656	1718	1193	767	1834
N_PILOT	356	356	NA	NA	NA	NA	NA	NA	183	14	346
N_Y	3326	2898	2522	6358514	0.76	841	1679	4974	3363	2005	5124
Y_N	939	769	769	591011	0.82	168	611	1268	944	648	1273
Y_Y	2917	2086	2690	7234731	0.92	951	1053	4781	2909	1740	4875

#### Live Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	1844	1253	2125	4517189	1.15	310	1236	2451	1830	1291	2458
22	1022	679	954	910715	0.93	199	632	1412	1016	652	1438

#### Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	286	140	299	89572	1.05	134	23.6	548	286	99	554
LC	183	172	122	14936	0.67	17	148.9	217	183	154	218
LT	339	370	159	25324	0.47	53	235.0	443	337	243	432
NN	245	154	295	86939	1.20	120	8.8	481	244	89	491

#### Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	251	174	208	43233	0.83	37	178	324	251	185	326
N_PILOT	102	102	NA	NA	NA	NA	NA	NA	51	3	100
N_Y	161	173	50	2473	0.31	17	129	194	161	129	191
Y_N	204	184	159	25203	0.78	35	136	272	205	145	275
Y_Y	183	165	73	5293	0.40	26	132	233	183	141	233

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	258	203	188	35185	0.73	27	204	312	257	209	313
22	129	140	57	3253	0.44	12	105	152	129	105	152

## Summary of Dead Counts for Periods 20 and 22

### Dead Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	244	114	270	72769	1.11	121	7.6	481	247	96	492
LC	137	96	113	12783	0.83	16	105.5	168	136	104	167
LT	235	141	175	30774	0.75	58	120.2	349	236	131	351
NN	109	68	119	14227	1.10	49	13.2	204	109	42	208

### Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	182	116	166	27687	0.91	30	124	241	182.6	131	243
N_PILOT	9	9	NA	NA	NA	NA	NA	NA	5.2	1	9
N_Y	94	69	68	4571	0.72	23	50	138	94.2	57	140
Y_N	146	86	132	17433	0.90	29	90	203	146.5	95	200
Y_Y	156	143	97	9485	0.63	34	88	223	155.5	95	221

### Dead Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	148	107	140	19727	0.95	20	108	188	147	110	186
22	169	108	143	20314	0.84	30	111	227	169	117	226

### Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	42	28	25	641	0.61	11.3	19.5	64	42	22.4	61
LC	22	12	22	503	1.03	3.2	15.5	28	22	16.1	28
LT	63	72	34	1166	0.55	11.4	40.2	85	63	41.5	85
NN	28	14	30	901	1.08	12.3	3.8	52	28	9.8	52

### Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	40.5	32.5	30.2	913	0.75	5.4	29.8	51.1	40.4	30.2	50.4
N_PILOT	2.6	2.6	NA	NA	NA	NA	NA	NA	1.5	1.0	2.0
N_Y	5.1	3.9	3.2	10	0.64	1.1	3.0	7.2	5.1	3.3	7.3
Y_N	30.5	23.0	26.6	710	0.88	5.8	19.1	41.8	30.8	20.1	42.6
Y_Y	10.5	9.6	5.5	30	0.52	1.9	6.7	14.3	10.5	7.1	13.9

### 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	17	32	1016	1.03	6.6	18	44	31	19	44

## Summary Plots for Periods 20 and 22

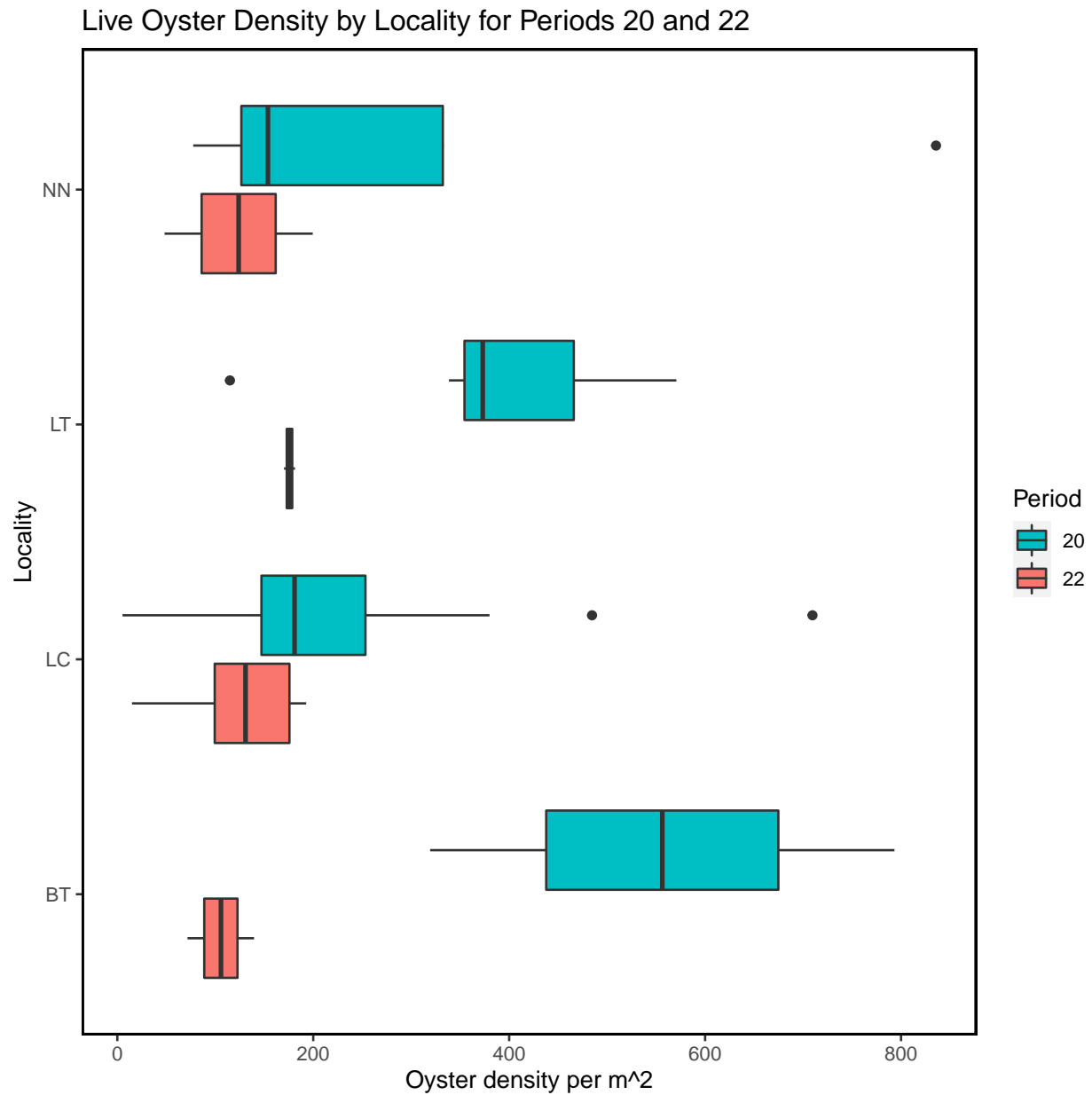


Figure- Calculated live oyster density by locality for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-12-04.

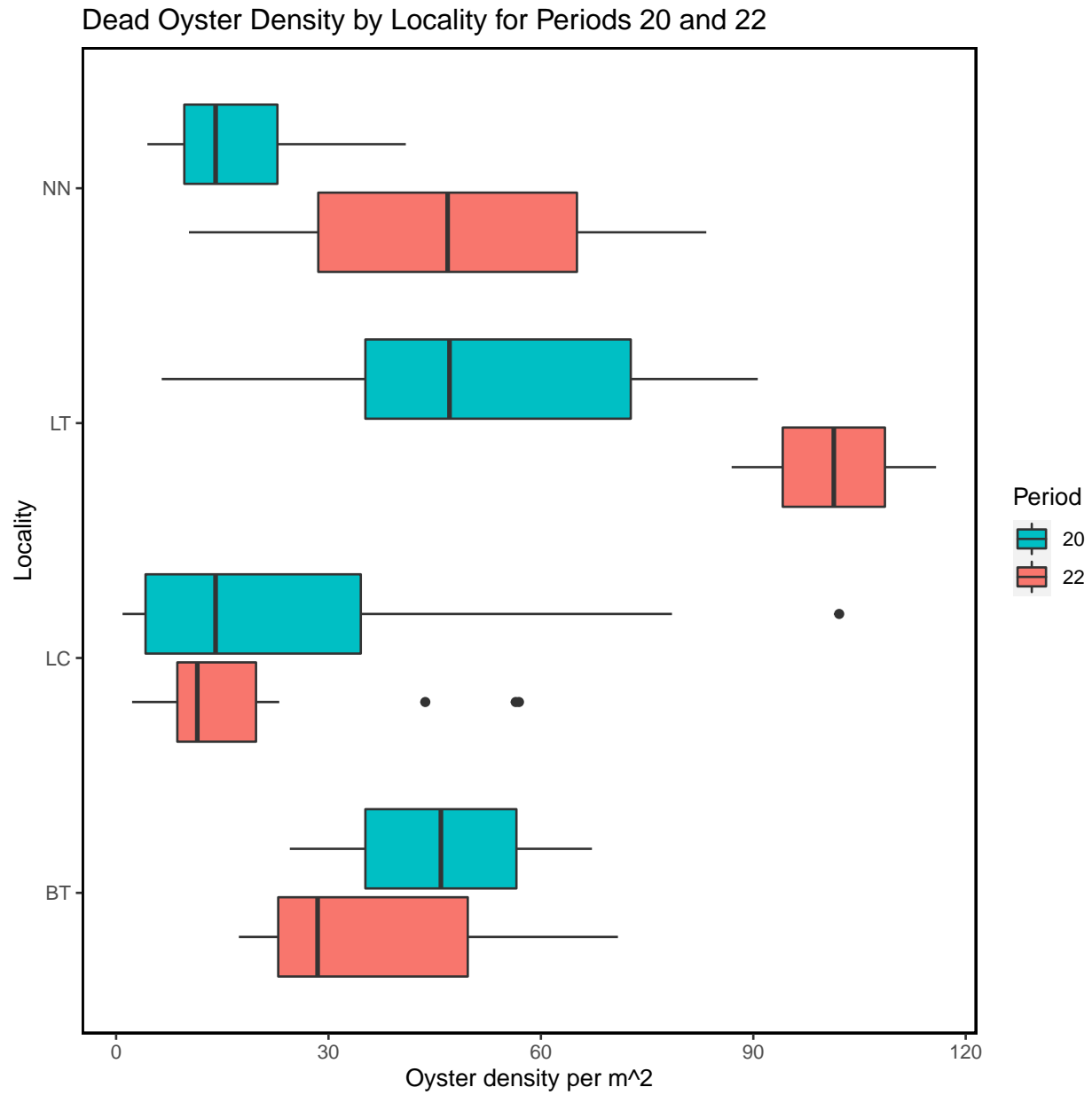


Figure- Calculated dead oyster density by locality for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-12-04.

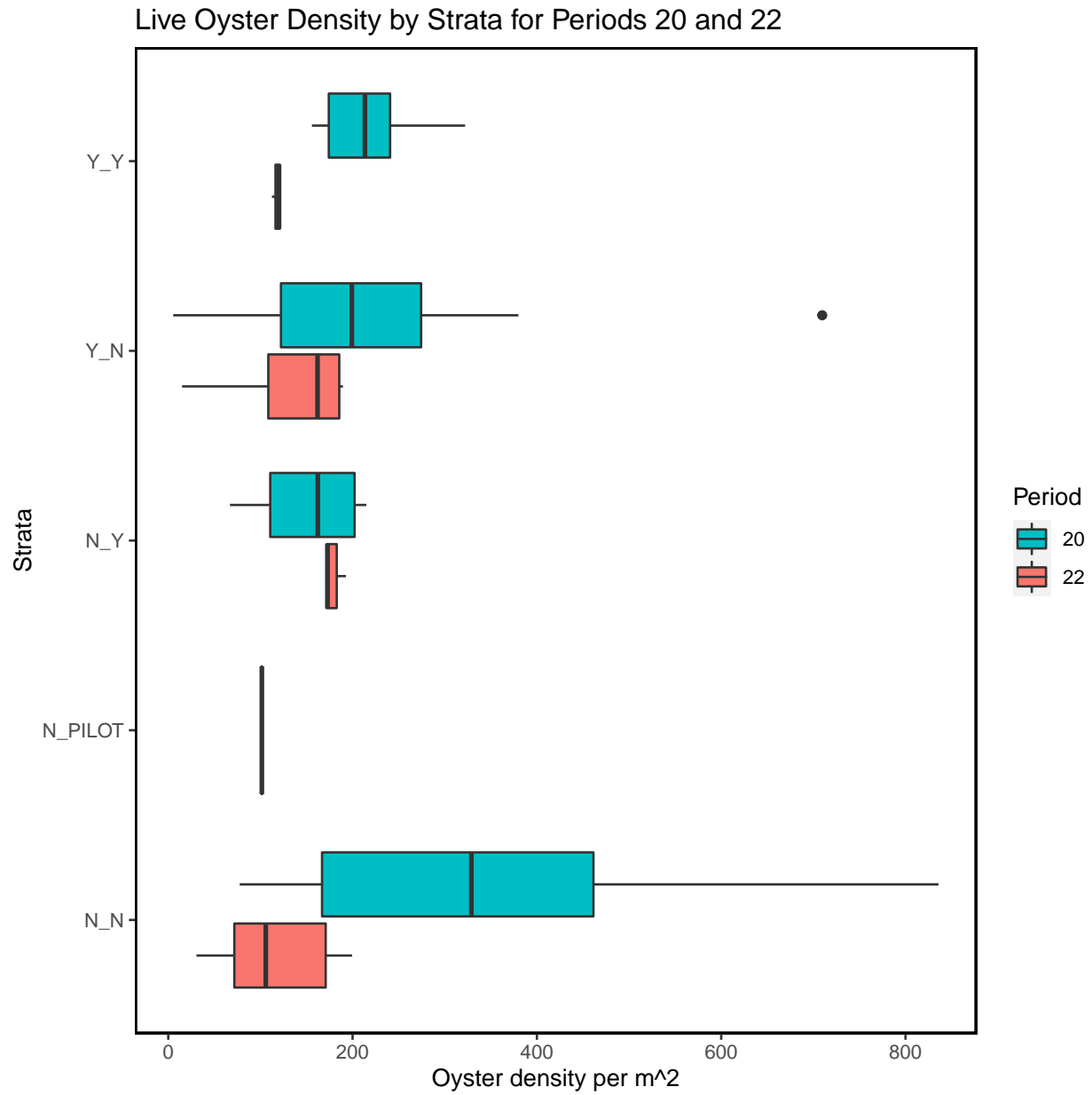


Figure- Calculated live oyster density by strata for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-12-04.



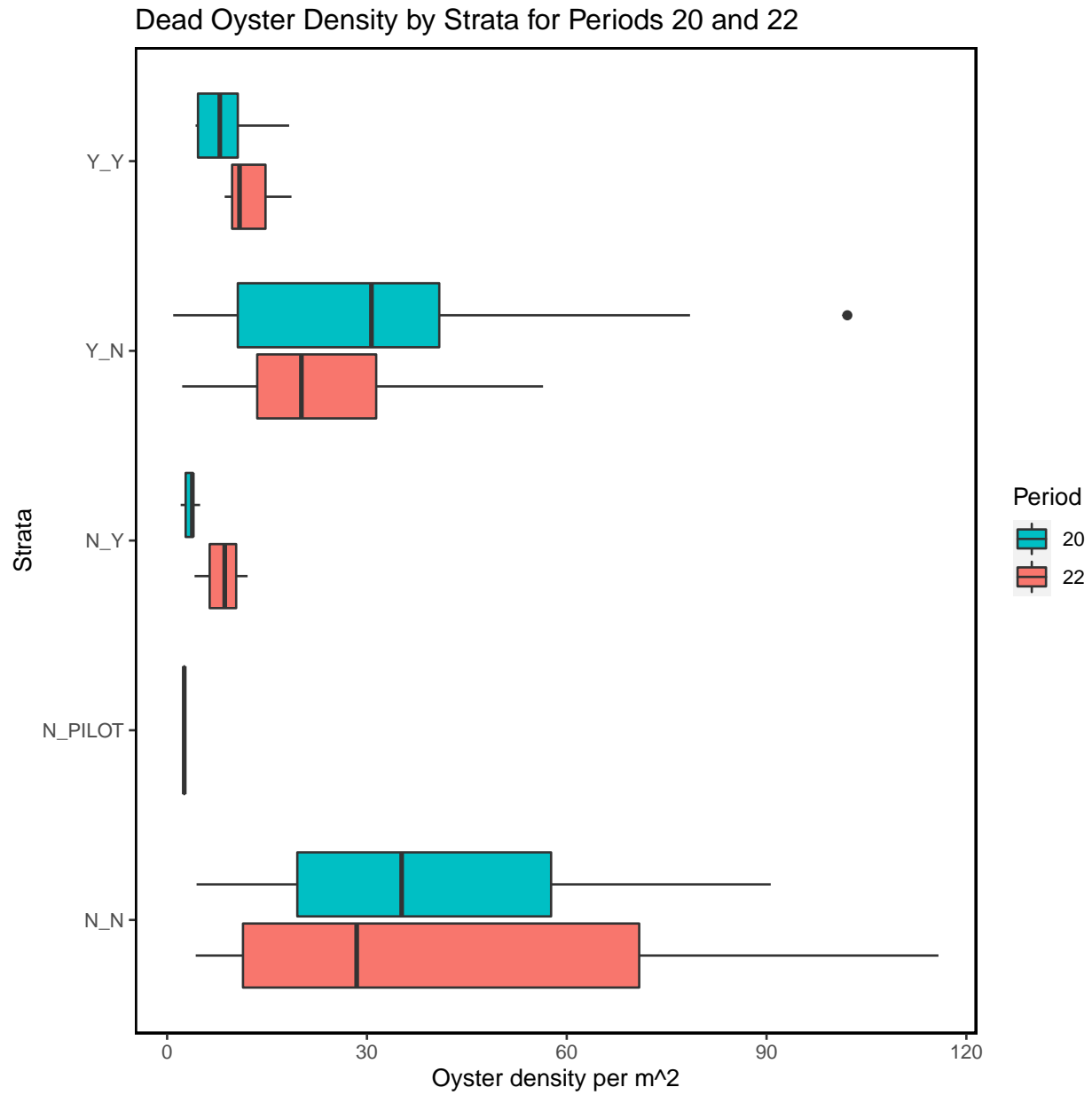


Figure- Calculated dead oyster density by strata for periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2020-12-04.

The following summary plot is calculated in R using the `geom_density` ([https://ggplot2.tidyverse.org/reference/geom\\_density.html](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.

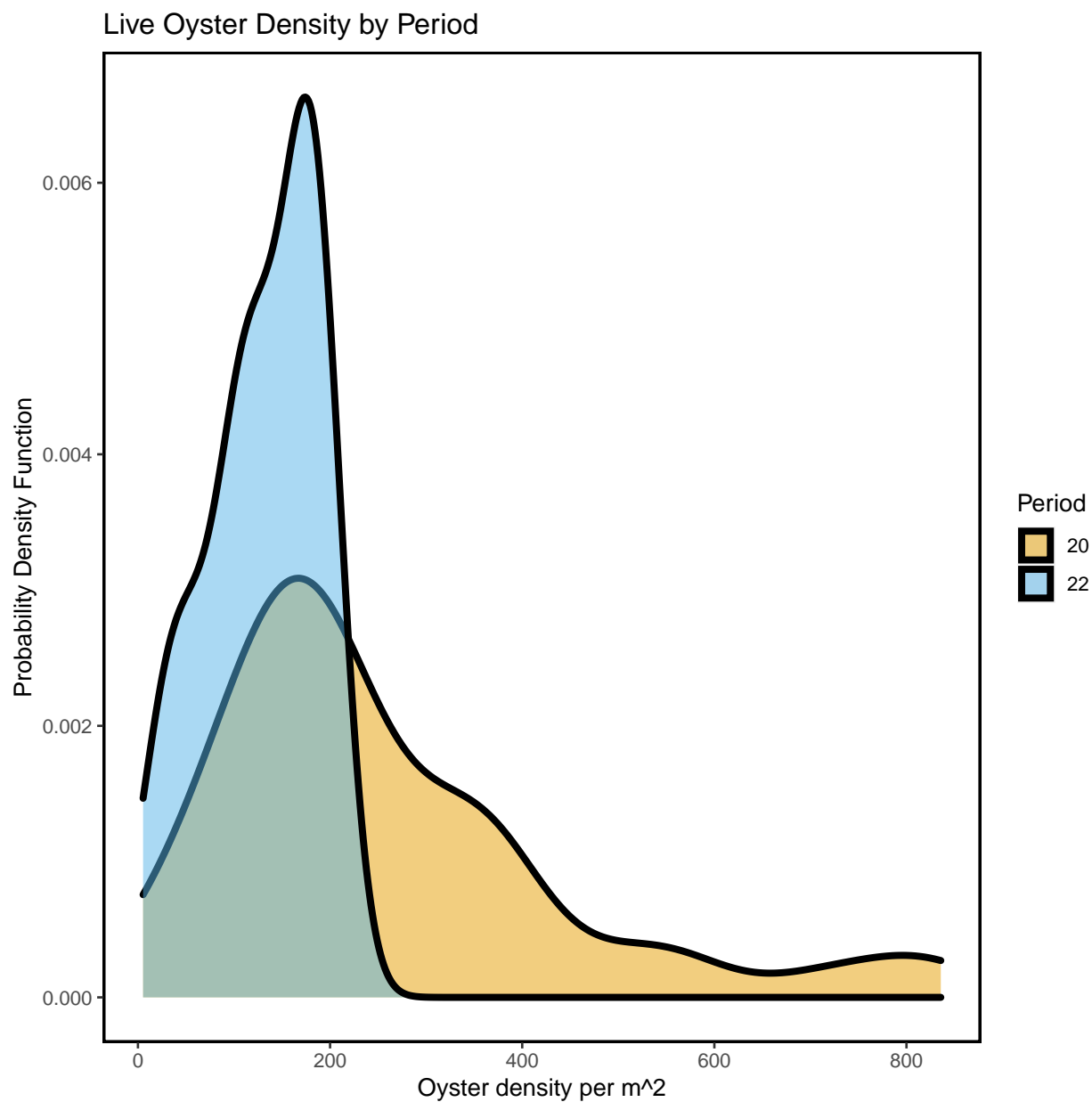


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2020-12-04.

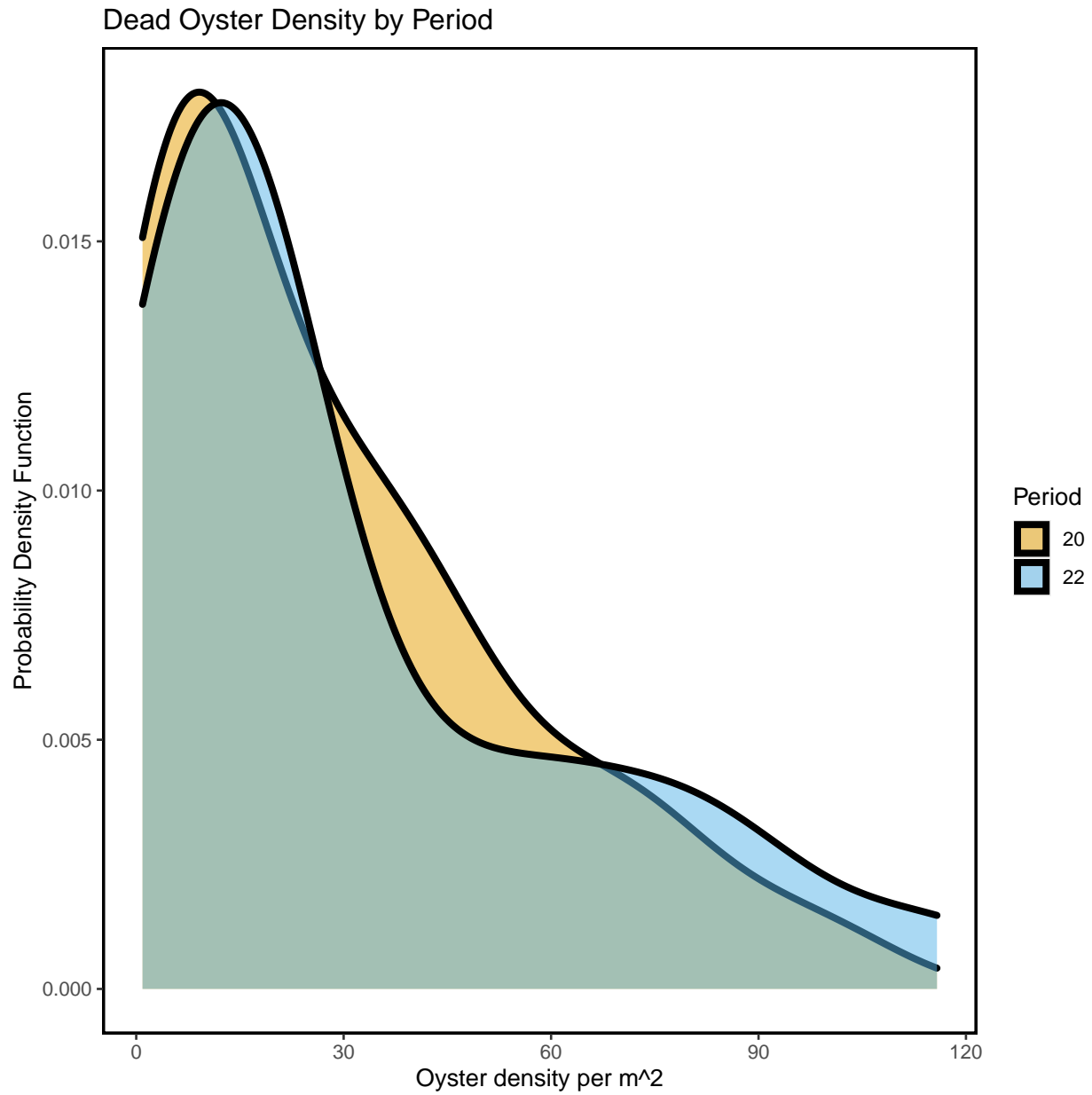


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2020-12-04.

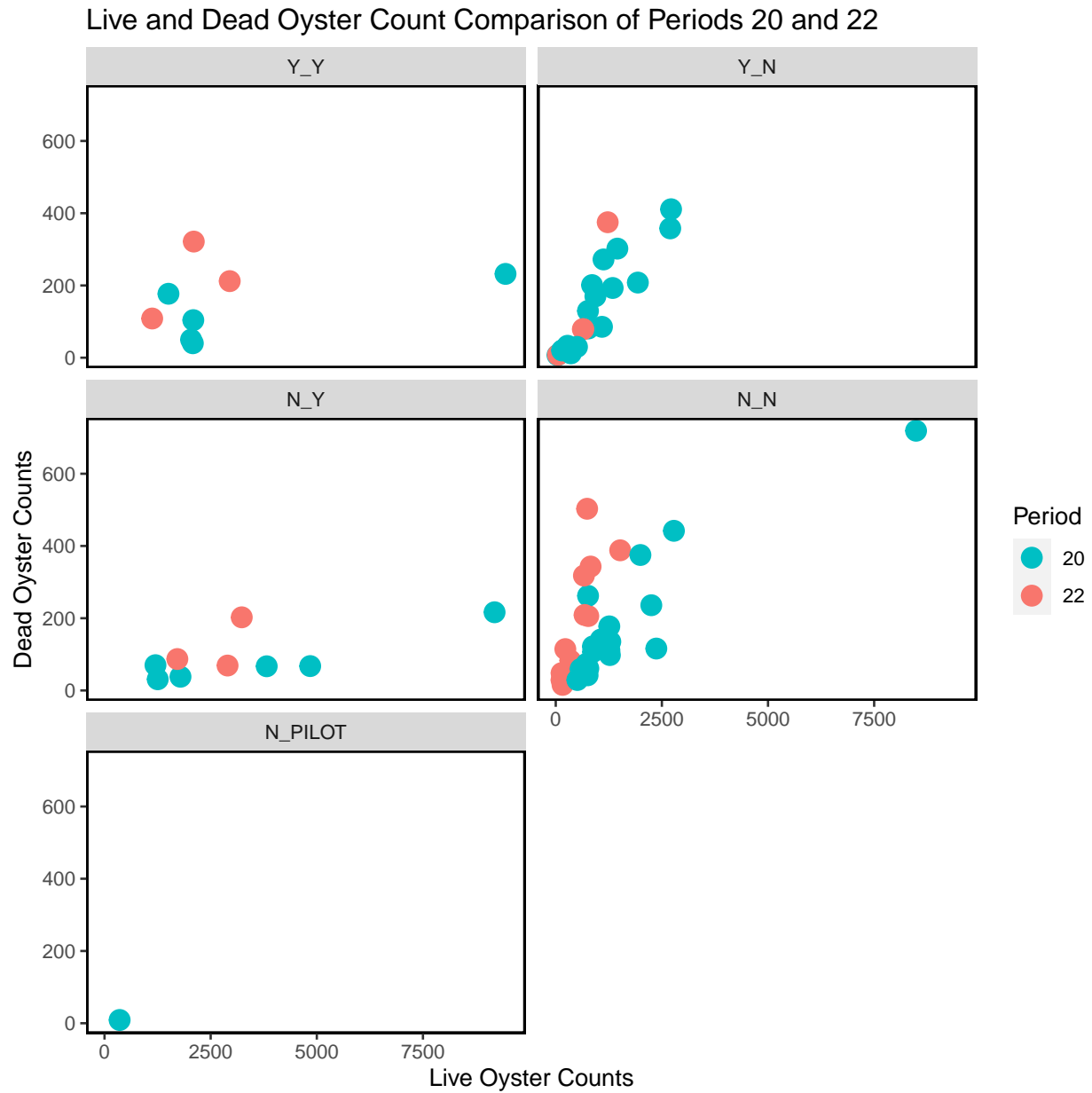


Figure- Live and dead oyster count comparison by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021), last sample date of period 22 as 2020-12-04.

## Live Counts Double Pass Results

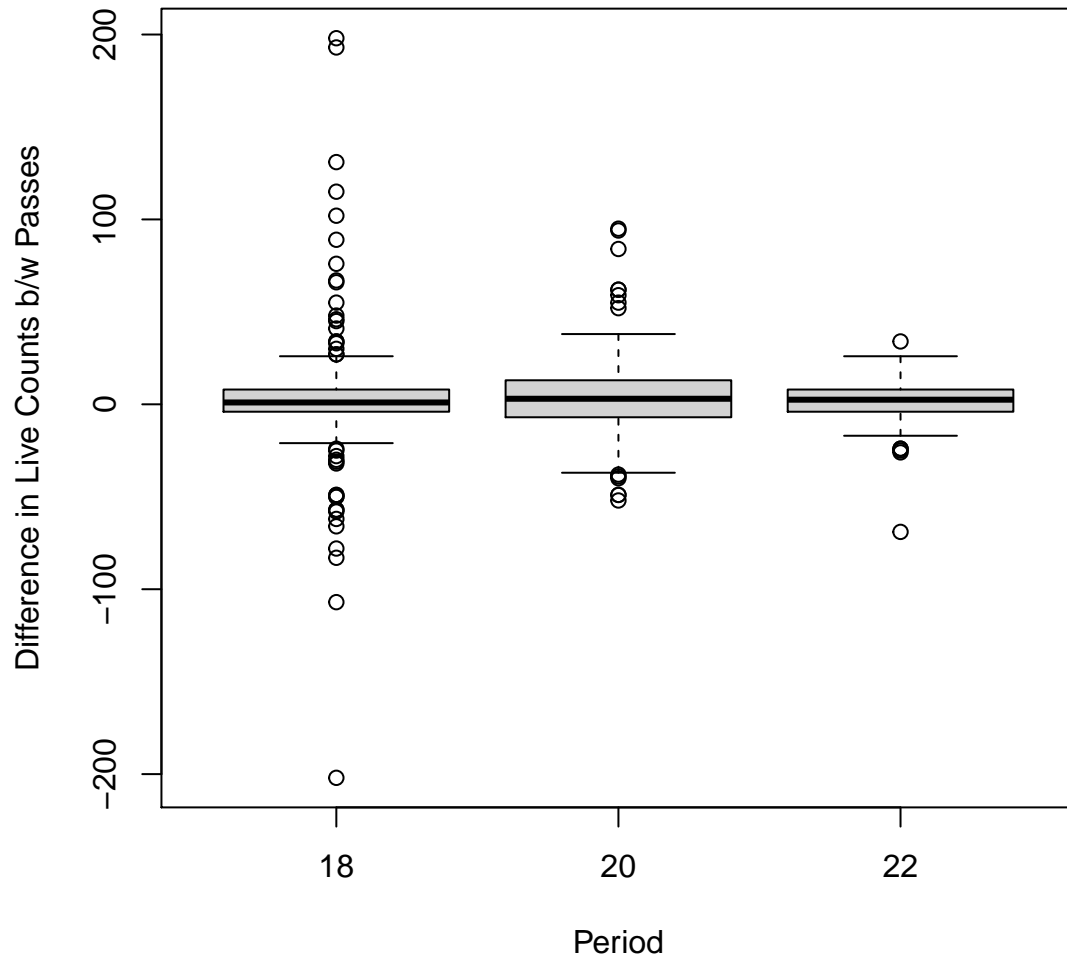


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, and 22

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	0.59	0.66
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

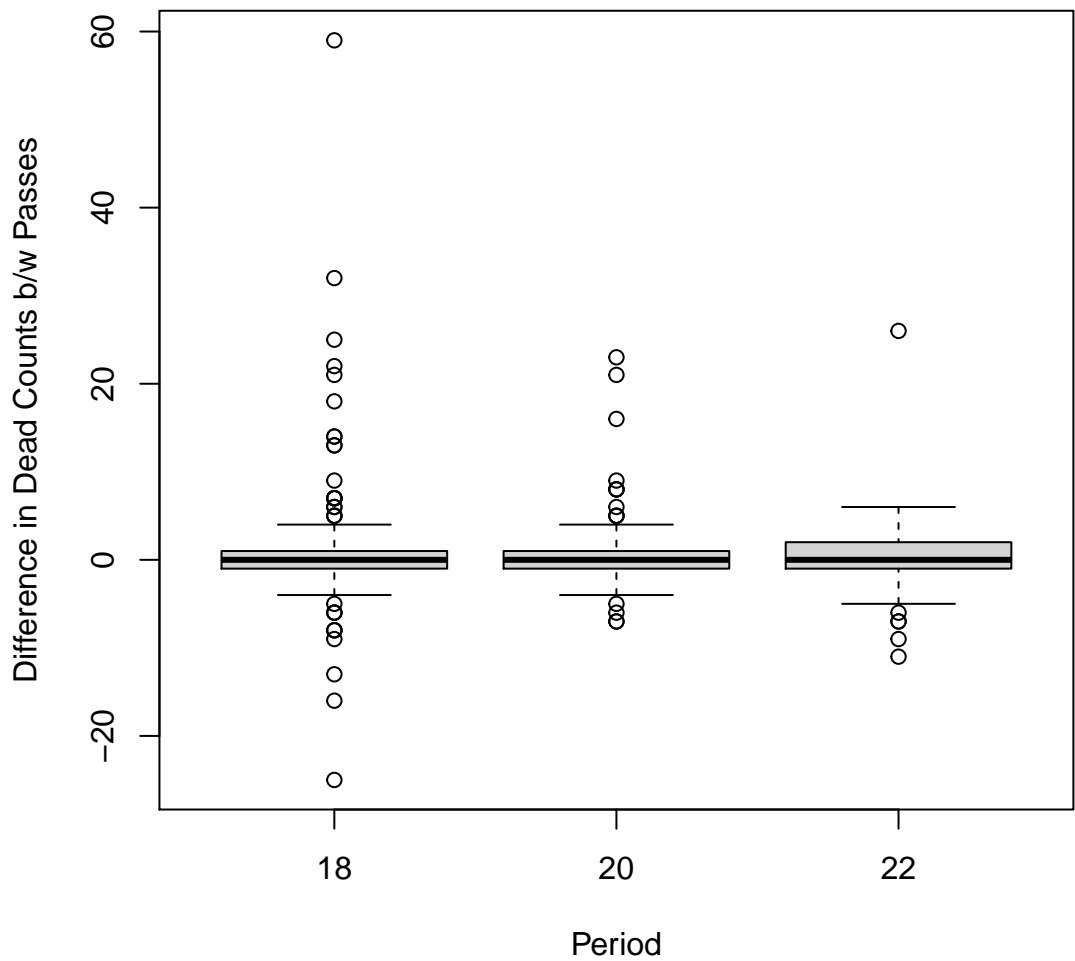


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, and 22

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	0.76	0.82
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 2020-12-04. 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	11	424
CK	26	712
CR	46	1330
HB	45	1129
LC	175	8382
LT	15	406
NN	10	255

### Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	106	3537
N_PILOT	13	799
N_Y	22	2136
Y_N	175	4995
Y_Y	12	1169

### 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	23	1116

### 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	3	90
22	LC	16	929
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)
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	3	286
22	Y_N	4	119
22	Y_Y	3	340
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

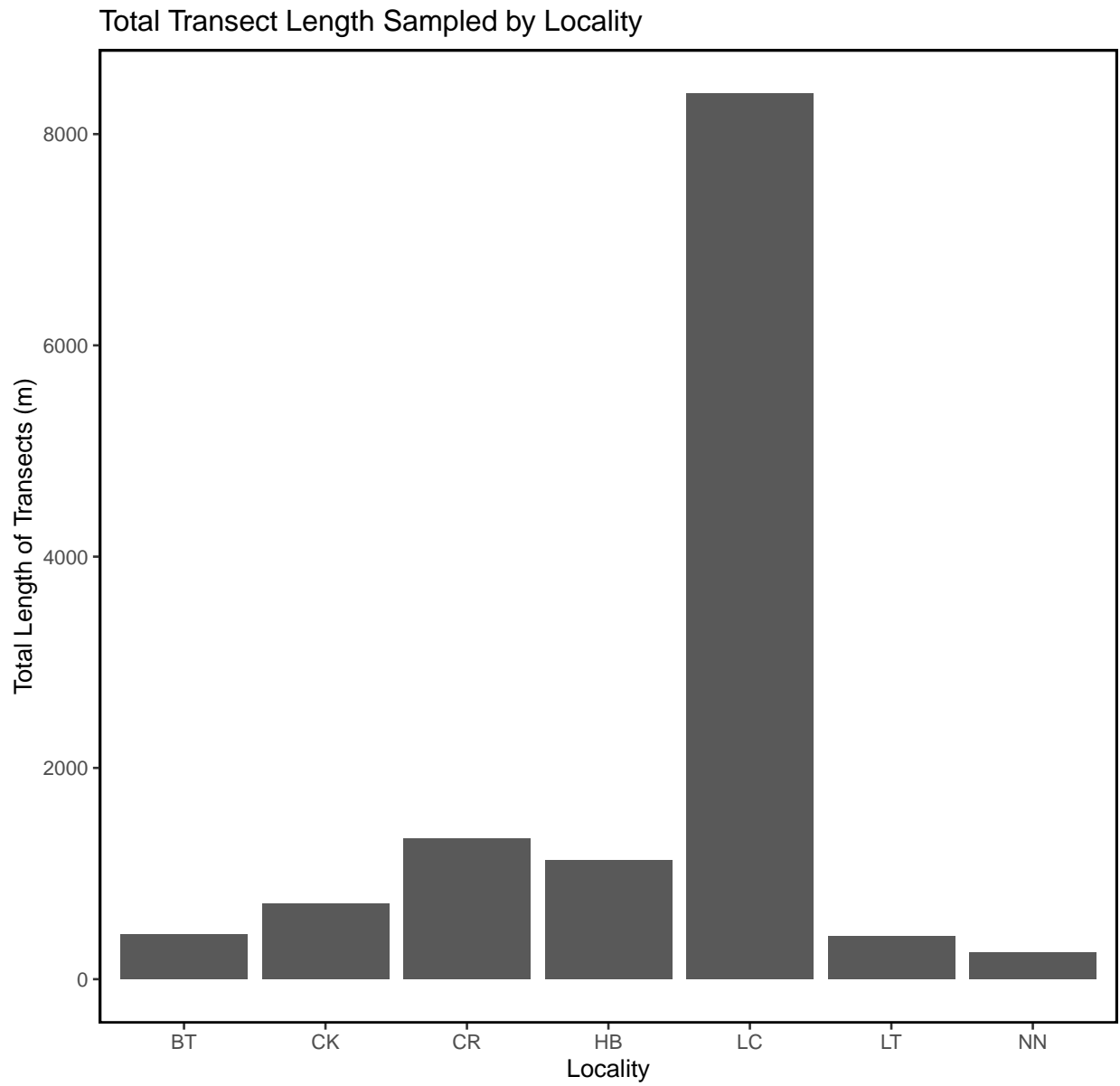


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

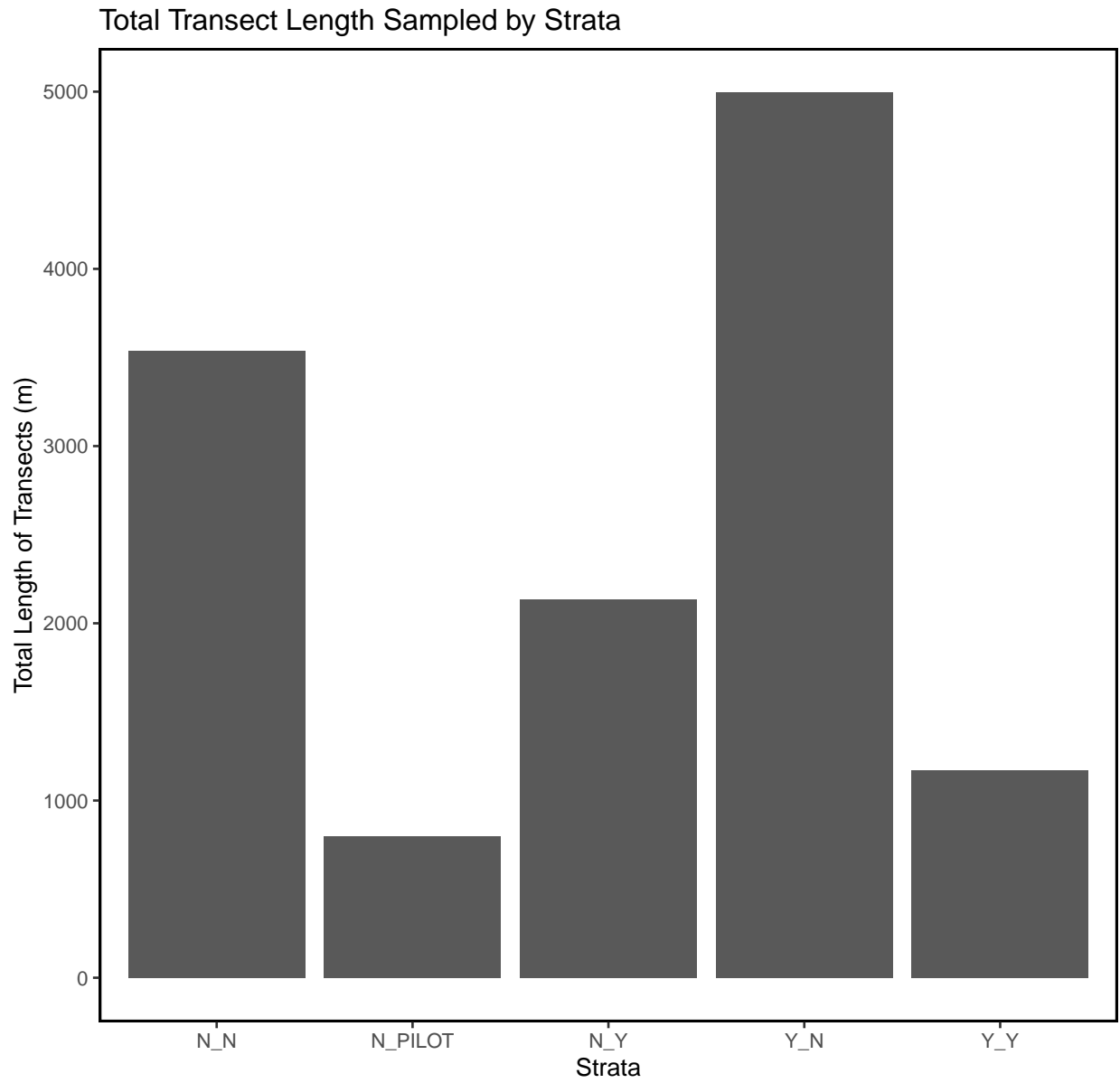
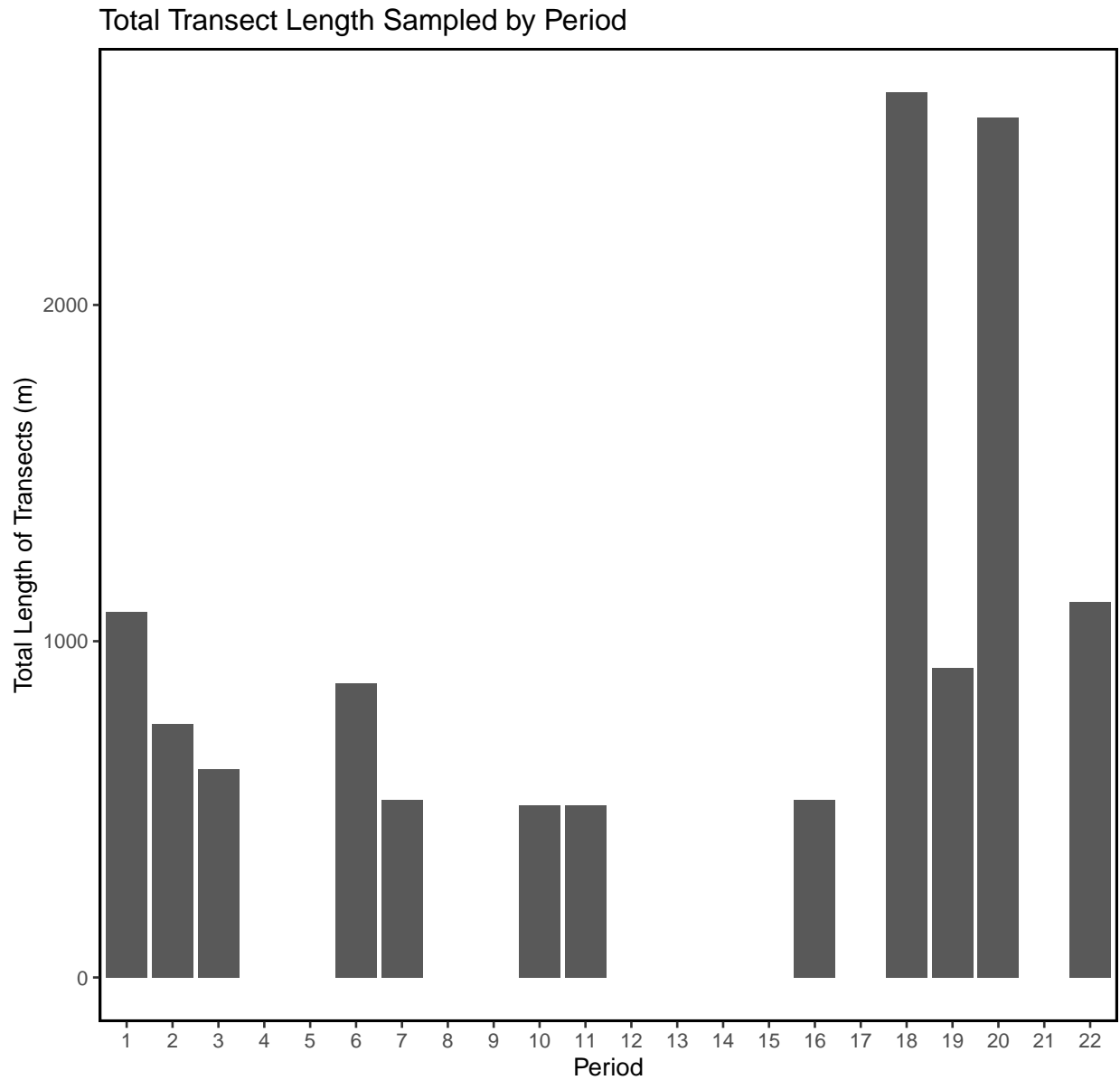


Figure – Bar plot of total transect length in meters sampled by strata for all periods.



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	1805	897	2435	5931263	1.35	734	366	3245	1783	726	3318
CK	857	444	1091	1190933	1.27	214	438	1277	863	484	1320
CR	1026	716	1035	1072162	1.01	153	727	1325	1034	755	1329
HB	902	364	1047	1095622	1.16	158	592	1211	898	599	1201
LC	1014	677	1285	1650762	1.27	98	822	1206	1012	822	1217
LT	1054	877	645	416505	0.61	167	728	1381	1054	769	1415
NN	720	649	644	414522	0.89	204	321	1119	716	394	1154

### Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	995	761	1087	1181711	1.09	106	787	1203	992	804	1196
N_PILLOT	1046	1109	627	392853	0.60	174	705	1386	1044	735	1392
N_Y	2141	1436	2085	4347385	0.97	445	1270	3013	2127	1362	3094
Y_N	792	436	933	870620	1.18	71	652	931	787	665	927
Y_Y	2100	1772	2464	6072619	1.17	711	706	3494	2126	1140	3605

### 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	1411	1030	1797
2	890	476	945	893727	1.06	176	546	1234	896	562	1229
3	738	296	817	668064	1.11	167	411	1065	742	452	1093
6	433	176	534	284791	1.23	96	245	621	431	269	618
7	50	29	56	3186	1.12	20	11	90	51	17	88
10	1207	1074	671	449607	0.56	237	743	1672	1201	813	1630
11	886	776	678	459708	0.77	240	416	1356	872	455	1330
16	494	366	467	217855	0.95	165	170	817	503	228	815
18	982	695	935	874733	0.95	120	748	1217	980	759	1217
19	555	329	573	328431	1.03	97	365	745	556	378	749
20	1844	1253	2125	4517189	1.15	310	1236	2451	1857	1301	2495
22	1022	679	954	910715	0.93	199	632	1412	1016	645	1403

## 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	207	42972	0.79	63	140	385	263	163	392
CK	241	112	321	102795	1.33	63	118	365	238	134	357
CR	288	181	294	86231	1.02	43	203	373	287	206	370
HB	257	101	303	92052	1.18	46	168	347	256	172	339
LC	157	122	154	23651	0.98	12	134	180	157	134	181
LT	274	239	152	23145	0.56	39	197	351	273	204	346
NN	215	154	234	54714	1.09	74	70	360	217	103	373

### Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	262	183	264	69745	1.01	26	212	313	263	215	316
N_PILOT	111	111	60	3604	0.54	17	79	144	112	82	147
N_Y	154	142	99	9885	0.64	21	113	196	154	116	199
Y_N	192	114	222	49498	1.16	17	158	225	192	161	225
Y_Y	132	121	94	8882	0.71	27	79	186	134	86	191

### 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	392	290.8	499.9
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	255	157.5	353.1
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	232	130.7	341.2
6	122	72.2	150.9	22769	1.24	27	68.6	174.9	122	72.6	174.7
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.7	8.9
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	124	83.3	169.7
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	91	49.0	135.4
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49	22.0	78.1
18	177	154.5	130.8	17117	0.74	17	144.3	210.0	177	144.8	210.9
19	160	85.6	171.9	29552	1.08	29	102.9	216.8	160	105.9	219.8
20	258	202.8	187.6	35185	0.73	27	204.4	311.7	258	209.4	316.2
22	129	139.6	57.0	3253	0.44	12	105.4	152.1	129	104.6	151.0

## 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	348	178	333	111065	0.96	100.5	151.0	545	351	188	558
CK	78	32	106	11170	1.36	37.4	4.3	151	77	17	155
CR	60	47	38	1444	0.63	12.7	35.2	85	60	40	85
HB	44	21	45	2000	1.02	14.9	14.8	73	44	20	74
LC	94	60	98	9647	1.04	8.5	77.8	111	94	79	112
LT	240	210	202	40850	0.84	52.2	137.2	342	242	151	344
NN	100	68	100	10018	1.00	31.7	38.1	162	100	52	163

### Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	156	78	197	38955	1.27	23	111	201	157	116	206
N_PILOT	82	87	46	2136	0.56	13	57	108	82	60	108
N_Y	59	54	54	2905	0.91	11	36	82	59	40	85
Y_N	99	58	108	11586	1.09	12	75	123	98	75	123
Y_Y	109	77	104	10847	0.96	30	50	168	109	54	169

### 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	30	11	50
10	80	88	65	4245	0.82	23.0	34.5	125	80	38	125
11	50	40	25	620	0.49	8.8	33.2	68	50	35	67
16	44	28	41	1708	0.93	14.6	15.6	73	45	21	74
18	133	55	192	36903	1.44	24.6	85.1	182	133	90	181
19	63	44	67	4548	1.08	11.6	40.0	85	63	42	86
20	148	107	140	19727	0.95	20.5	107.6	188	147	110	188
22	169	108	143	20314	0.84	29.7	110.6	227	169	113	226

## 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	55	51	37	1332	0.66	11.0	33.8	77	55	36.3	77
CK	21	11	28	757	1.29	9.7	2.3	40	21	5.8	40
CR	20	14	15	235	0.77	5.1	10.0	30	20	11.7	30
HB	13	8	14	201	1.12	4.7	3.4	22	13	5.1	23
LC	16	8	20	392	1.22	1.7	12.8	20	16	12.9	20
LT	58	47	40	1570	0.68	10.2	38.2	78	58	40.3	78
NN	28	16	26	668	0.91	8.2	12.5	45	28	14.5	44

### Dead Oyster Density by Strata

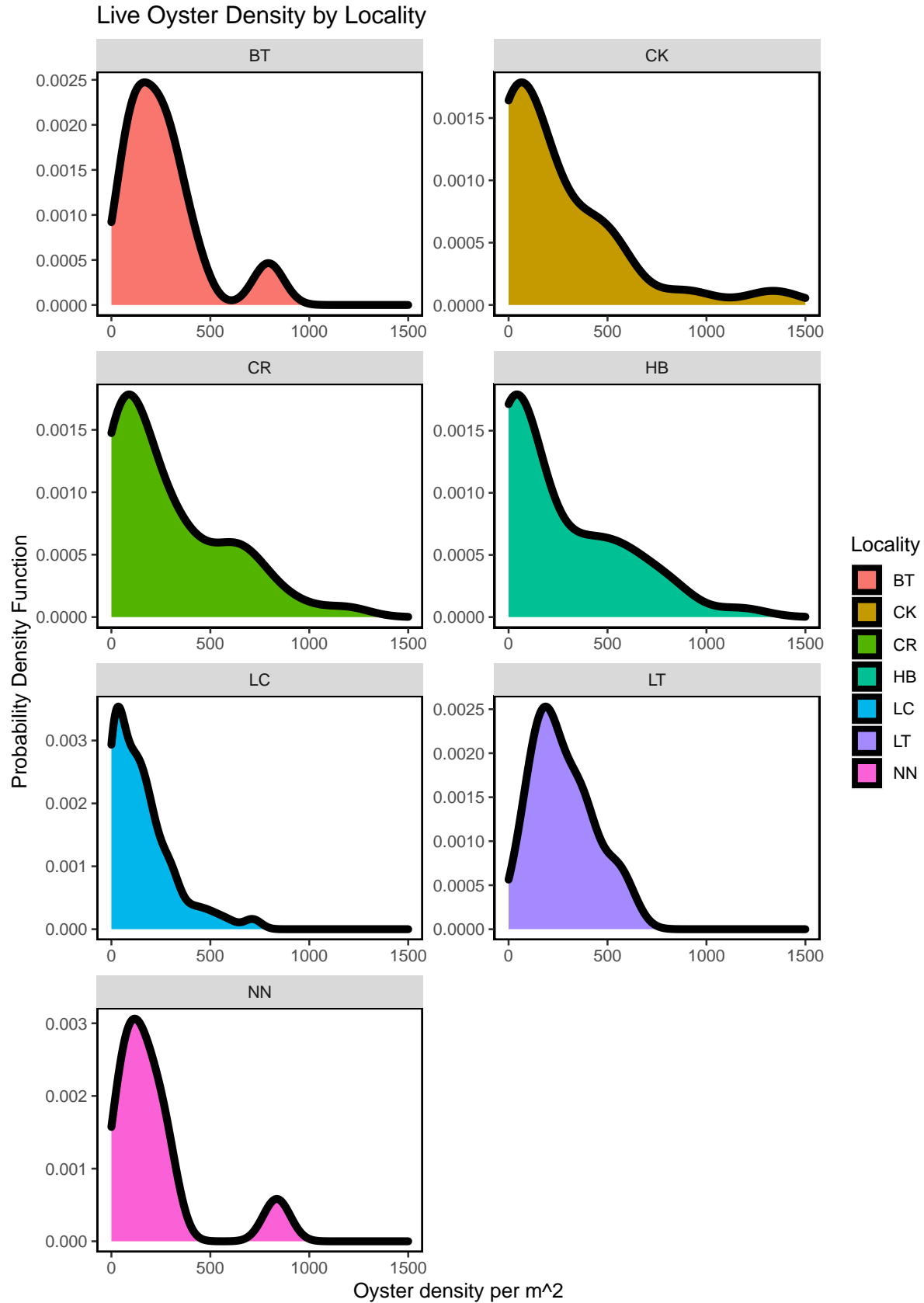
Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	32.5	21.0	33.2	1102	1.02	3.9	24.9	40.1	32.4	25.2	41
N_PILOT	8.5	8.7	4.5	20	0.53	1.2	6.1	10.9	8.5	6.4	11
N_Y	5.1	3.8	4.8	23	0.94	1.0	3.1	7.1	5.1	3.4	7
Y_N	22.4	15.5	22.9	526	1.03	2.6	17.2	27.5	22.4	17.5	27
Y_Y	7.4	6.3	6.4	41	0.87	1.8	3.8	11.0	7.5	4.2	11

### Dead Oyster Density by Period

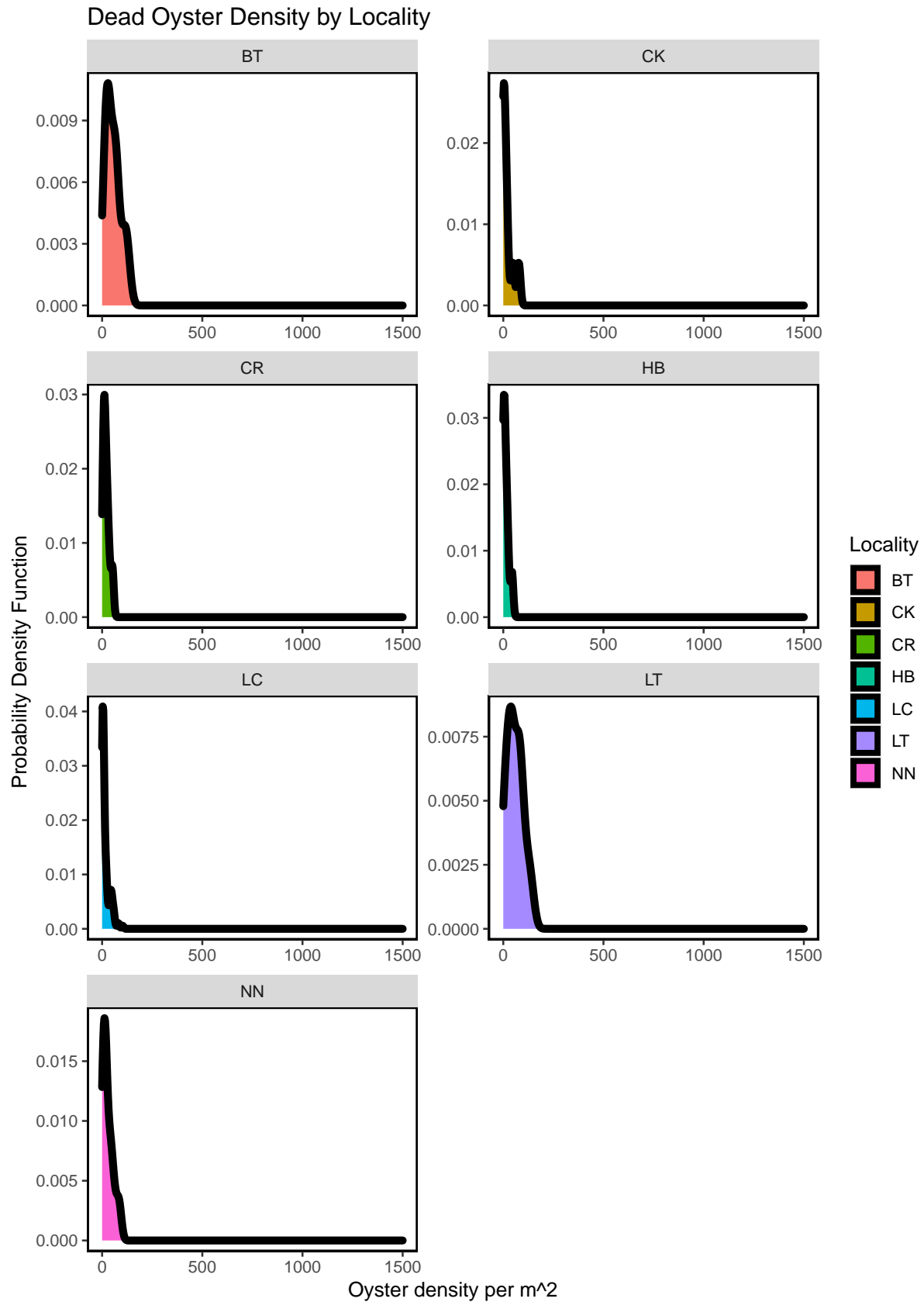
Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
7	2.9	1.8	3.0	8.9	1.03	1.05	0.82	4.9	2.9	1.0	5.0
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.2	4.2	13.0
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.1	3.7	6.7
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	1.8	7.1
18	26.4	15.7	31.3	980.1	1.19	4.01	18.54	34.3	26.3	18.6	34.1
19	18.1	13.1	19.3	370.6	1.07	3.30	11.59	24.5	18.0	11.8	25.8
20	27.9	18.4	26.4	697.6	0.95	3.85	20.38	35.5	28.1	21.3	35.6
22	31.0	17.3	31.9	1016.2	1.03	6.65	18.00	44.1	30.6	18.5	43.2



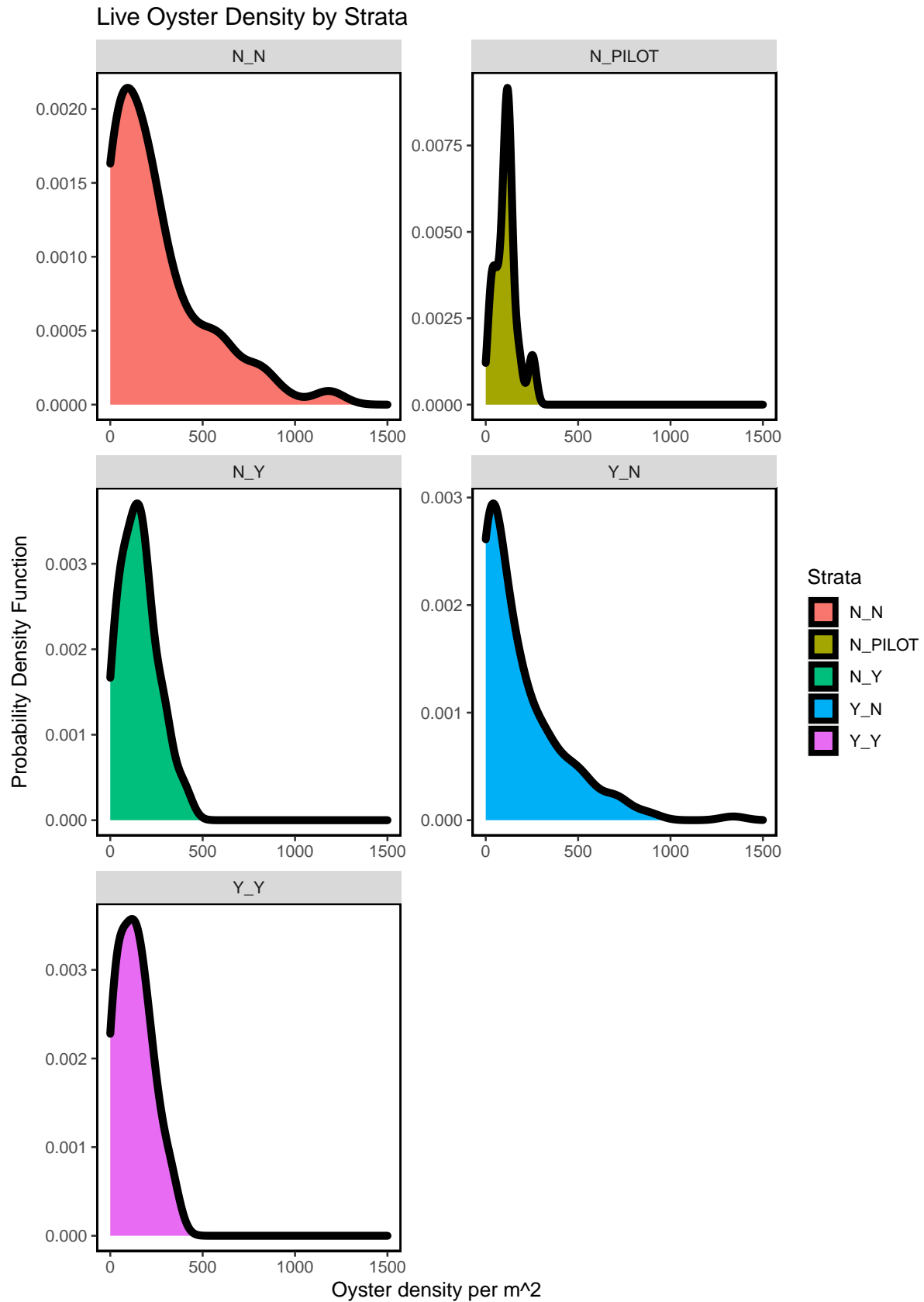
## Summary Density Plots for all Periods



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

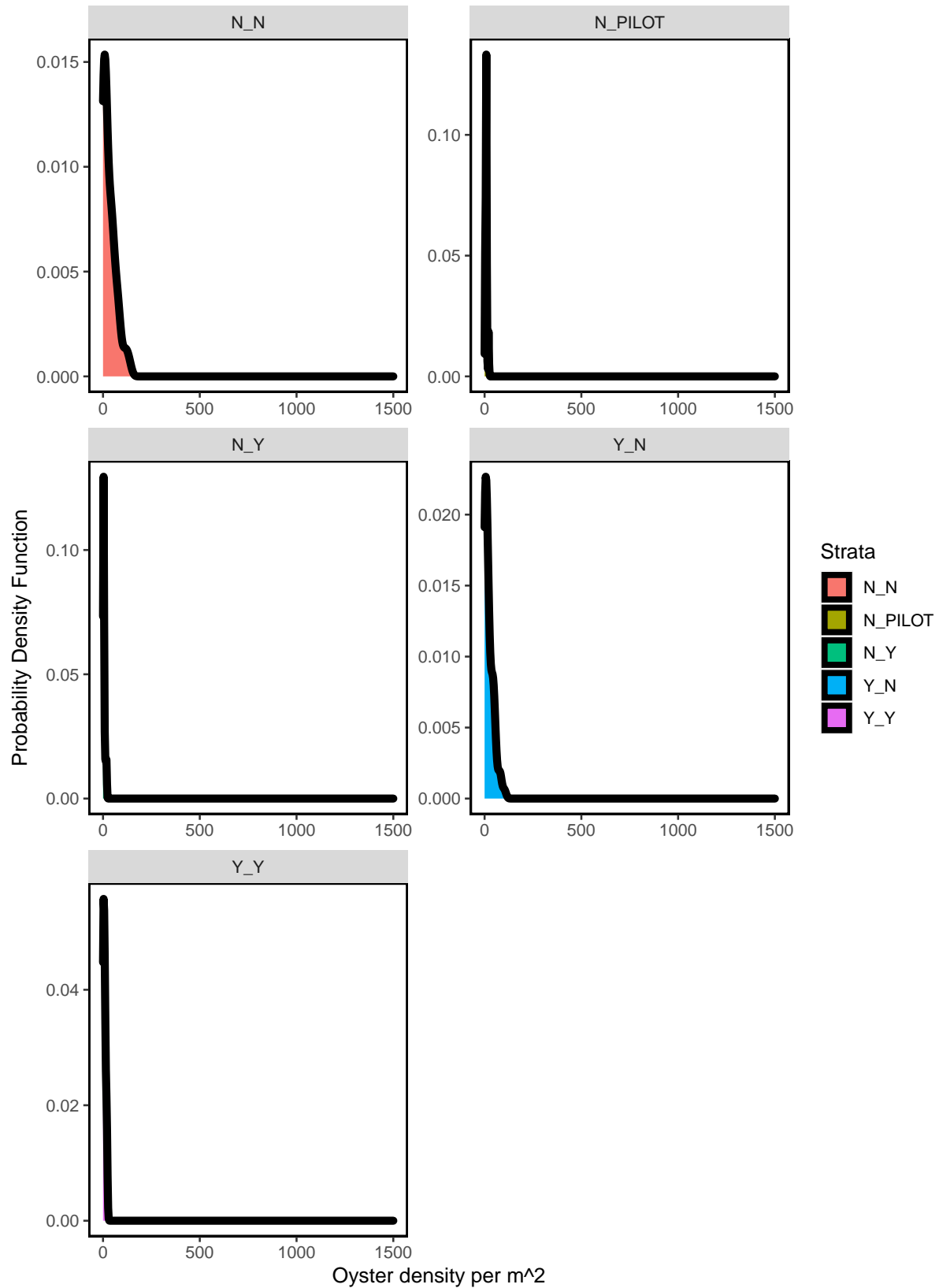


Figure– Calculated dead oyster density by locality for all periods including period 22 (current period).

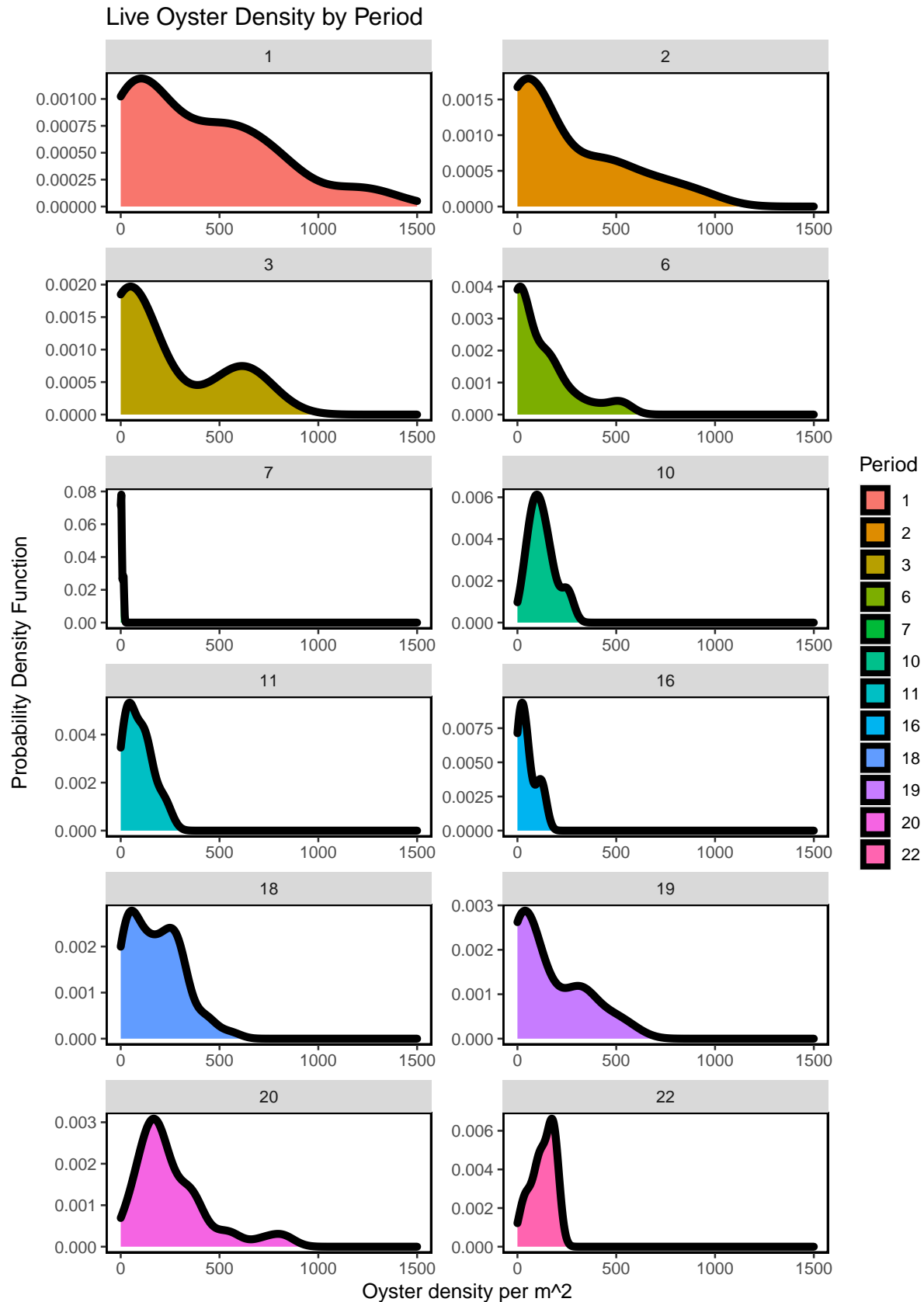


Figure– Calculated live oyster density by strata for all periods including period 22 (current period).

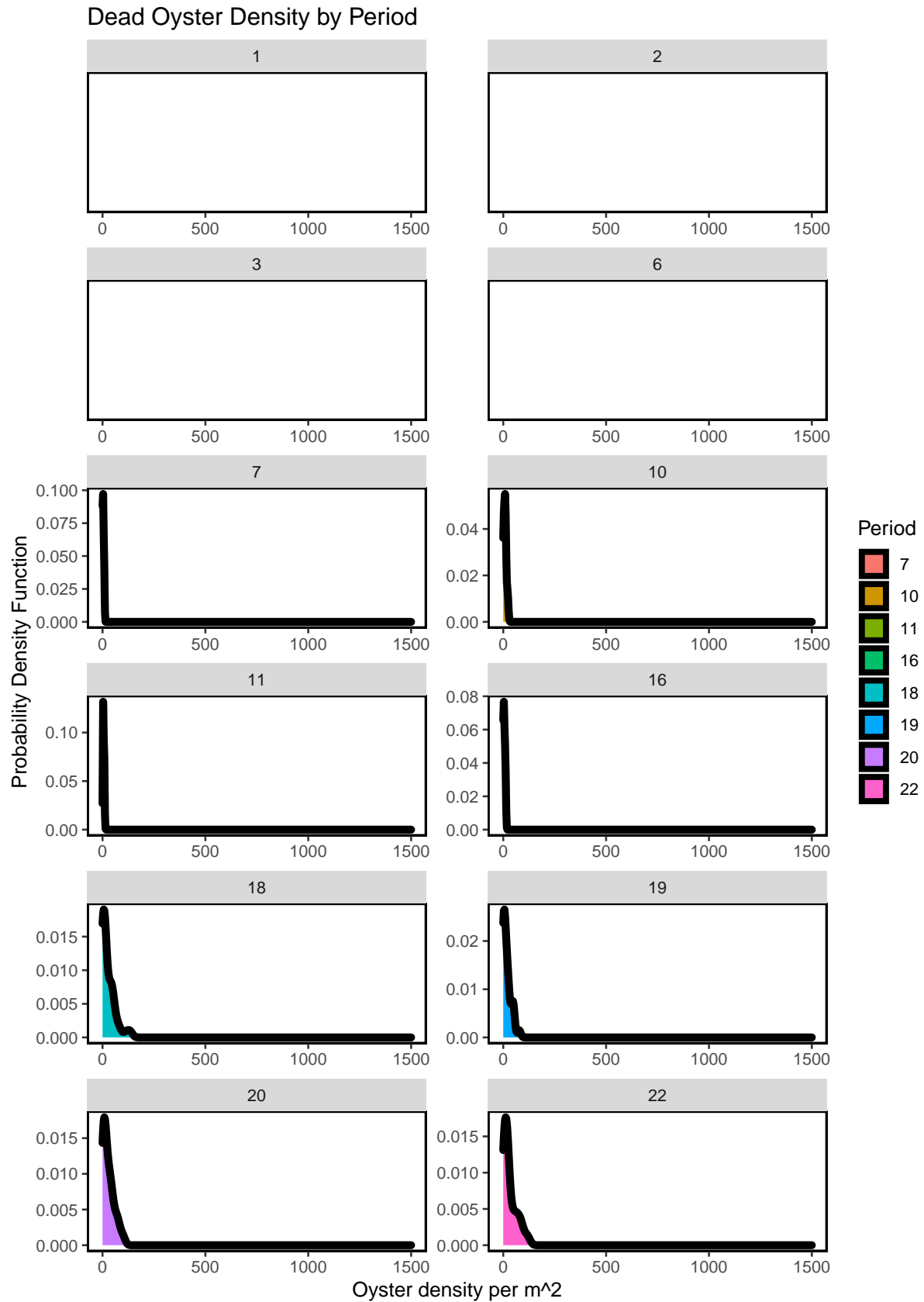
# Dead Oyster Density by Strata



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

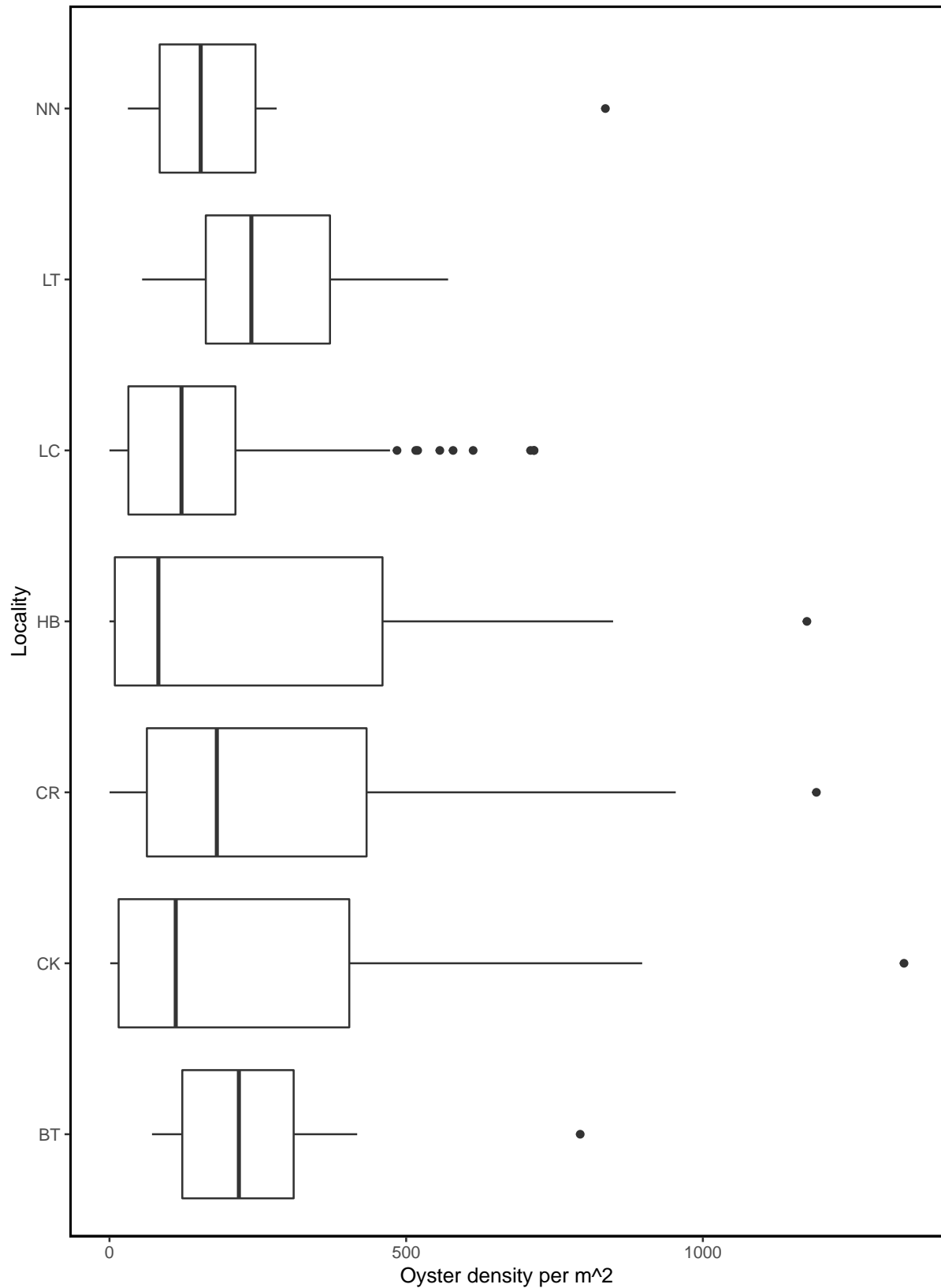


Figure– Calculated live oyster density for all periods including period 22 (current period) using a probability densi



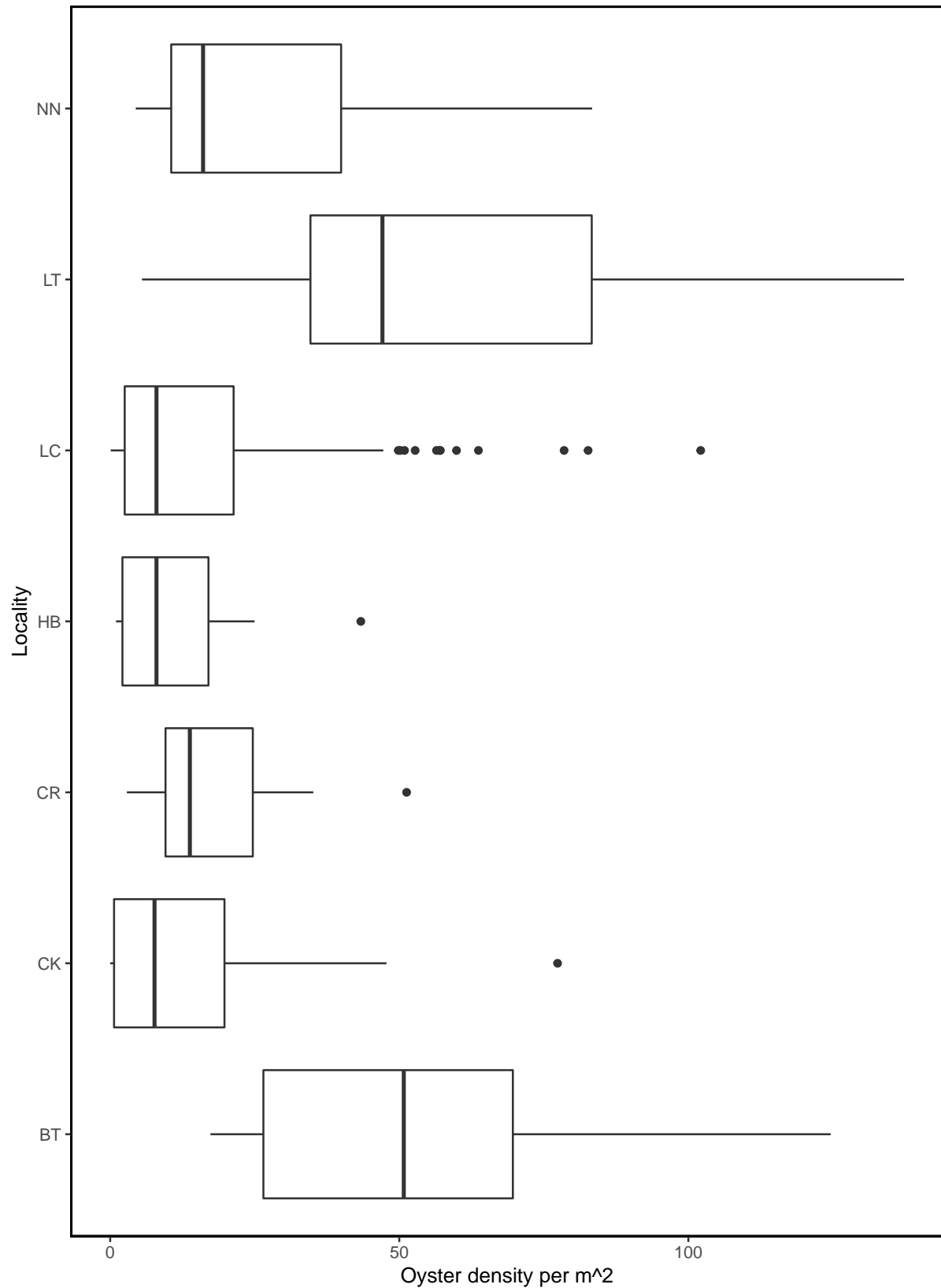
Figure– Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality



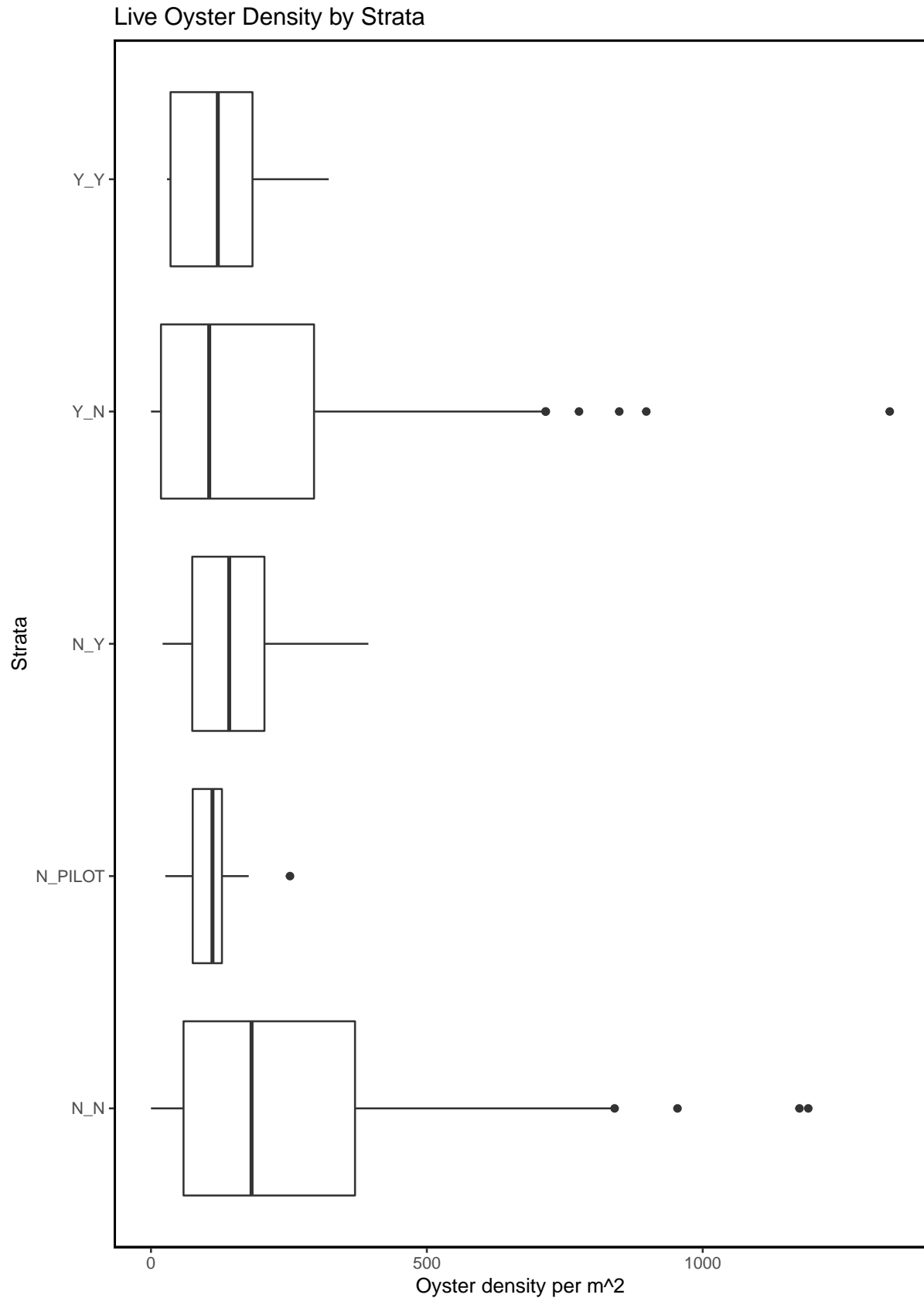
Figure– Box plot depicting live oyster density by locality for all periods including period 22 (current period).

Dead Oyster Density by Locality

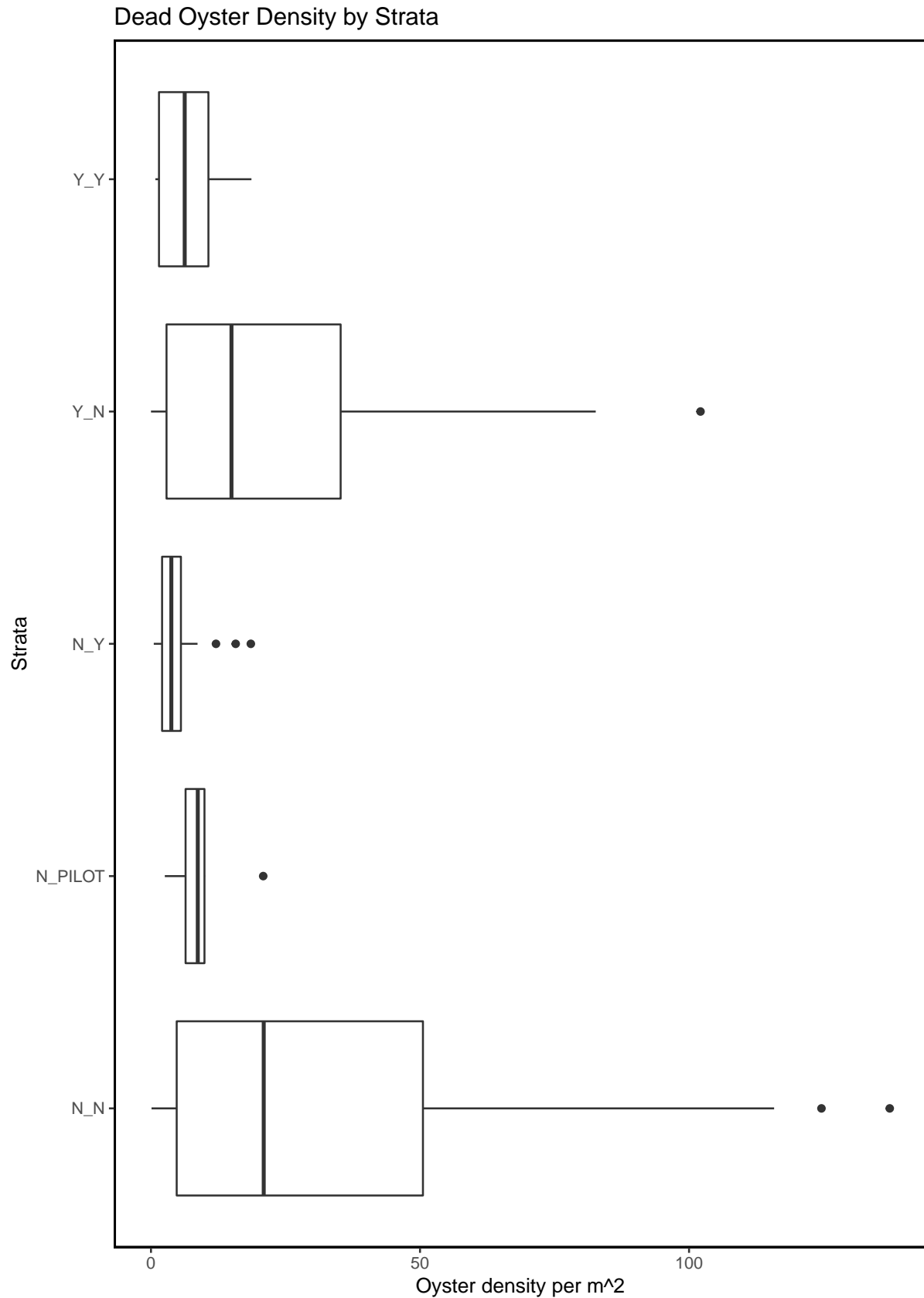


Figure– Box plot depicting dead oyster density by locality for all periods including period 22 (current period).

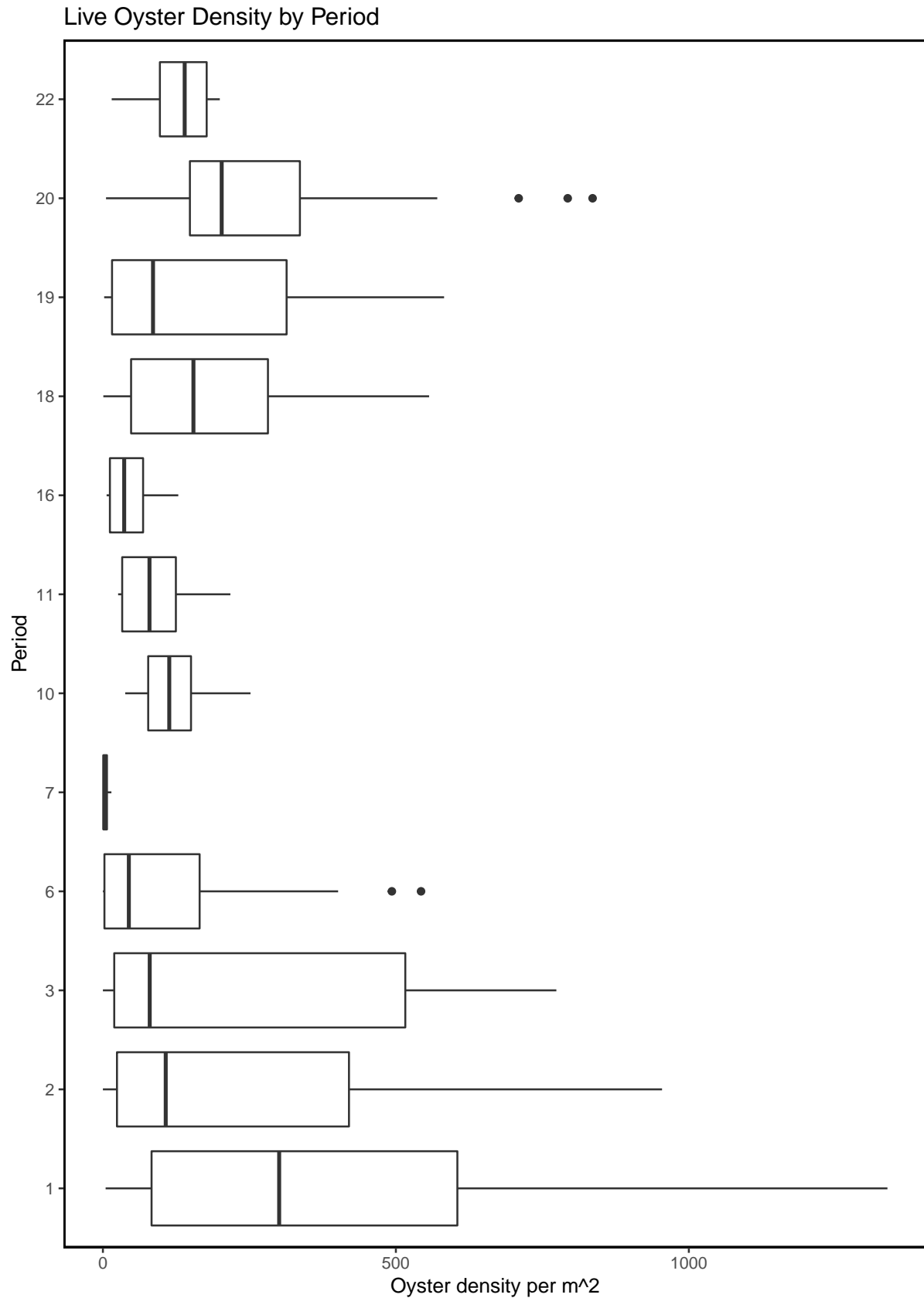




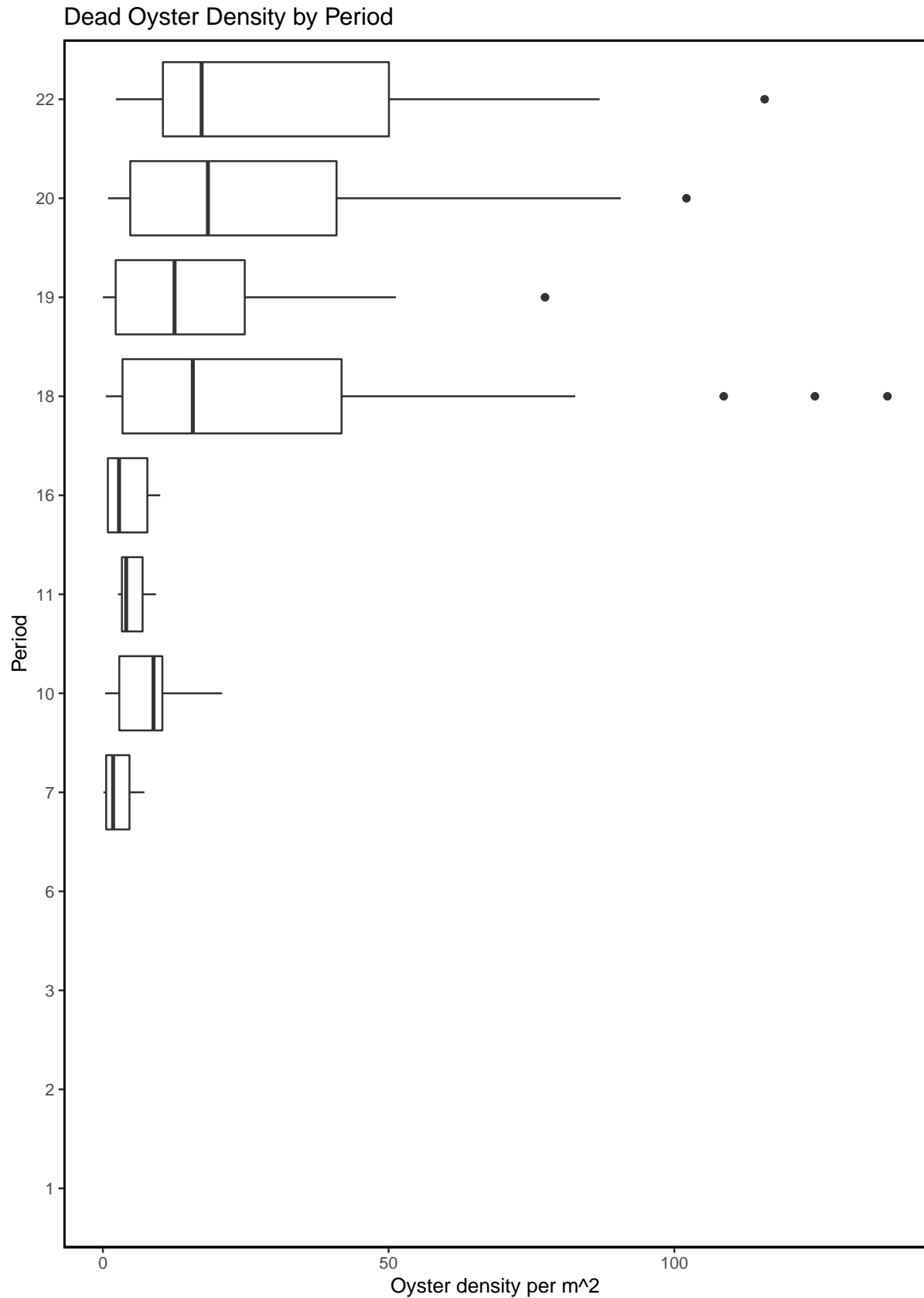
Figure– Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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



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

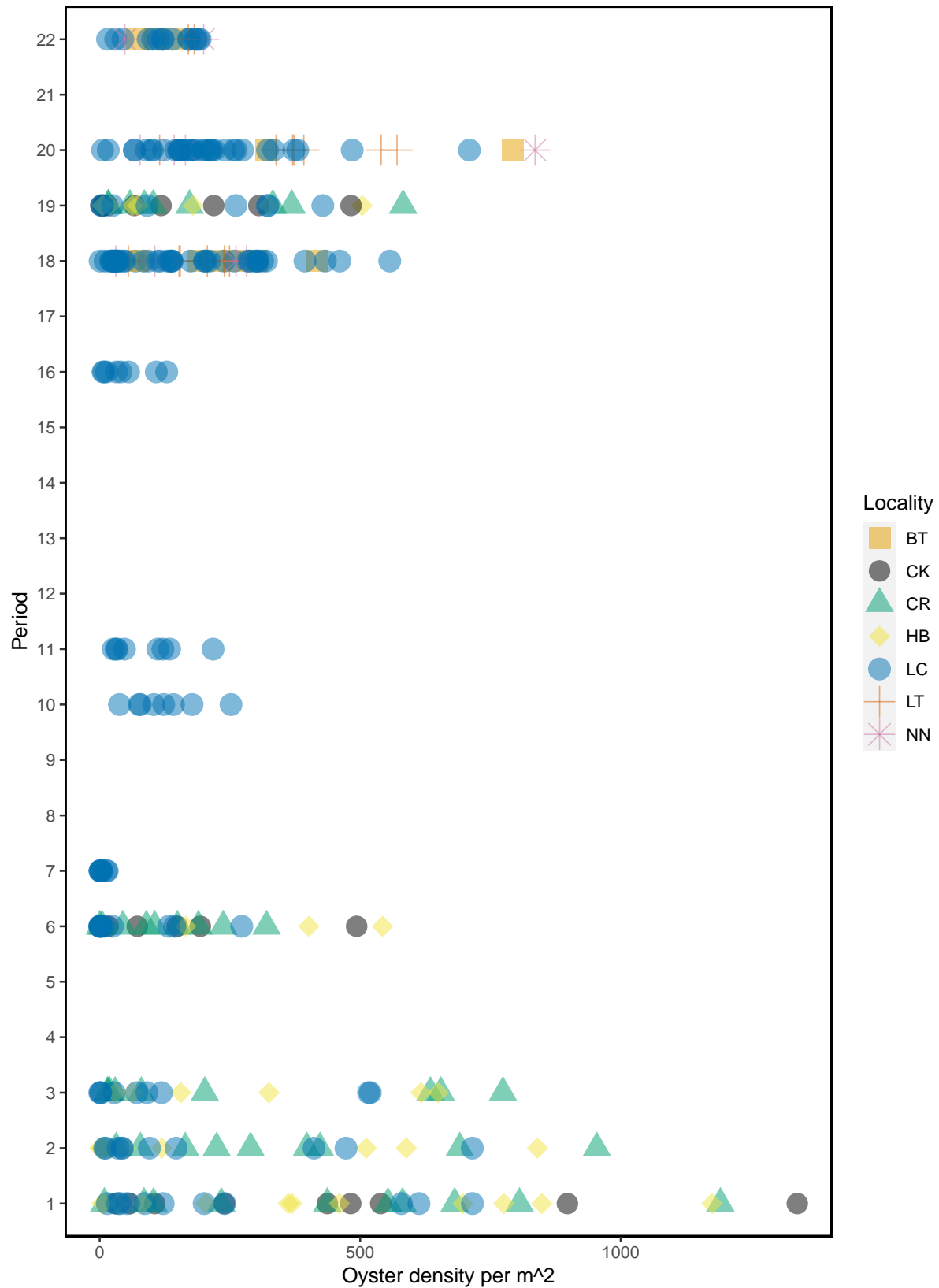


Figure – Live oyster density by locality and period for all periods including period 22 (current period).



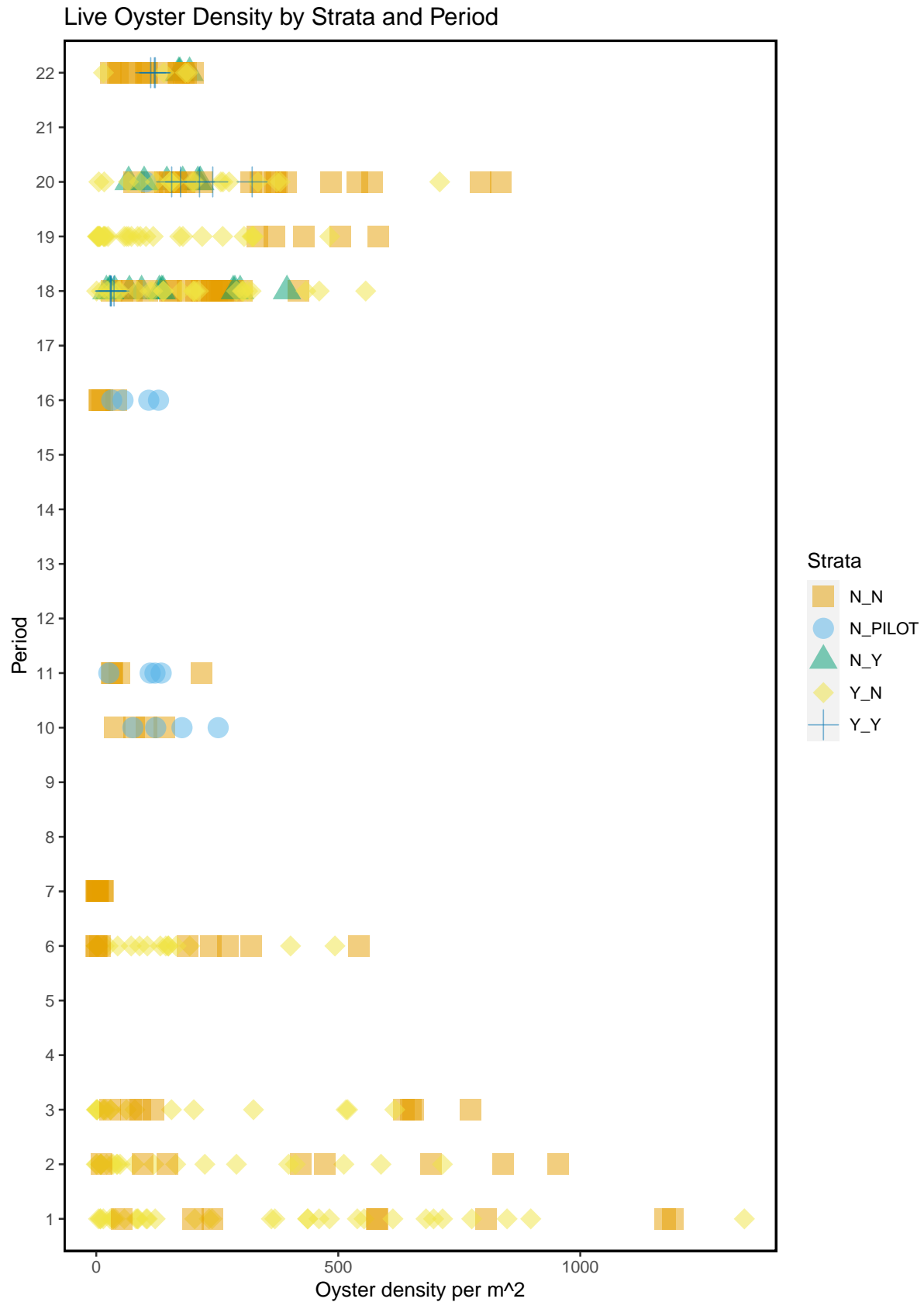
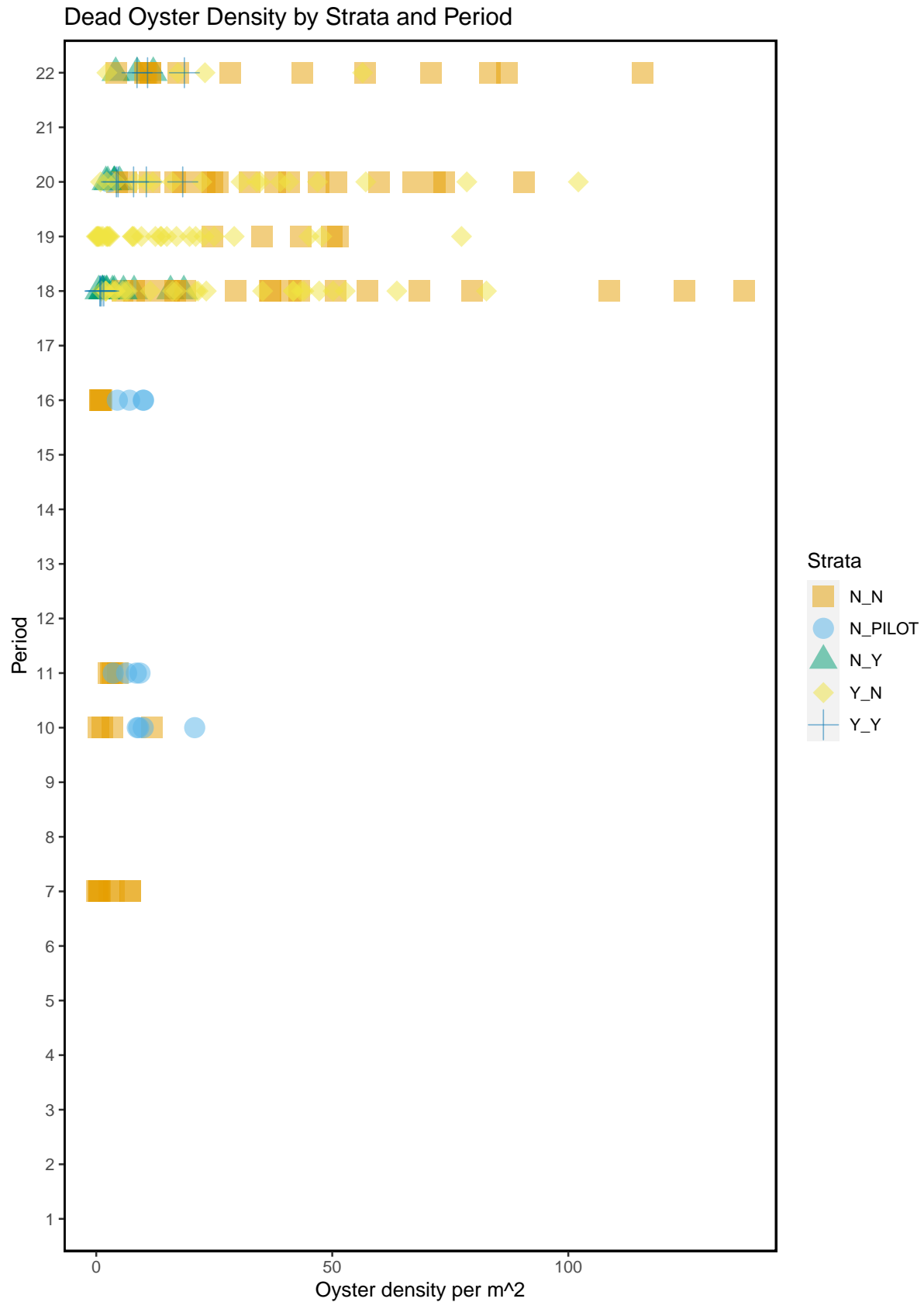


Figure – Live oyster density by strata and period for all periods including period 22 (current period).





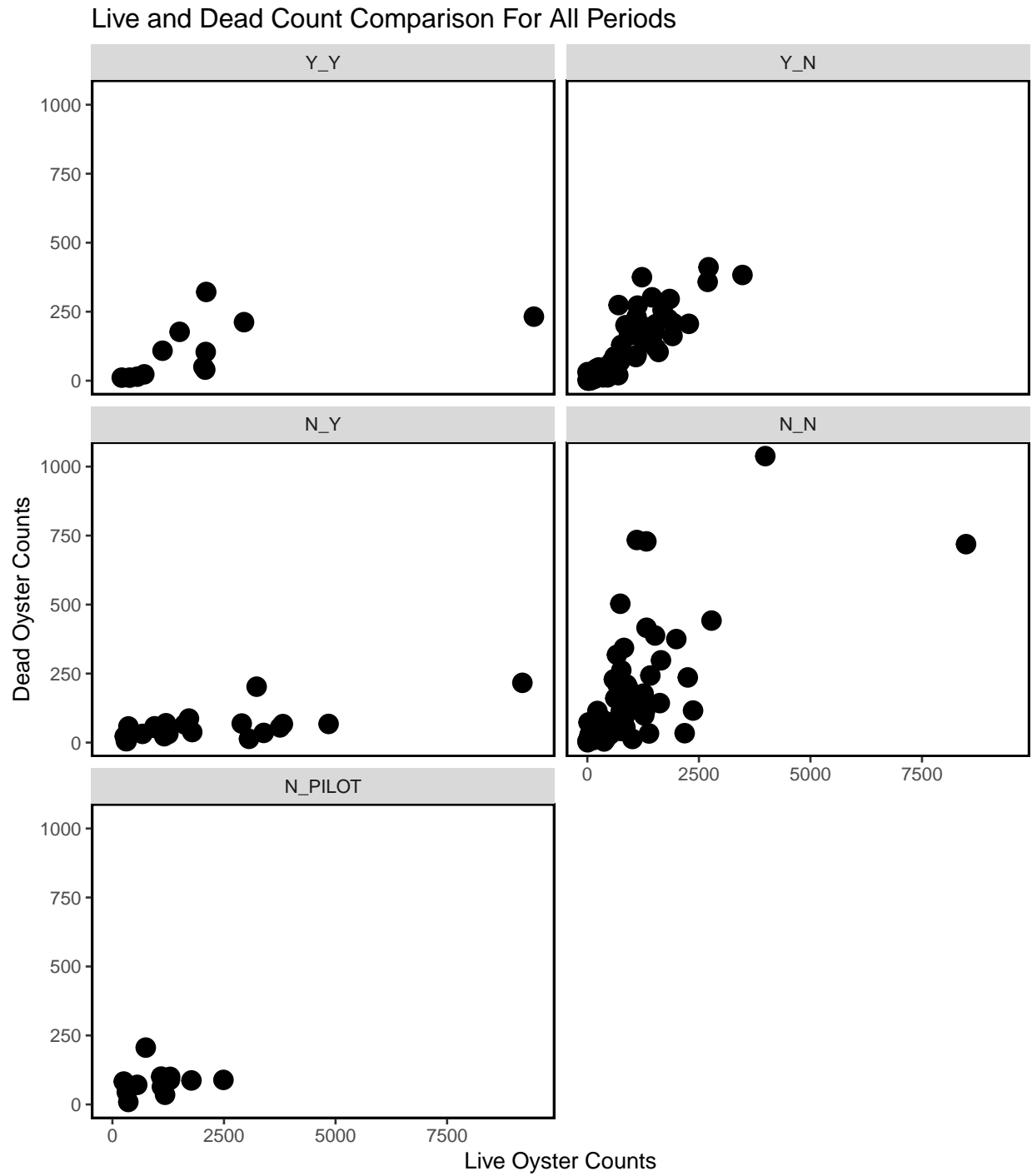


Figure- Live and dead oyster comparison for all periods, last sample date of period 22 is 2020-12-04.

## 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).

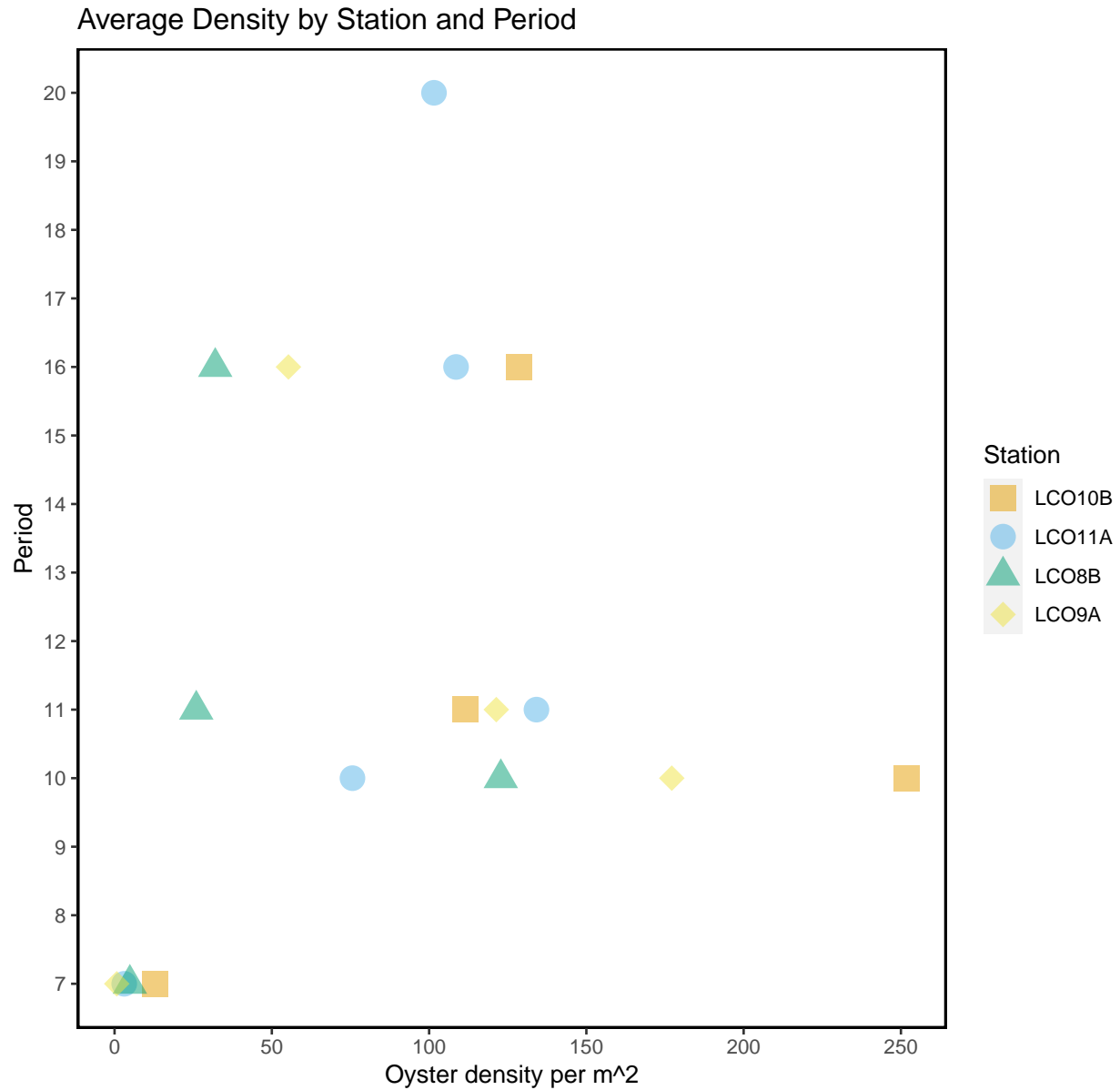


Figure – Average live oyster density comparison by station and period for all stations that were sampled during the pilc

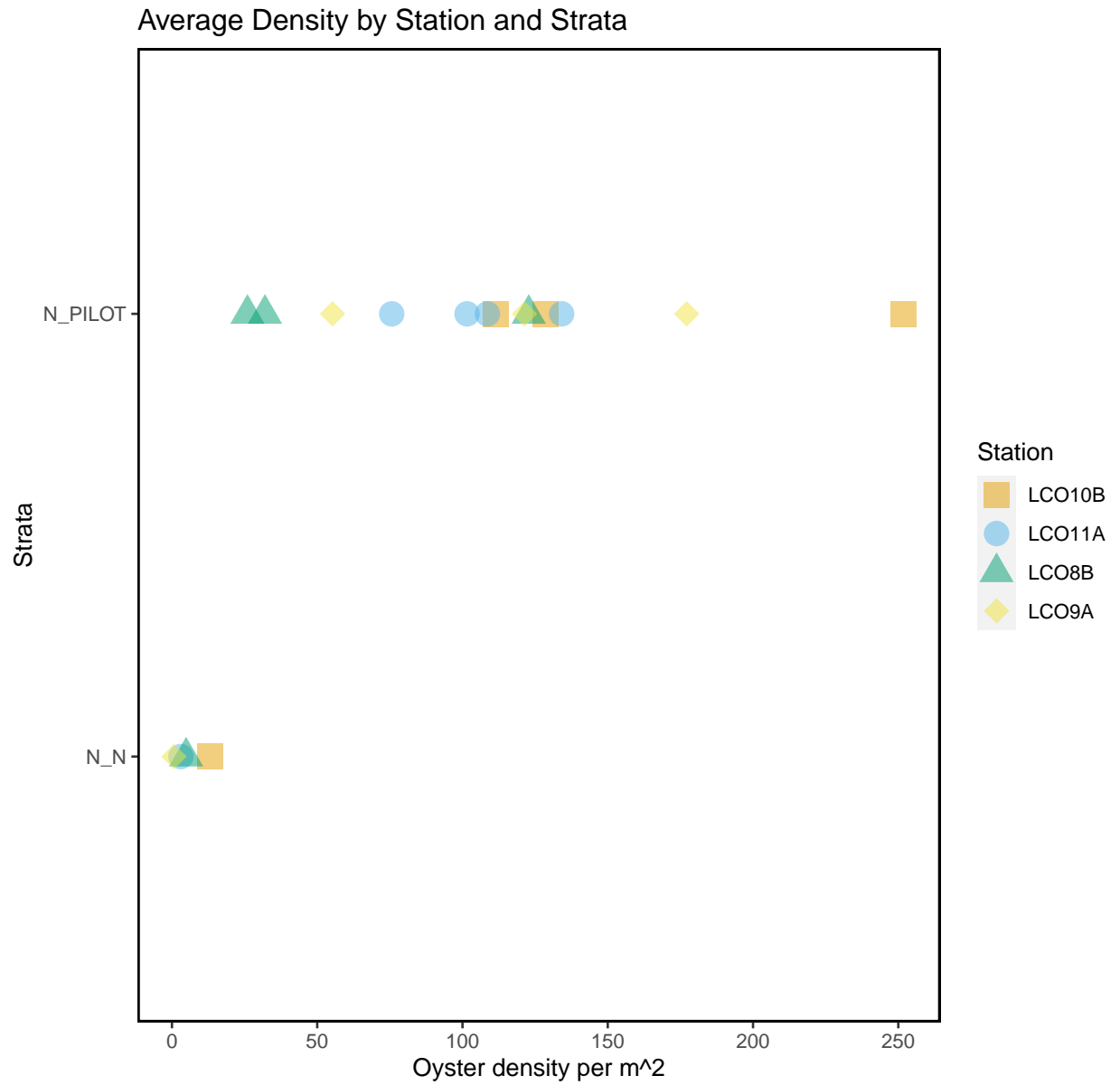


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

## Latest Data Entered

Displayed are the entries for the last date of sampling (2020-12-04).

date	station	tran_length	count_live	count_dead	treatment	strata
2020-12-04	LCI42	2.5	32	2	control	N_N
2020-12-04	LCI42	5.0	68	9	control	N_N
2020-12-04	LCI42	7.5	158	13	control	N_N
2020-12-04	LCI42	10.0	121	11	control	N_N
2020-12-04	LCI42	12.5	126	17	control	N_N
2020-12-04	LCI42	15.0	74	17	control	N_N
2020-12-04	LCI42	17.5	75	17	control	N_N
2020-12-04	LCI42	20.0	40	27	control	N_N
2020-12-04	LCI42	22.5	92	17	control	N_N
2020-12-04	LCI42	25.0	113	96	control	N_N
2020-12-04	LCI42	27.5	69	24	control	N_N
2020-12-04	LCI42	30.0	0	0	control	N_N
2020-12-04	LCI42	32.5	0	0	control	N_N
2020-12-04	LCI42	35.0	0	0	control	N_N
2020-12-04	LCI42	37.5	0	0	control	N_N
2020-12-04	LCI42	40.0	0	0	control	N_N
2020-12-04	LCI42	42.5	0	0	control	N_N
2020-12-04	LCI42	45.0	1	1	control	N_N
2020-12-04	LCI42	47.5	134	76	control	N_N
2020-12-04	LCI42	50.0	122	30	control	N_N
2020-12-04	LCI42	52.5	157	15	control	N_N
2020-12-04	LCI42	55.0	114	13	control	N_N
2020-12-04	LCI42	57.5	21	1	control	N_N
2020-12-04	LCI42	58.3	1	2	control	N_N
2020-12-04	LCI40	2.5	7	3	control	N_N
2020-12-04	LCI40	5.0	37	5	control	N_N
2020-12-04	LCI40	7.5	88	17	control	N_N
2020-12-04	LCI40	10.0	109	35	control	N_N
2020-12-04	LCI40	12.5	97	86	control	N_N
2020-12-04	LCI40	15.0	215	37	control	N_N
2020-12-04	LCI40	17.5	73	21	control	N_N
2020-12-04	LCI40	20.0	9	1	control	N_N
2020-12-04	LCI40	22.5	13	1	control	N_N
2020-12-04	LCI40	24.1	31	3	control	N_N