

Transect Report Lone Cabbage

Overview

This report provides summary statistics and figures for ongoing transect sampling. The first section of the report focuses on the current sampling (Winter 2021-2022) and how the collected data compare to last year's sampling (Winter 2020-2021). So far 13 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, 131 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

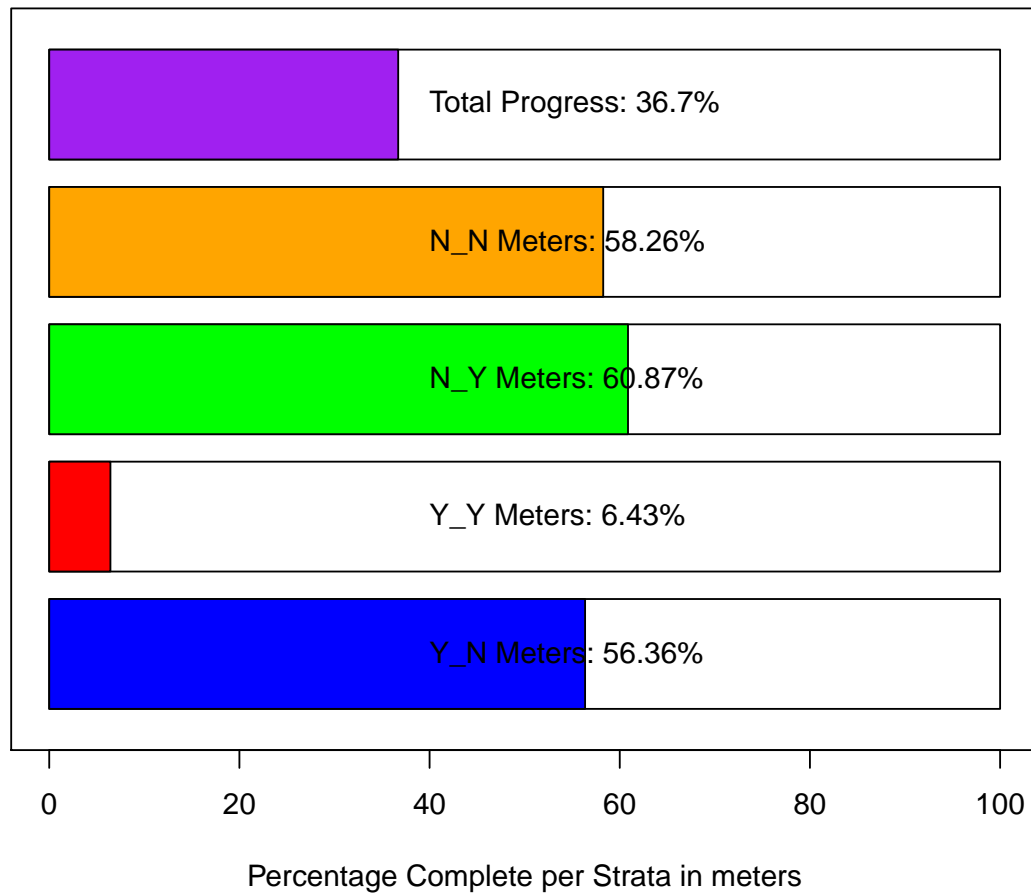
Definition of Strata

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 24, and last year's sampling period is period 22.**

Field Sites– Strata Progress



Summary Tables for Periods 18, 20, 22, and 24

These summary tables provide summary statistics on live counts and oyster densities for just periods **18 (Winter 2018-2019)**, **20 (Winter 2019-2020)**, **22 (Winter 2020-2021)**, and **24 (Winter 2021-2022)**.

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, 22, and 24

Live Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	1575	856	2195	4815993	1.39	587	425	2724	1602	720	2834
LC	1449	880	1670	2788183	1.15	143	1169	1728	1450	1194	1768
LT	1040	868	590	348447	0.57	139	768	1313	1038	799	1327
NN	786	727	649	420847	0.83	196	403	1169	787	474	1238

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1122	821	1206	1454296	1.07	152	824	1420	1117	852	1448
N_PILLOT	2180	3009	1582	2501624	0.73	913	390	3970	2203	356	3174
N_Y	2439	1789	2019	4076080	0.83	351	1750	3128	2442	1837	3221
Y_N	808	644	754	569198	0.93	93	626	990	802	635	986
Y_Y	2455	1506	2859	8175013	1.16	738	1008	3901	2440	1228	4058

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	985	759	1237
20	1844	1253	2125	4517189	1.15	310	1236	2451	1839	1290	2487
22	1334	702	1693	2867783	1.27	242	860	1808	1330	914	1841
24	1562	1312	1357	1841814	0.87	283	1008	2117	1565	1037	2132

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	255	212	184	34019	0.72	49	159	352	254	176	350
LC	167	156	122	14996	0.73	10	147	188	167	147	186
LT	283	275	141	19841	0.50	33	218	348	285	225	352
NN	223	164	224	50283	1.01	68	90	355	218	118	365

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	241	205	158	25109	0.66	20	202	280	240	205	279
N_PILLOT	143	147	39	1557	0.28	23	98	188	143	102	180

N_Y	152	138	91	8233	0.60	16	121	183	152	123	181
Y_N	177	157	145	21110	0.82	18	142	213	178	145	210
Y_Y	113	101	88	7709	0.78	23	69	157	112	73	154

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
18	176	155	130	16945	0.74	17	144	209	176	145	209
20	256	203	187	35057	0.73	27	203	310	257	206	318
22	137	121	93	8638	0.68	13	111	163	137	112	162
24	196	180	101	10133	0.51	21	154	237	196	158	239

Summary of Dead Counts for Periods 18, 20, 22, and 24

Dead Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	304	174	306	93661	1.01	82	144	464	303	163	478
LC	137	79	158	24986	1.16	14	110	163	137	113	162
LT	230	176	191	36661	0.83	45	141	318	231	152	323
NN	104	74	96	9216	0.92	29	48	161	104	57	161

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	211	137	219	47829	1.04	28	157	265	211	161	264
N_PILOT	136	127	131	17150	0.97	76	-13	284	136	9	224
N_Y	101	66	103	10584	1.01	18	66	136	101	70	138
Y_N	123	80	124	15437	1.01	15	93	153	123	94	154
Y_Y	206	104	277	76865	1.34	72	66	347	206	77	350

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	133	89	181
20	148	107	140	19727	0.95	20	108	188	147	110	189
22	191	128	193	37399	1.01	28	137	245	191	142	249
24	166	127	191	36413	1.15	40	88	244	166	103	249

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	54	45	34	1130	0.62	9.0	37	72	55	38	71
LC	21	12	22	505	1.09	1.9	17	24	21	17	24
LT	57	49	37	1377	0.65	8.7	40	74	57	41	74
NN	28	17	23	530	0.82	6.9	15	42	28	16	42

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	44.1	37.0	31.8	1014	0.72	4.01	36.3	52.0	44.3	36.0	52.4
N_PILOT	7.6	7.6	5.0	25	0.66	2.88	1.9	13.2	7.4	2.6	12.5
N_Y	6.2	4.9	4.5	20	0.72	0.78	4.7	7.7	6.2	4.7	7.6
Y_N	27.0	19.0	25.4	645	0.94	3.13	20.9	33.1	27.0	21.4	32.7
Y_Y	8.9	7.9	6.6	44	0.74	1.70	5.5	12.2	8.9	5.7	12.4

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	26	18	35
20	28	18	26	682	0.94	3.8	20	35	28	21	36
22	28	14	28	807	1.00	4.1	21	36	29	21	37
24	27	16	27	723	1.00	5.6	16	38	27	17	38

Summary Plots for Periods 18, 20, 22, and 24

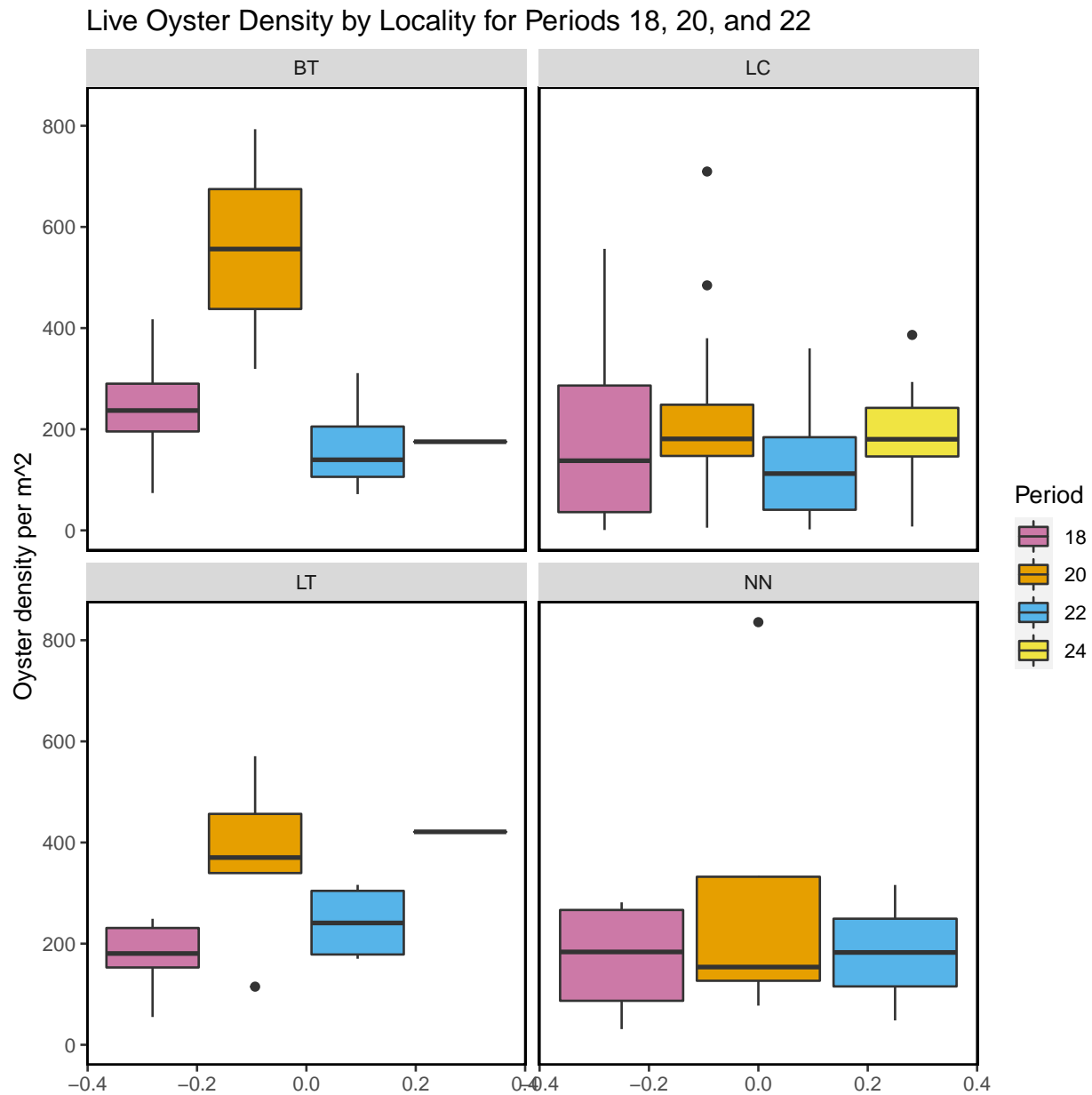


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-08.

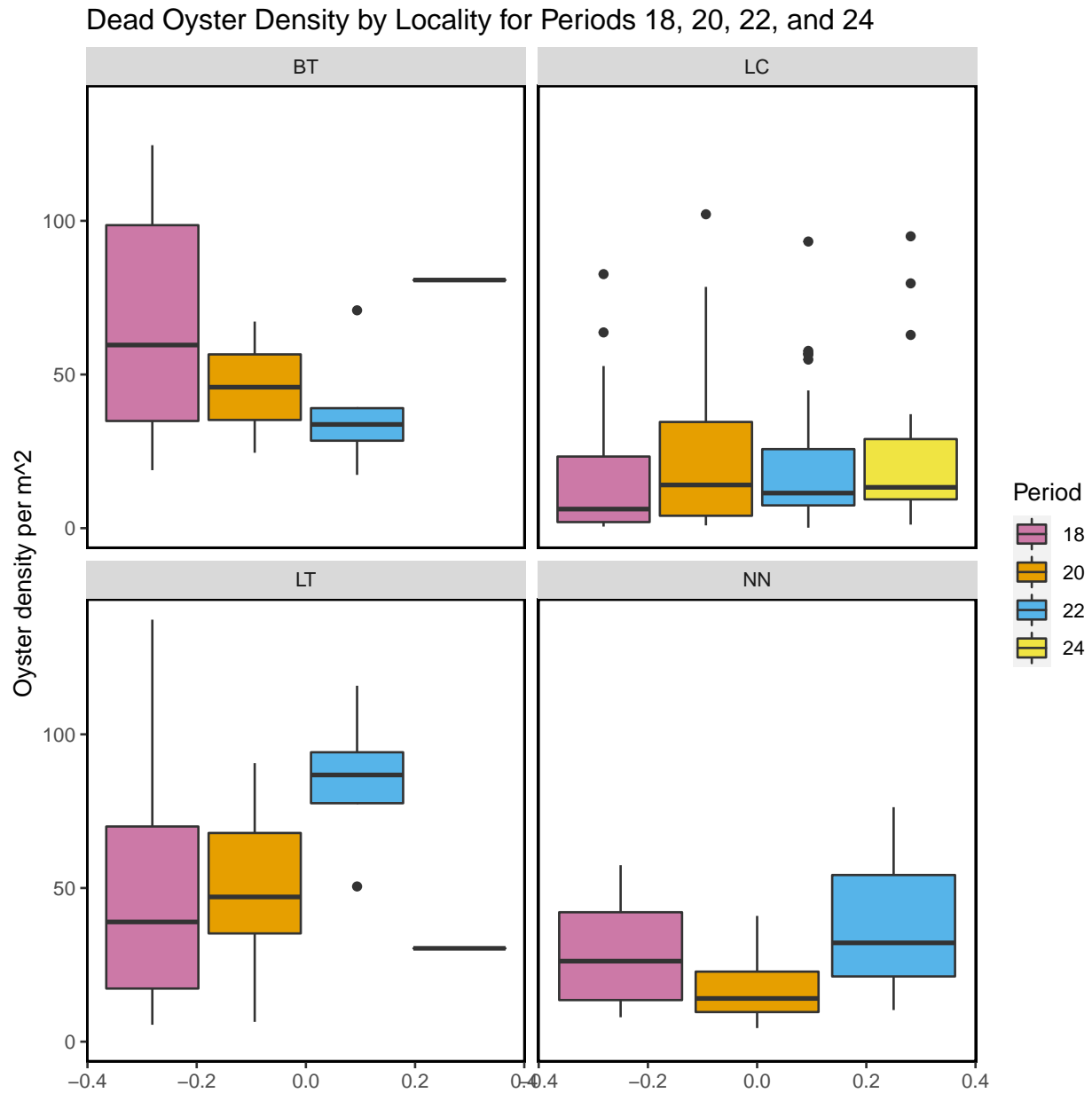


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-08.

Live Oyster Density by Strata for Periods 18, 20, 22, and 24

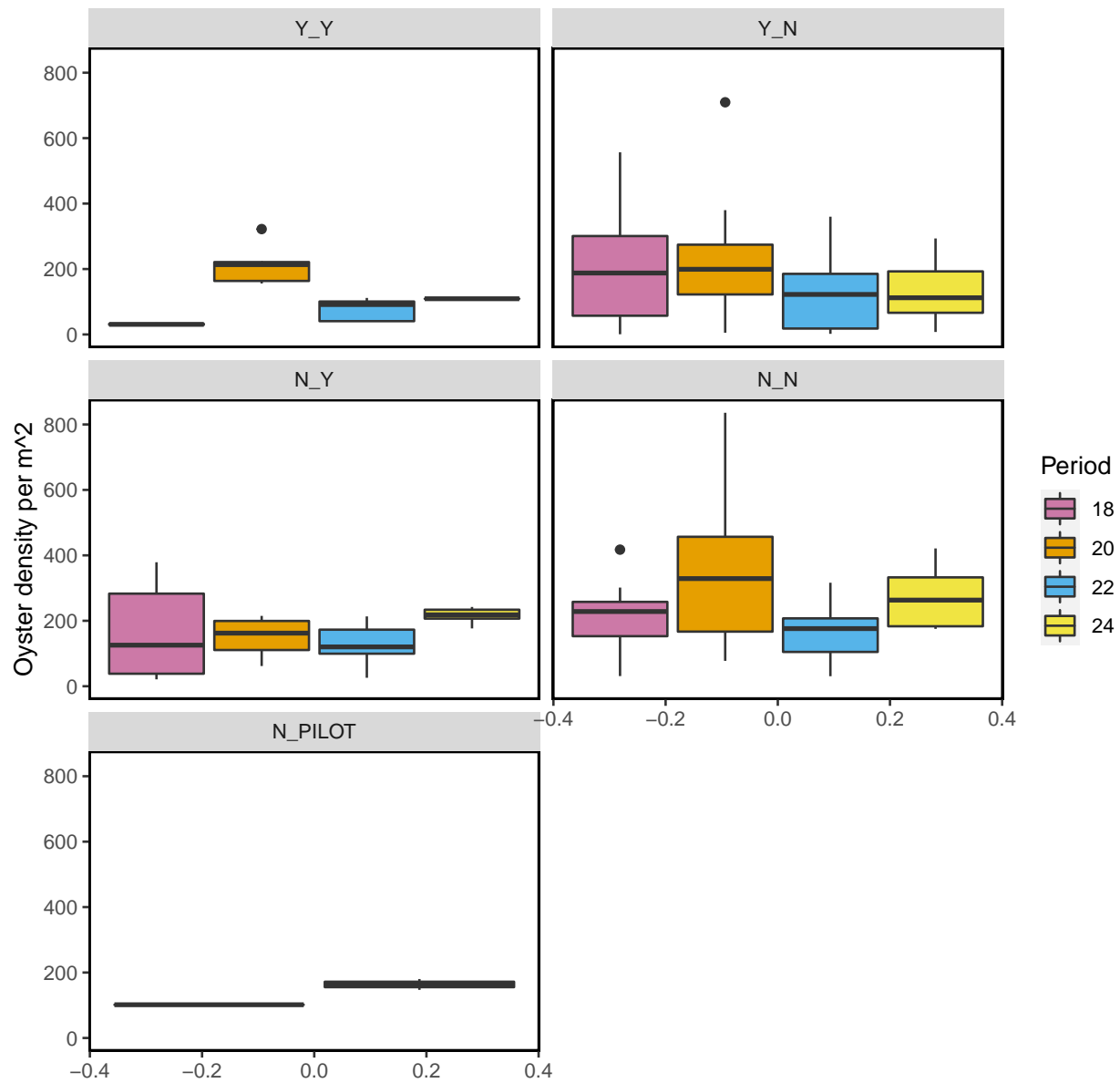


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-08.

Dead Oyster Density by Strata for Periods 18, 20, 22, and 24

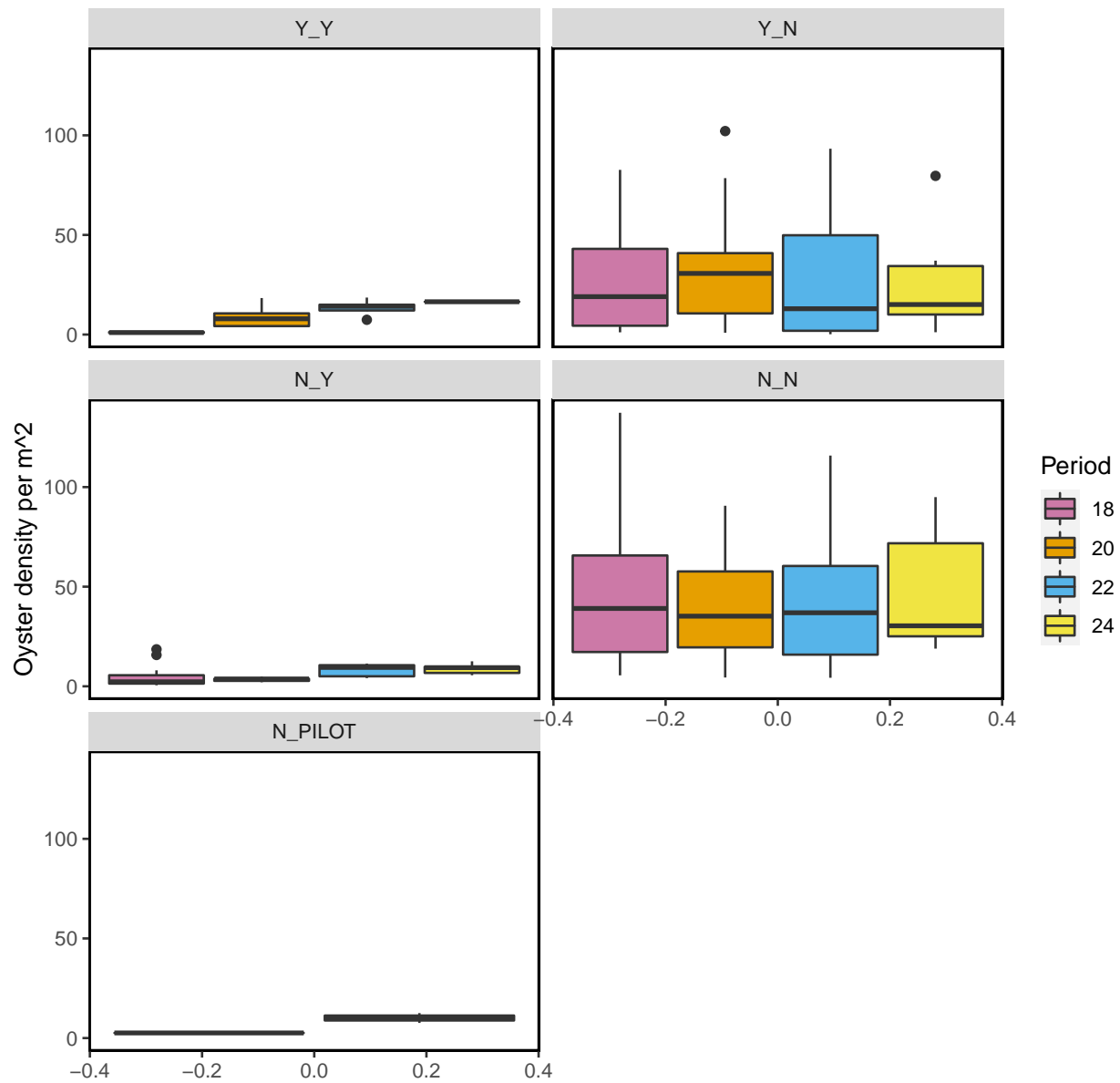


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-08.

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.

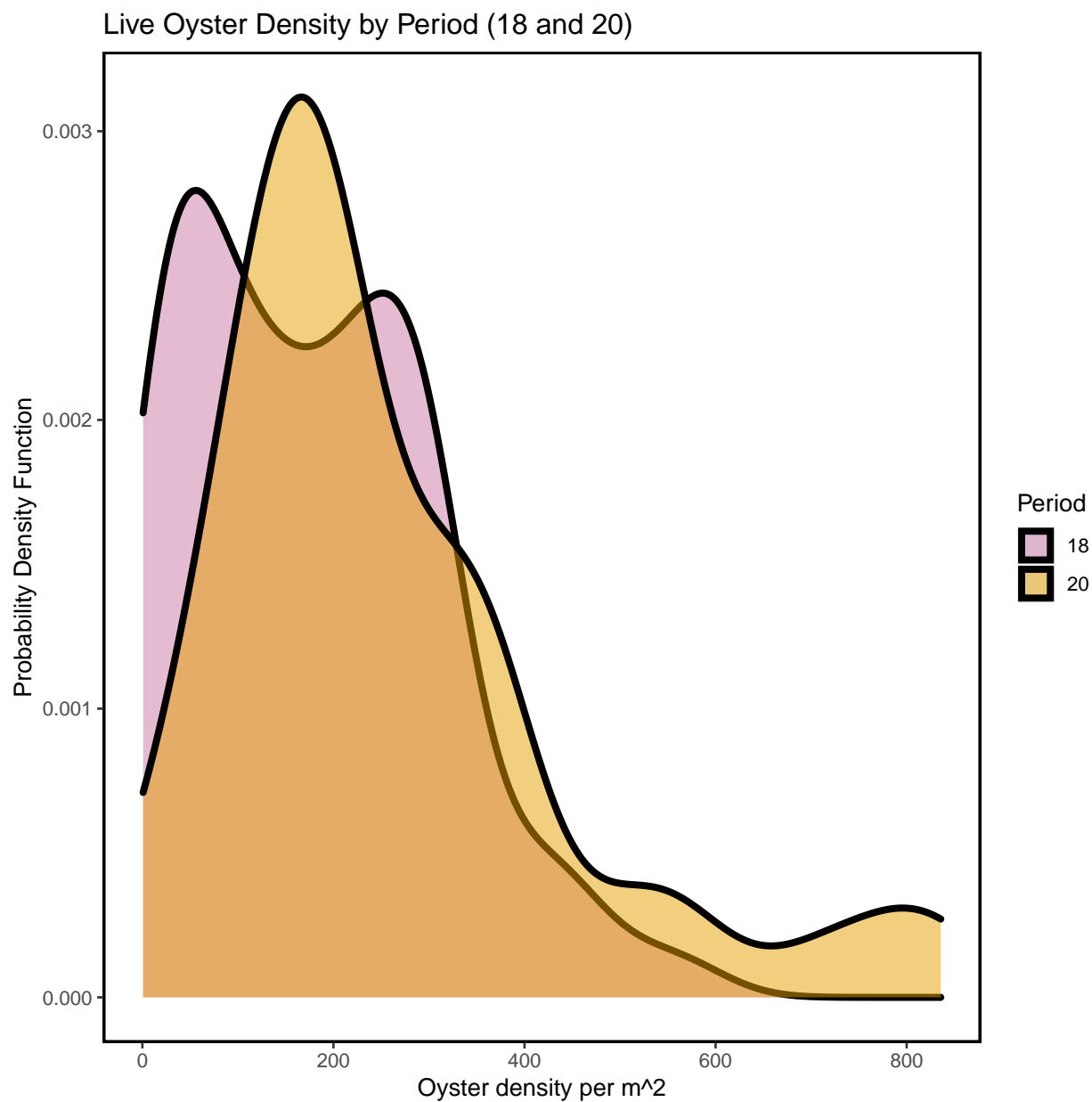


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-12-08.

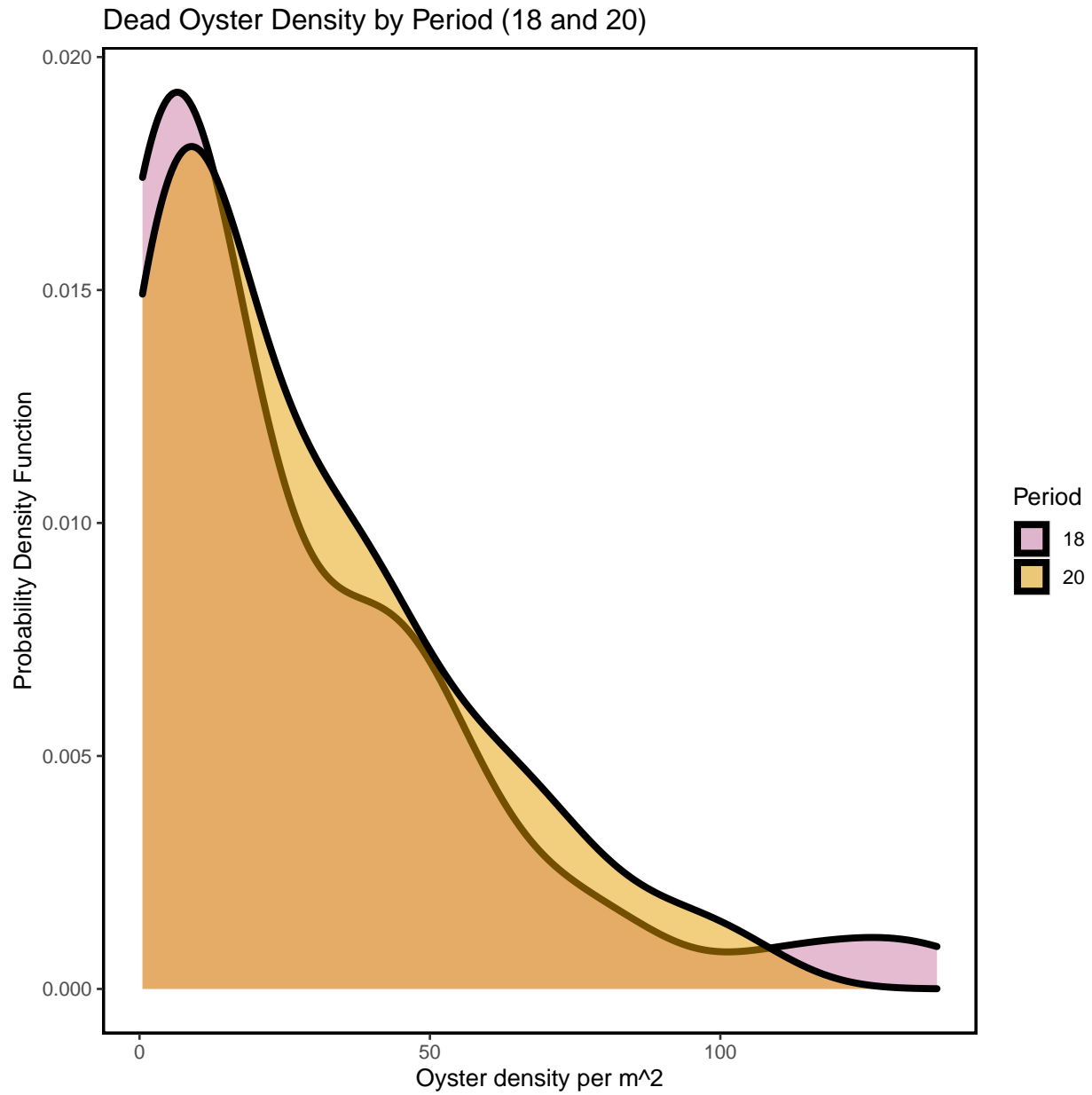


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-12-08.

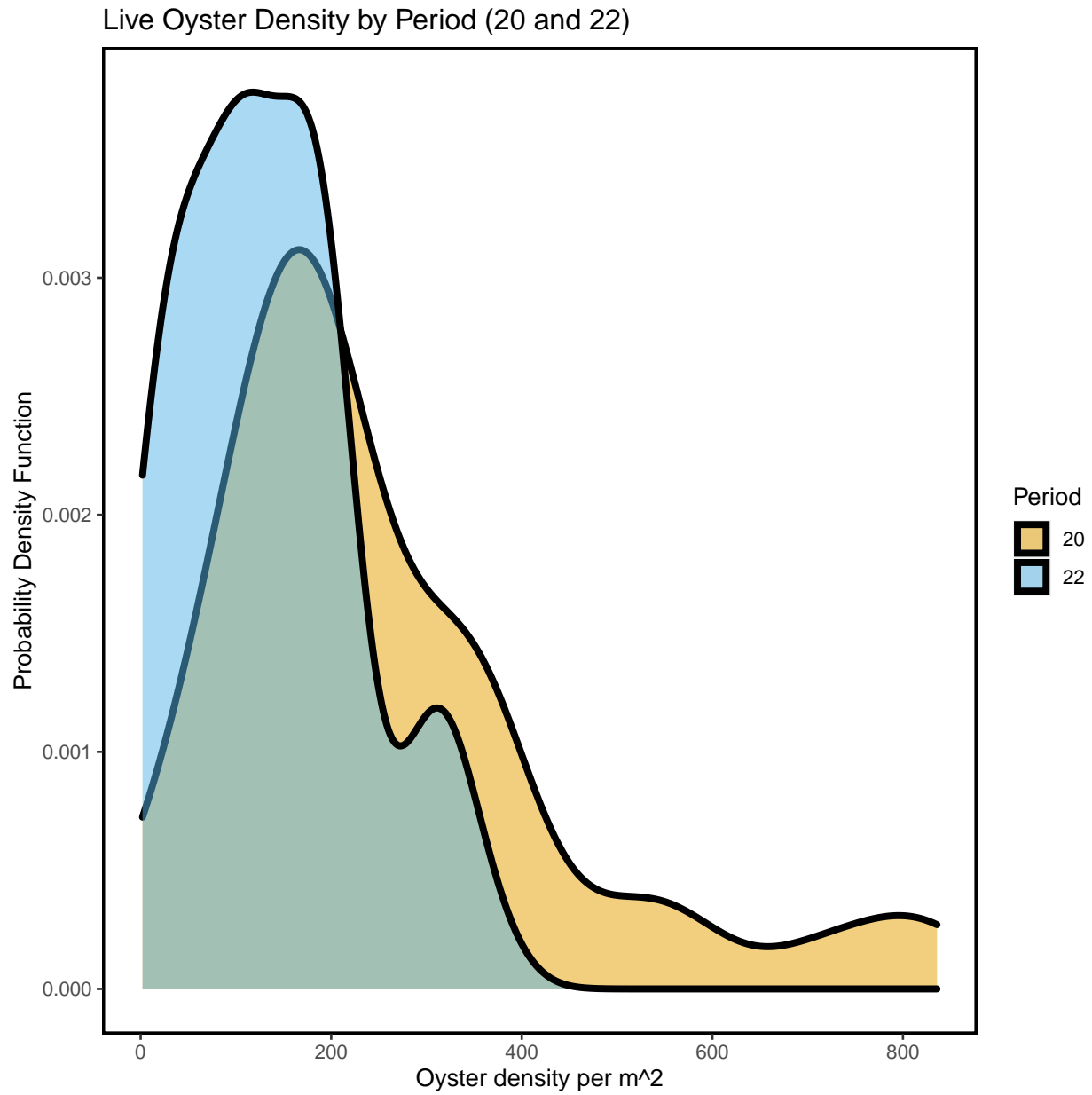


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-12-08.

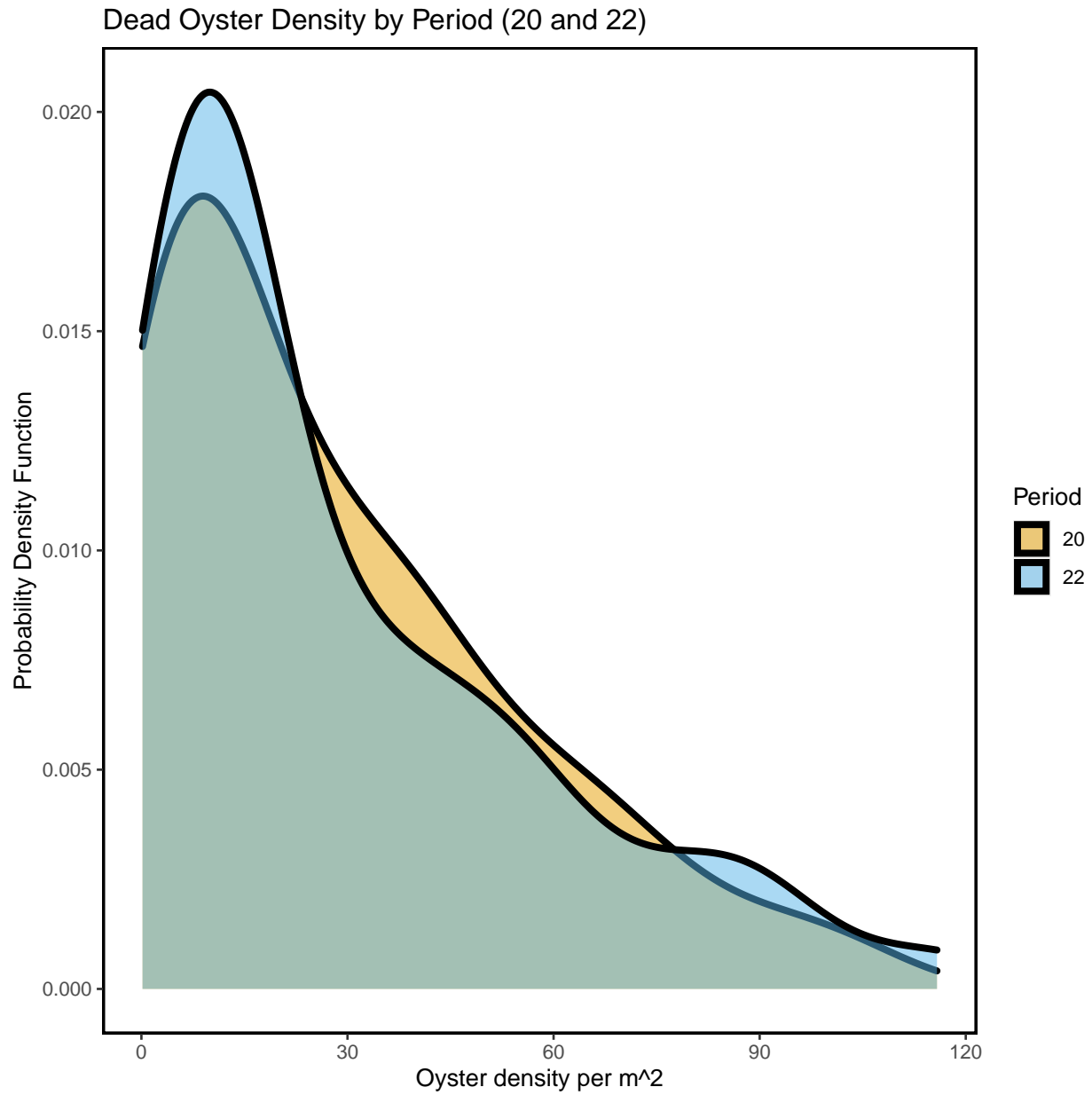


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-12-08.

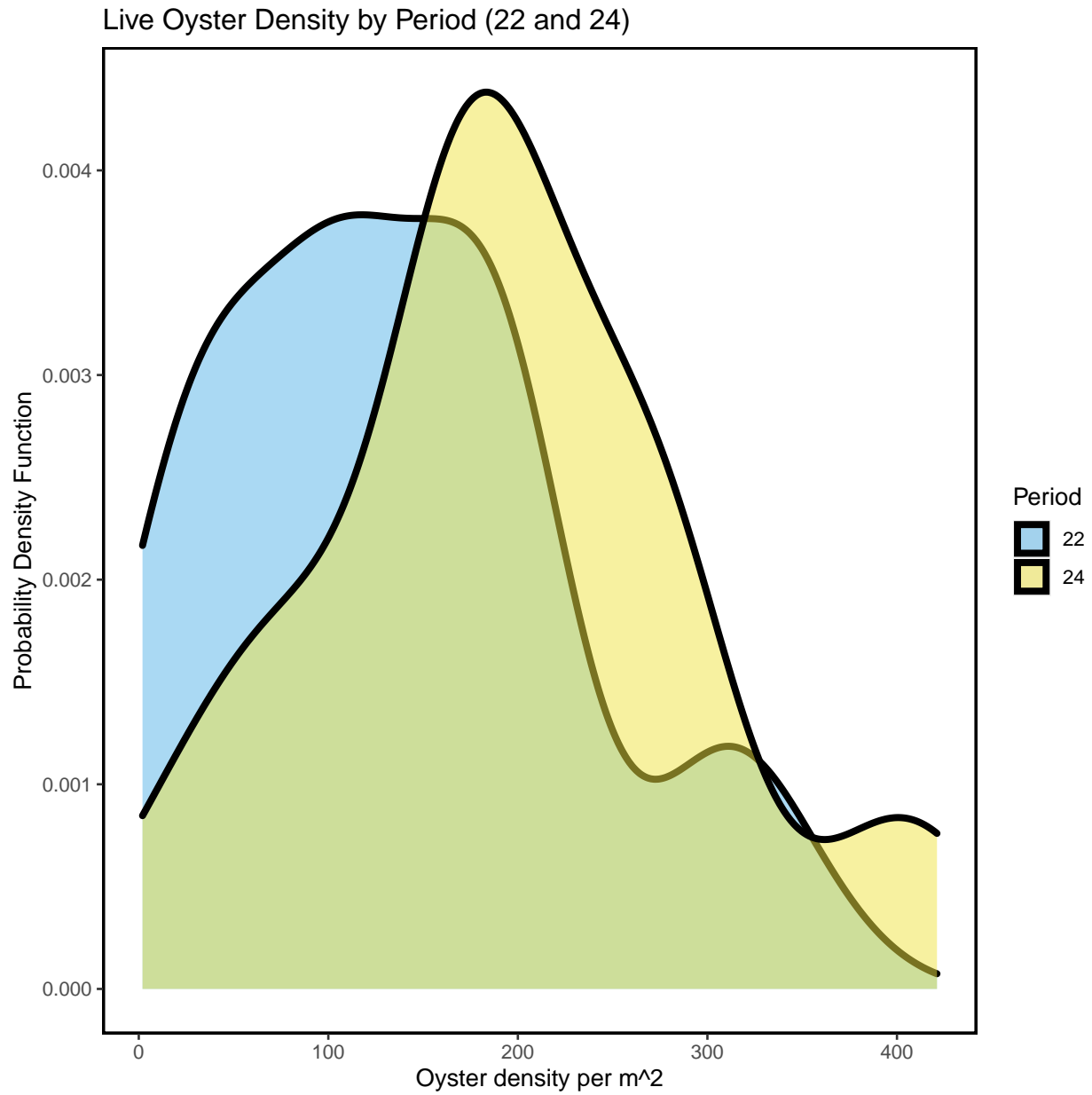


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-12-08.

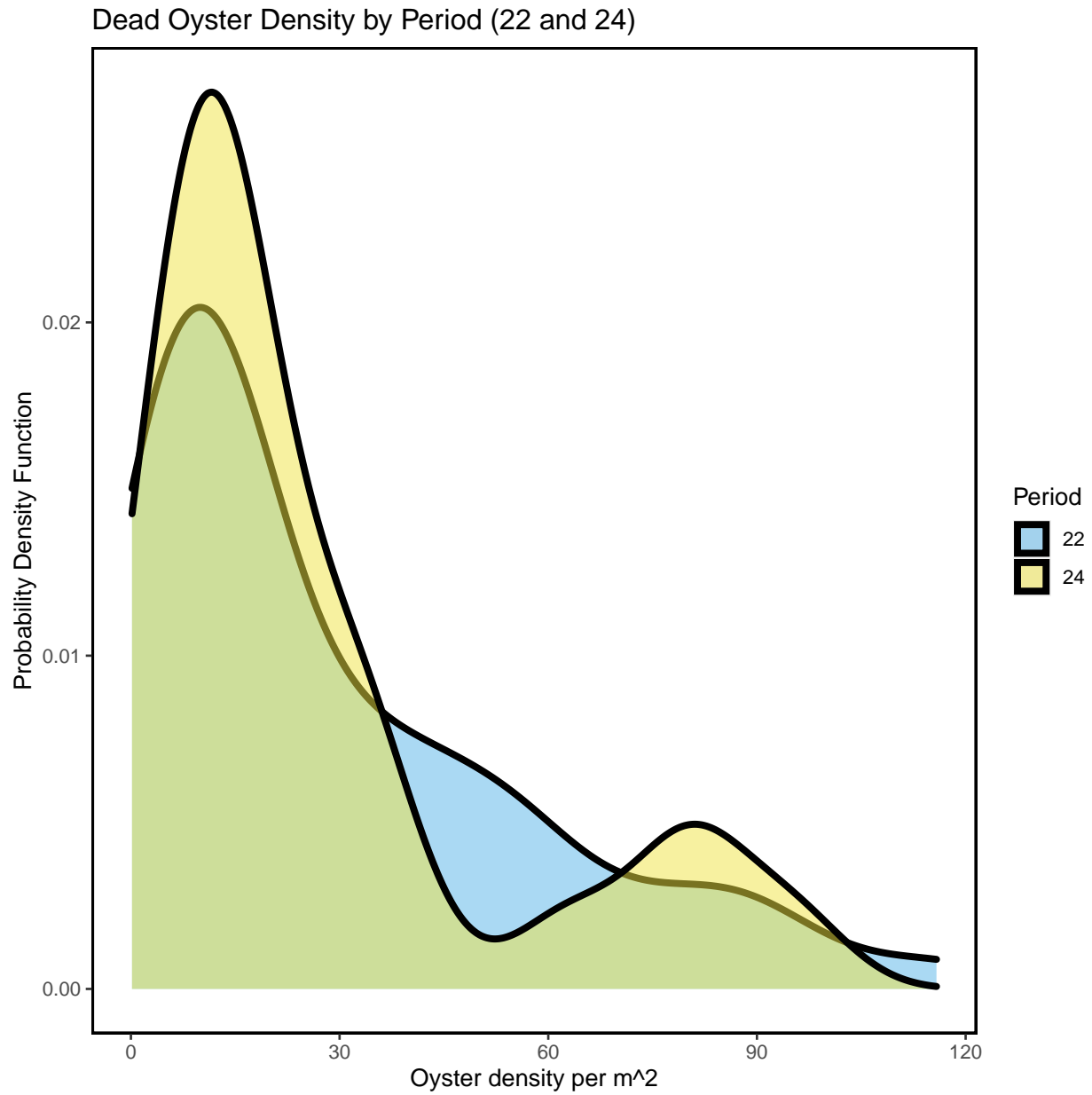


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-12-08.

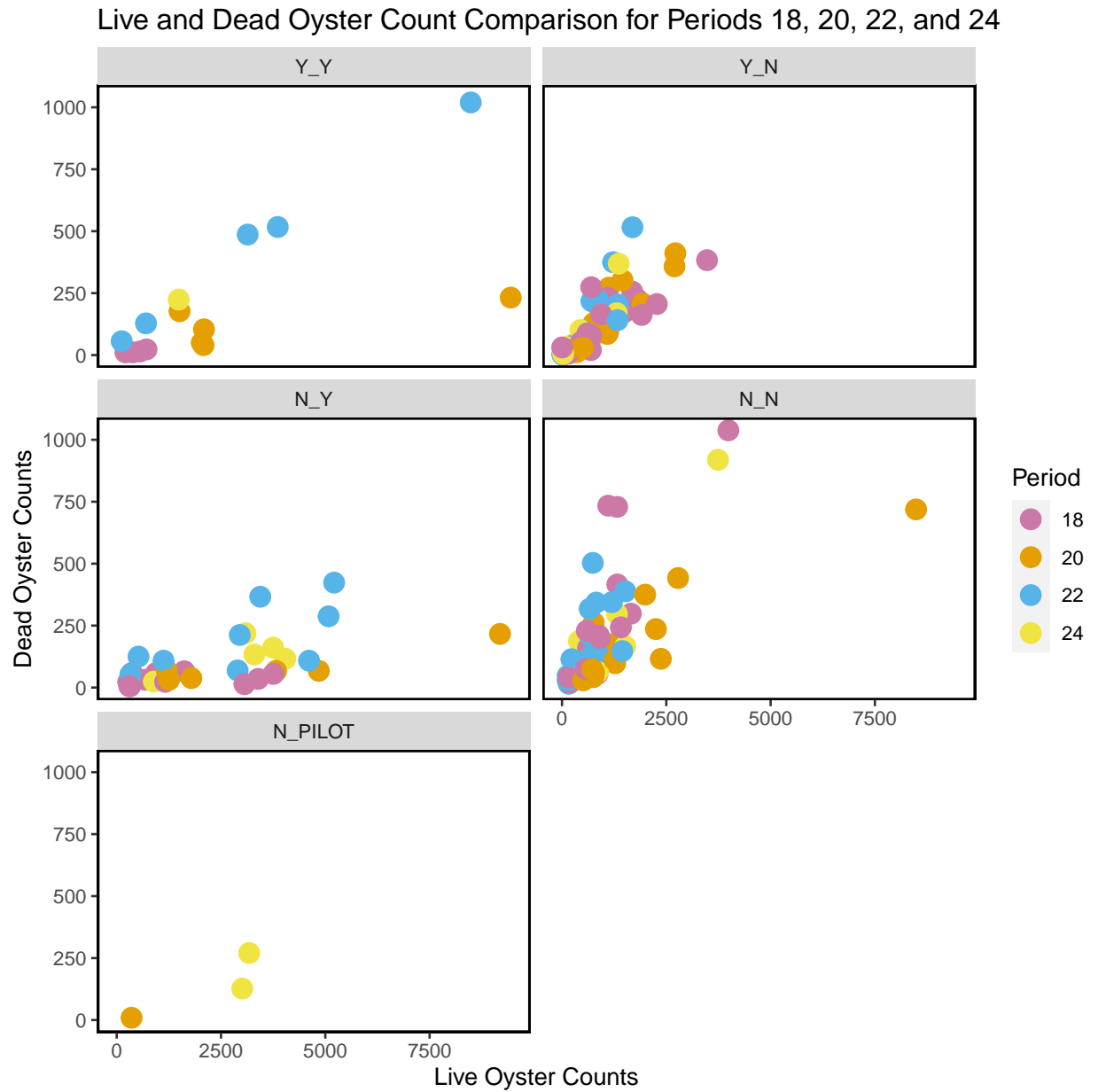


Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021) and 24 (Winter 2021-2022), last sample date of period 24 as 2021-12-08.

Live Counts Double Pass Results

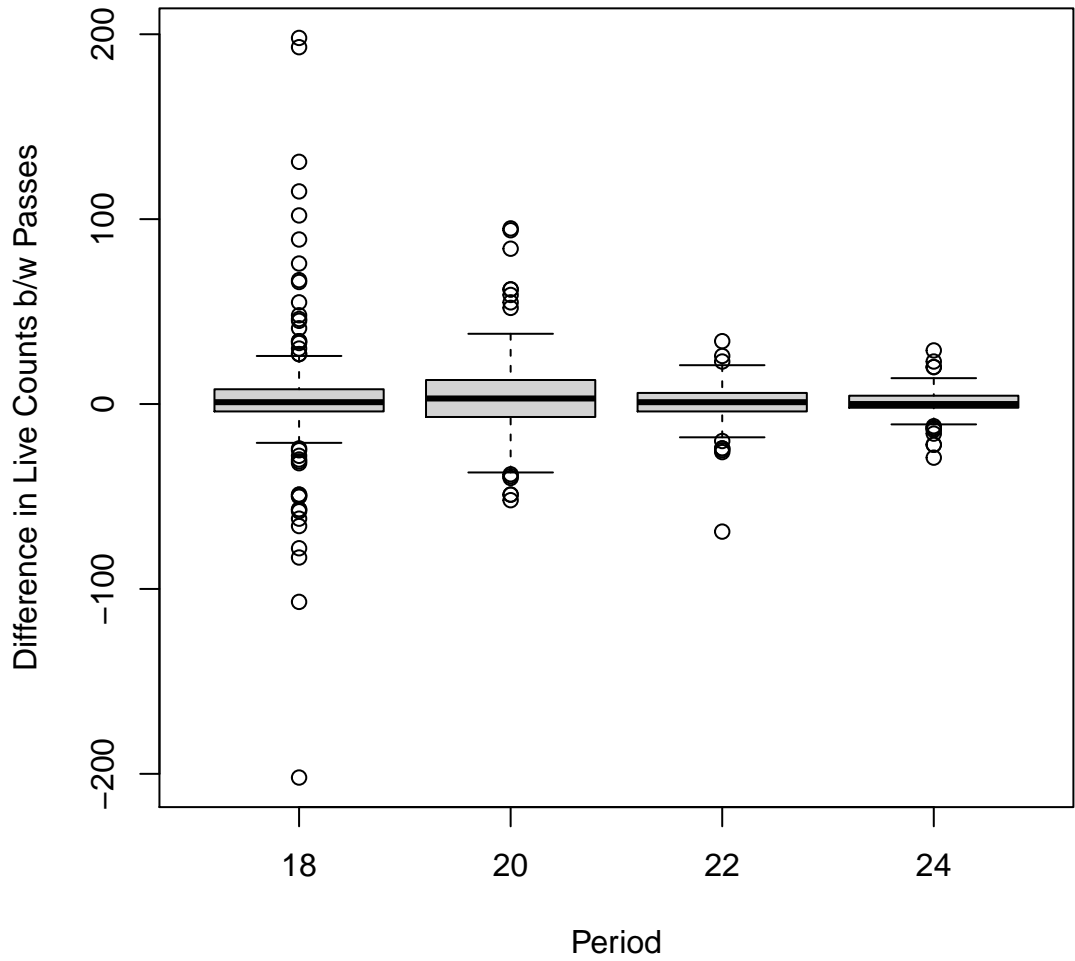


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, and 24

locality	period	mean_difference	sd_difference	CV
BT	18	-5.43	60.0	-11.1
LC	18	3.58	30.0	8.4
NN	18	13.17	15.5	1.2
LC	20	4.33	22.4	5.2
LT	20	2.64	39.2	14.9
BT	22	-1.00	18.9	-18.9
LC	22	0.14	9.0	63.6
LT	22	3.38	10.9	3.2
LC	24	0.60	8.1	13.5

Table- Coefficient variation between pass 1 and pass 2, aggregated by locality and period for live counts

Dead Counts Double Pass Results

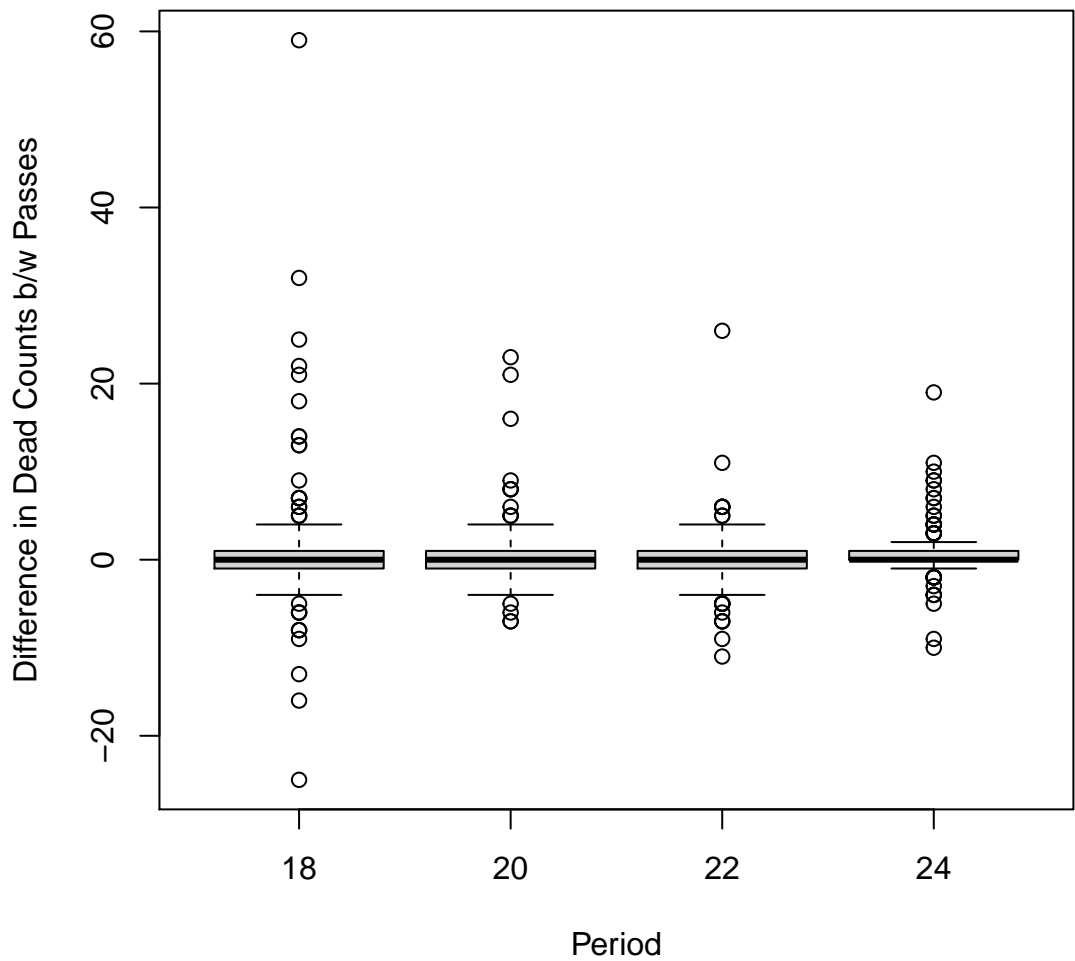


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, and 24

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
LC	24	1.39	1.38

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 2021-12-08. 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
23	Summer	2021
24	Winter	2021-2022

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	14	481
CK	26	734
CR	46	1375
HB	45	1129
LC	217	11889
LT	18	468
NN	11	288

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	120	3927
N_PILOT	15	1050
N_Y	33	3662
Y_N	194	5649
Y_Y	15	2075

Effort by Period

Period	Number of Transects	Total Length (m)
1	42	1086
2	30	753
3	25	619
6	33	919
7	8	528
10	8	512
11	8	511
16	8	528
18	61	2660
19	35	944
20	47	2586
22	49	3535
24	23	1184

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	2156
18	LT	6	182
18	NN	4	84
19	CK	9	221

19	CR	9	249
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	2188
20	LT	7	176
20	NN	4	126
22	BT	5	132
22	LC	37	3228
22	LT	4	96
22	NN	3	78
24	BT	1	15
24	LC	21	1155
24	LT	1	13
3	CR	9	269
3	HB	7	184
3	LC	9	167
6	CK	8	271
6	CR	9	272
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	977
18	Y_N	26	728
18	Y_Y	4	384
19	N_N	5	93
19	Y_N	30	851
2	N_N	8	148
2	Y_N	22	605
20	N_N	18	595
20	N_PILOT	1	23
20	N_Y	6	903
20	Y_N	17	602
20	Y_Y	5	464
22	N_N	20	546
22	N_Y	9	1324
22	Y_N	15	526
22	Y_Y	5	1138
24	N_N	7	198

24	N_PILOT	2	251
24	N_Y	5	458
24	Y_N	8	187
24	Y_Y	1	89
3	N_N	8	147
3	Y_N	17	472
6	N_N	8	178
6	Y_N	25	740
7	N_N	8	528

Effort Plot Summaries for all Periods

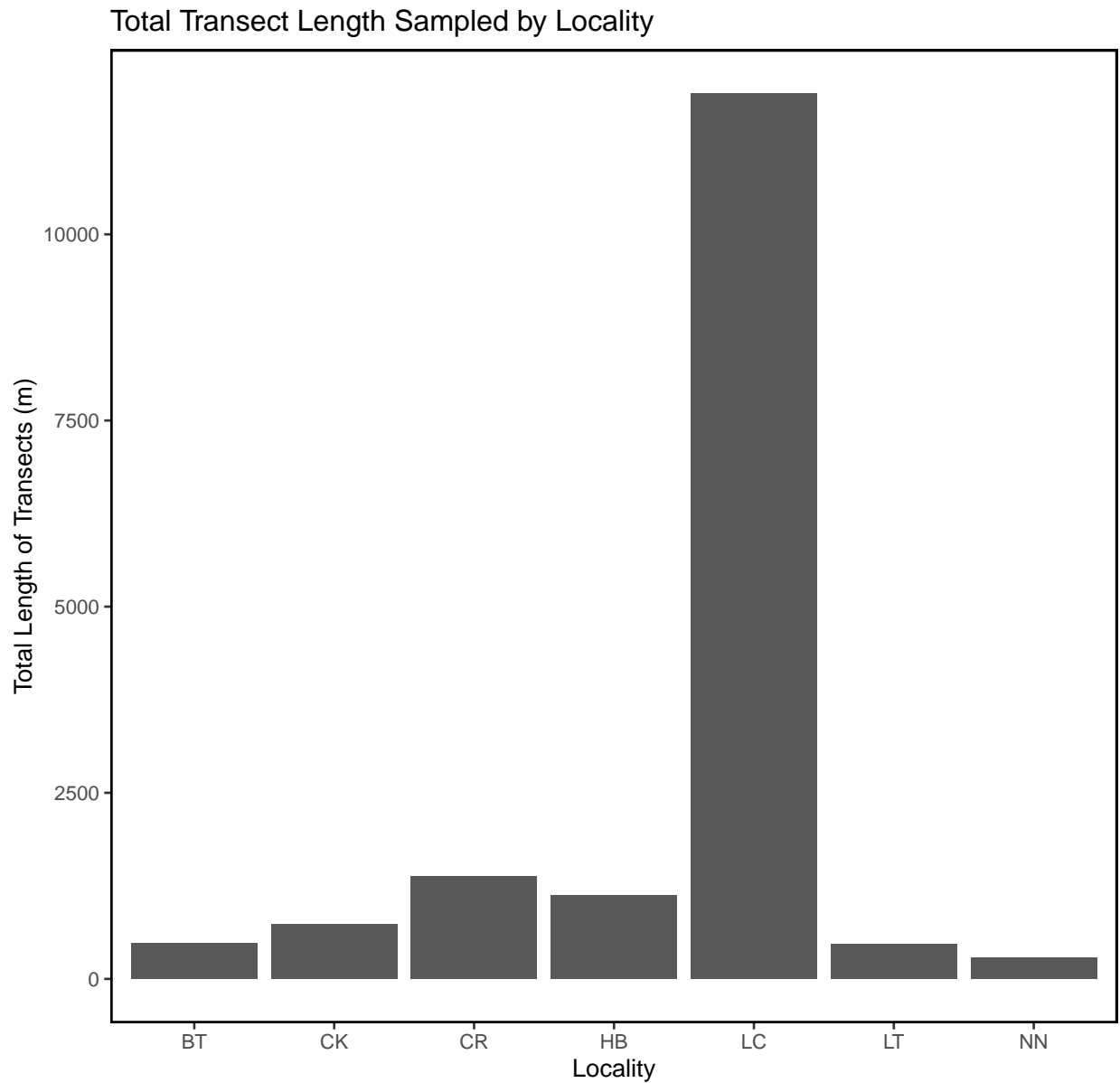


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

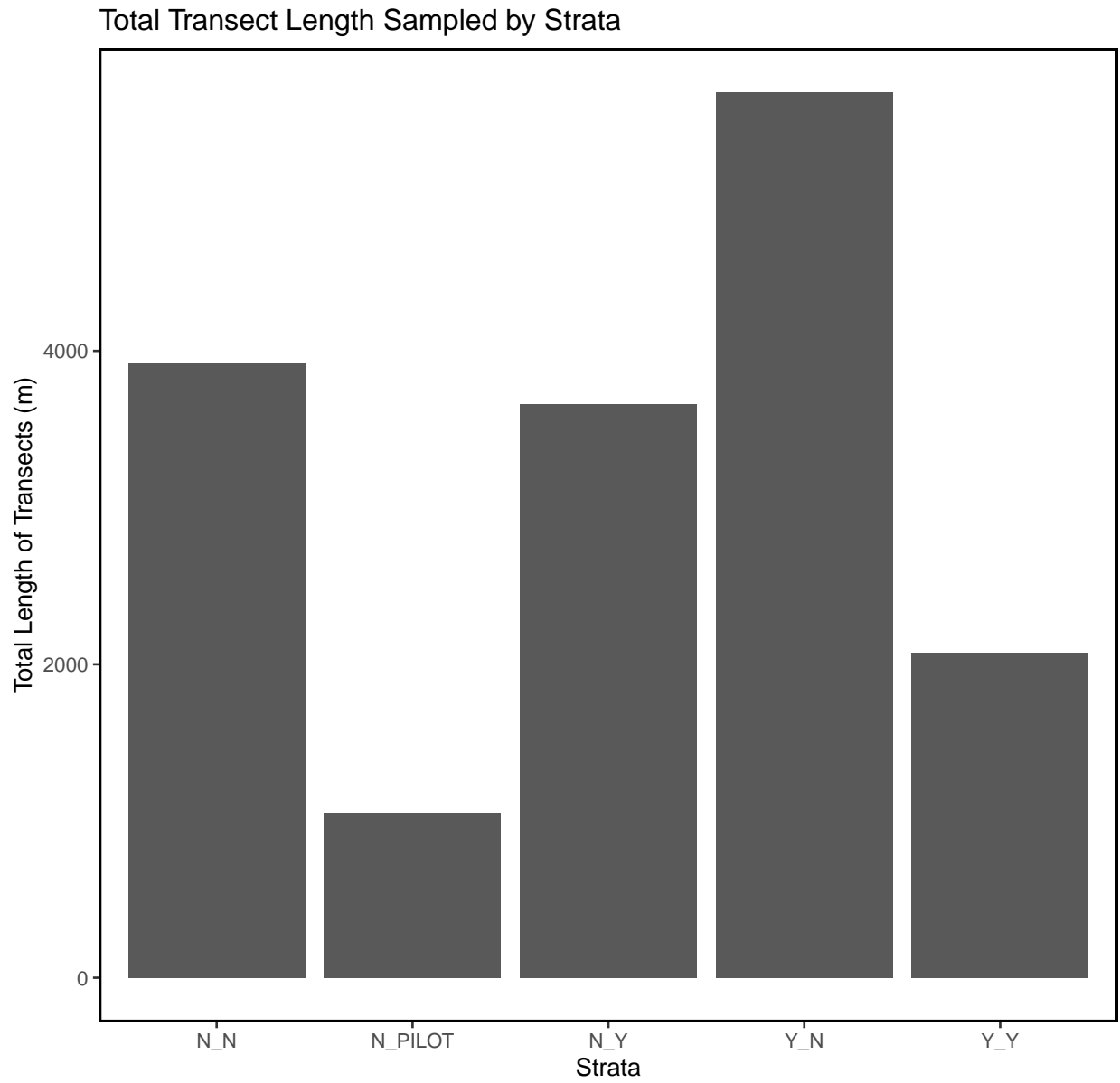
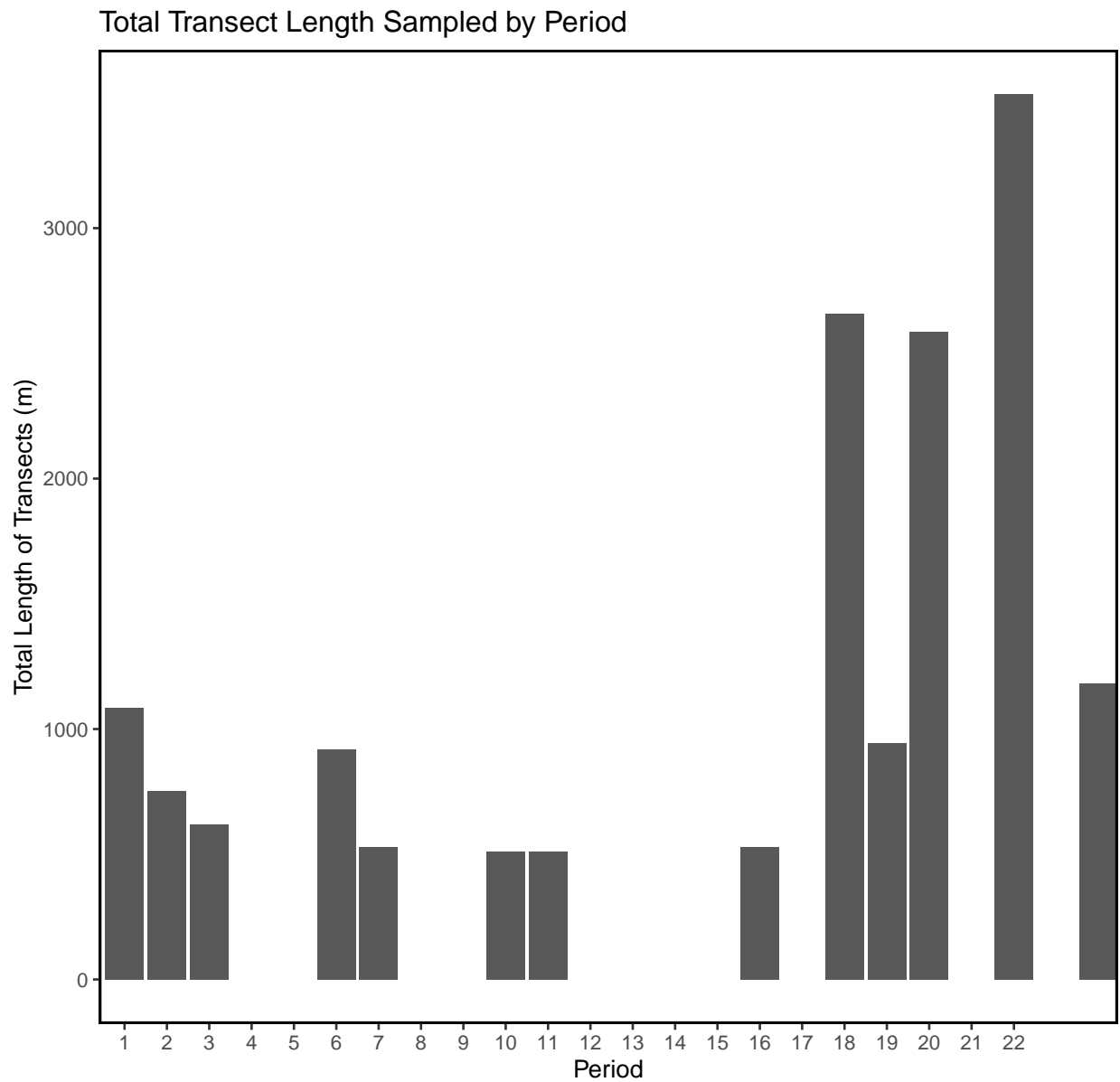


Figure – Bar plot of total transect length in meters sampled by strata for all periods.



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	1575	856	2195	4815993	1.39	587	425	2724	1573	722	2833
CK	857	444	1091	1190933	1.27	214	438	1277	865	494	1327
CR	1026	716	1035	1072162	1.01	153	727	1325	1026	764	1310
HB	902	364	1047	1095622	1.16	158	592	1211	899	597	1238
LC	1148	697	1449	2100563	1.26	99	954	1342	1148	971	1357
LT	1040	868	590	348447	0.57	139	768	1313	1035	799	1312
NN	786	727	649	420847	0.83	196	403	1169	788	475	1188

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1009	766	1059	1120802	1.05	97	819	1200	1009	840	1201
N_PILLOT	1318	1136	925	856059	0.70	239	850	1787	1316	904	1793
N_Y	2439	1789	2019	4076080	0.83	351	1750	3128	2437	1780	3159
Y_N	770	435	904	817434	1.17	65	642	898	769	639	904
Y_Y	2455	1506	2859	8175013	1.16	738	1008	3901	2445	1219	4019

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	1029	1825
2	890	476	945	893727	1.06	176	546	1234	889	546	1216
3	738	296	817	668064	1.11	167	411	1065	738	452	1054
6	433	176	534	284791	1.23	96	245	621	427	250	609
7	50	29	56	3186	1.12	20	11	90	50	17	92
10	1207	1074	671	449607	0.56	237	743	1672	1196	783	1630
11	886	776	678	459708	0.77	240	416	1356	887	458	1338
16	494	366	467	217855	0.95	165	170	817	498	228	793
18	982	695	935	874733	0.95	120	748	1217	985	760	1236
19	555	329	573	328431	1.03	97	365	745	562	382	758
20	1844	1253	2125	4517189	1.15	310	1236	2451	1846	1289	2547
22	1334	702	1693	2867783	1.27	242	860	1808	1341	897	1858
24	1562	1312	1357	1841814	0.87	283	1008	2117	1559	1030	2113

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	255	212	184	34019	0.72	49.3	159	352	255	179	359
CK	241	112	321	102927	1.33	62.9	118	364	241	136	365
CR	283	178	294	86605	1.04	43.4	198	368	283	206	367
HB	257	101	303	92052	1.18	45.7	168	347	256	173	346
LC	155	122	145	20953	0.94	9.9	135	174	155	135	174
LT	283	275	141	19841	0.50	33.2	218	348	283	225	344
NN	223	164	224	50283	1.01	67.6	90	355	219	117	351

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	261	189	249	61991	0.95	23	216	306	262	221	306
N_PILOT	118	121	59	3467	0.50	15	88	148	119	92	148
N_Y	152	138	91	8233	0.60	16	121	183	152	122	185
Y_N	185	111	215	46198	1.16	16	154	215	185	154	217
Y_Y	113	101	88	7709	0.78	23	69	157	114	73	157

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	395	284.7	511
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	255	156.1	359
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	235	133.6	345
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	123	75.9	180
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.7	9
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	124	84.4	170
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	90	50.0	136
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49	21.2	80
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	176	146.1	208
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	152	99.6	212
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	257	208.6	310
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	137	112.7	163
24	196	180.2	100.7	10133	0.51	21	154.4	236.7	196	156.6	236

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	304	174	306	93661	1.01	82	143.6	464	304	167	476
CK	78	32	106	11170	1.36	37	4.3	151	79	19	150
CR	60	47	38	1444	0.63	13	35.2	85	60	41	86
HB	44	21	45	2000	1.02	15	14.8	73	44	20	72
LC	118	68	145	21073	1.23	11	96.8	140	118	98	140
LT	230	176	191	36661	0.83	45	141.3	318	229	149	314
NN	104	74	96	9216	0.92	29	47.6	161	103	57	160

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	163	90	201	40398	1.23	21	121	205	164	125	209
N_PILOT	98	89	65	4243	0.67	17	65	131	100	71	134
N_Y	101	66	103	10584	1.01	18	66	136	100	67	139
Y_N	103	53	114	13058	1.11	12	80	126	102	80	126
Y_Y	206	104	277	76865	1.34	72	66	347	209	92	356

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	50
10	80	88	65	4245	0.82	23.0	34.5	125	79	38	122
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	18	74
18	133	55	192	36903	1.44	24.6	85.1	182	134	88	184
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	191	128	193	37399	1.01	27.6	137.2	245	192	140	252
24	166	127	191	36413	1.15	39.8	87.8	244	165	105	257

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	54	44.9	34	1130	0.62	9.0	36.9	72	54	39.3	72
CK	21	11.3	28	757	1.29	9.7	2.3	40	21	5.5	41
CR	18	10.8	16	247	0.87	5.2	7.8	28	18	9.3	29
HB	13	8.0	14	201	1.12	4.7	3.4	22	13	5.2	23
LC	18	9.5	21	447	1.19	1.6	14.6	21	18	14.7	21
LT	57	48.8	37	1377	0.65	8.7	40.2	74	57	41.5	73
NN	28	16.7	23	530	0.82	6.9	14.6	42	28	15.8	41

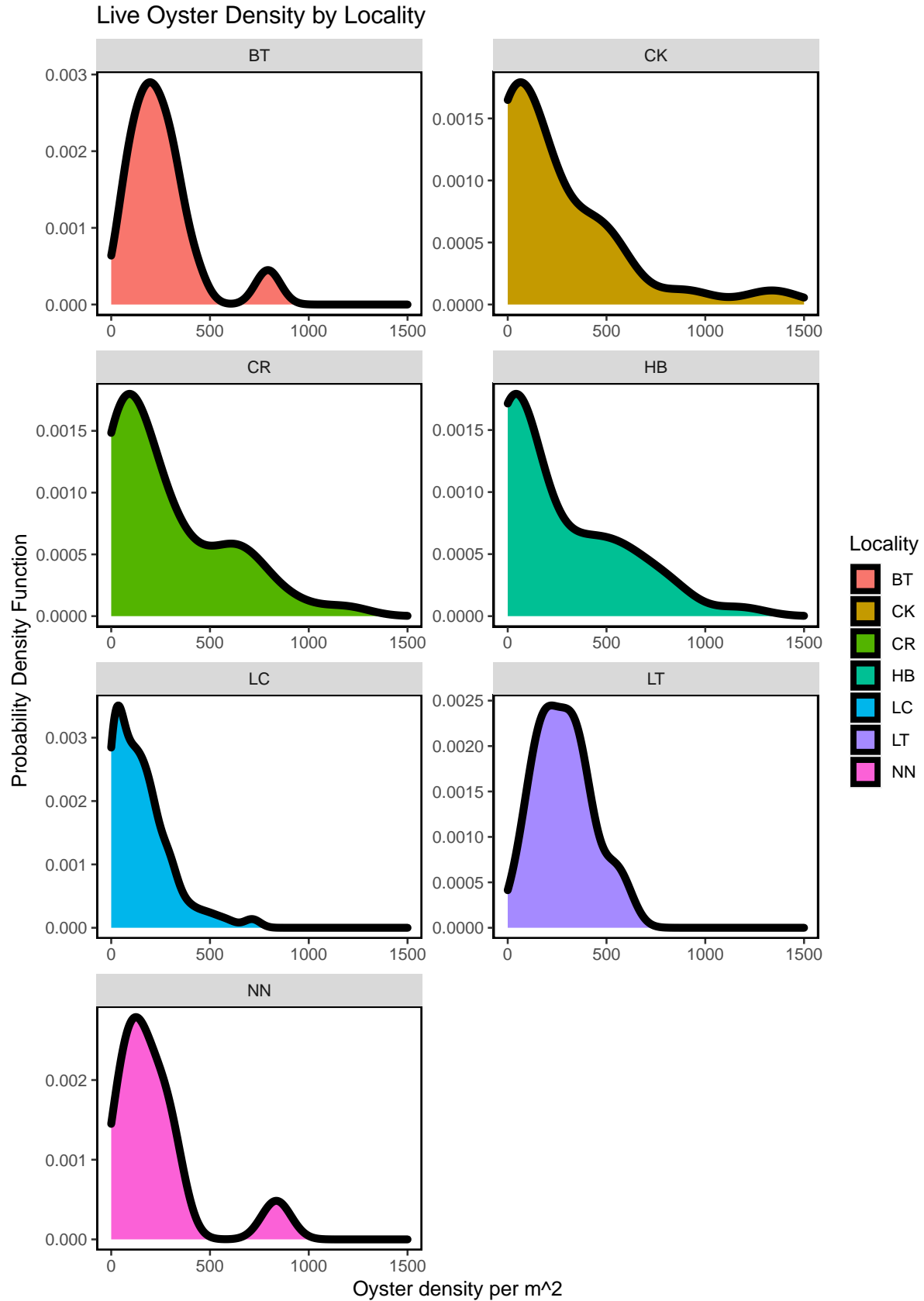
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	34.4	28.7	32.2	1034	0.93	3.43	27.7	41.1	34.5	28.2	41.6
N_PILOT	8.7	8.7	4.3	18	0.49	1.11	6.5	10.9	8.7	6.8	10.8
N_Y	6.2	4.9	4.5	20	0.72	0.78	4.7	7.7	6.2	4.7	7.7
Y_N	23.0	13.6	24.0	575	1.04	2.46	18.2	27.8	22.9	18.5	27.4
Y_Y	8.9	7.9	6.6	44	0.74	1.70	5.5	12.2	8.8	5.8	12.1

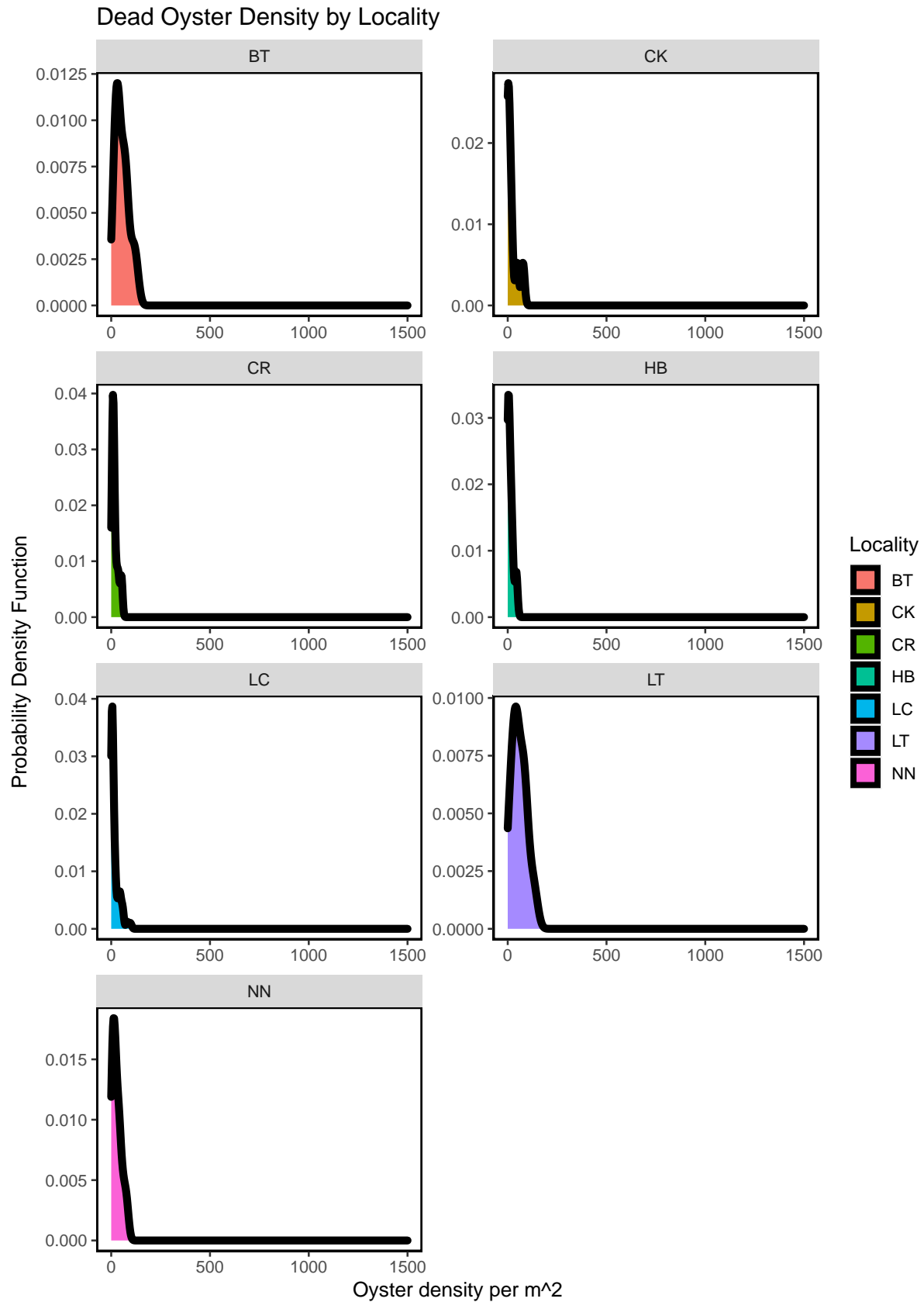
Dead Oyster Density by Period

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
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.2	4.1	13
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.7	7
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.5	1.8	7
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.5	19.3	34
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.6	11.8	24
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.8	20.7	36
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.7	21.2	37
24	26.8	16.5	26.9	723.1	1.00	5.61	15.81	37.8	26.8	17.0	37

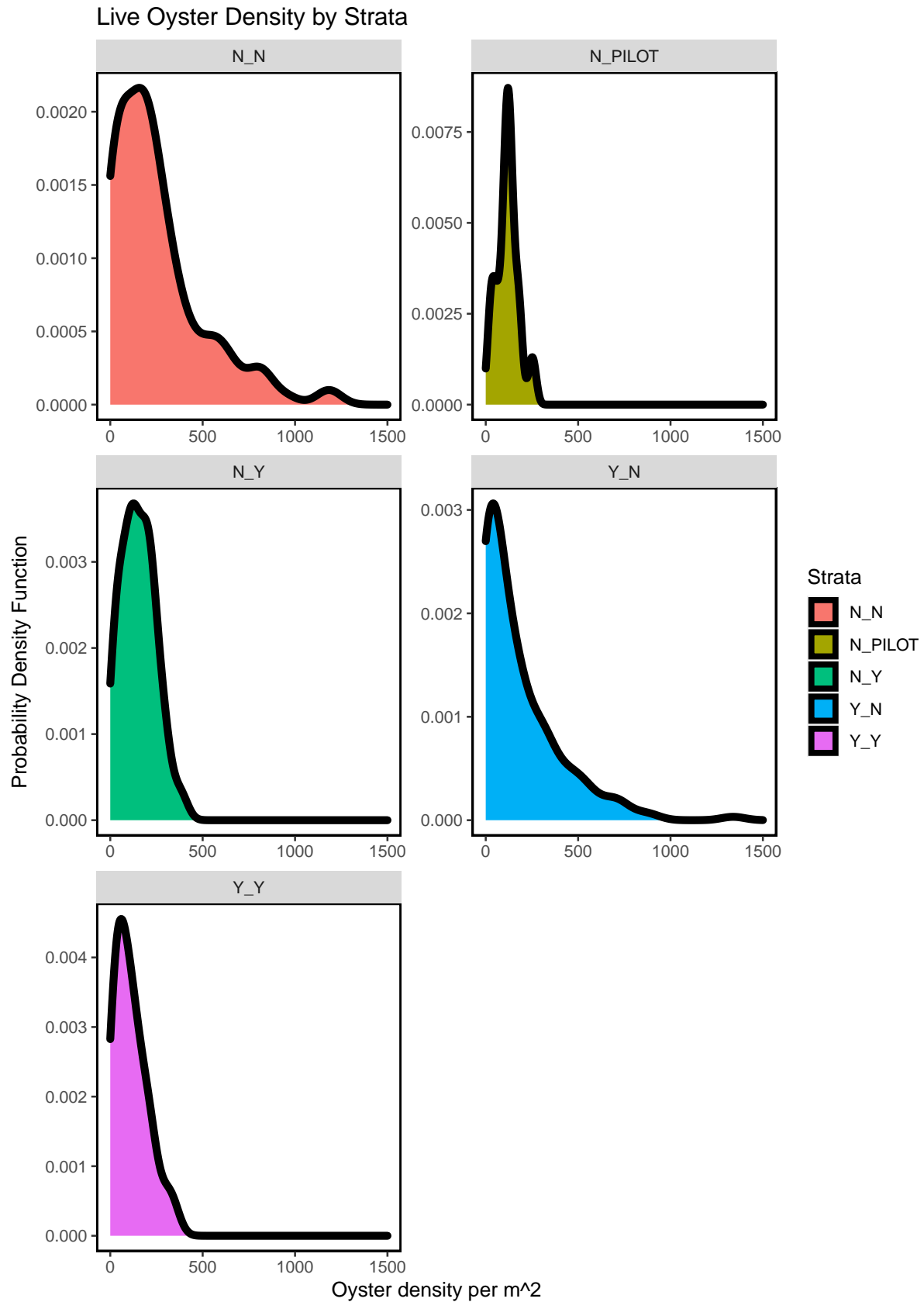
Summary Density Plots for all Periods



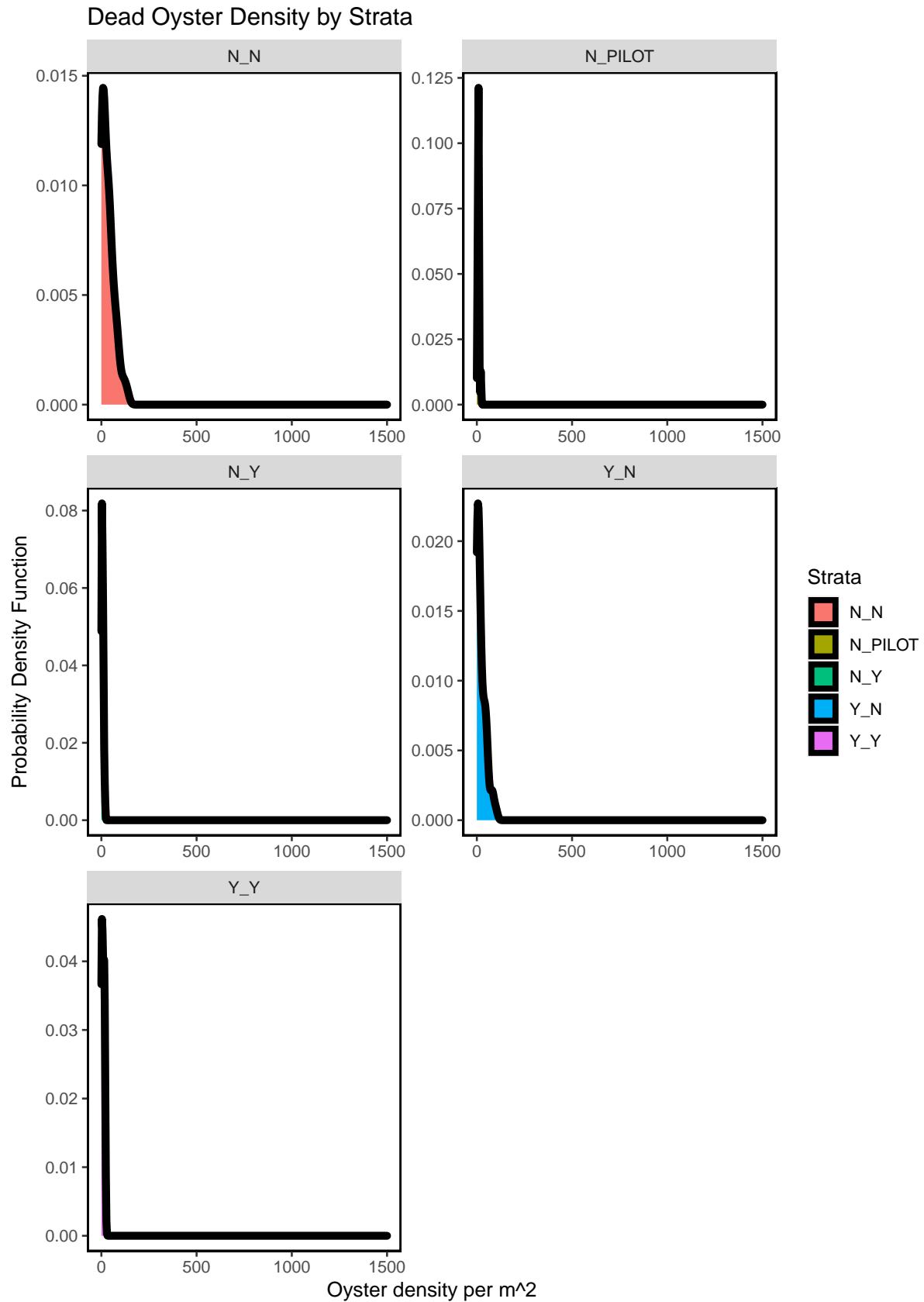
Figure– Calculated live oyster density by locality for all periods including period 22 (current period).



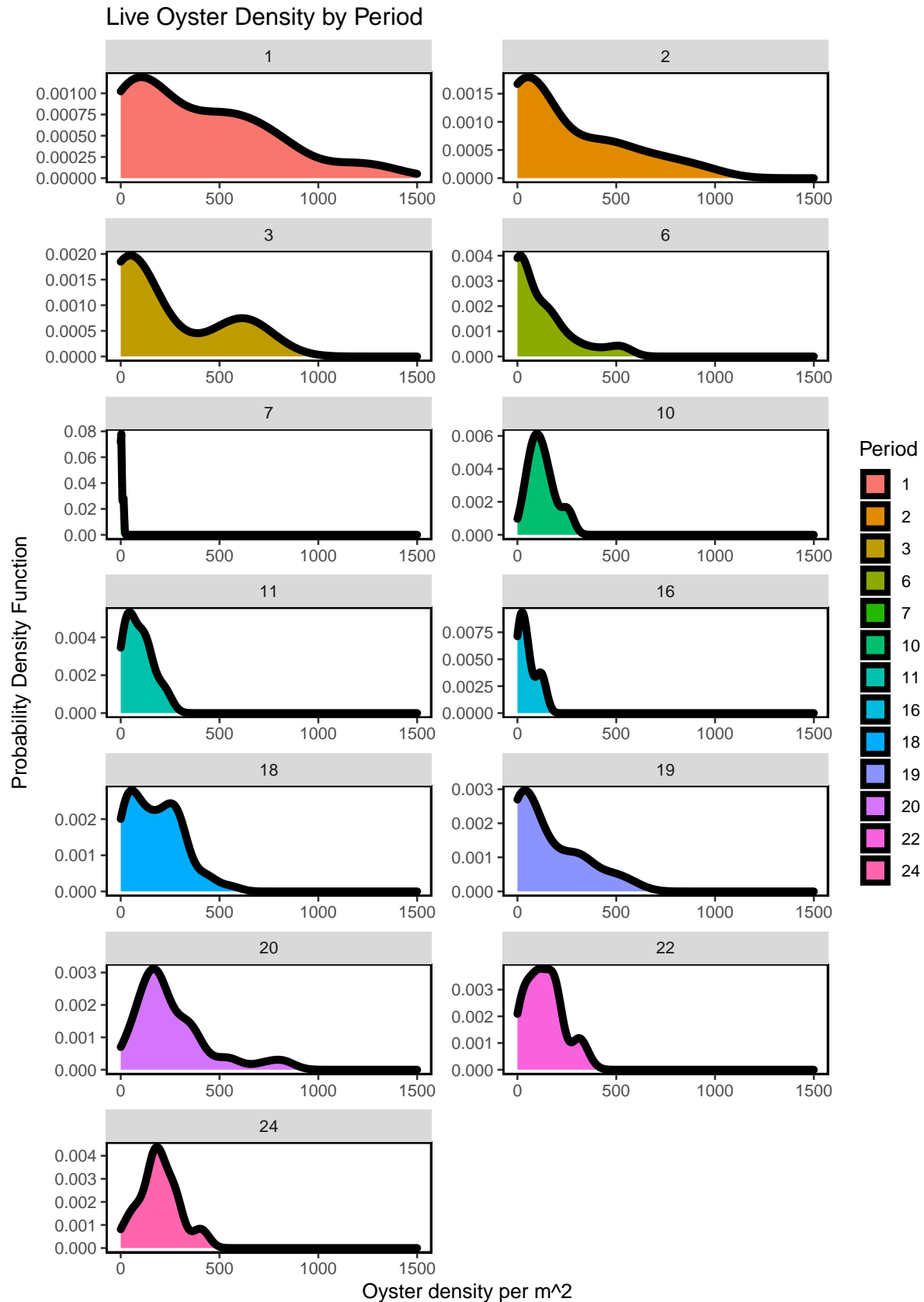
Figure– Calculated dead oyster density by locality for all periods including period 22 (current period).



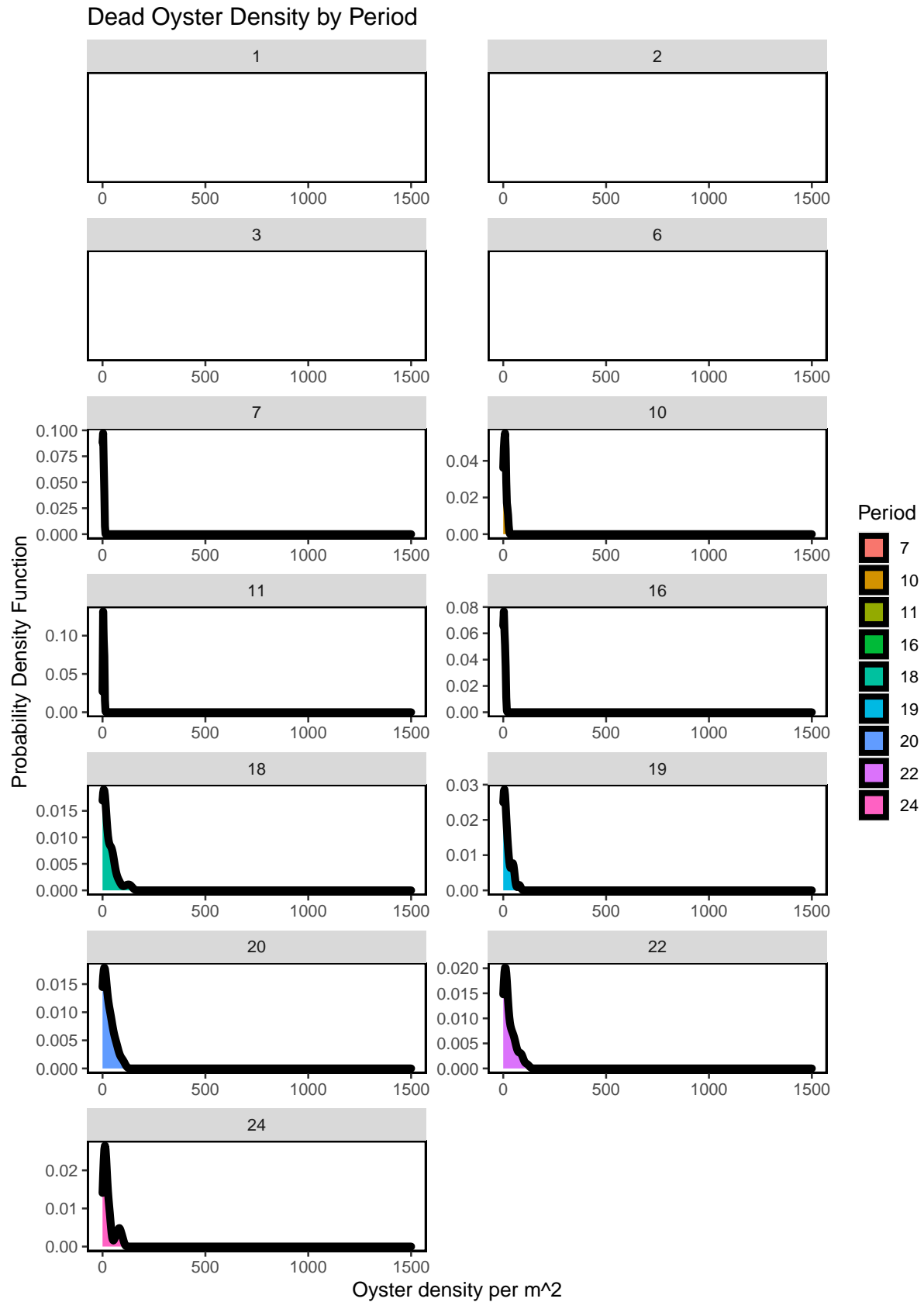
Figure– Calculated live oyster density by strata for all periods including period 22 (current period).



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

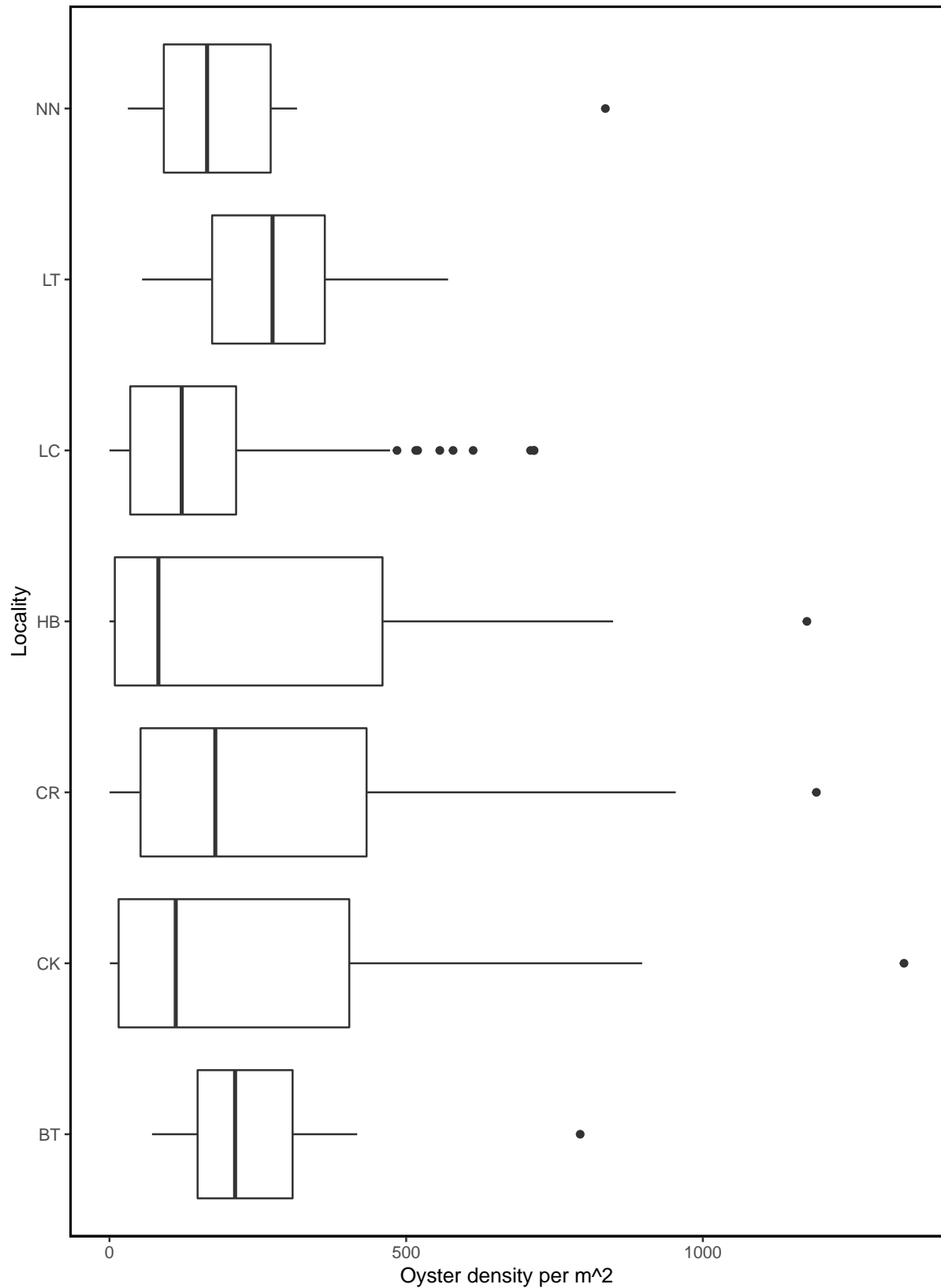


Figure– Calculated live oyster density for all periods including period 22 (current period) using a probability densi



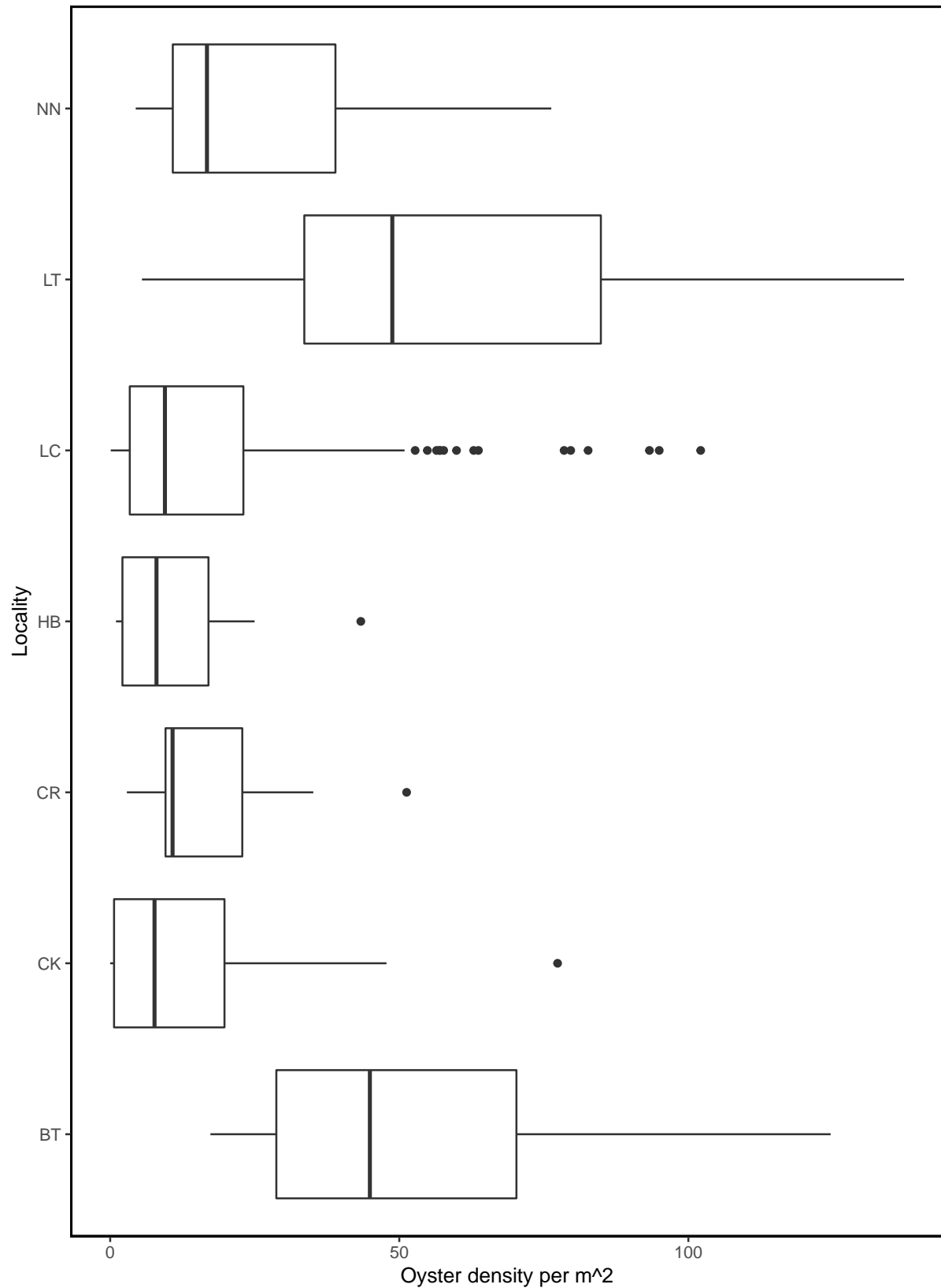
Figure– Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

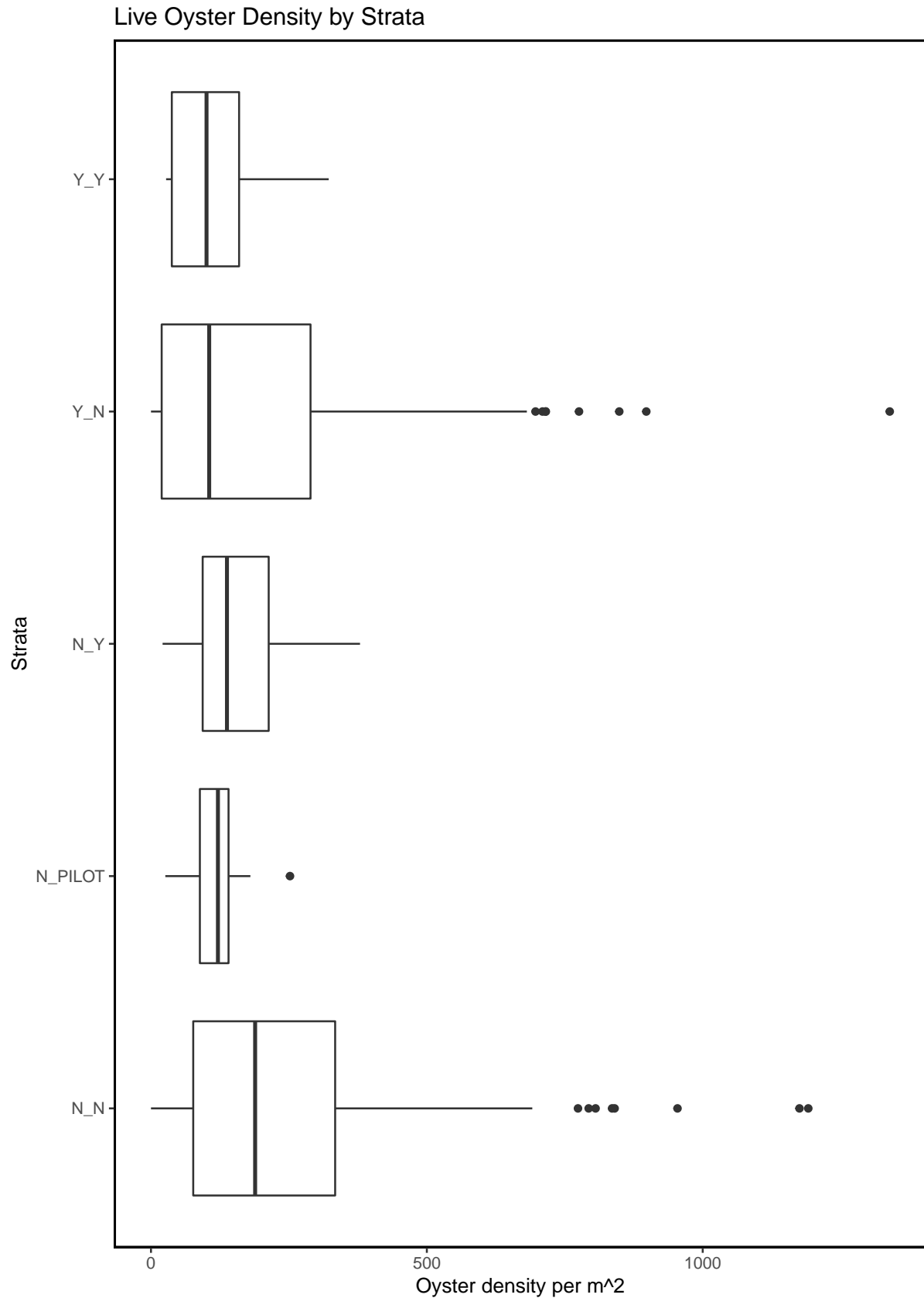


Figure– Box plot depicting live oyster density by locality for all periods including period 22 (current period).

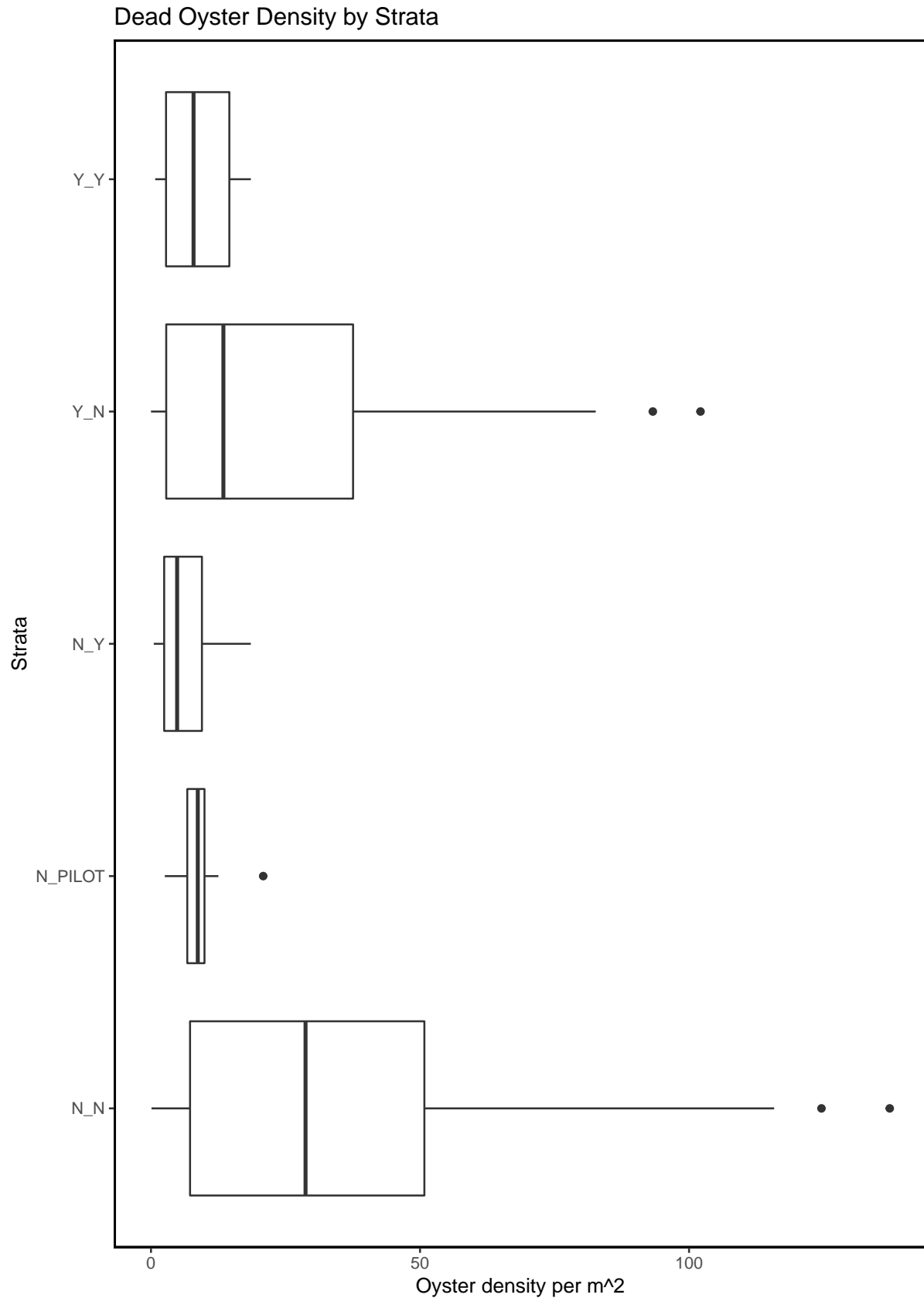
Dead Oyster Density by Locality



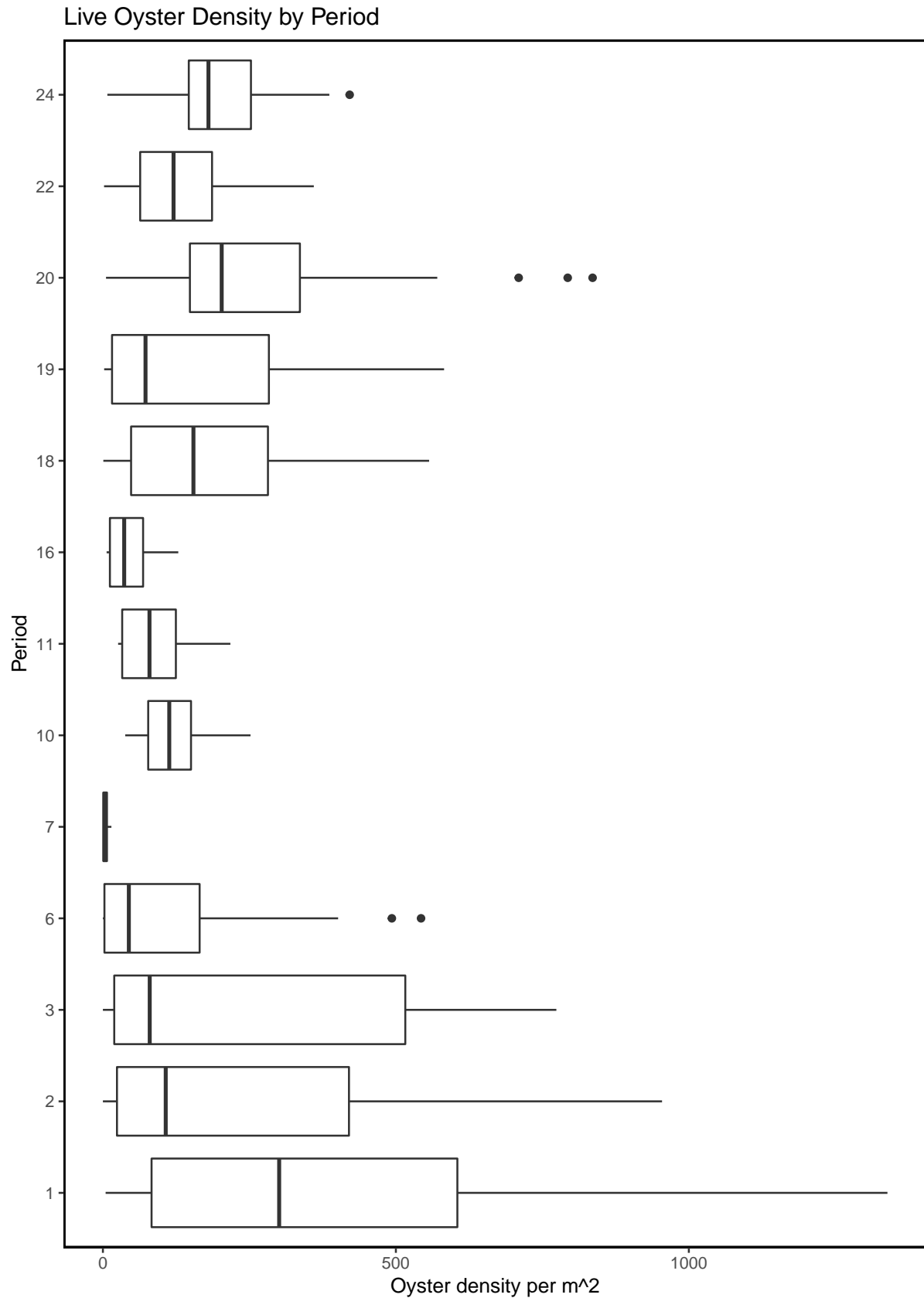
Figure– Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



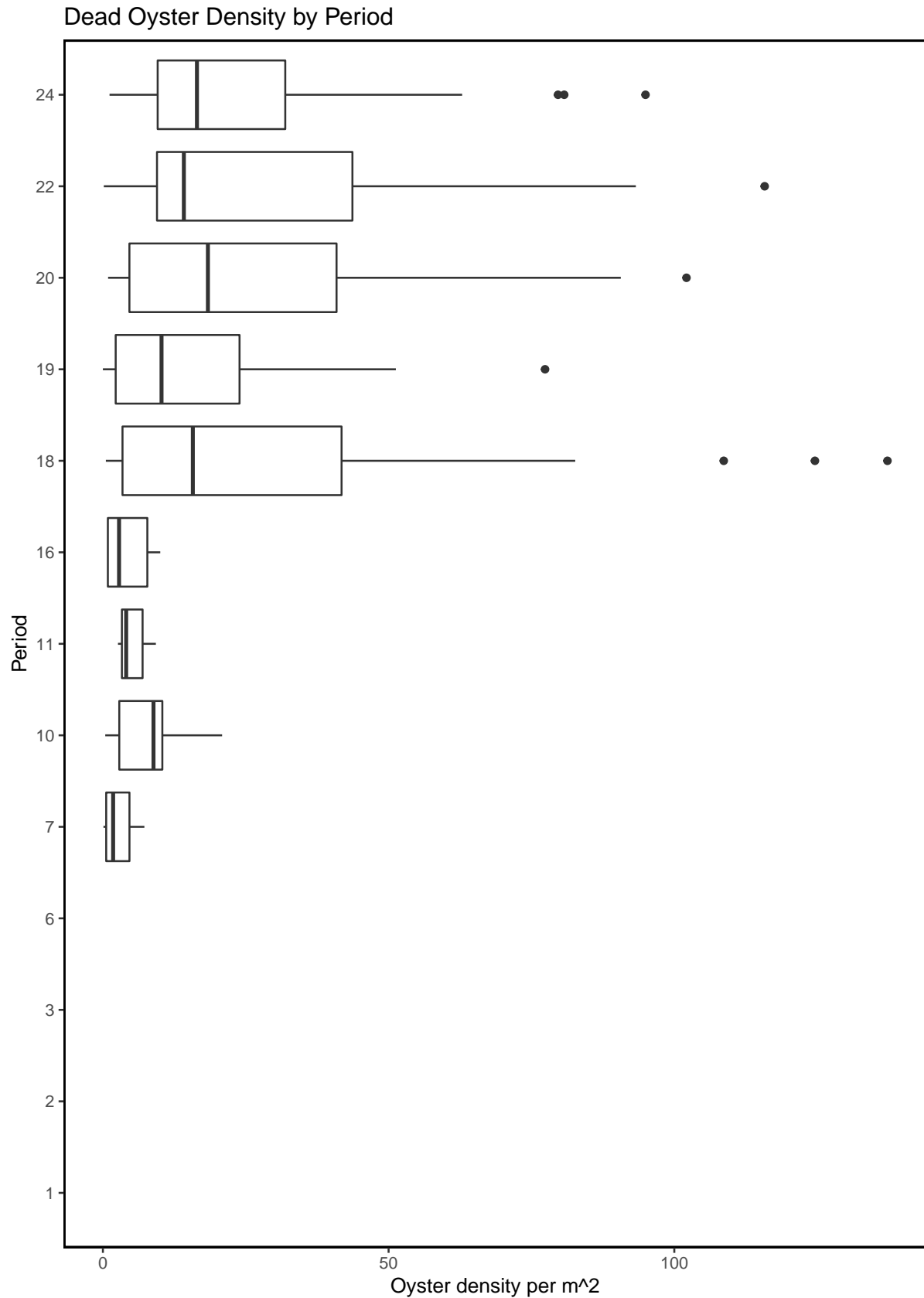
Figure– Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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

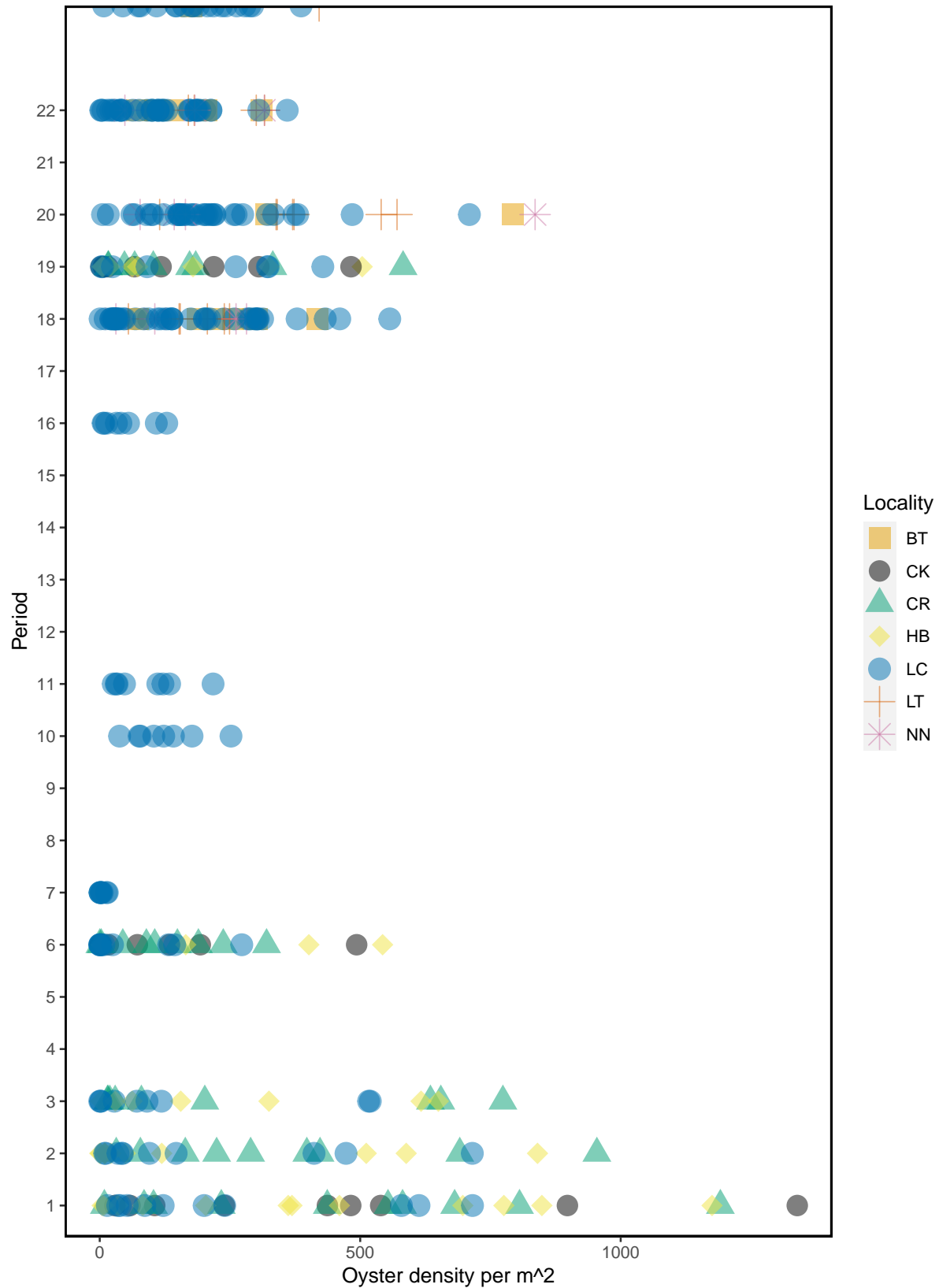


Figure – Live oyster density by locality and period for all periods including period 22 (current period).

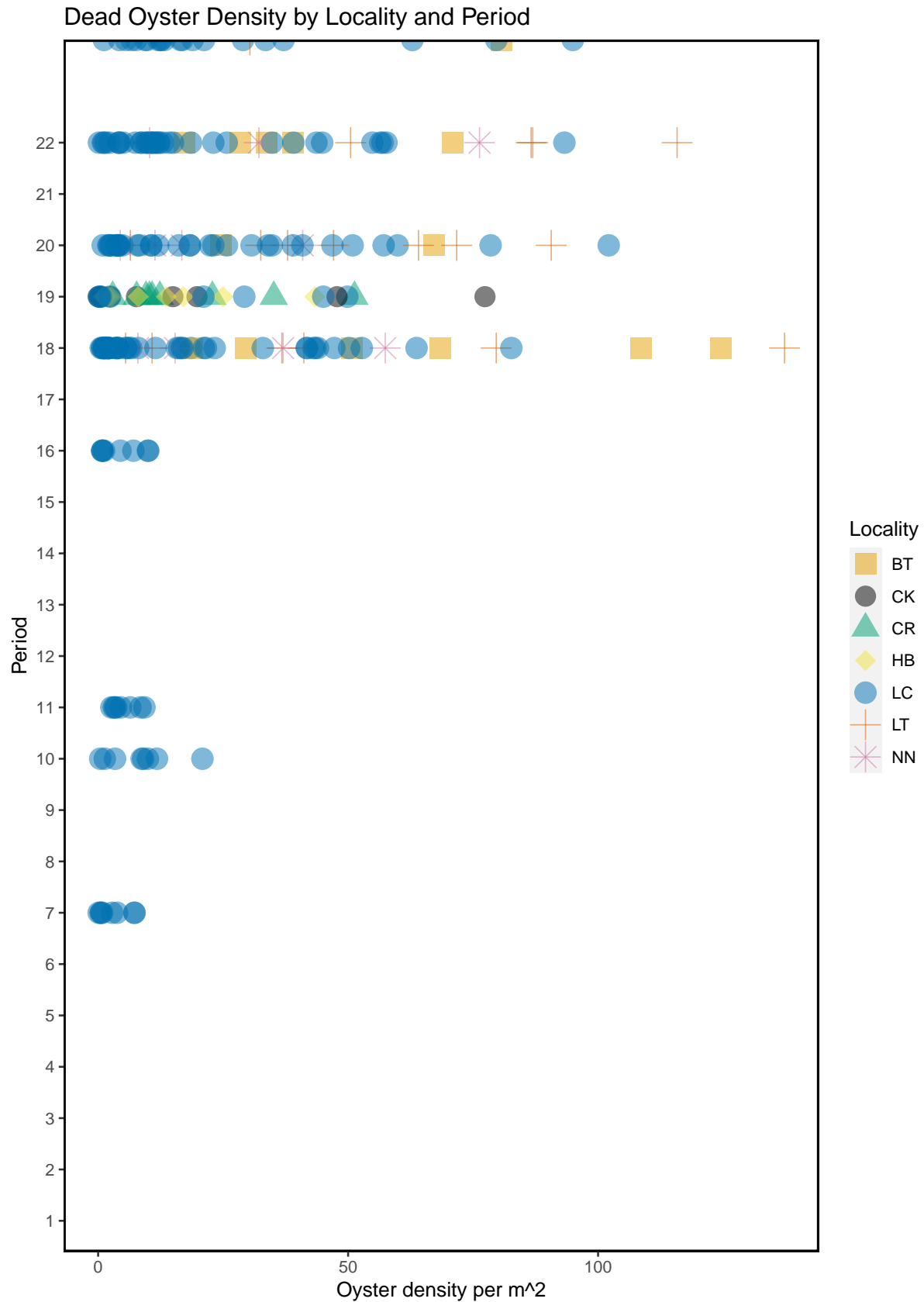


Figure – Dead oyster density by locality and period for all periods including period 22 (current period).

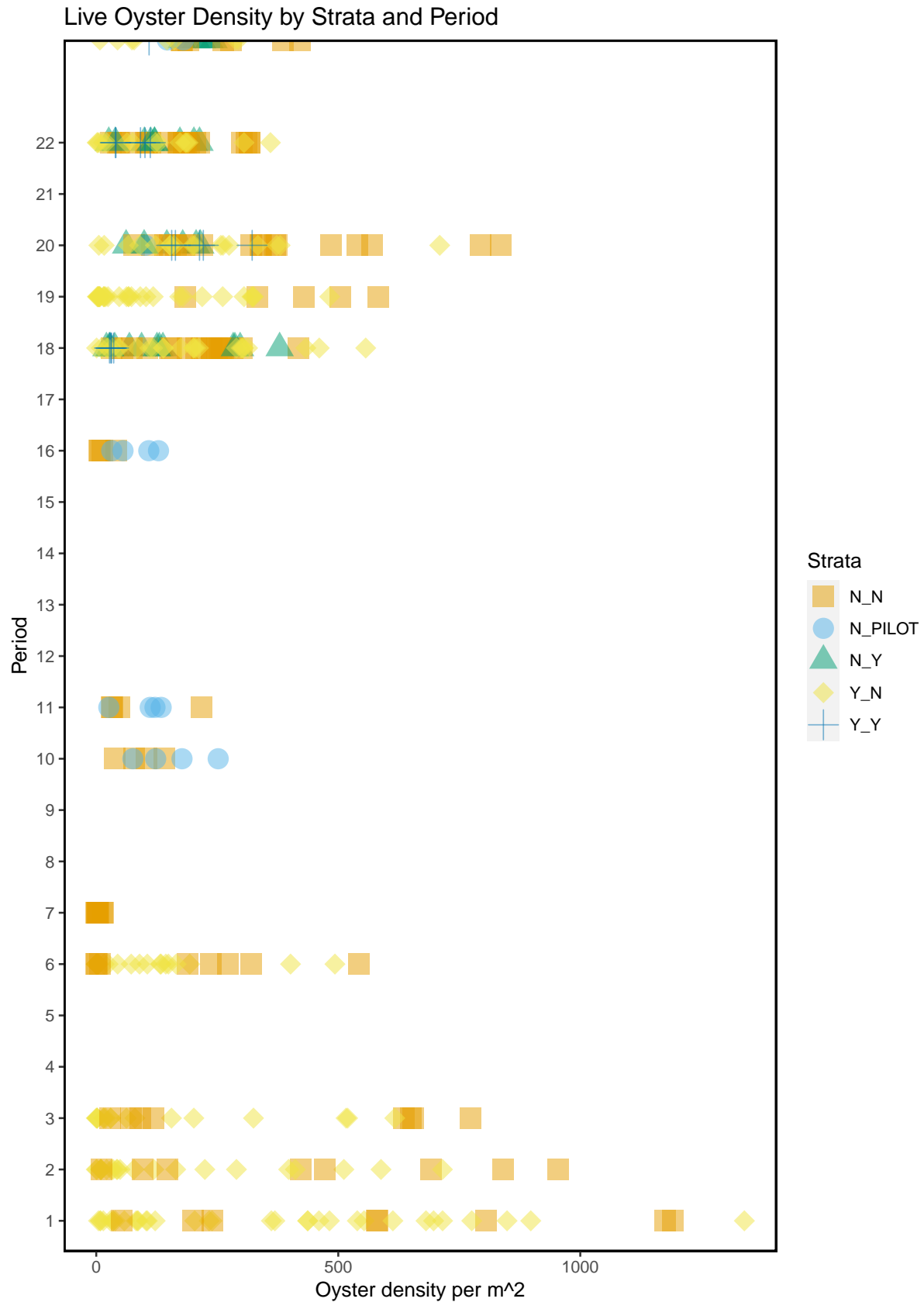


Figure – Live oyster density by strata and period for all periods including period 22 (current period).

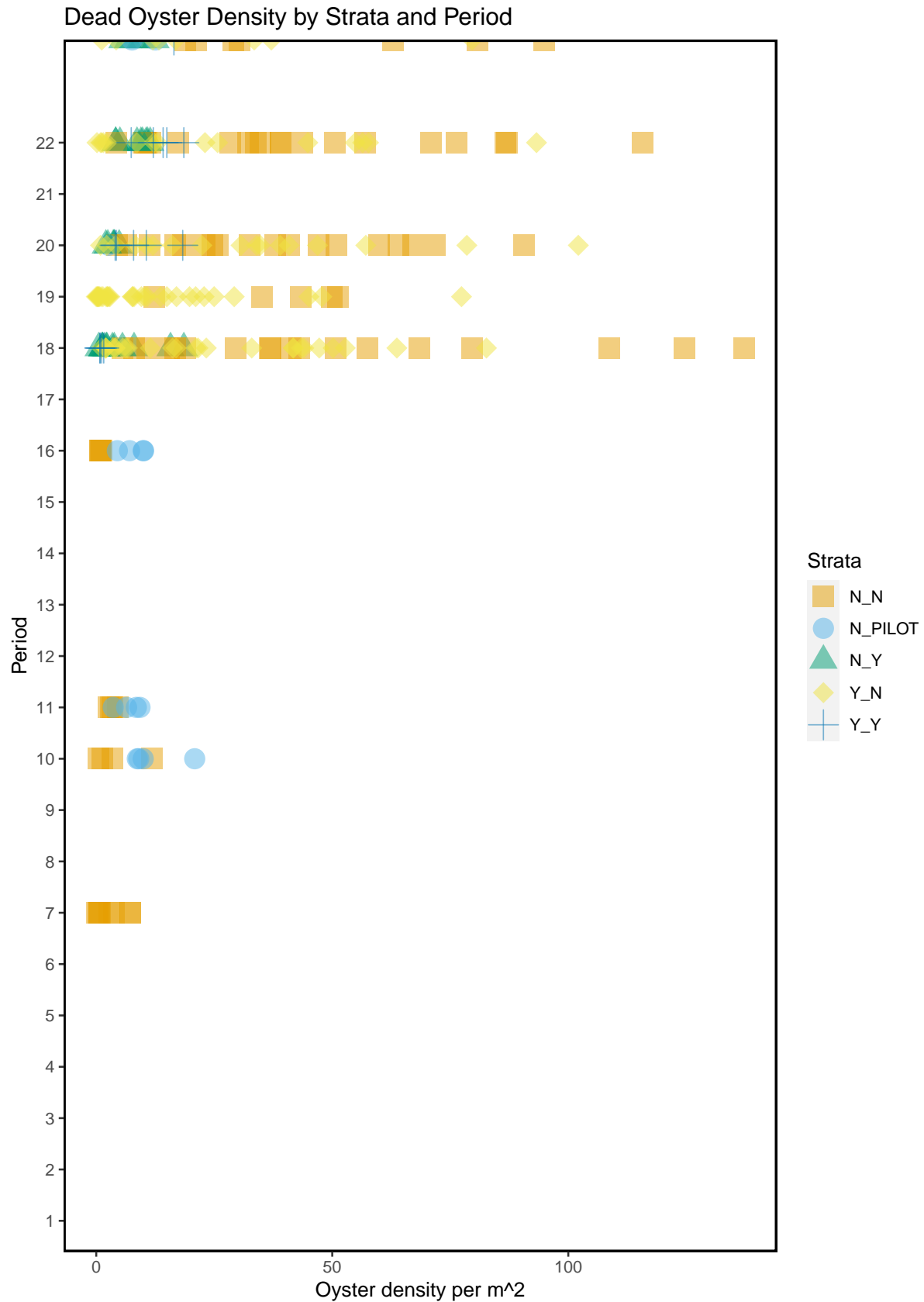


Figure – Dead oyster density by strata and period for all periods including period 22 (current period).

Live and Dead Count Comparison For All Periods

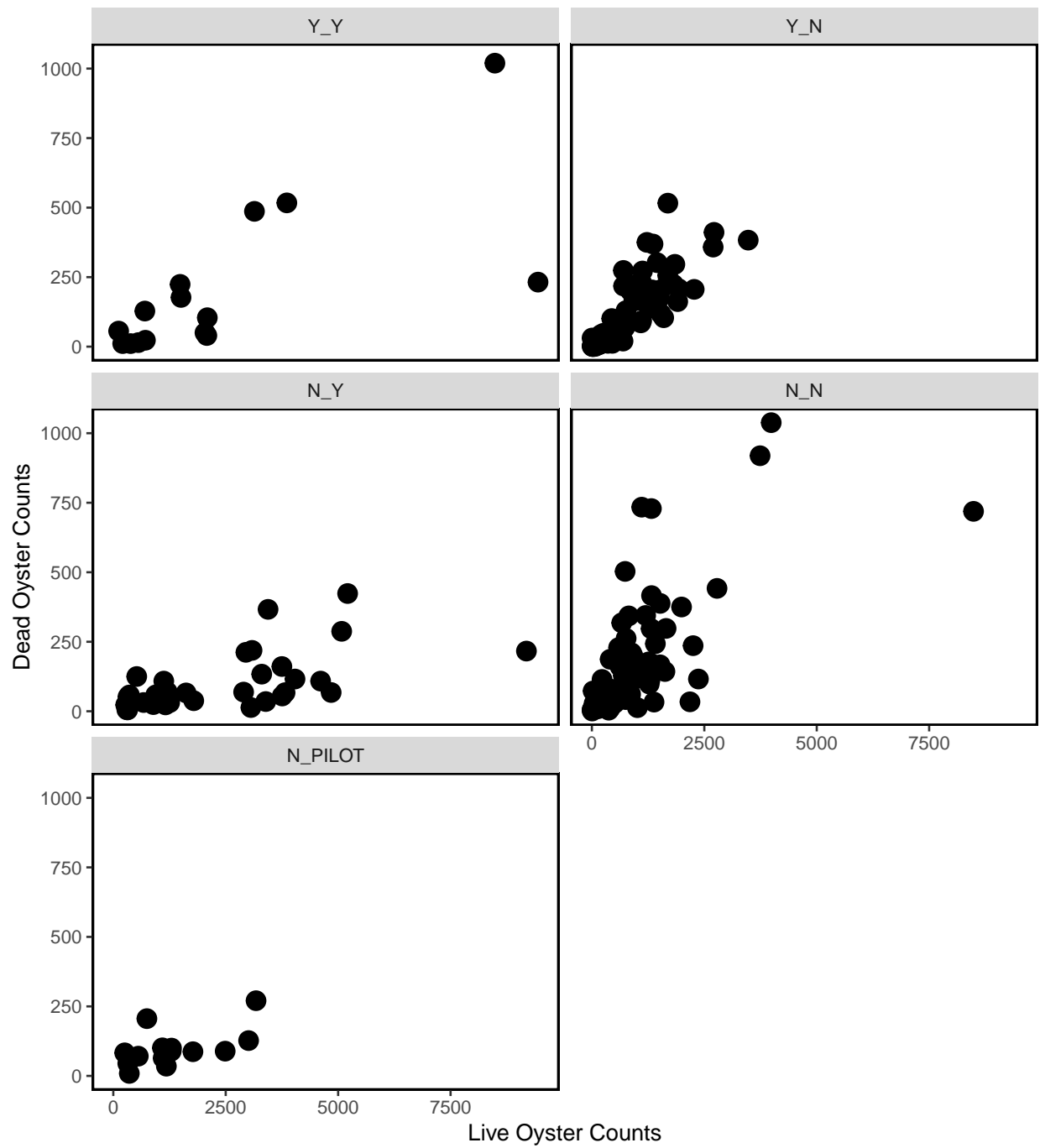


Figure- Live and dead oyster comparison for all periods, last sample date of period 24 is 2021-12-08.

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).

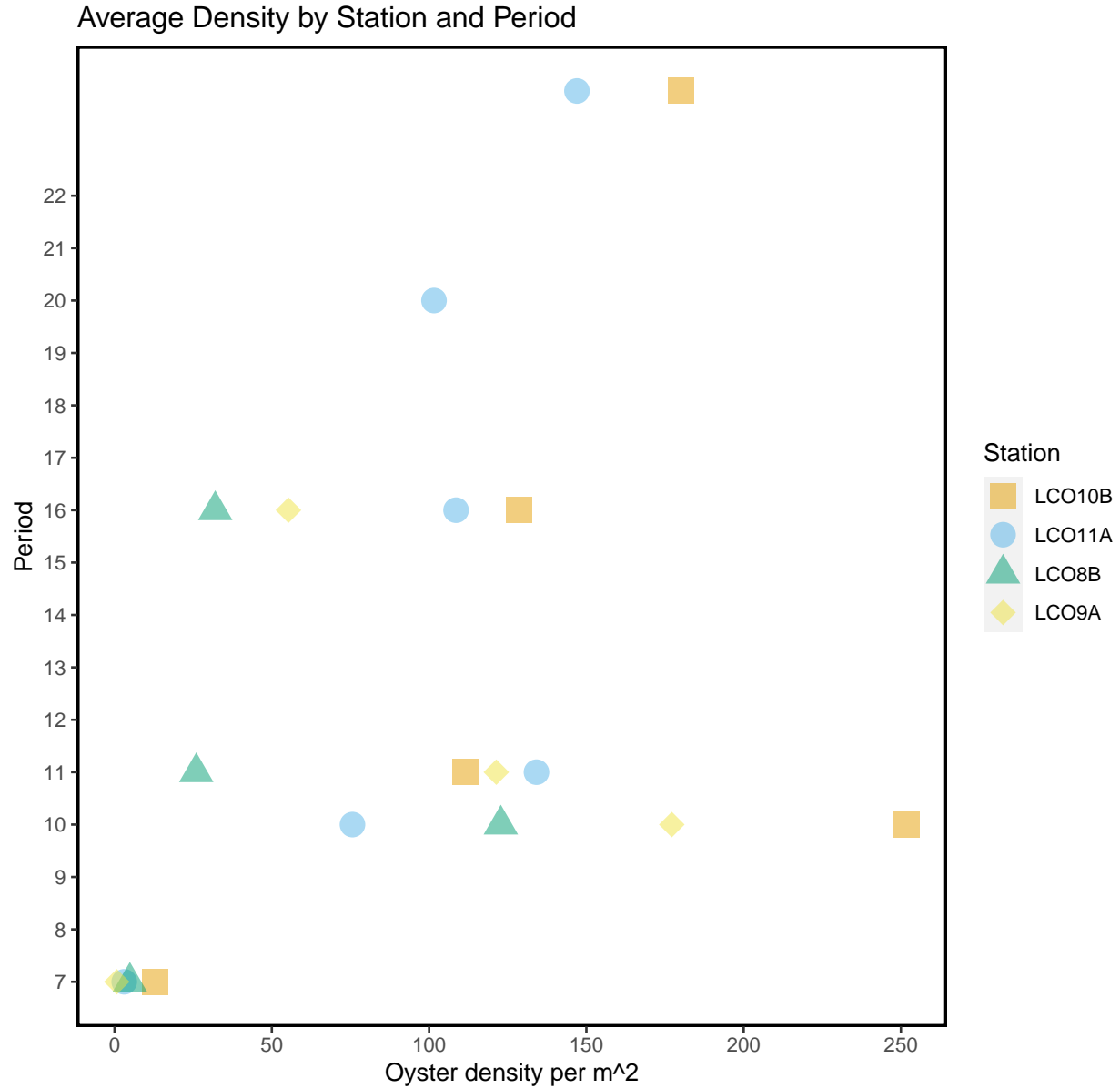


Figure – Average live oyster density comparison by station and period for all stations that were sampled during the pilc

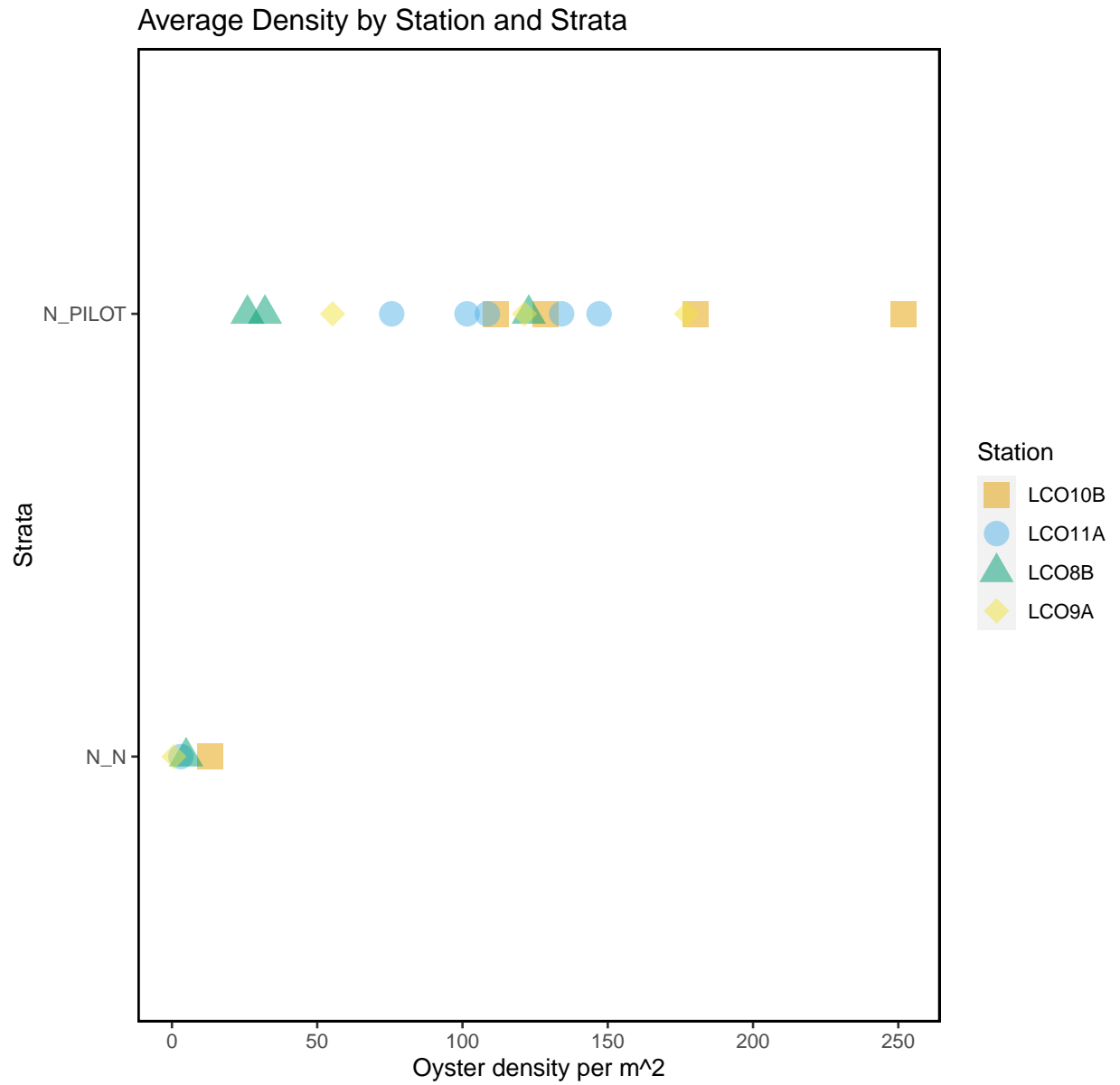


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

Latest Data Entered

Displayed are the entries for the last date of sampling (2021-12-08).

date	station	tran_length	count_live	count_dead	treatment	strata
2021-12-08	LTI15	2.5	88	10	control	N_N
2021-12-08	LTI15	5.0	162	13	control	N_N
2021-12-08	LTI15	7.5	147	11	control	N_N
2021-12-08	LTI15	10.0	233	11	control	N_N
2021-12-08	LTI15	12.5	158	12	control	N_N
2021-12-08	LTI15	13.4	72	5	control	N_N
2021-12-08	LCI52	2.5	67	30	control	Y_N
2021-12-08	LCI52	5.0	121	41	control	Y_N
2021-12-08	LCI52	7.5	166	32	control	Y_N
2021-12-08	LCI52	10.0	108	33	control	Y_N
2021-12-08	LCI52	12.5	121	44	control	Y_N
2021-12-08	LCI52	15.0	46	11	control	Y_N
2021-12-08	LCI52	17.5	101	35	control	Y_N
2021-12-08	LCI52	20.0	87	41	control	Y_N
2021-12-08	LCI52	22.5	92	34	control	Y_N
2021-12-08	LCI52	25.0	184	57	control	Y_N
2021-12-08	LCI52	27.5	166	29	control	Y_N
2021-12-08	LCI52	30.0	74	20	control	Y_N
2021-12-08	LCI52	30.4	1	0	control	Y_N
2021-12-08	LCI52	2.5	62	28	control	Y_N
2021-12-08	LCI52	5.0	131	22	control	Y_N
2021-12-08	LCI52	7.5	179	25	control	Y_N
2021-12-08	LCI52	10.0	104	24	control	Y_N
2021-12-08	LCI52	12.5	115	35	control	Y_N
2021-12-08	LCI52	15.0	53	6	control	Y_N
2021-12-08	LCI52	17.5	102	24	control	Y_N
2021-12-08	LCI52	20.0	101	40	control	Y_N
2021-12-08	LCI52	22.5	101	30	control	Y_N
2021-12-08	LCI52	25.0	185	51	control	Y_N
2021-12-08	LCI52	27.5	166	29	control	Y_N
2021-12-08	LCI52	30.0	85	17	control	Y_N
2021-12-08	LCI52	30.4	1	0	control	Y_N