

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

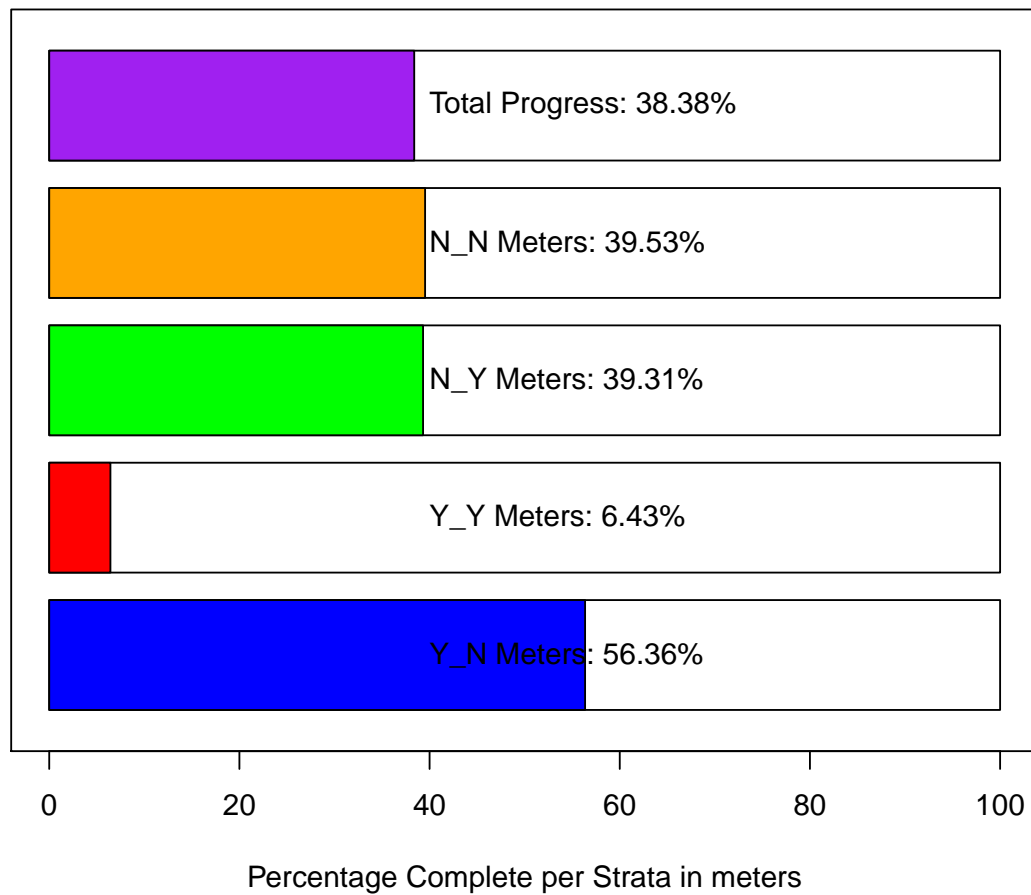
Definition of Strata

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	1540	708	2904
LC	1432	869	1664	2769663	1.16	143	1152	1712	1436	1150	1715
LT	1040	868	590	348447	0.57	139	768	1313	1042	798	1324
NN	786	727	649	420847	0.83	196	403	1169	781	451	1146

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1080	818	1168	1363985	1.08	148	789	1371	1079	834	1398
N_PILLOT	2180	3009	1582	2501624	0.73	913	390	3970	2171	356	3174
N_Y	2439	1789	2019	4076080	0.83	351	1750	3128	2449	1816	3101
Y_N	808	644	754	569198	0.93	93	626	990	806	633	998
Y_Y	2455	1506	2859	8175013	1.16	738	1008	3901	2470	1218	4023

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	982	751	1216
20	1844	1253	2125	4517189	1.15	310	1236	2451	1852	1317	2577
22	1334	702	1693	2867783	1.27	242	860	1808	1328	899	1813
24	1463	1102	1301	1693414	0.89	277	919	2007	1473	962	2035

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	252	172	359
LC	166	154	121	14748	0.73	10	145	186	166	145	186
LT	283	275	141	19841	0.50	33	218	348	282	219	347
NN	223	164	224	50283	1.01	68	90	355	223	120	366

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	238	199	159	25168	0.67	20	199	278	239	203	282
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	122	183
Y_N	177	157	145	21110	0.82	18	142	213	177	143	212

Y_Y	113	101	88	7709	0.78	23	69	157	113	75	159
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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	177	146	210
20	256	203	187	35057	0.73	27	203	310	255	205	309
22	137	121	93	8638	0.68	13	111	163	137	113	161
24	187	178	94	8801	0.50	20	148	226	187	148	227

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	301	172	454
LC	131	79	144	20604	1.10	12	107	155	131	108	154
LT	230	176	191	36661	0.83	45	141	318	228	147	317
NN	104	74	96	9216	0.92	29	48	161	105	59	168

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	199	136	201	40260	1.01	25	149	249	198	154	248
N_PILOT	136	127	131	17150	0.97	76	-13	284	136	9	270
N_Y	101	66	103	10584	1.01	18	66	136	102	68	137
Y_N	123	80	124	15437	1.01	15	93	153	122	94	152
Y_Y	206	104	277	76865	1.34	72	66	347	205	87	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	87	188
20	148	107	140	19727	0.95	20	108	188	147	112	189
22	191	128	193	37399	1.01	28	137	245	191	140	251
24	132	122	100	9901	0.76	21	90	173	130	91	172

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	54	39	71
LC	20	12	22	468	1.08	1.9	16	24	20	17	24
LT	57	49	37	1377	0.65	8.7	40	74	57	40	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	43.3	36.9	31.4	987	0.73	3.99	35.5	51.1	43.3	36.2	51.5
N_PILOT	7.6	7.6	5.0	25	0.66	2.88	1.9	13.2	7.5	2.6	12.5
N_Y	6.2	4.9	4.5	20	0.72	0.78	4.7	7.7	6.2	4.8	7.8
Y_N	27.0	19.0	25.4	645	0.94	3.13	20.9	33.1	27.0	21.1	33.1
Y_Y	8.9	7.9	6.6	44	0.74	1.70	5.5	12.2	8.9	6.0	12.1

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	19	35
20	28	18	26	682	0.94	3.8	20	35	28	20	35
22	28	14	28	807	1.00	4.1	21	36	29	21	37
24	24	15	23	526	0.97	4.9	14	33	24	15	33

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

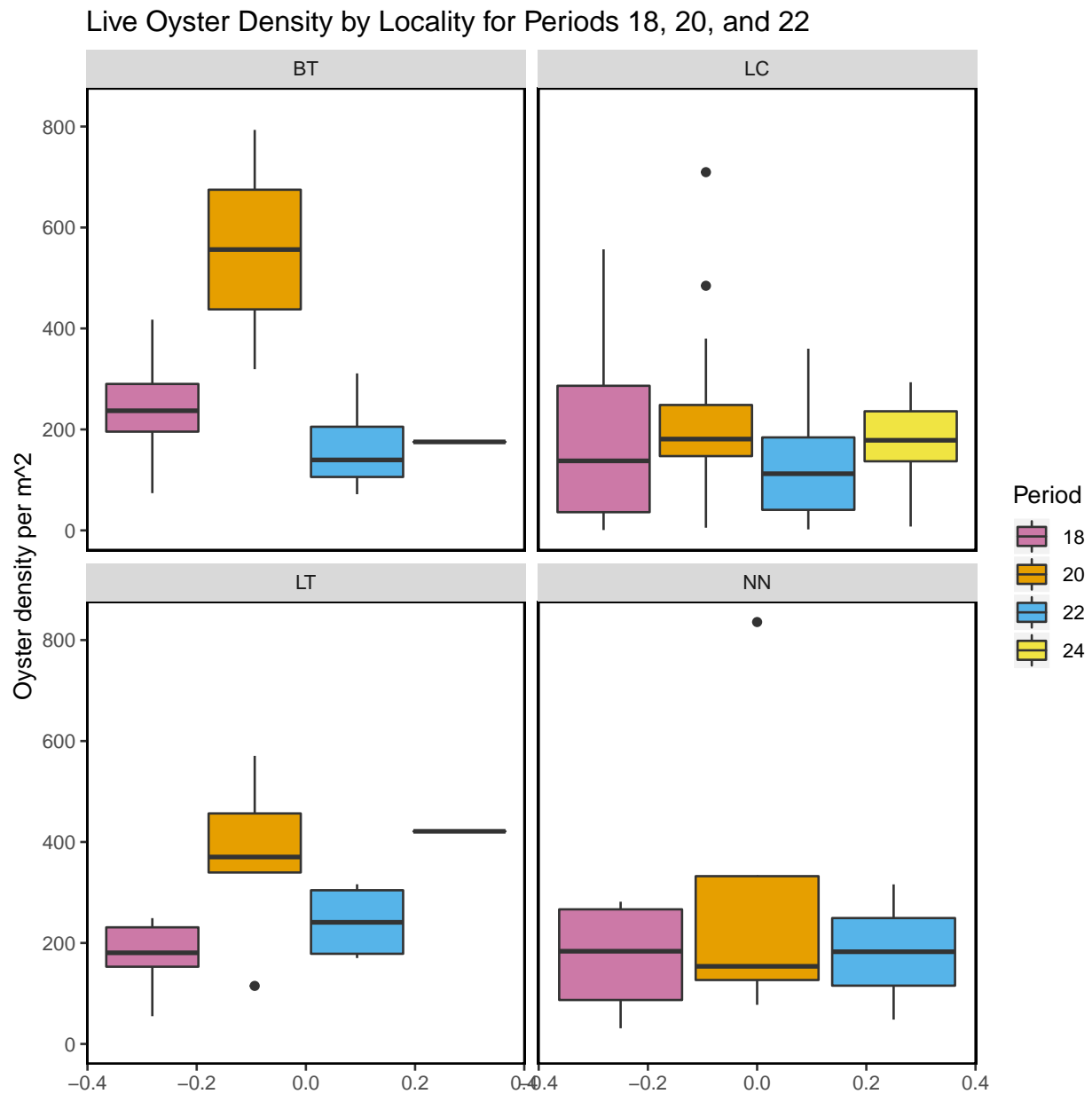


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-08.

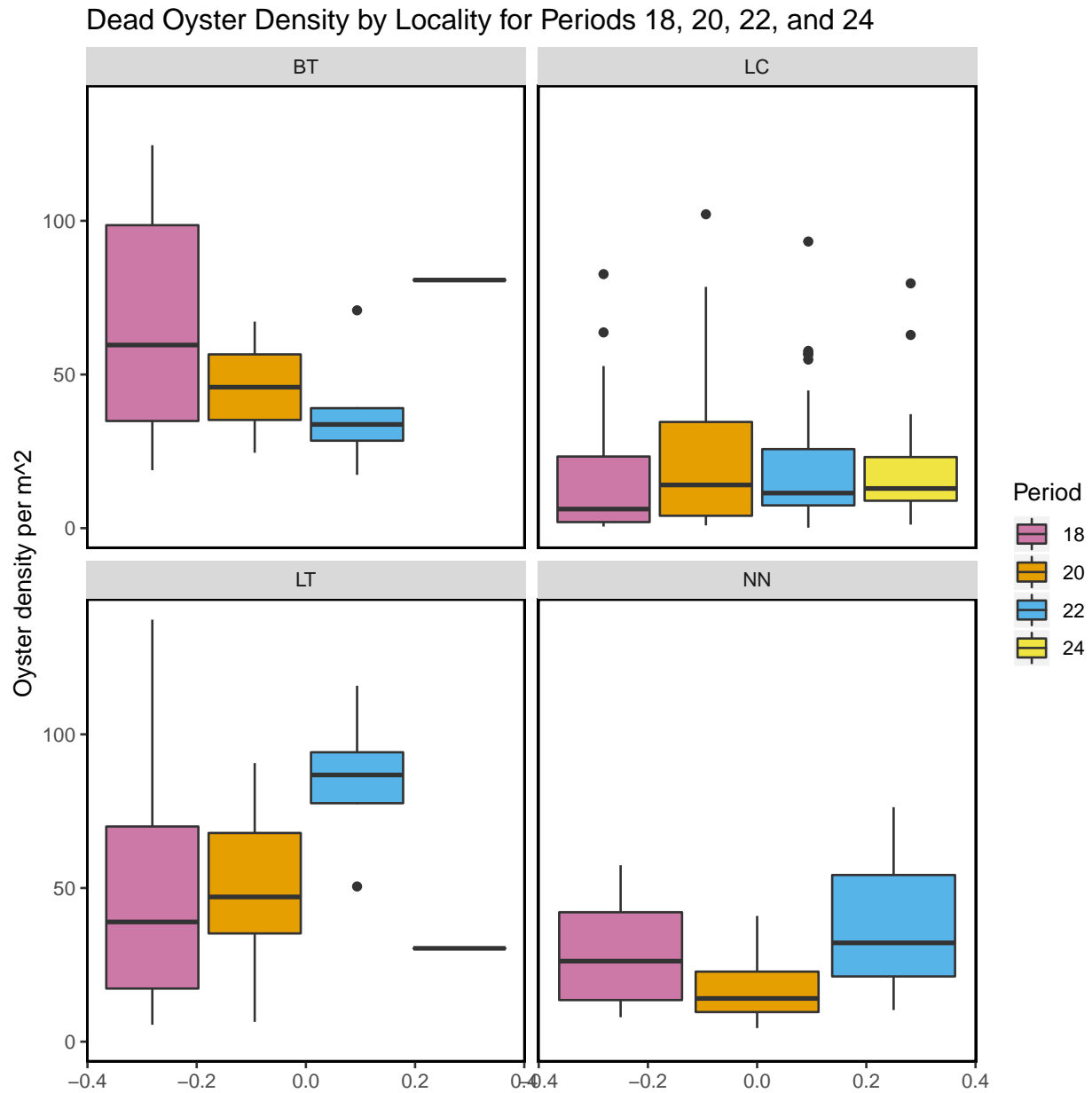


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-08.

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

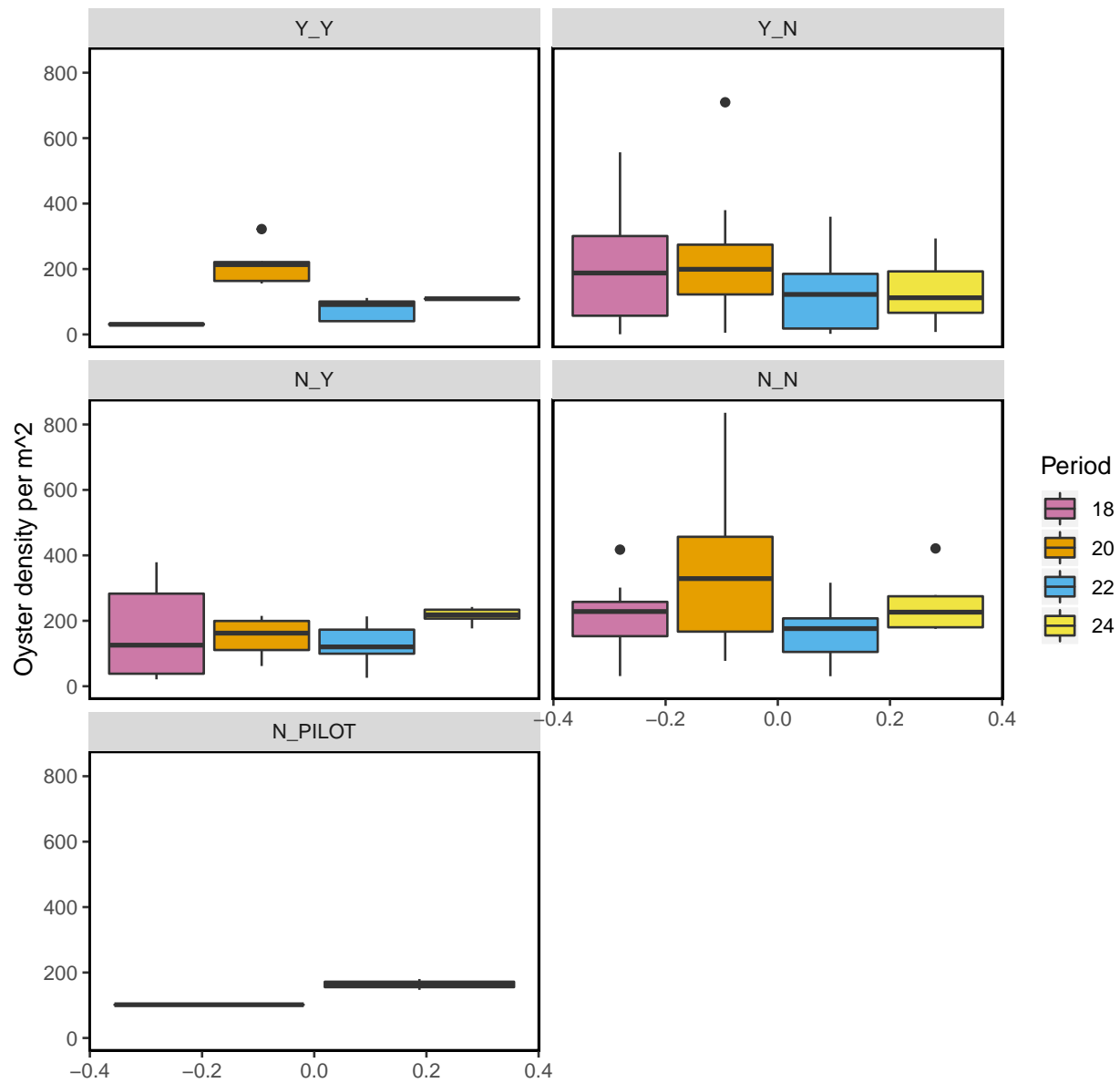


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-08.

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

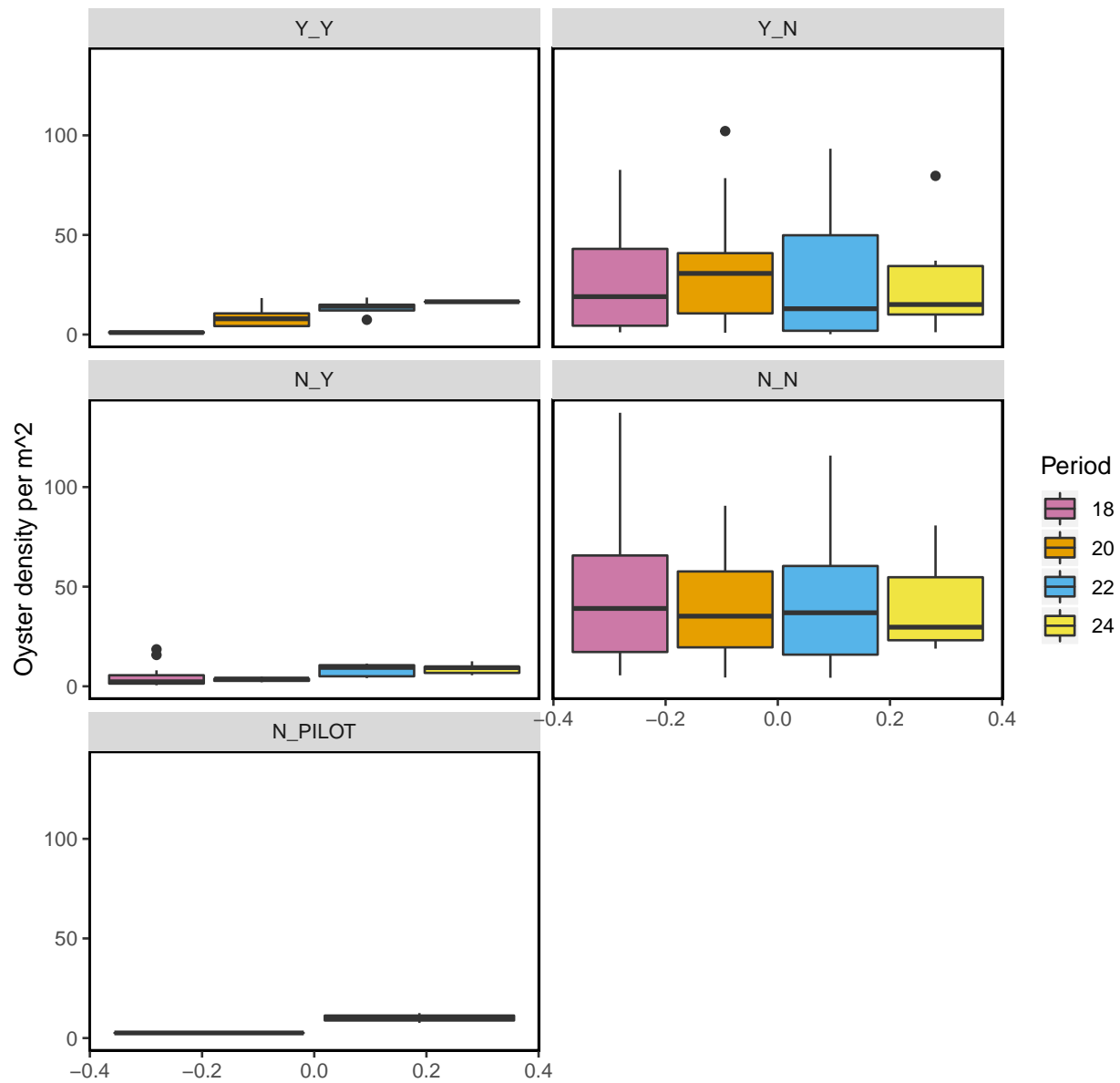


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-08.

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.

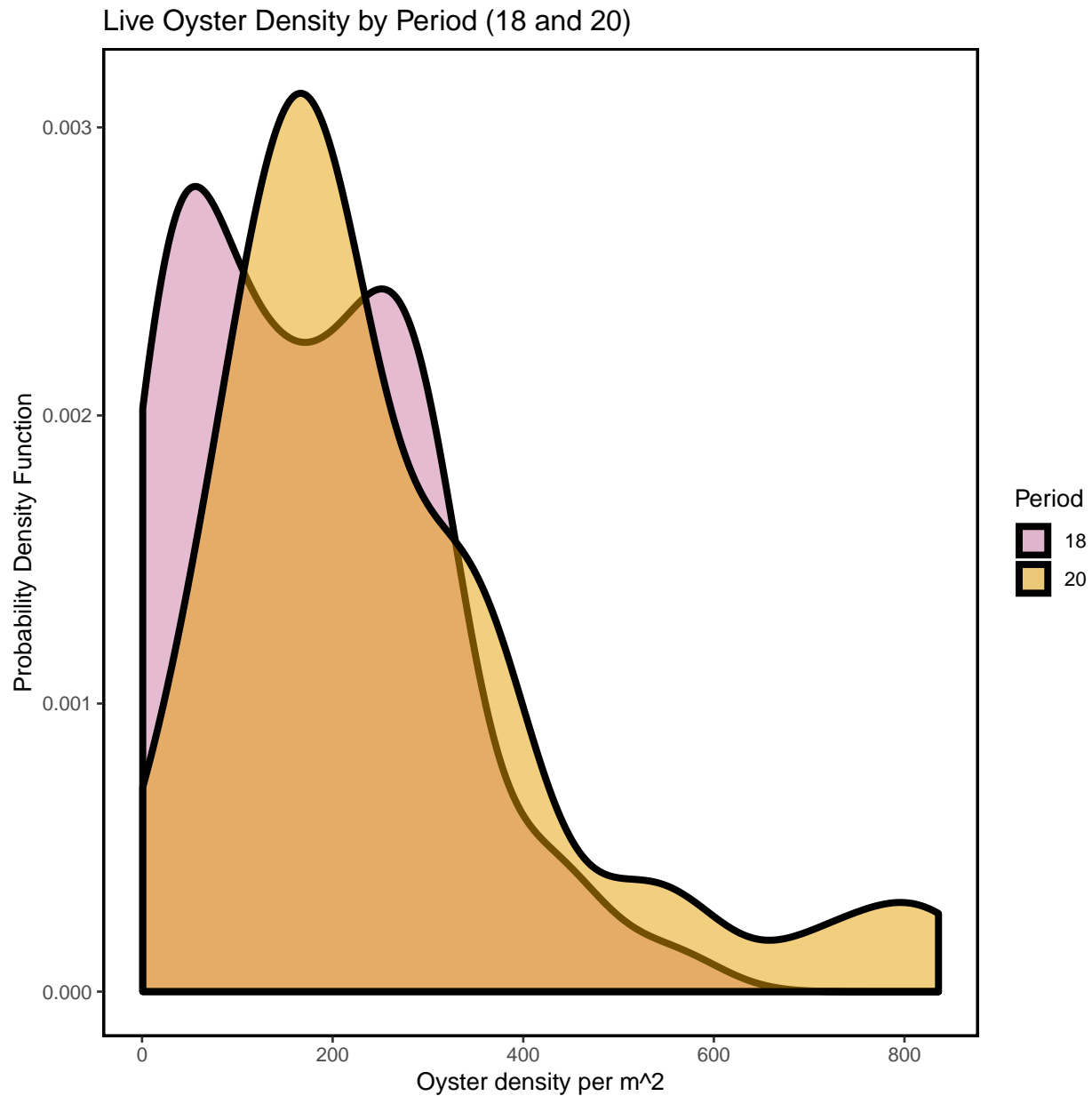


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-12-08.

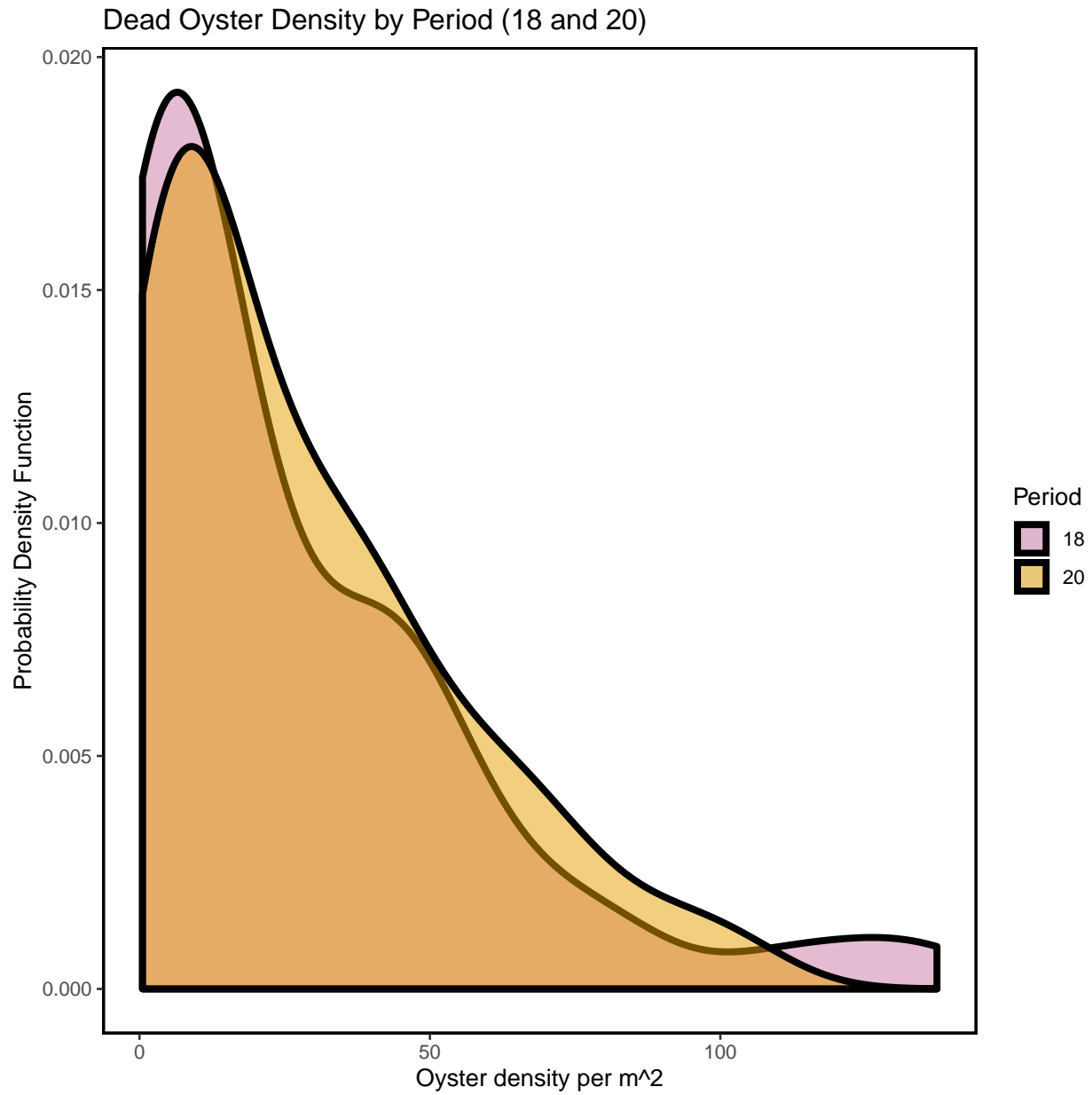


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-12-08.

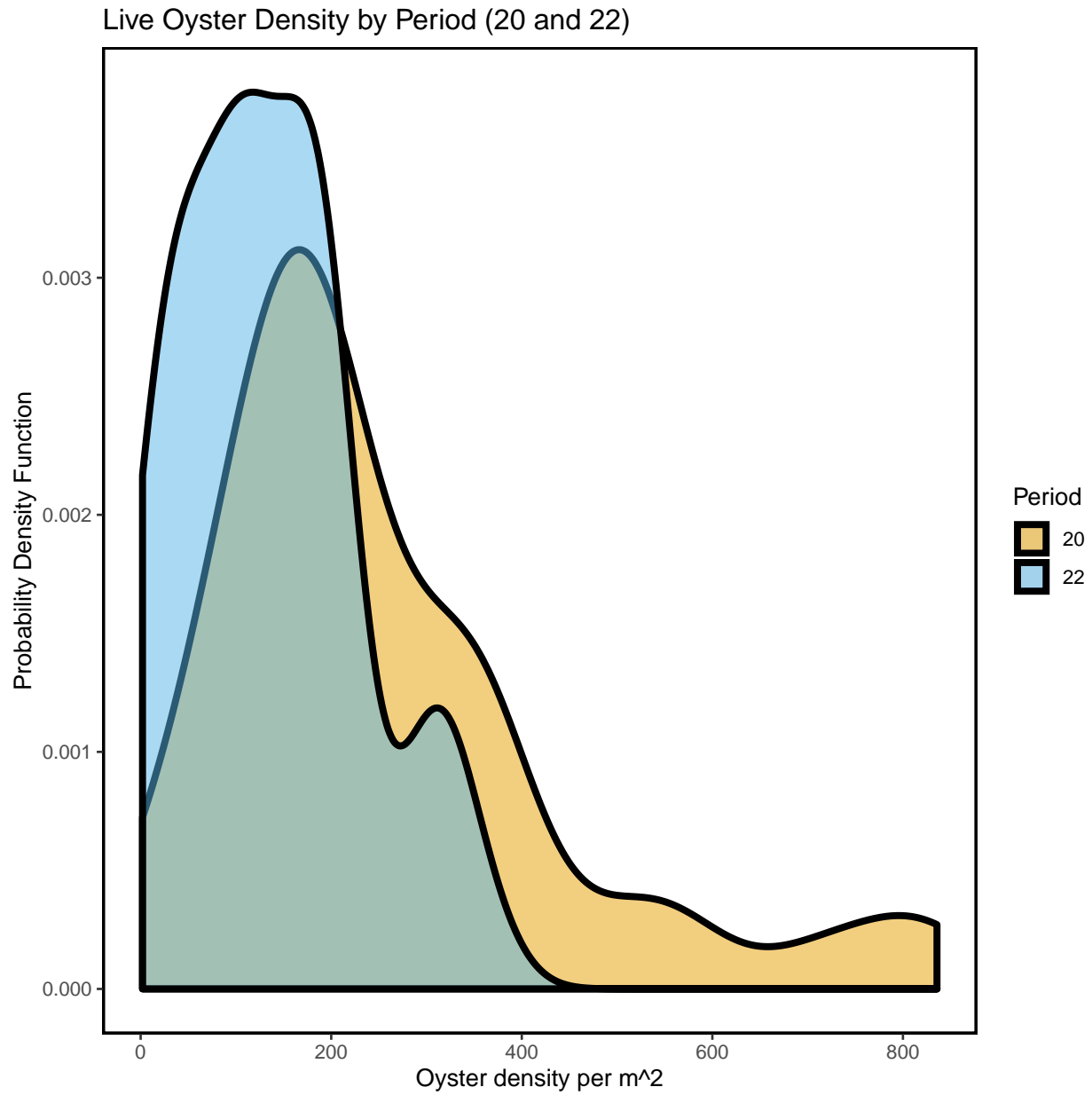


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-12-08.

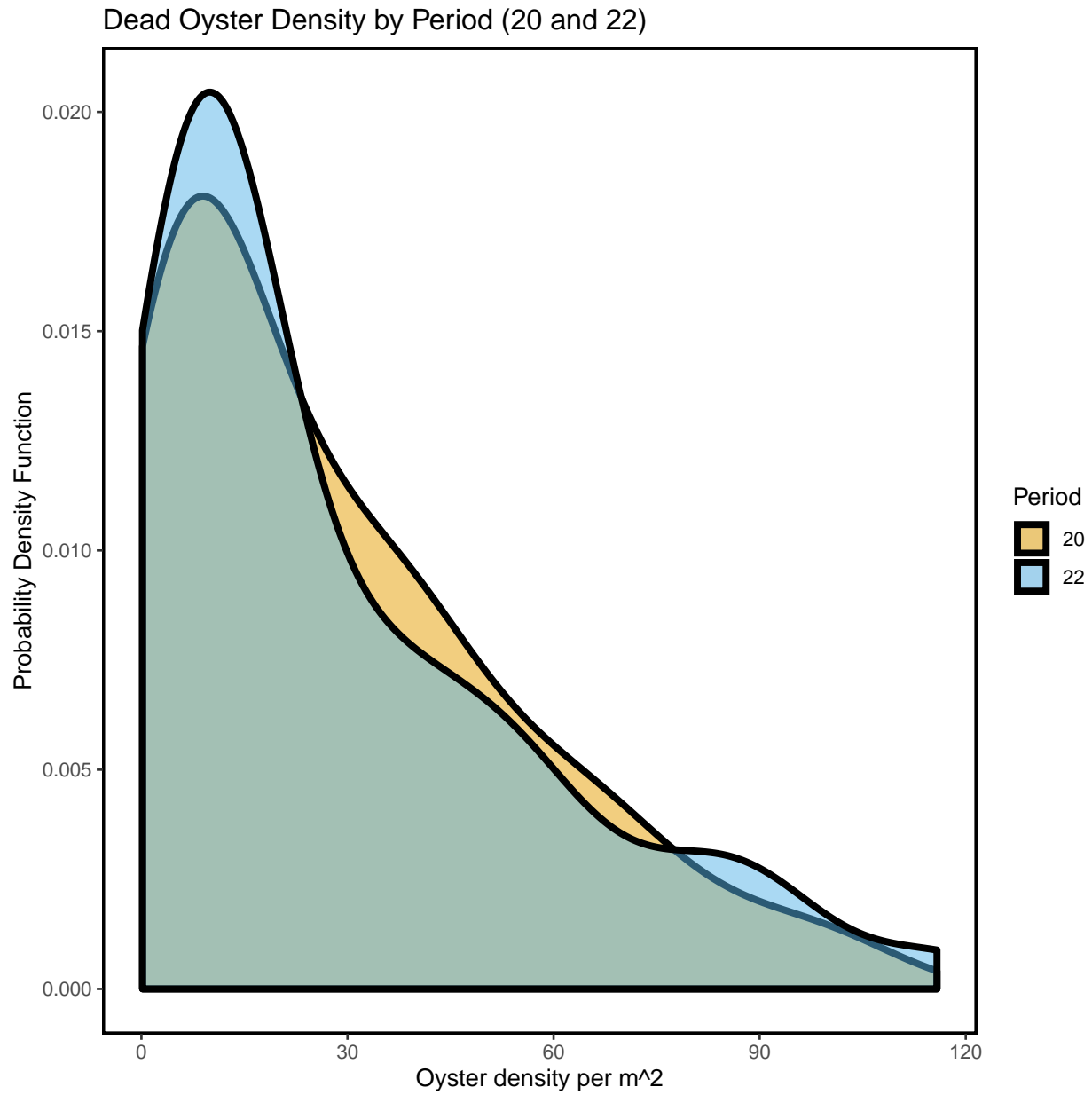


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-12-08.

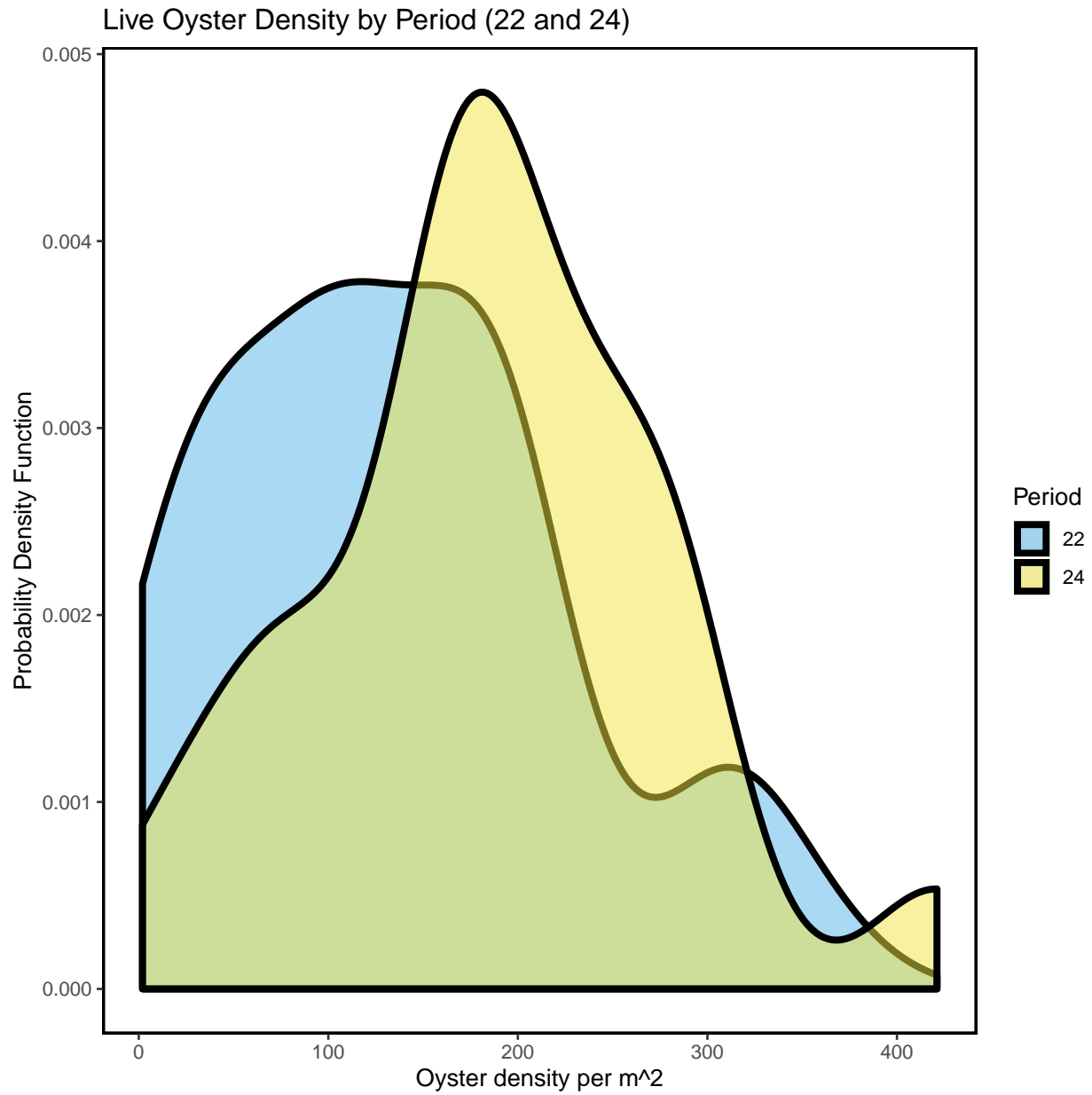


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-12-08.

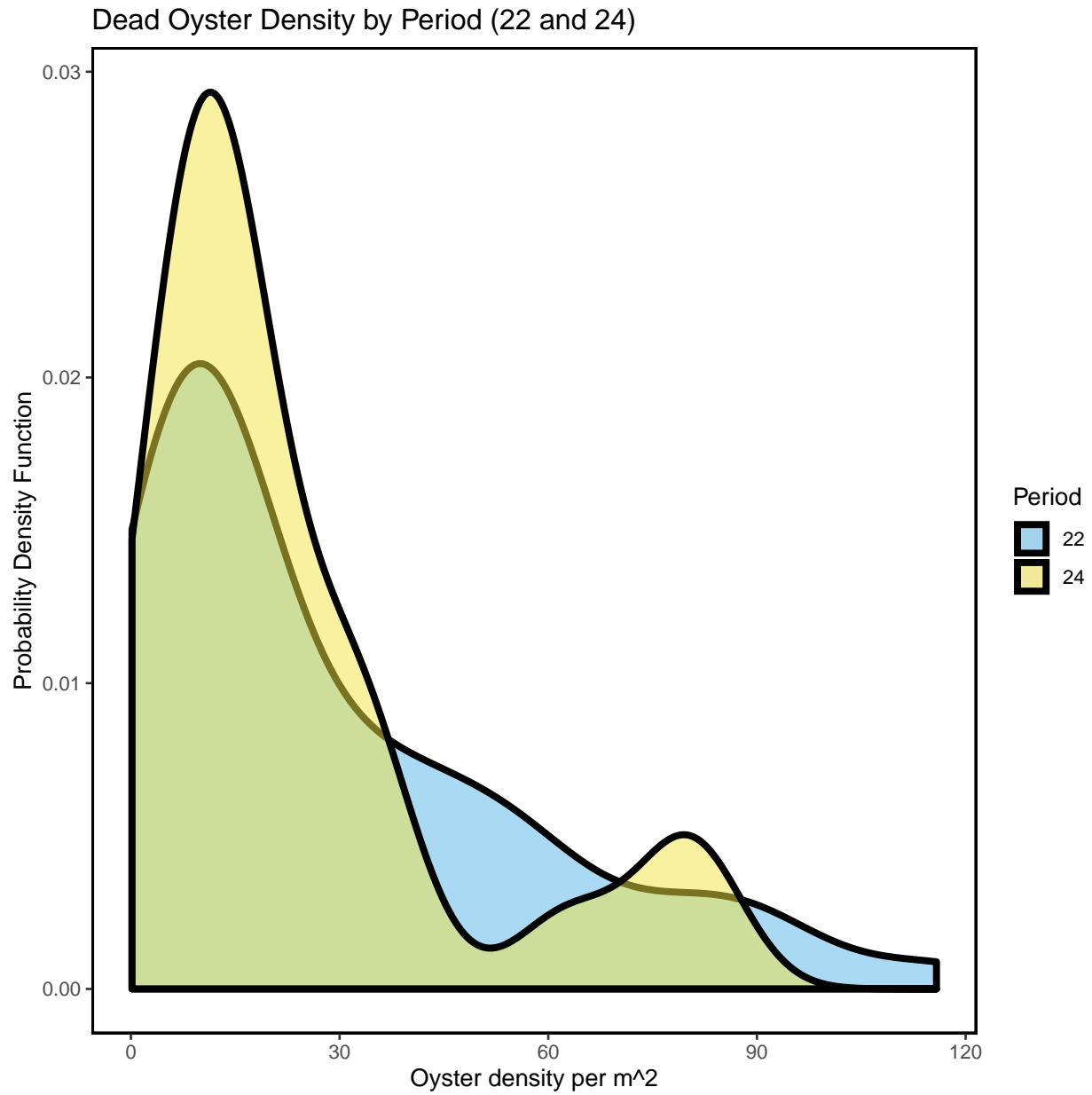


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-12-08.

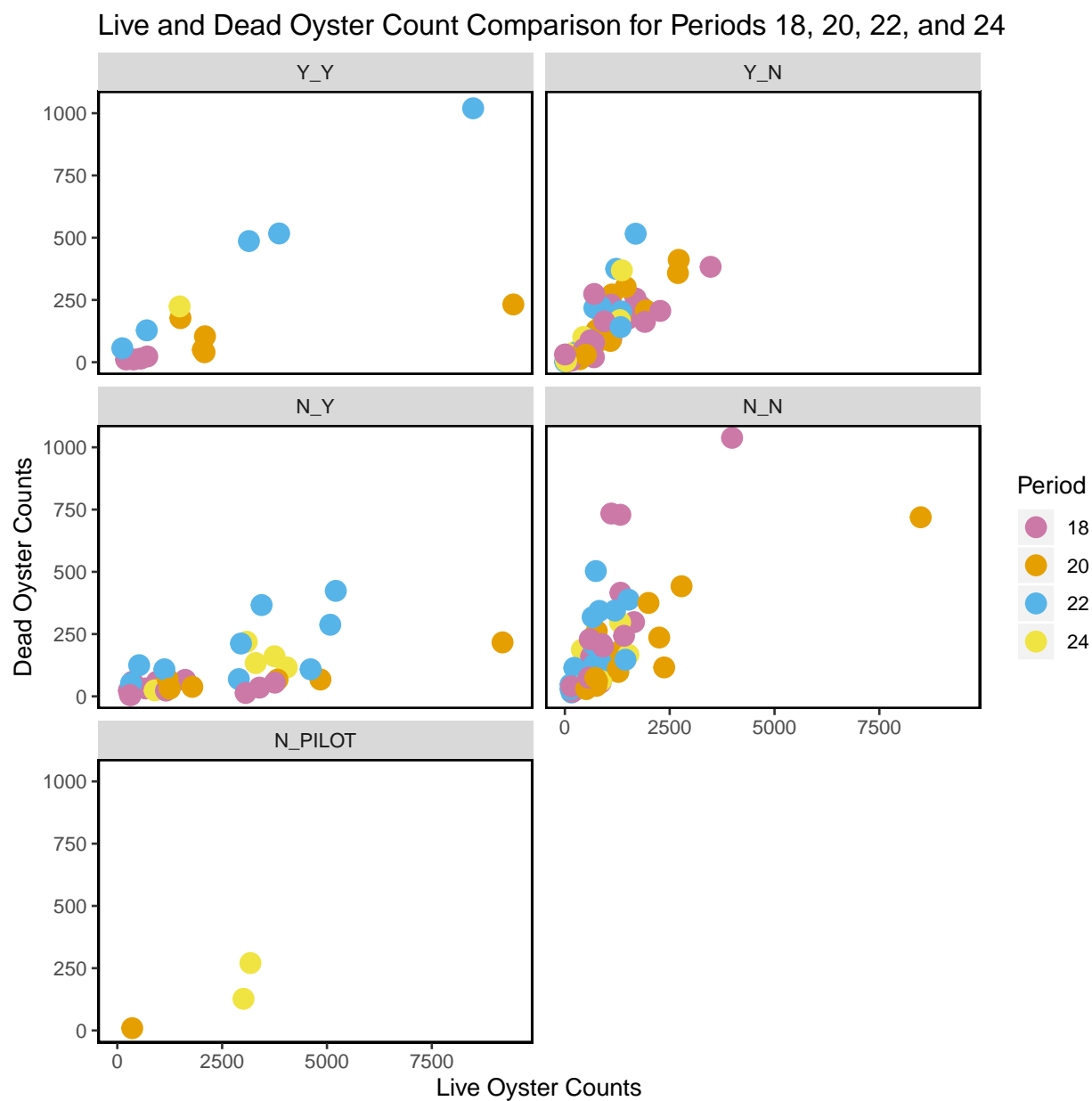


Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021) and 24 (Winter 2021-2022), last sample date of period 24 as 2021-12-08.

Live Counts Double Pass Results

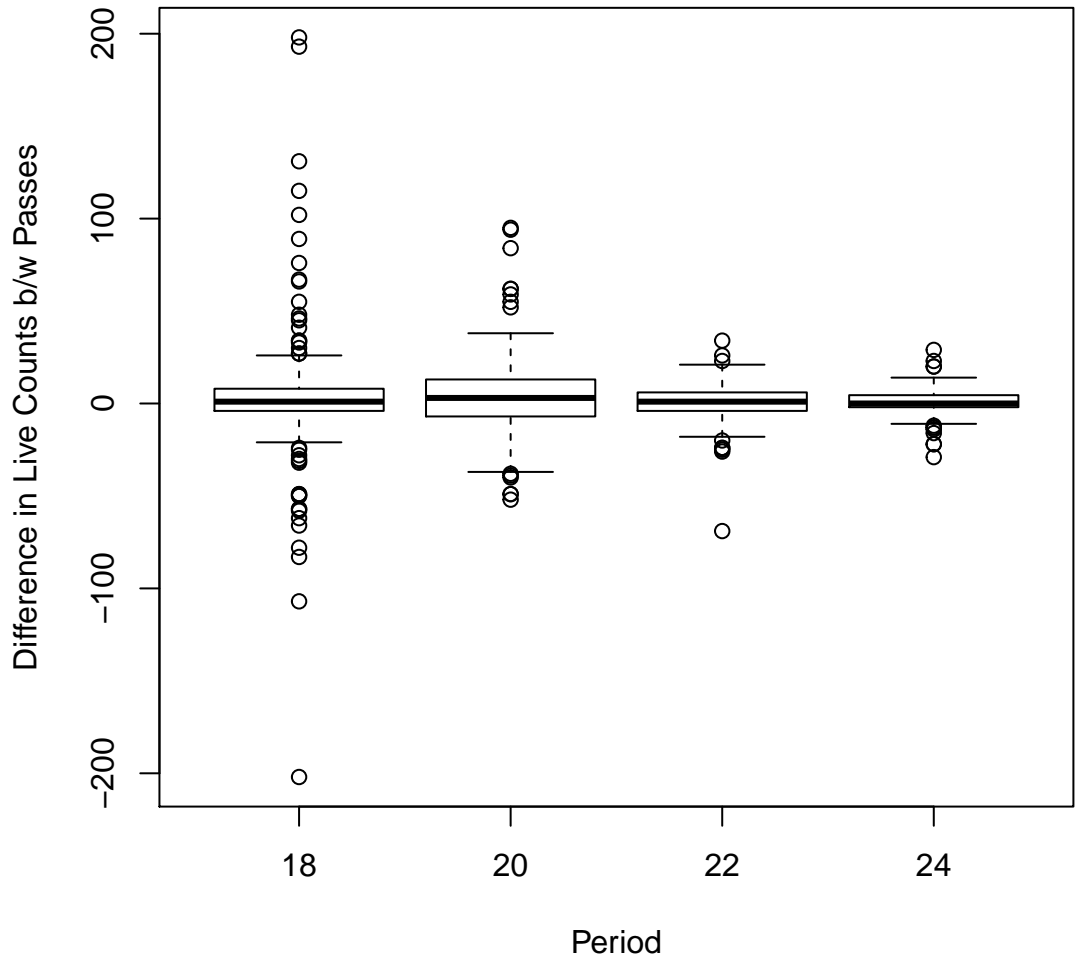


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, and 24

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

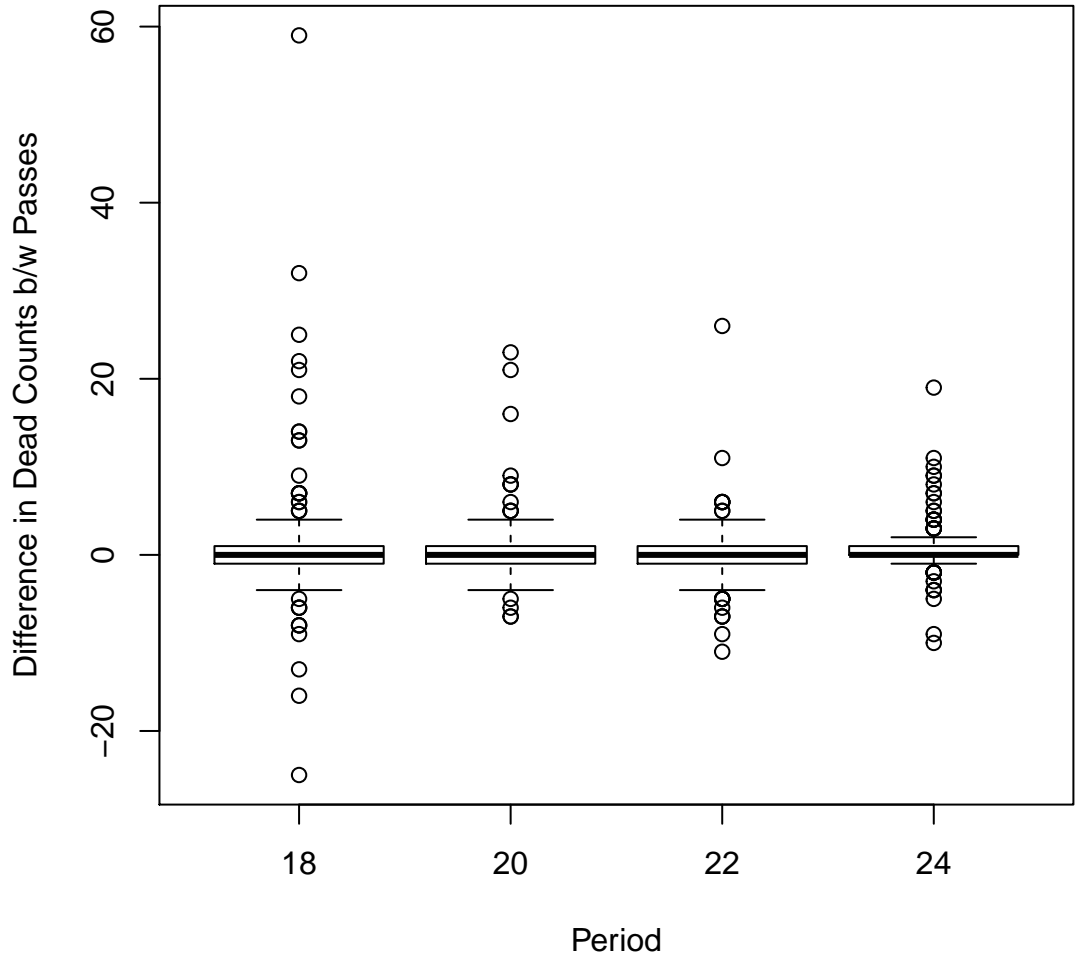


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, and 24

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	216	11826
LT	18	468
NN	11	288

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	119	3864
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	22	1120

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	20	1092
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	6	134
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

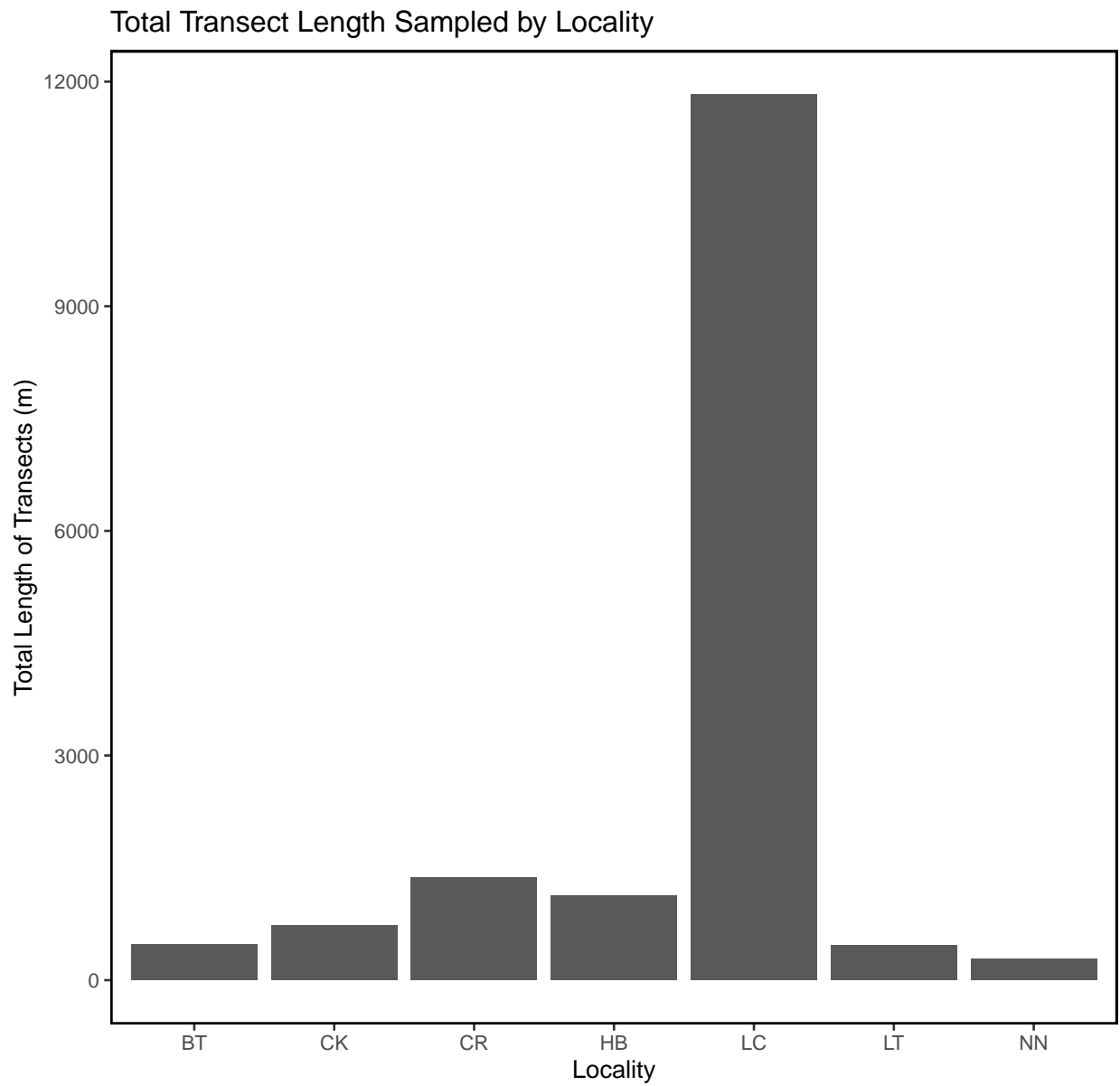


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

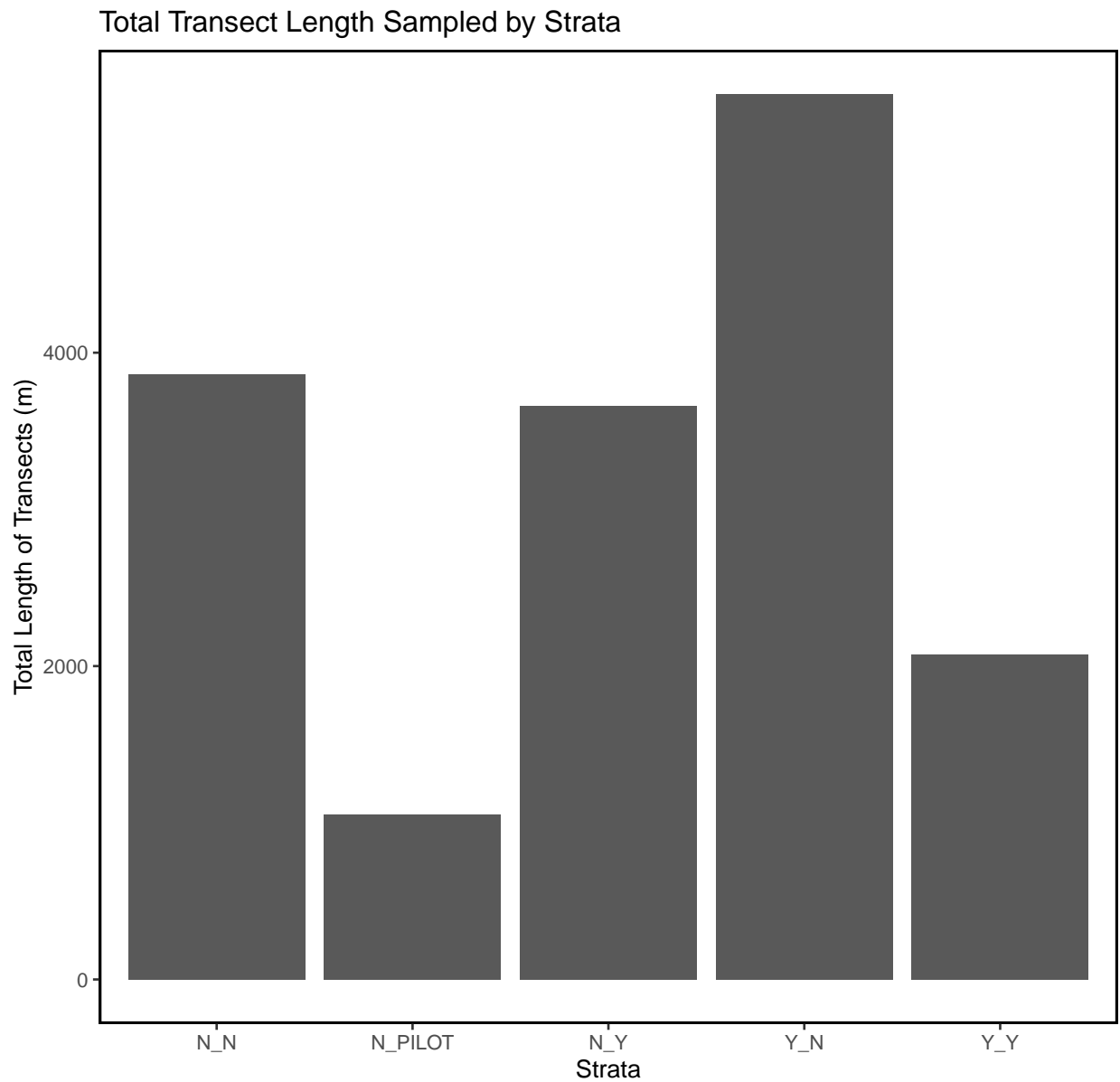
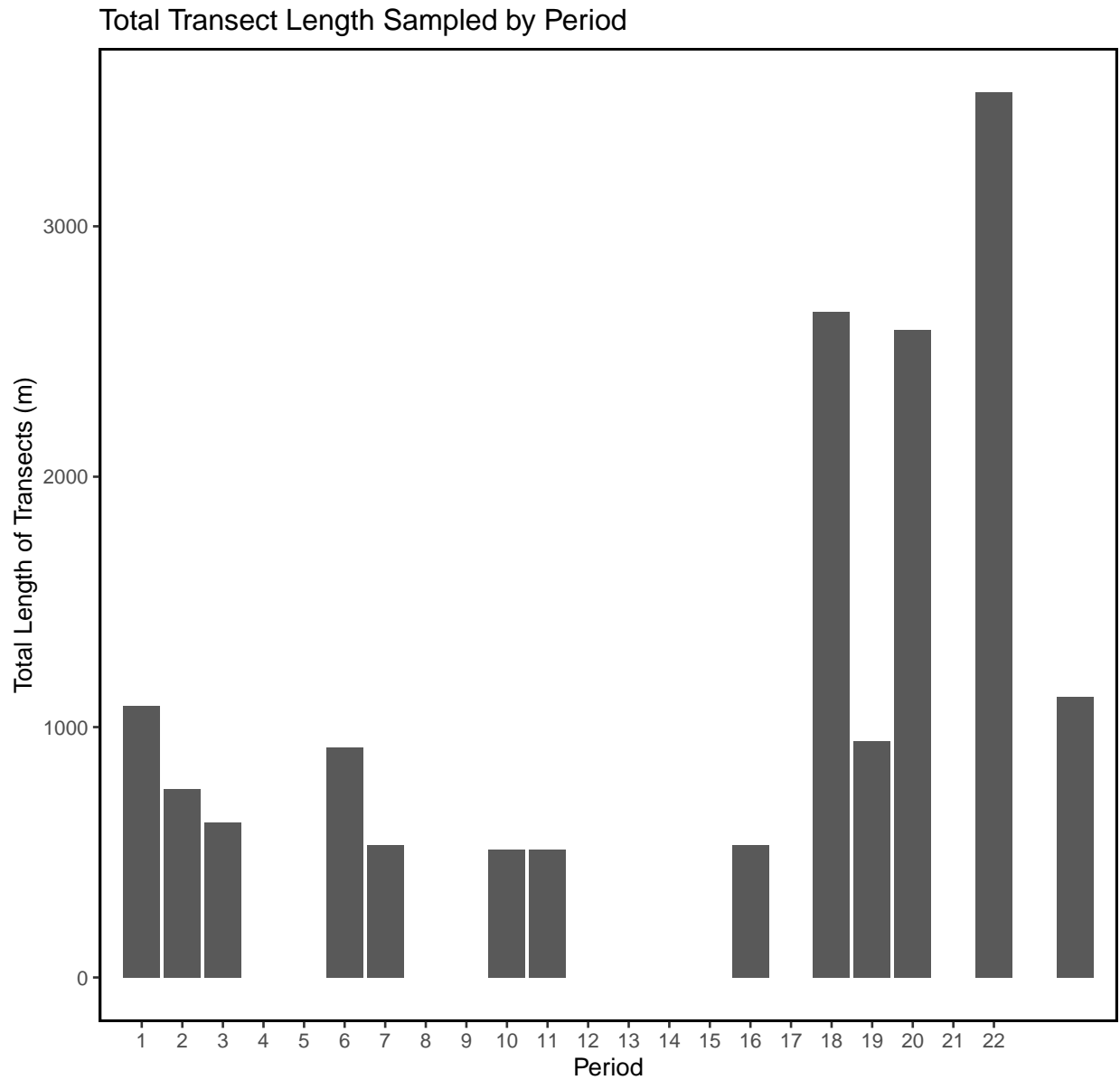


Figure – Bar plot of total transect length in meters sampled by strata for all periods.



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	1577	735	2856
CK	857	444	1091	1190933	1.27	214	438	1277	862	490	1320
CR	1026	716	1035	1072162	1.01	153	727	1325	1026	758	1348
HB	902	364	1047	1095622	1.16	158	592	1211	909	617	1236
LC	1136	695	1442	2078638	1.27	99	942	1330	1137	958	1330
LT	1040	868	590	348447	0.57	139	768	1313	1037	799	1330
NN	786	727	649	420847	0.83	196	403	1169	790	469	1209

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	986	764	1033	1066109	1.05	95	800	1172	987	822	1181
N_PILLOT	1318	1136	925	856059	0.70	239	850	1787	1333	928	1803
N_Y	2439	1789	2019	4076080	0.83	351	1750	3128	2436	1792	3128
Y_N	770	435	904	817434	1.17	65	642	898	773	653	894
Y_Y	2455	1506	2859	8175013	1.16	738	1008	3901	2446	1250	3886

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	1046	1806
2	890	476	945	893727	1.06	176	546	1234	883	586	1254
3	738	296	817	668064	1.11	167	411	1065	741	435	1076
6	433	176	534	284791	1.23	96	245	621	432	258	624
7	50	29	56	3186	1.12	20	11	90	51	16	90
10	1207	1074	671	449607	0.56	237	743	1672	1215	786	1686
11	886	776	678	459708	0.77	240	416	1356	872	463	1334
16	494	366	467	217855	0.95	165	170	817	497	225	827
18	982	695	935	874733	0.95	120	748	1217	987	774	1232
19	555	329	573	328431	1.03	97	365	745	553	369	743
20	1844	1253	2125	4517189	1.15	310	1236	2451	1845	1313	2541
22	1334	702	1693	2867783	1.27	242	860	1808	1344	944	1831
24	1463	1102	1301	1693414	0.89	277	919	2007	1469	971	2020

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	258	175	359
CK	241	112	321	102927	1.33	62.9	118	364	240	129	372
CR	283	178	294	86605	1.04	43.4	198	368	283	199	372
HB	257	101	303	92052	1.18	45.7	168	347	257	173	344
LC	154	122	144	20798	0.94	9.9	134	173	154	135	173
LT	283	275	141	19841	0.50	33.2	218	348	282	223	348
NN	223	164	224	50283	1.01	67.6	90	355	221	119	371

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	260	189	250	62385	0.96	23	215	305	259	215	304
N_PILOT	118	121	59	3467	0.50	15	88	148	118	92	146
N_Y	152	138	91	8233	0.60	16	121	183	152	120	182
Y_N	185	111	215	46198	1.16	16	154	215	185	156	218
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
1	393	300.8	362.6	131444	0.92	56	283.8	503.1	392	289.6	514.9
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	252	156.7	351.3
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	234	131.2	343.4
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	123	76.3	181.8
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.7	9.3
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	123	81.5	167.0
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	91	49.0	138.2
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	50	22.6	82.4
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	177	144.4	211.1
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	154	102.0	208.4
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	257	206.7	313.4
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	138	112.0	162.1
24	187	178.5	93.8	8801	0.50	20	147.7	226.1	187	149.9	225.6

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	303	167	464
CK	78	32	106	11170	1.36	37	4.3	151	79	19	157
CR	60	47	38	1444	0.63	13	35.2	85	60	38	85
HB	44	21	45	2000	1.02	15	14.8	73	44	19	72
LC	114	67	132	17508	1.16	10	94.1	133	113	94	132
LT	230	176	191	36661	0.83	45	141.3	318	231	152	322
NN	104	74	96	9216	0.92	29	47.6	161	104	59	170

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	155	83	185	34151	1.20	20	116	193	154	117	194
N_PILOT	98	89	65	4243	0.67	17	65	131	97	69	131
N_Y	101	66	103	10584	1.01	18	66	136	101	67	137
Y_N	103	53	114	13058	1.11	12	80	126	102	81	125
Y_Y	206	104	277	76865	1.34	72	66	347	201	83	351

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	40	124
11	50	40	25	620	0.49	8.8	33.2	68	50	36	68
16	44	28	41	1708	0.93	14.6	15.6	73	44	20	71
18	133	55	192	36903	1.44	24.6	85.1	182	134	91	185
19	63	44	67	4548	1.08	11.6	40.0	85	62	41	87
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	144	249
24	132	122	100	9901	0.76	21.2	89.9	173	132	92	174

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	39.0	71
CK	21	11.3	28	757	1.29	9.7	2.3	40	22	5.6	42
CR	18	10.8	16	247	0.87	5.2	7.8	28	18	9.4	29
HB	13	8.0	14	201	1.12	4.7	3.4	22	13	5.2	22
LC	17	9.4	20	415	1.18	1.5	14.2	20	17	14.5	20
LT	57	48.8	37	1377	0.65	8.7	40.2	74	58	42.1	76
NN	28	16.7	23	530	0.82	6.9	14.6	42	28	16.3	41

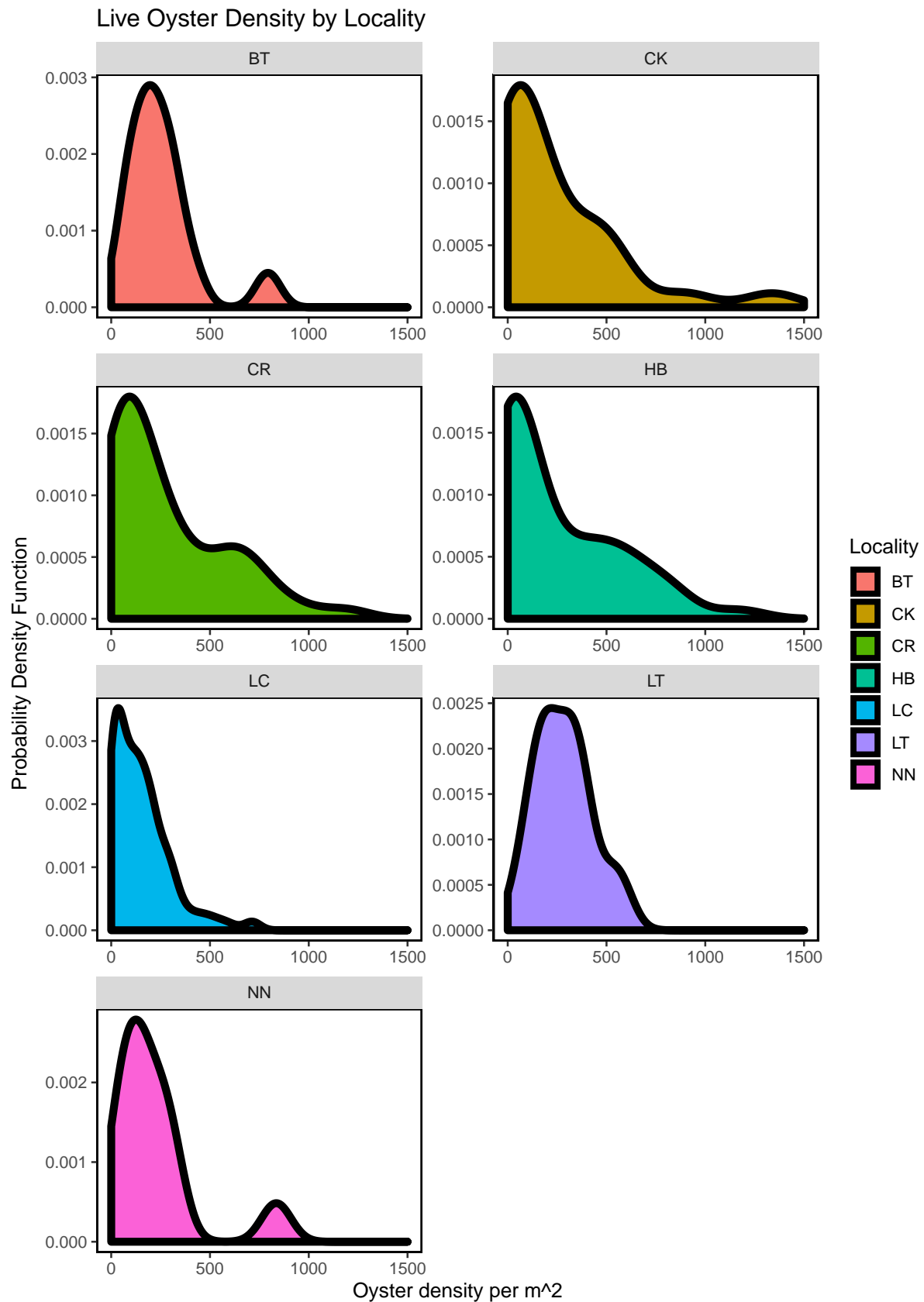
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	33.7	28.5	31.7	1003	0.94	3.40	27.1	40.4	33.7	27.6	40.4
N_PILOT	8.7	8.7	4.3	18	0.49	1.11	6.5	10.9	8.6	6.7	10.7
N_Y	6.2	4.9	4.5	20	0.72	0.78	4.7	7.7	6.2	4.8	7.7
Y_N	23.0	13.6	24.0	575	1.04	2.46	18.2	27.8	22.9	18.4	27.9
Y_Y	8.9	7.9	6.6	44	0.74	1.70	5.5	12.2	8.9	5.6	12.2

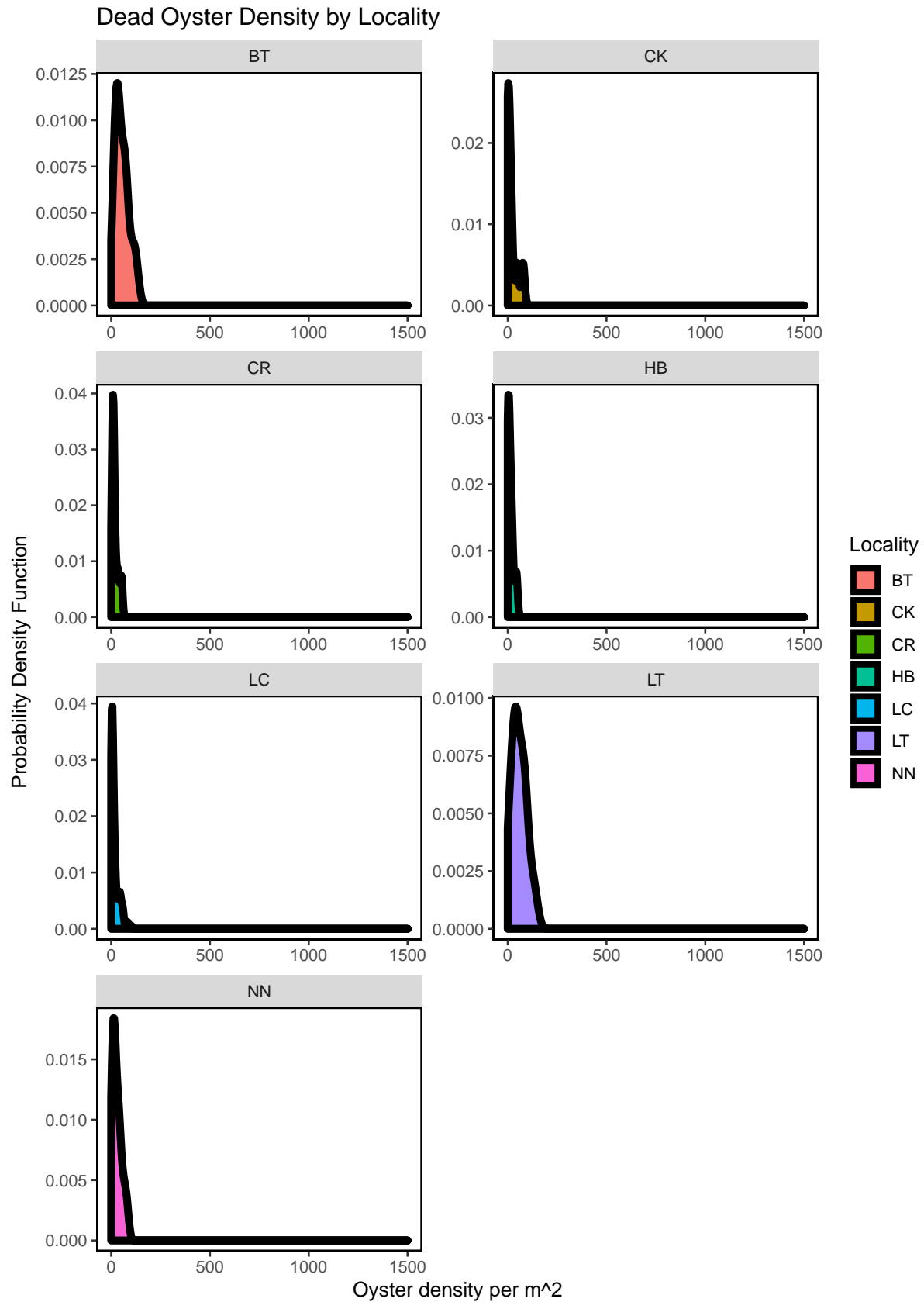
Dead Oyster Density by Period

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	1.1	5.0
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.2	4.2	12.8
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.6	6.8
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	2.0	7.1
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.4	19.5	34.3
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.6	11.7	24.2
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.8	20.7	36.4
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.6	20.8	36.6
24	23.7	14.9	22.9	526.2	0.97	4.89	14.11	33.3	23.7	15.1	33.2

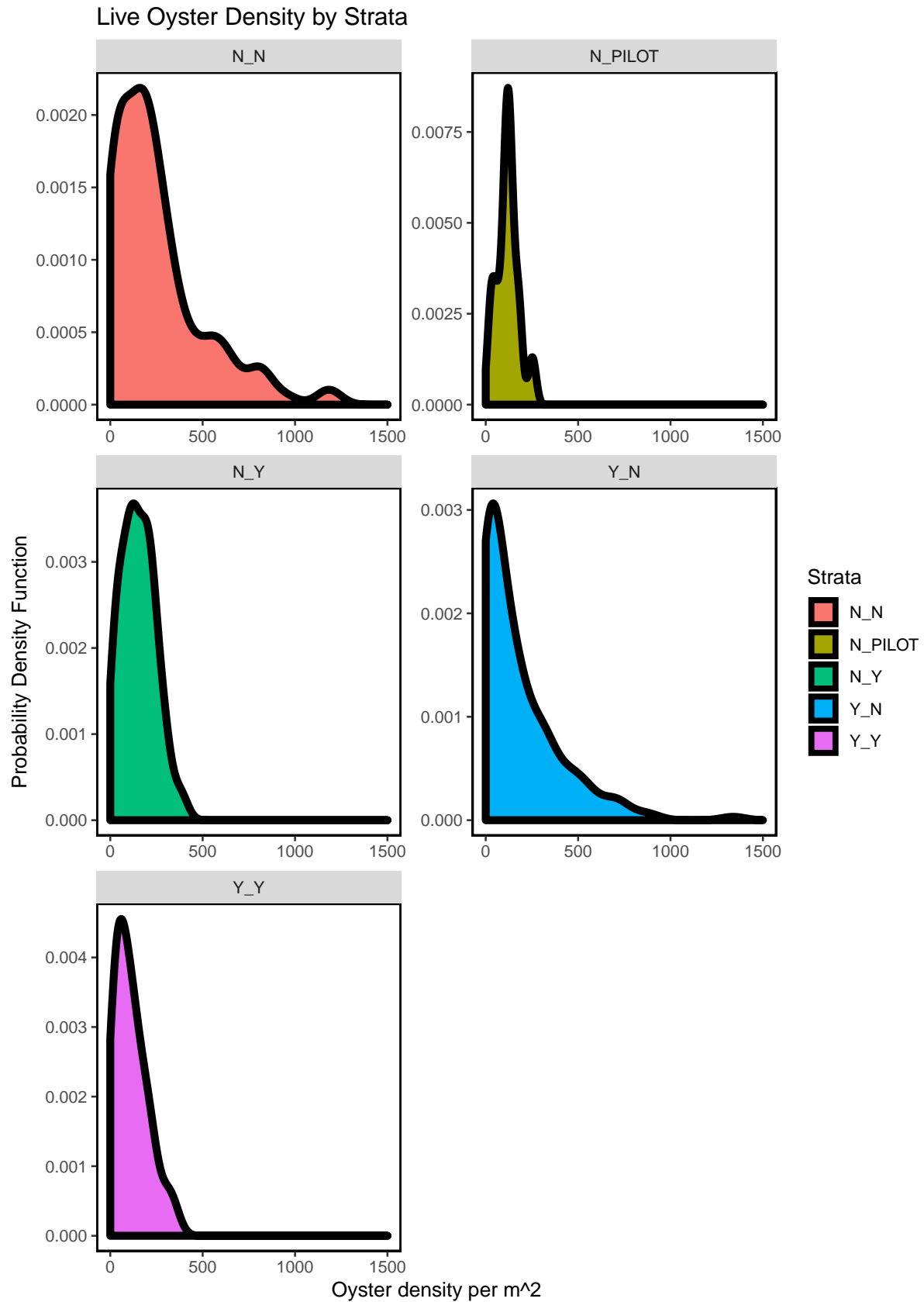
Summary Density Plots for all Periods



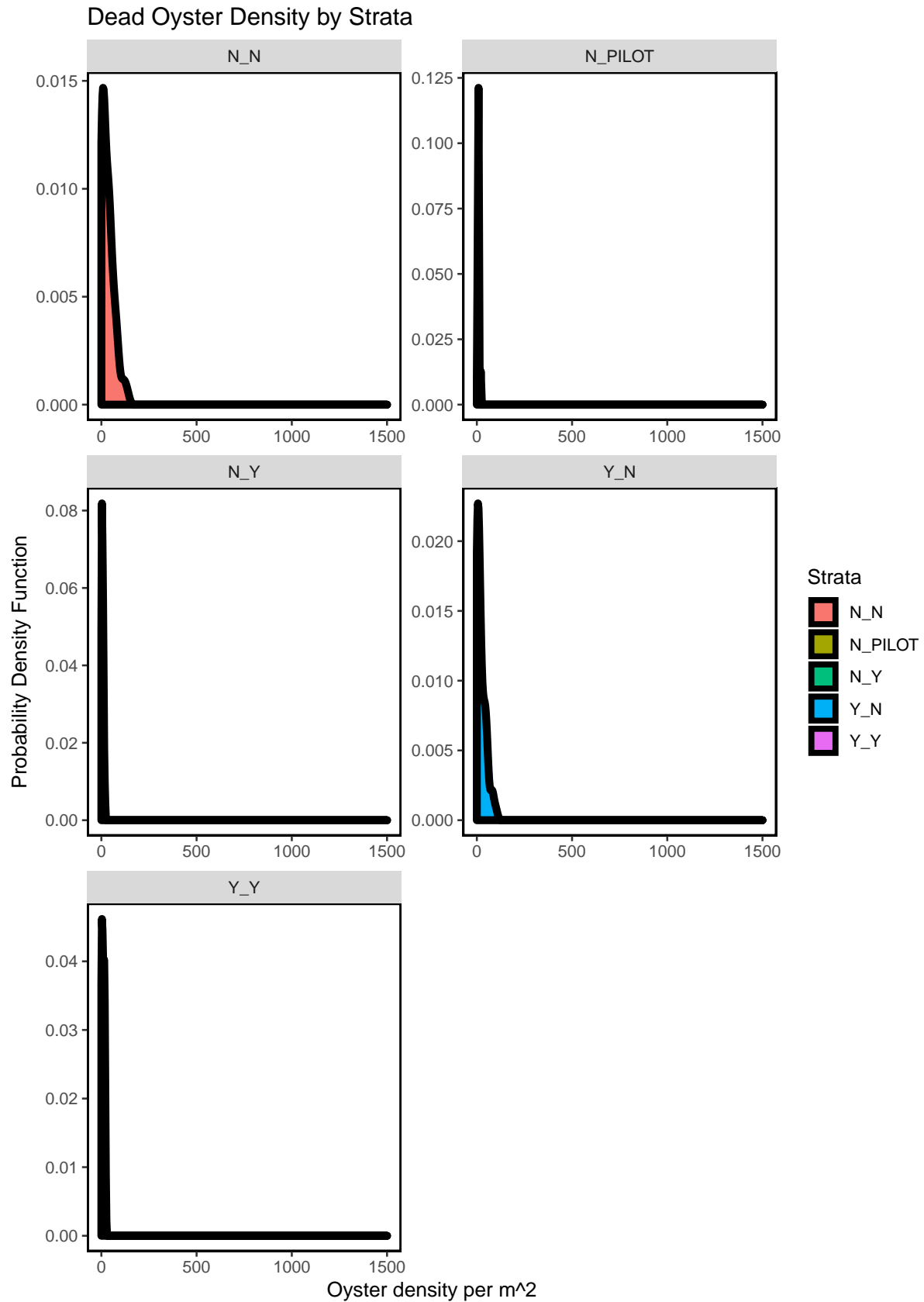
Figure– Calculated live oyster density by locality for all periods including period 22 (current period).



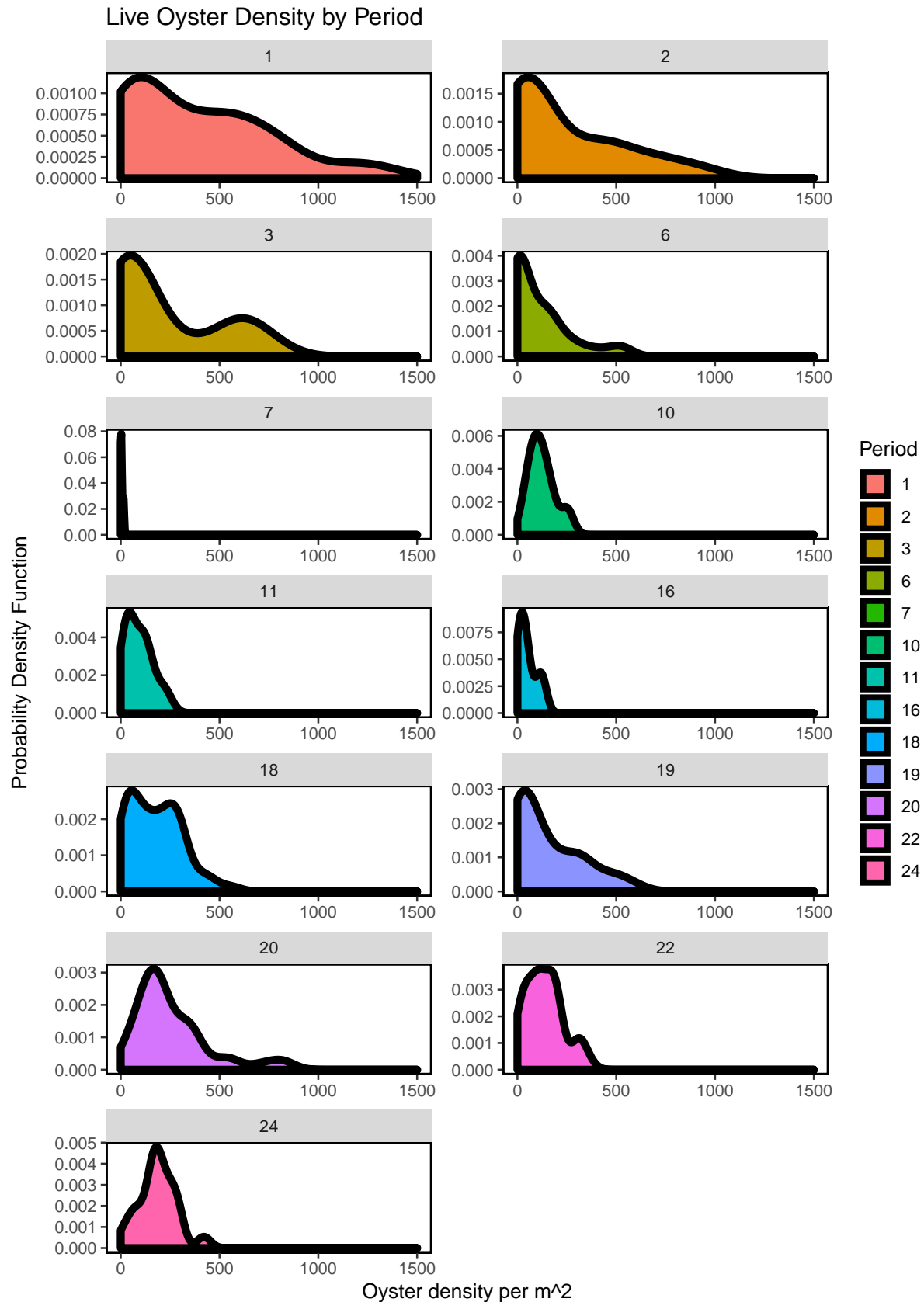
Figure– Calculated dead oyster density by locality for all periods including period 22 (current period).



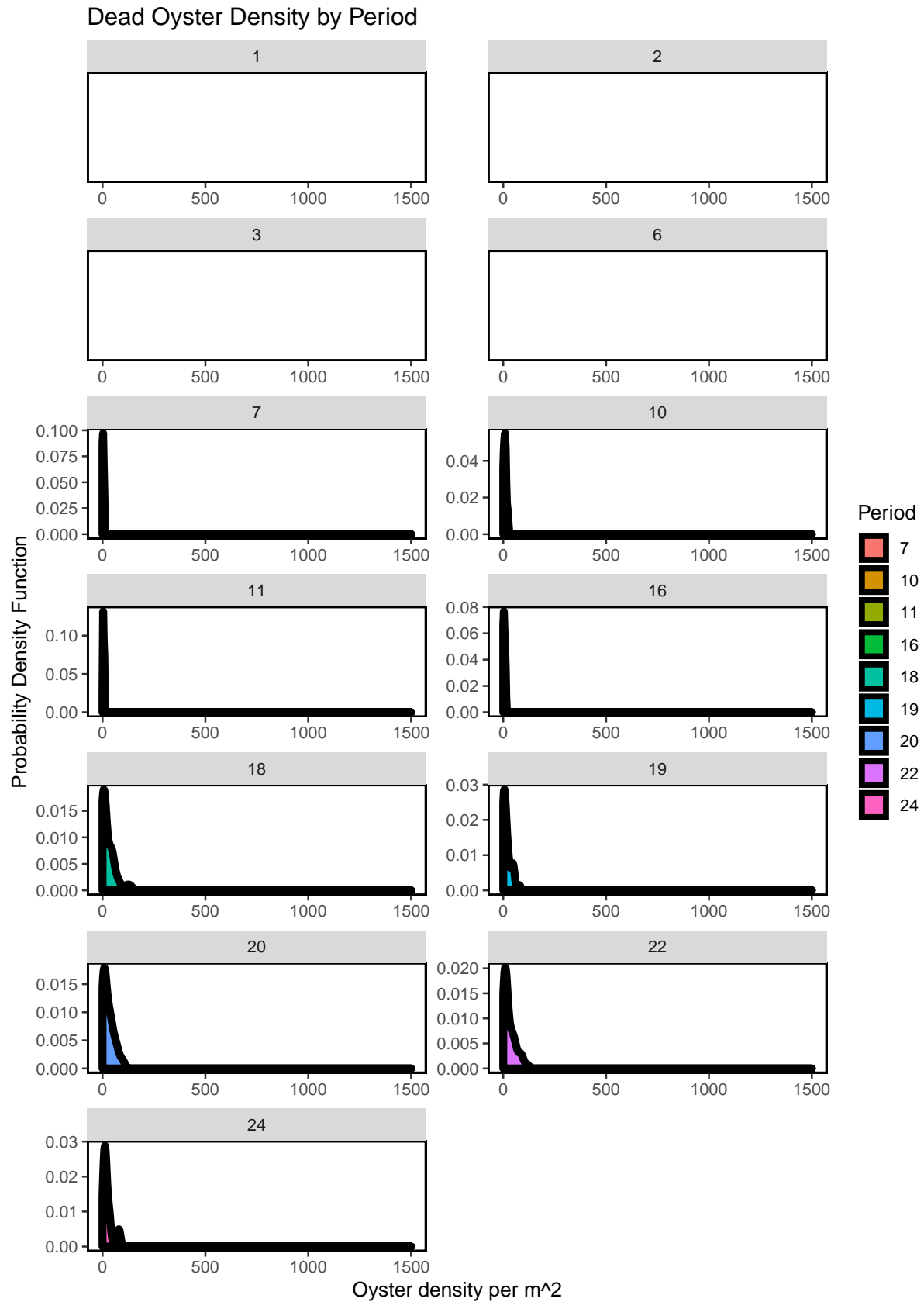
Figure– Calculated live oyster density by strata for all periods including period 22 (current period).



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

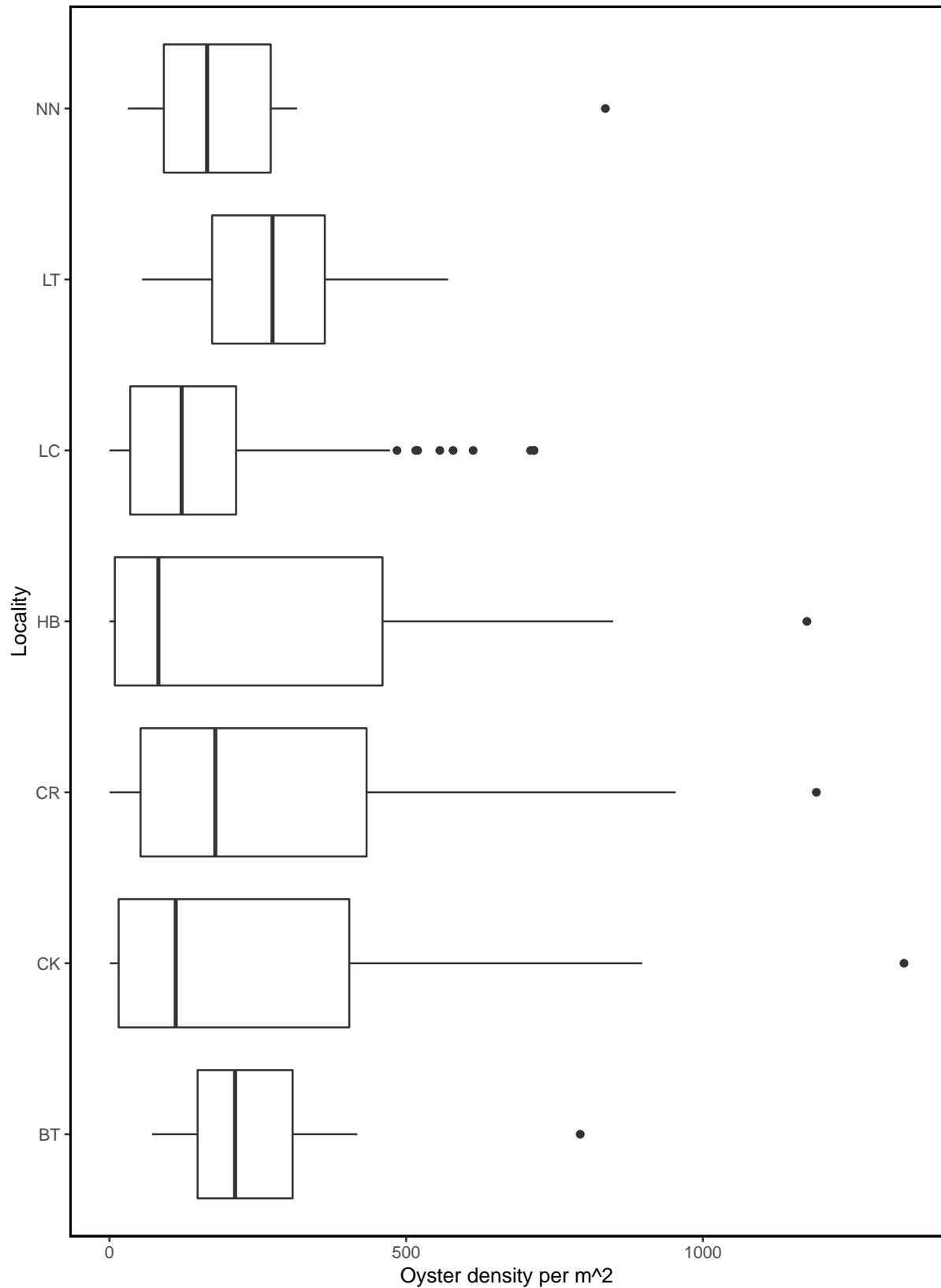


Figure– Calculated live oyster density for all periods including period 22 (current period) using a probability densi



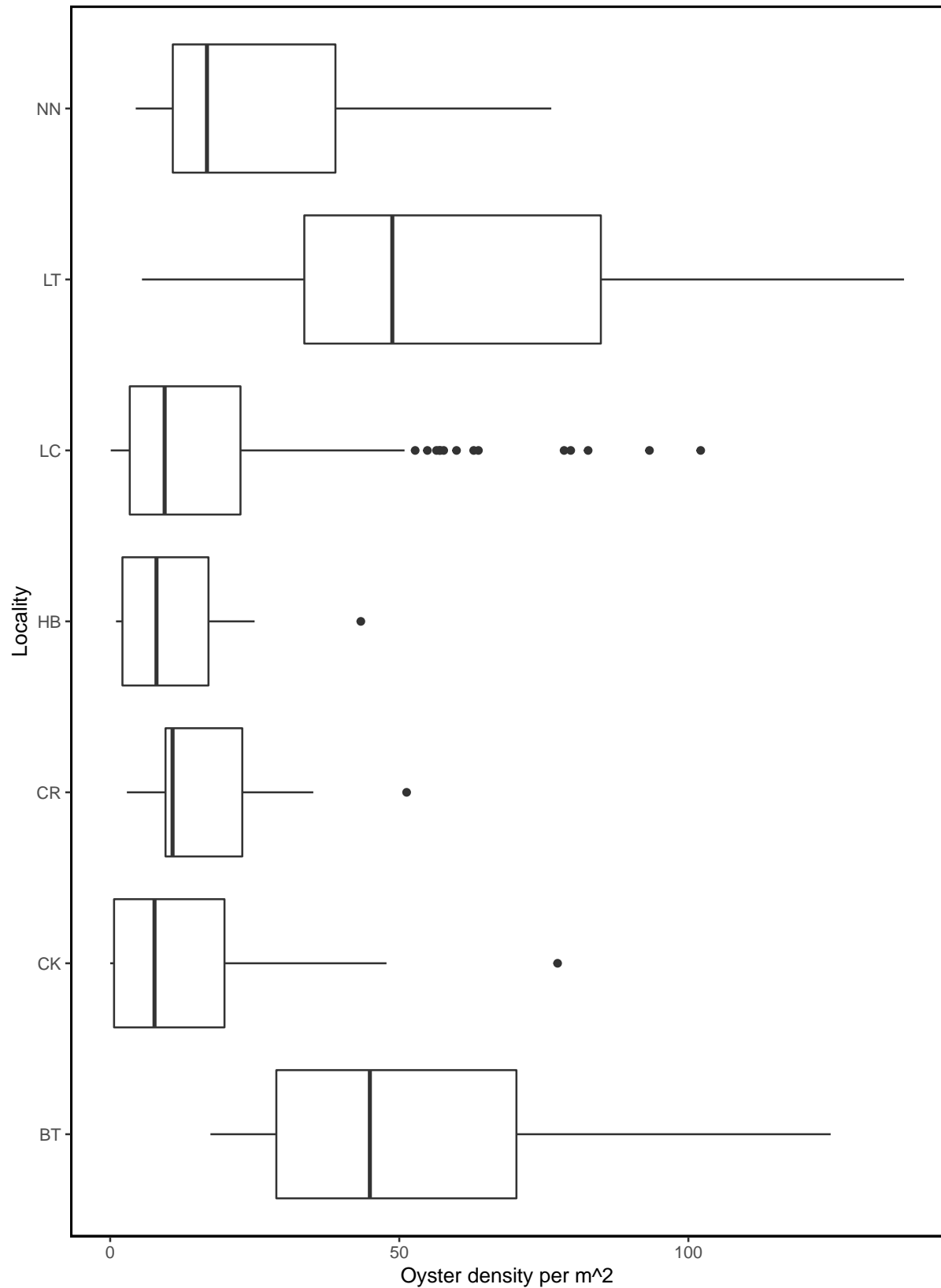
Figure– Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

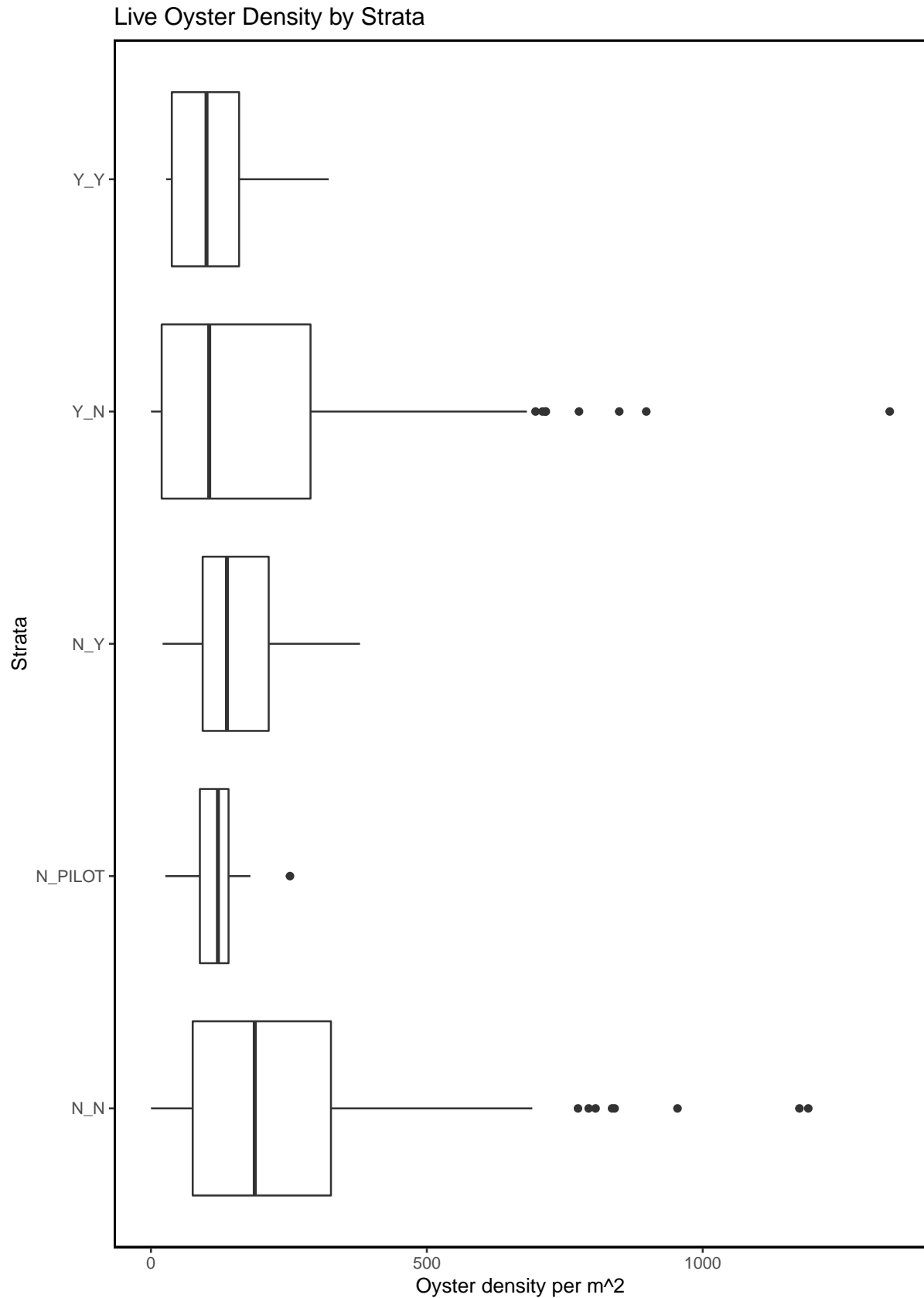


Figure– Box plot depicting live oyster density by locality for all periods including period 22 (current period).

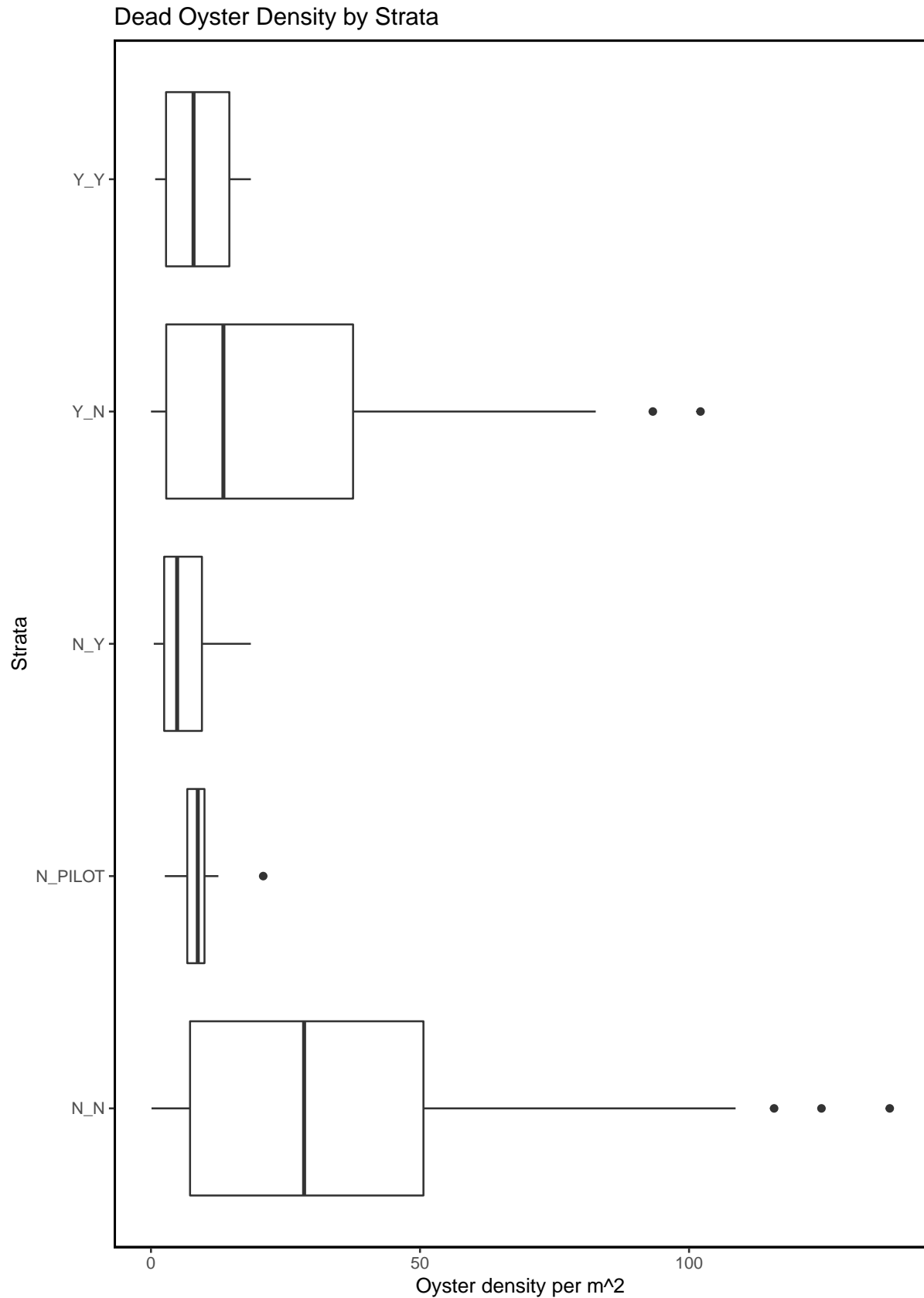
Dead Oyster Density by Locality



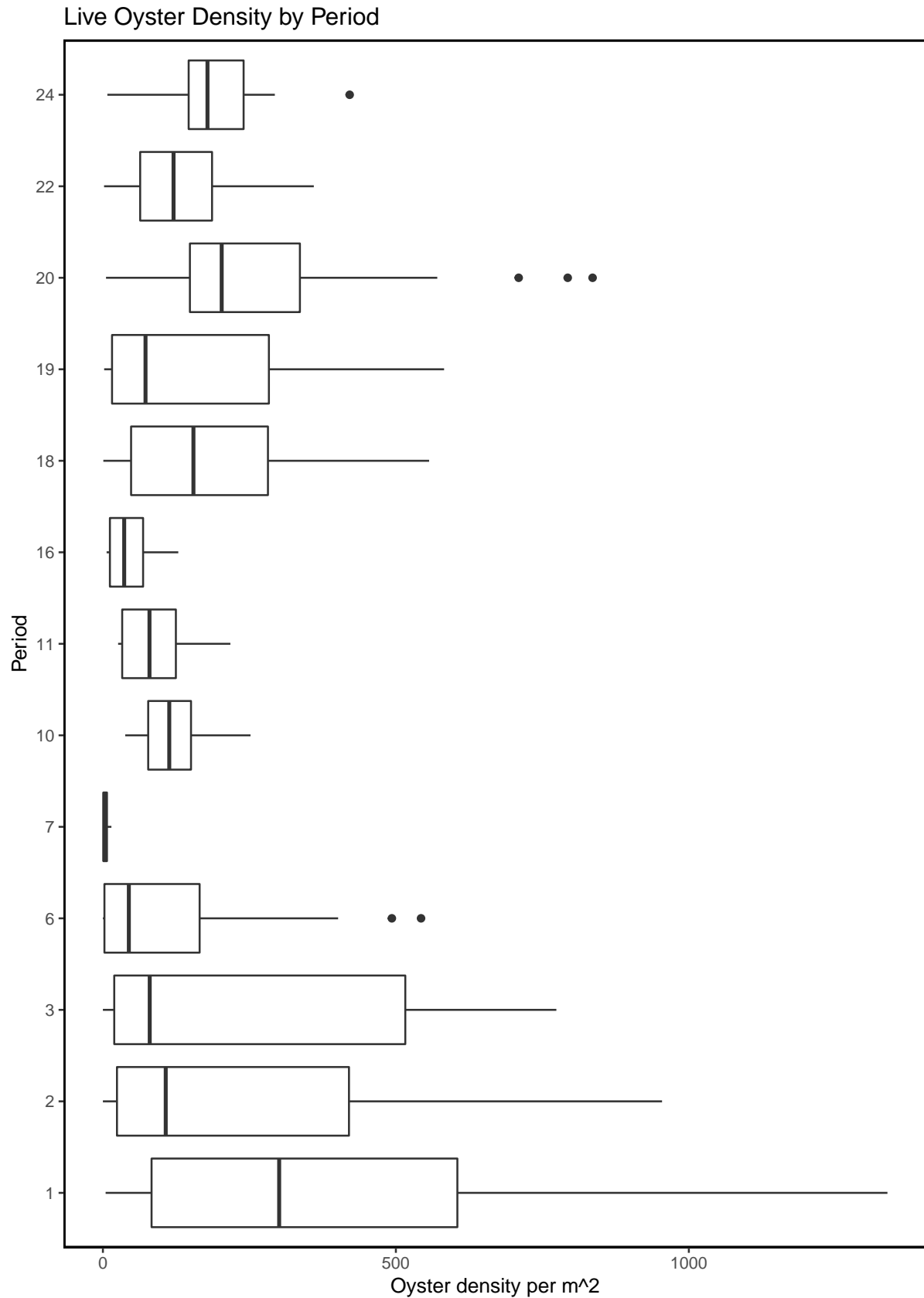
Figure– Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



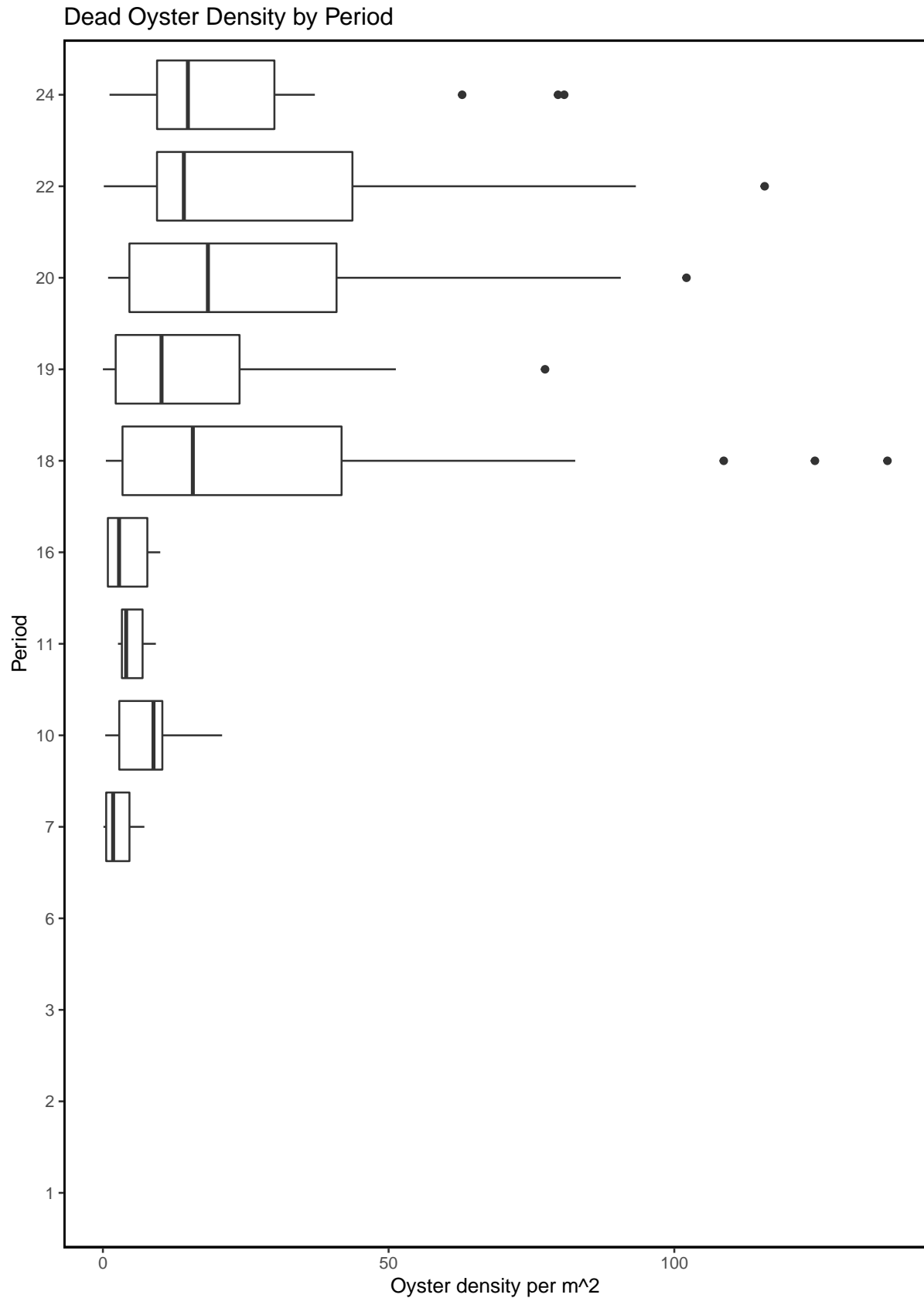
Figure– Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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

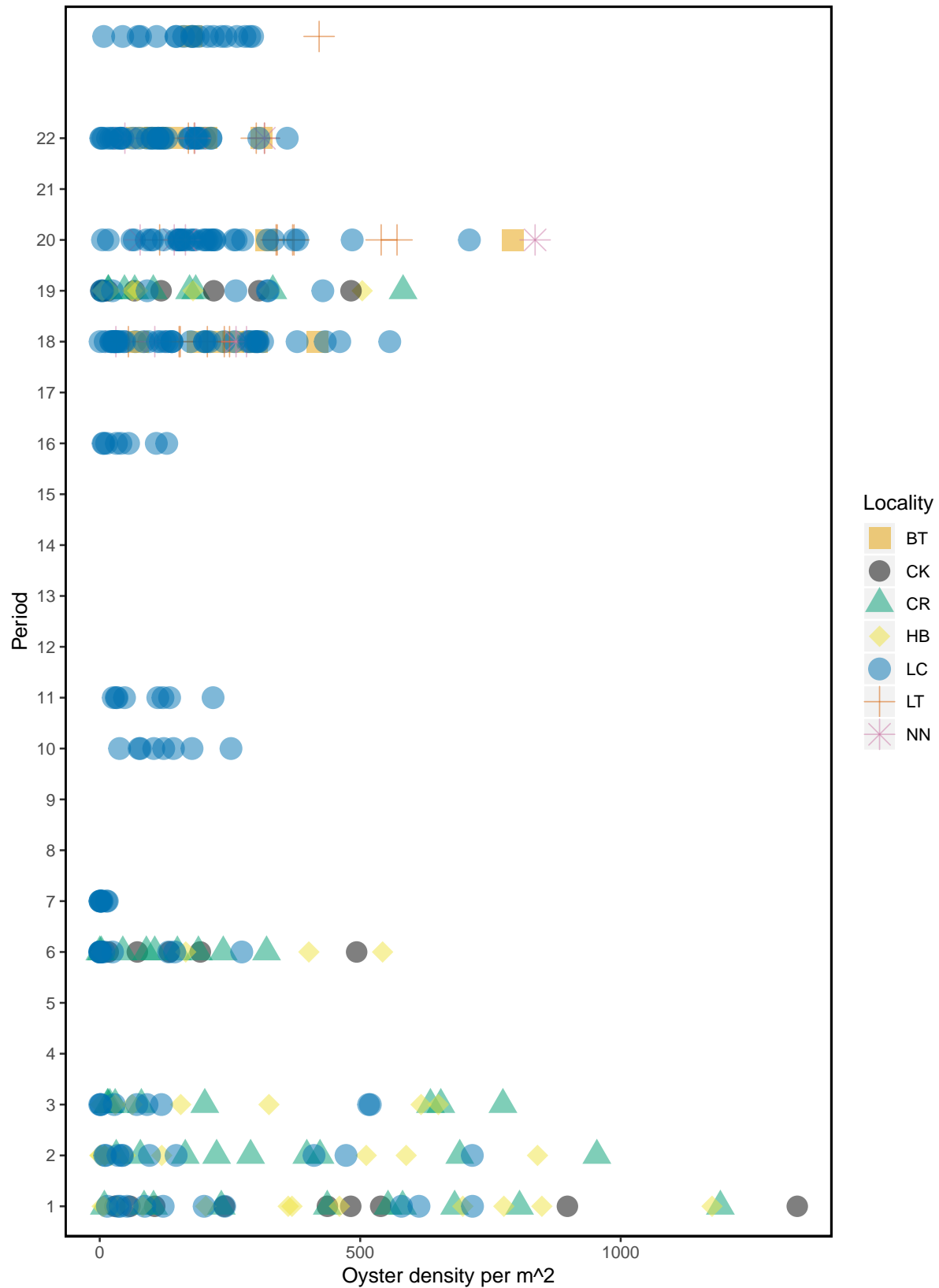


Figure – Live oyster density by locality and period for all periods including period 22 (current period).

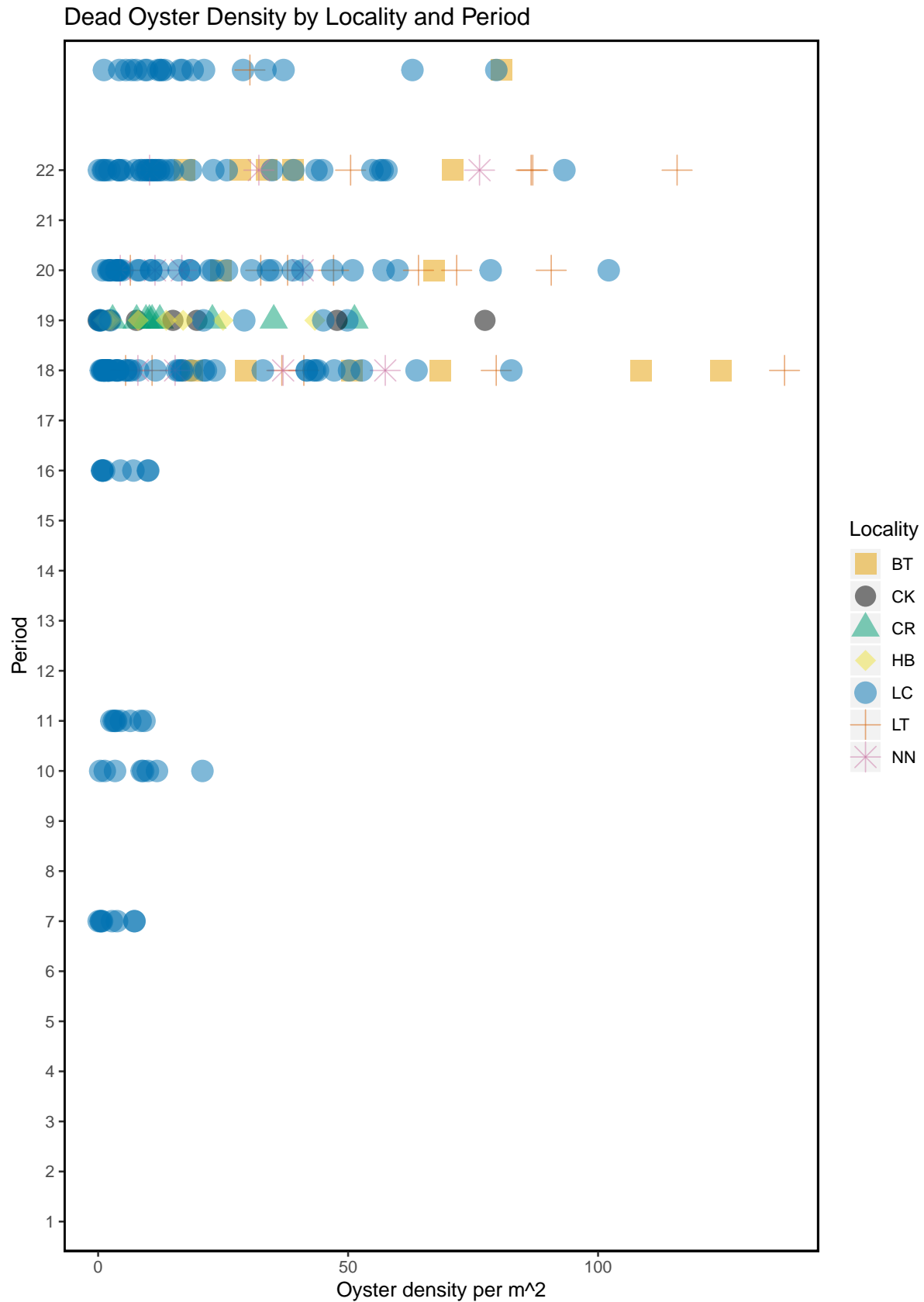


Figure – Dead oyster density by locality and period for all periods including period 22 (current period).

Live Oyster Density by Strata and Period

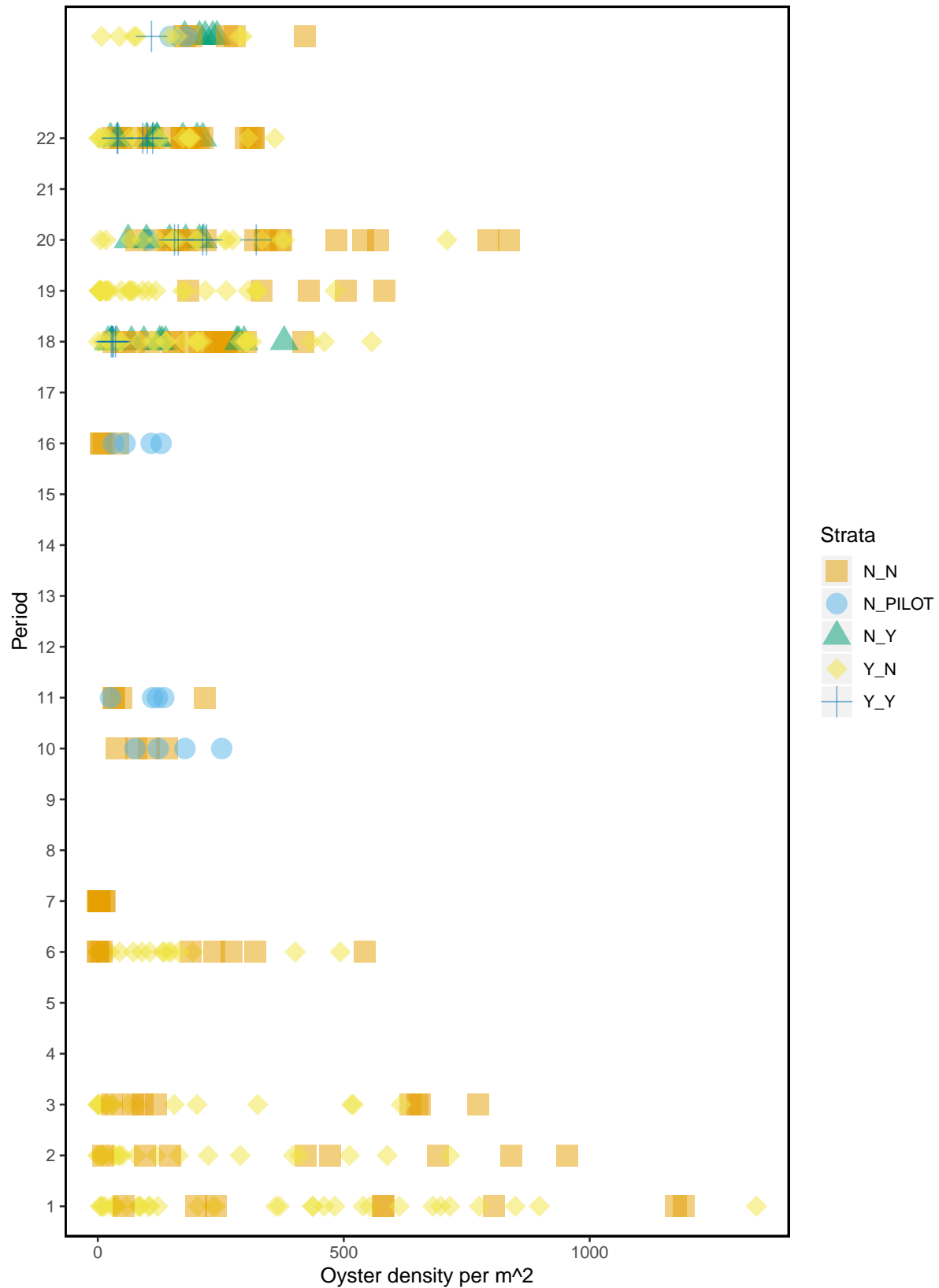
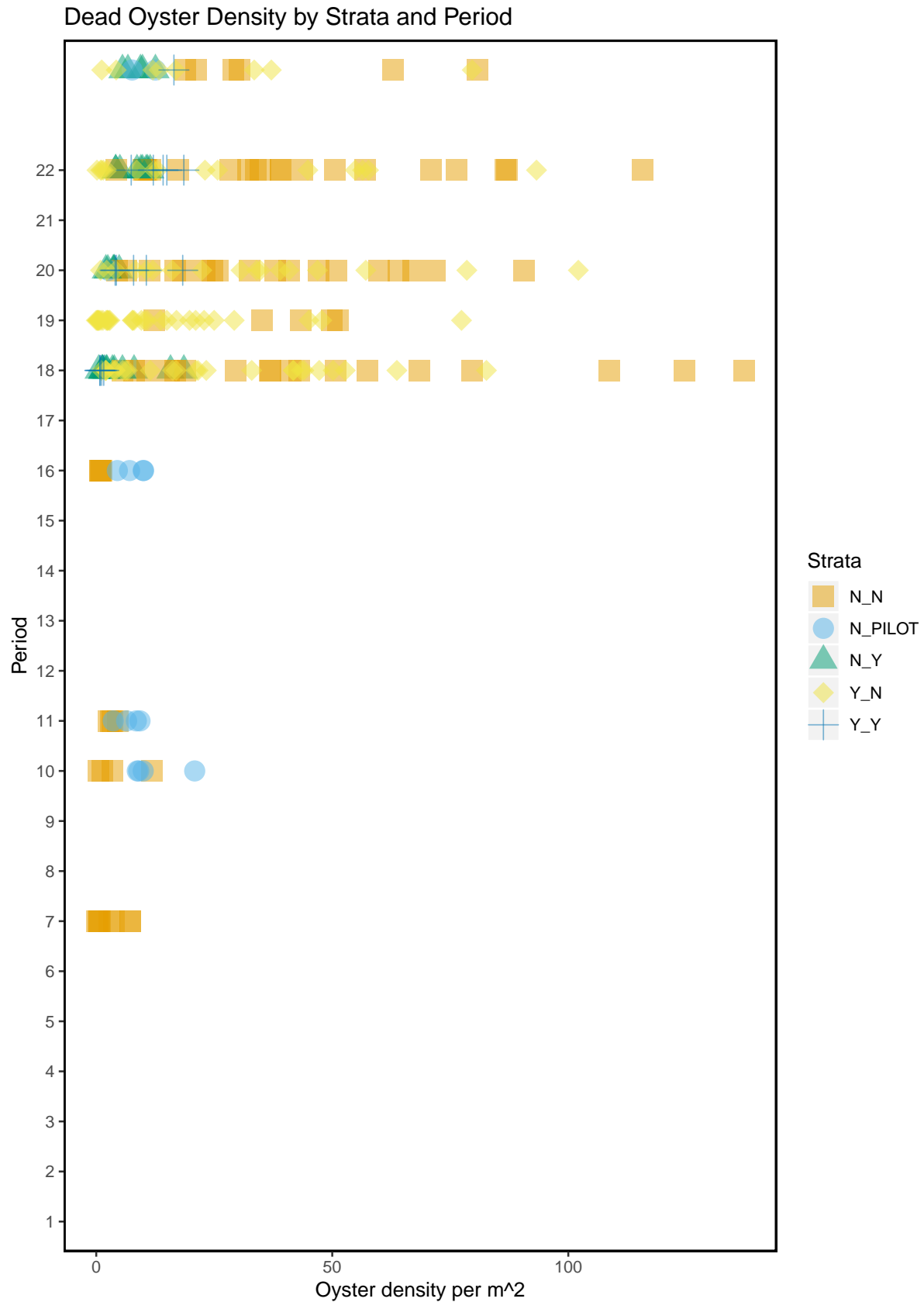


Figure – Live oyster density by strata and period for all periods including period 22 (current period).



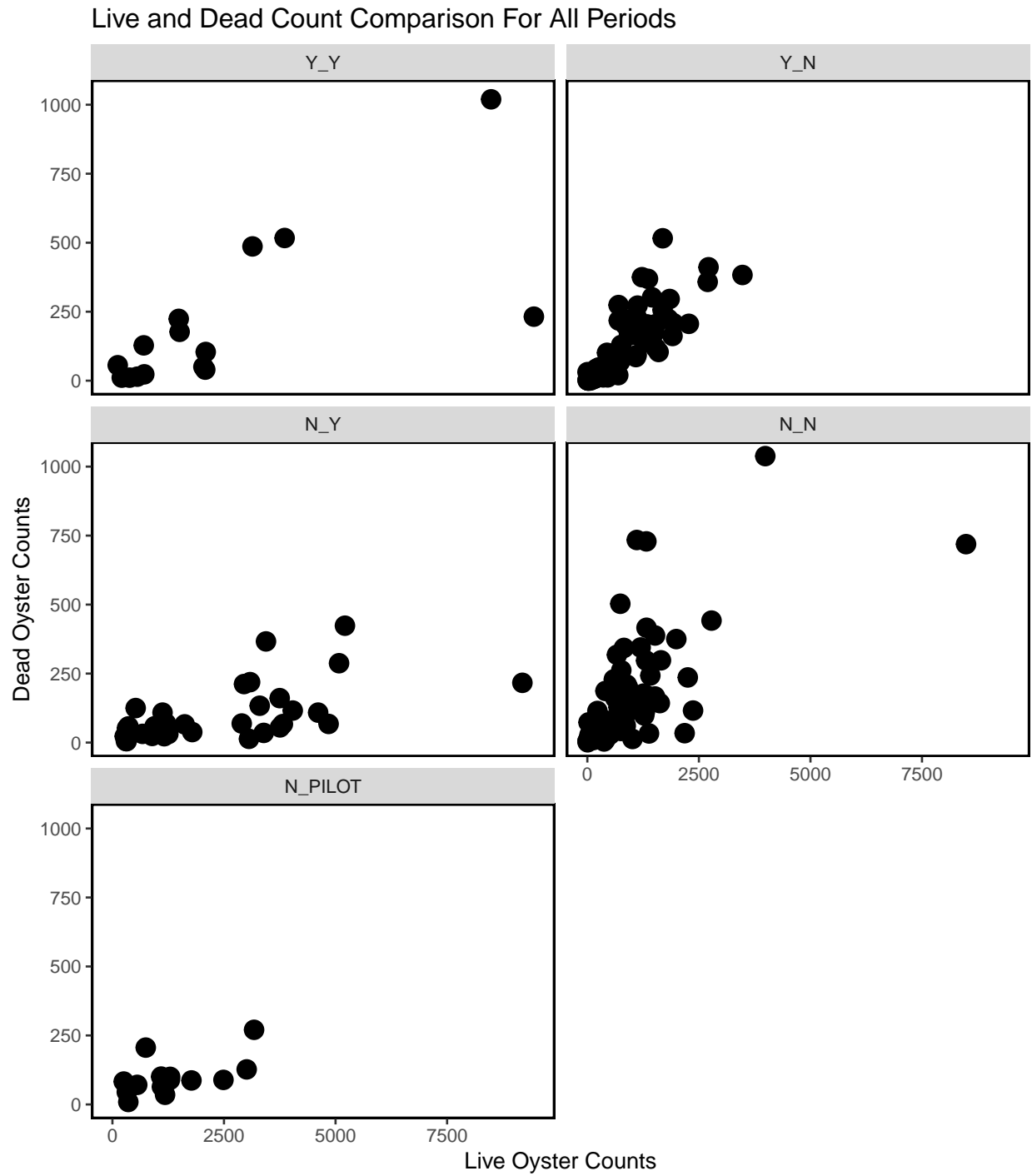


Figure- Live and dead oyster comparison for all periods, last sample date of period 24 is 2021-12-08.

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).

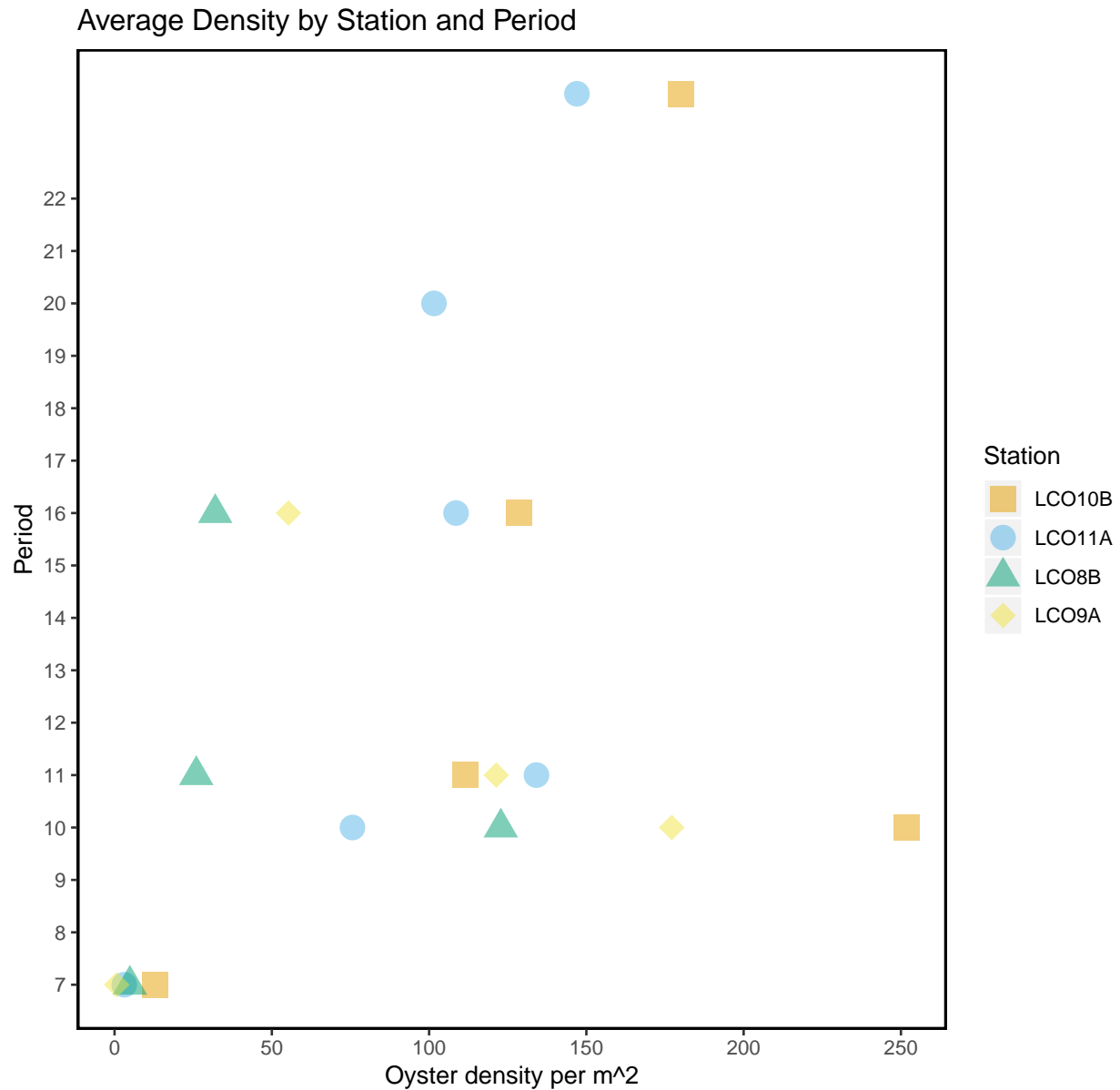


Figure – Average live oyster density comparison by station and period for all stations that were sampled during the pilc

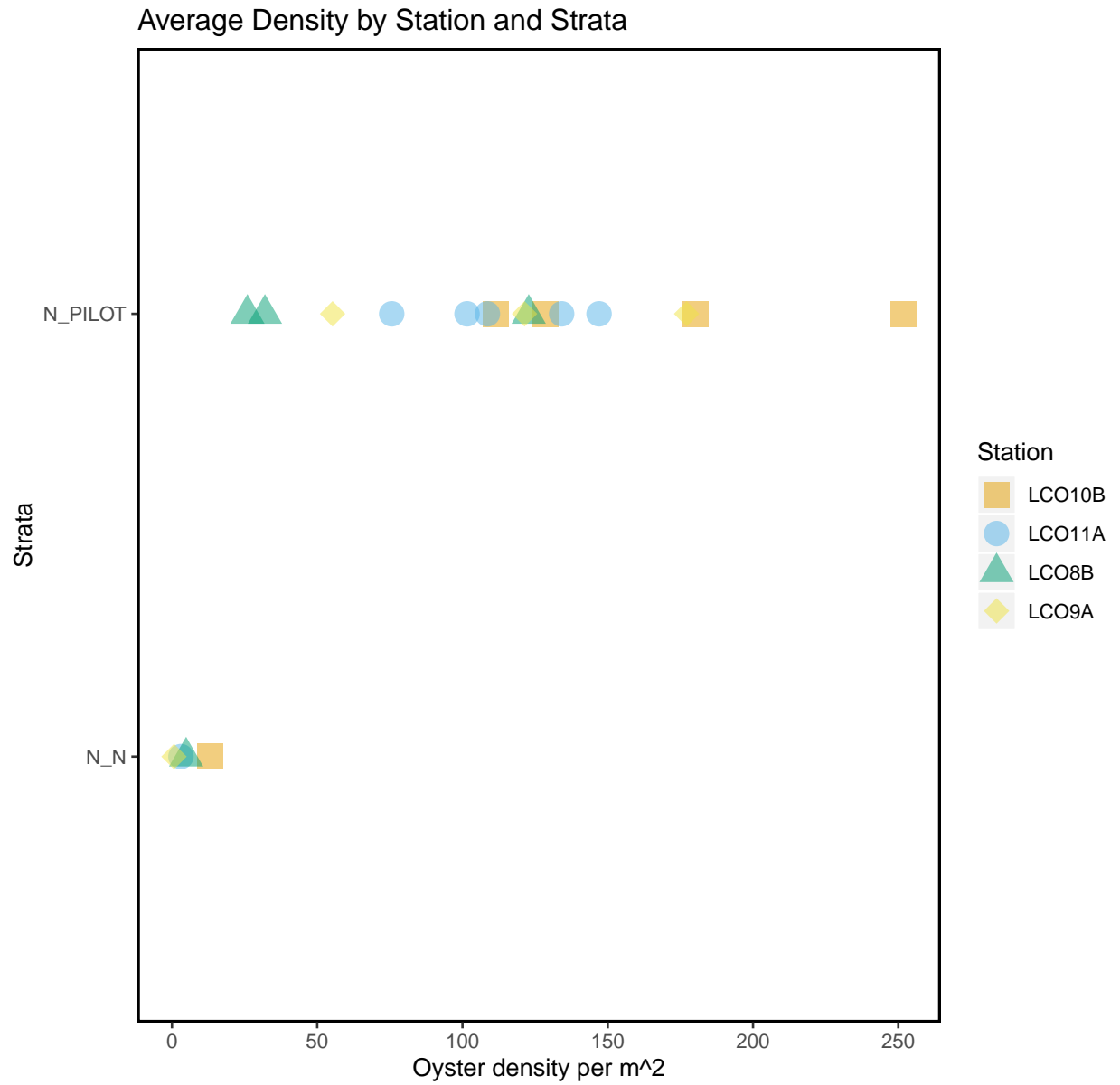


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

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