

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 4 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, 122 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

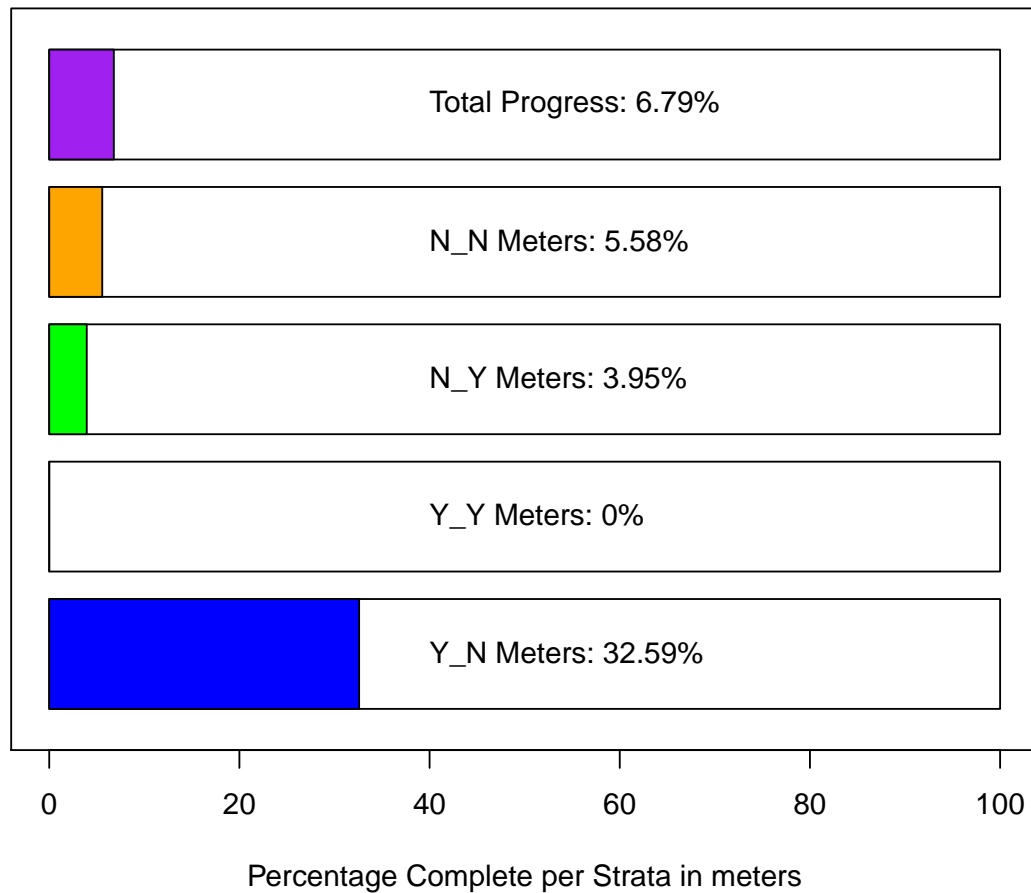
Definition of Strata

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	1665	897	2257	5094708	1.36	626	438	2892	1680	733	2940
LC	1358	761	1686	2841011	1.24	152	1060	1656	1356	1074	1660
LT	1051	877	607	368075	0.58	147	762	1339	1045	790	1337
NN	786	727	649	420847	0.83	196	403	1169	789	464	1178

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1094	816	1211	1465690	1.11	160	780	1409	1089	843	1454
N_PILOT	356	356	NA	NA	NA	NA	NA	NA	183	11	348
N_Y	2299	1253	2100	4409483	0.91	390	1535	3063	2304	1587	3140
Y_N	801	638	763	581901	0.95	96	613	989	798	627	979
Y_Y	2524	1772	2954	8726548	1.17	790	976	4071	2500	1208	3975

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	981	755	1233
20	1844	1253	2125	4517189	1.15	310	1236	2451	1818	1310	2439
22	1334	702	1693	2867783	1.27	242	860	1808	1338	913	1881
24	462	441	407	165635	0.88	154	161	764	460	222	740

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	262	218	190	36278	0.73	53	158	365	262	172	371
LC	161	146	125	15635	0.78	11	139	183	161	141	185
LT	275	249	141	19819	0.51	34	208	342	273	212	340
NN	223	164	224	50283	1.01	68	90	355	223	121	373

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	236	192	163	26635	0.69	22	194	279	236	198	279
N_PILOT	102	102	NA	NA	NA	NA	NA	NA	51	3	99

N_Y	142	125	92	8503	0.65	17	108	175	142	112	175
Y_N	176	153	147	21541	0.84	18	139	212	174	141	211
Y_Y	113	96	91	8301	0.80	24	65	161	113	71	163

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	143	207
20	256	203	187	35057	0.73	27	203	310	256	208	313
22	137	121	93	8638	0.68	13	111	163	138	112	163
24	115	146	71	5063	0.62	27	62	167	115	69	159

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	313	169	317	100240	1.01	88	141	485	320	172	491
LC	126	67	147	21539	1.16	13	100	152	126	102	153
LT	240	210	193	37090	0.80	47	148	331	240	156	331
NN	104	74	96	9216	0.92	29	48	161	106	58	167

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	204	135	207	42915	1.0	27	150	257	202.8	153	257
N_PILOT	9	9	NA	NA	NA	NA	NA	NA	4.9	1	9
N_Y	95	59	106	11233	1.1	20	56	134	94.1	59	134
Y_N	120	79	122	14968	1.0	15	90	151	120.7	92	153
Y_Y	205	80	288	82752	1.4	77	54	356	208.6	78	372

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	132	90	185
20	148	107	140	19727	0.95	20	108	188	148	113	192
22	191	128	193	37399	1.01	28	137	245	193	145	245
24	52	60	30	921	0.58	11	30	75	52	32	71

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	52	39	34	1162	0.65	9.5	34	71	52	35	70
LC	20	11	21	462	1.09	1.9	16	23	20	16	24
LT	59	50	38	1415	0.64	9.1	41	77	59	42	75
NN	28	17	23	530	0.82	6.9	15	42	28	16	43

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	43.2	37.0	32.0	1026	0.74	4.24	34.9	51.5	43.3	35.4	51.2
N_PILOT	2.6	2.6	NA	NA	NA	NA	NA	NA	1.5	1.0	2.0
N_Y	5.8	4.1	4.5	21	0.78	0.84	4.2	7.5	5.8	4.2	7.5
Y_N	26.4	16.9	24.9	621	0.95	3.14	20.2	32.5	26.4	20.6	32.7
Y_Y	8.3	7.7	6.5	42	0.78	1.74	4.9	11.7	8.2	5.0	11.6

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	18.5	34	27	18.6	35
20	28	18	26	682	0.94	3.8	20.2	35	28	20.5	36
22	28	14	28	807	1.00	4.1	20.5	36	28	21.2	36
24	15	13	10	104	0.67	3.9	7.7	23	15	8.2	23

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

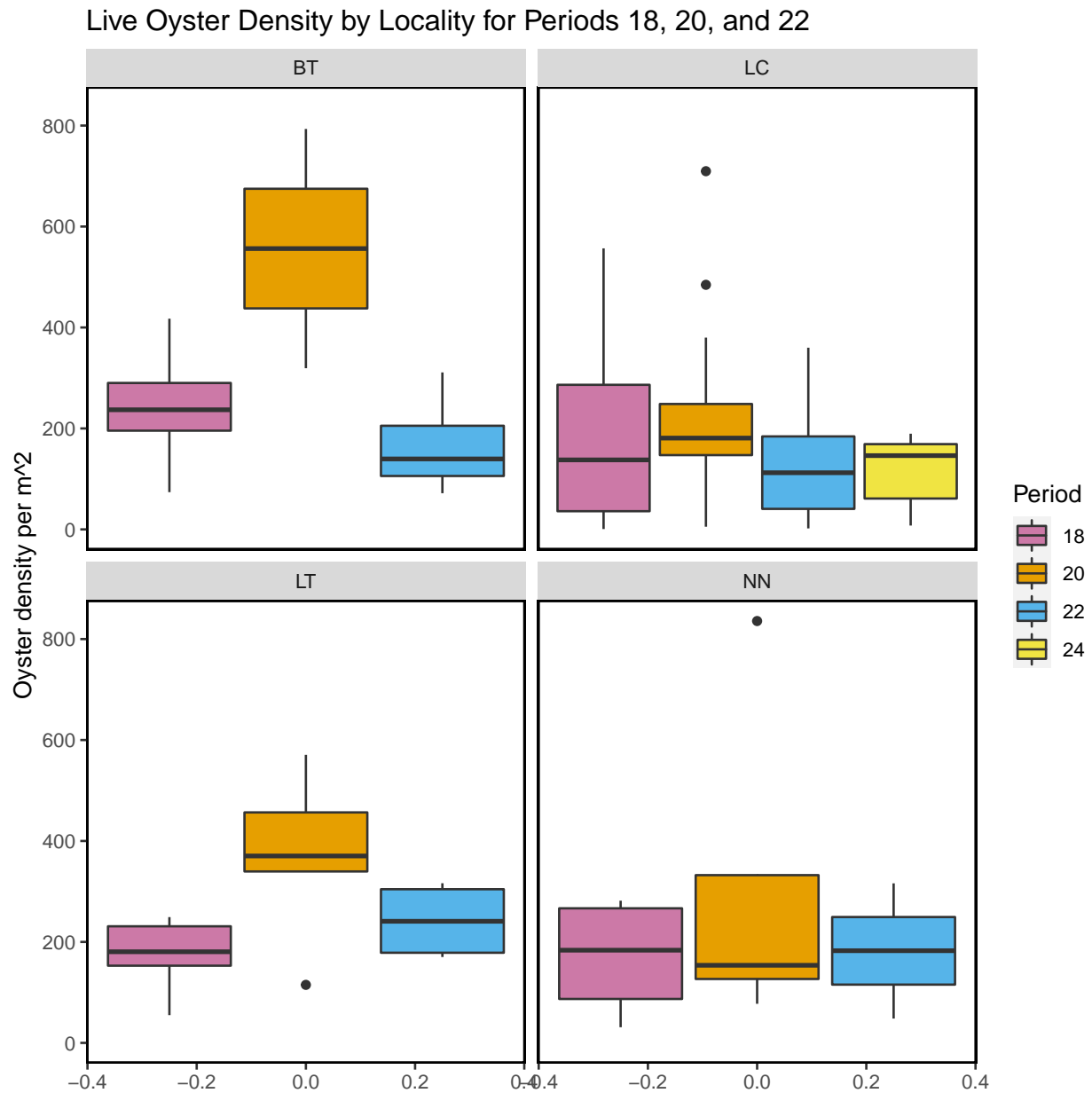


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-11-09.

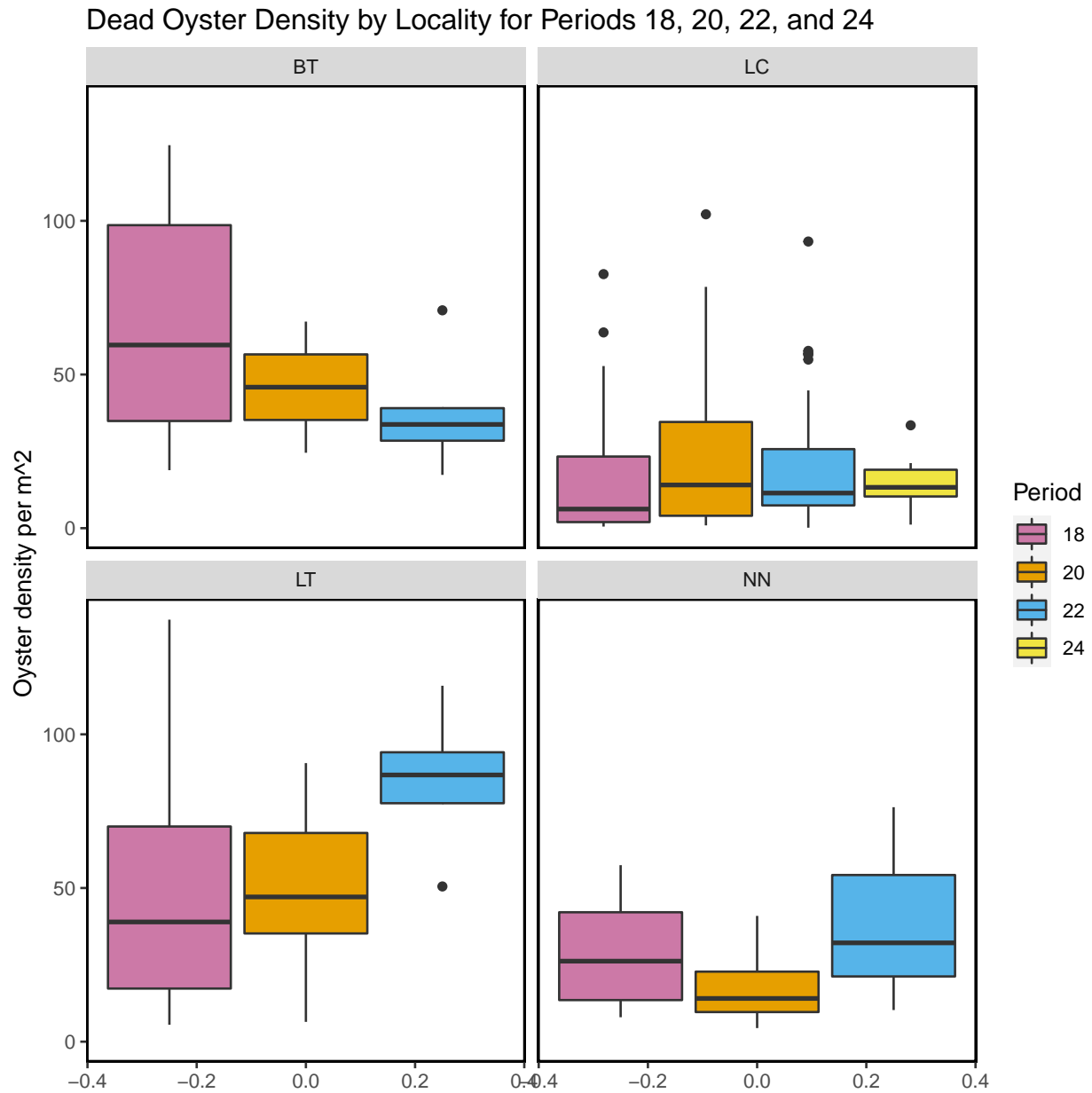


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-11-09.

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

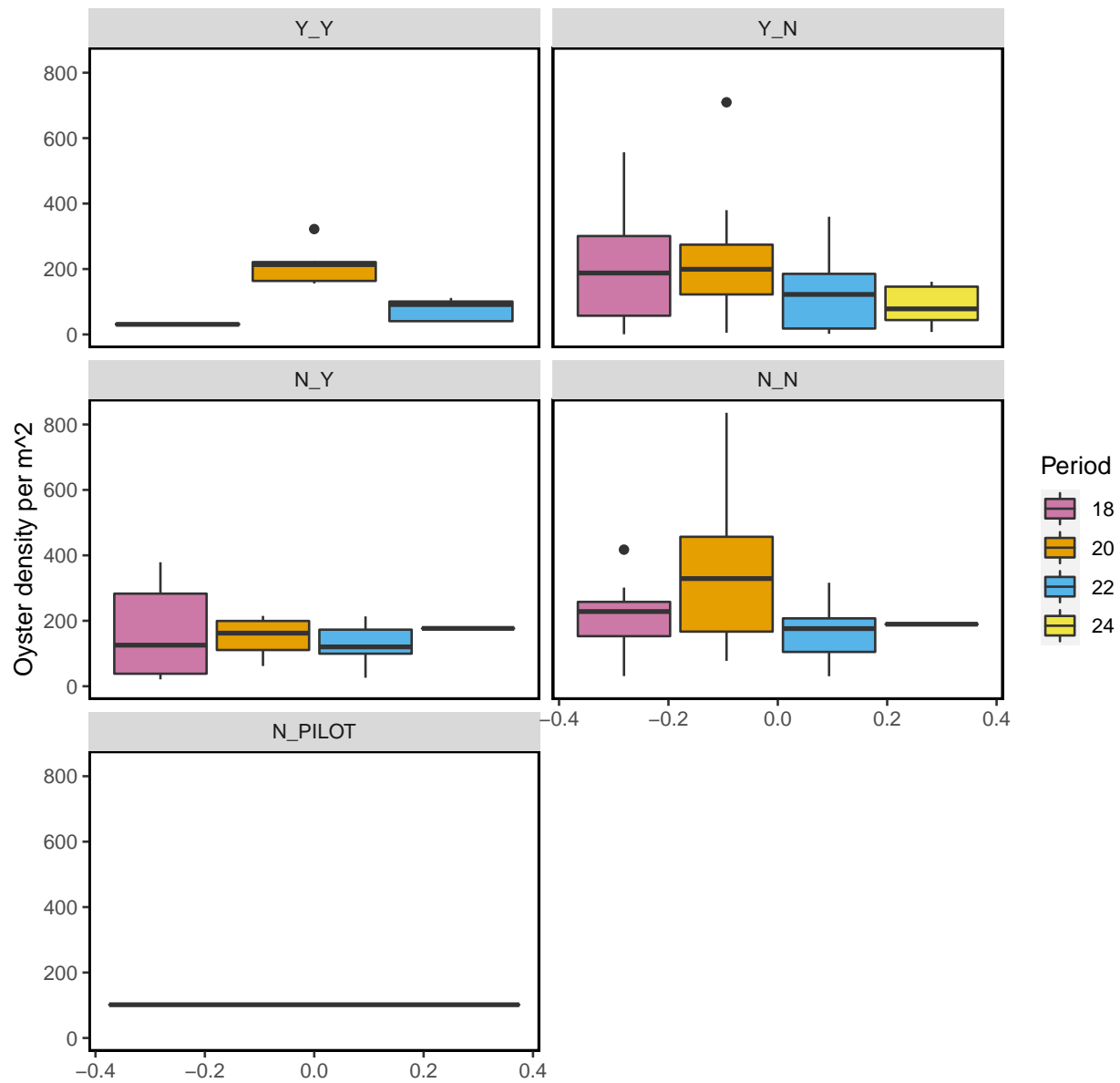


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-11-09.

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

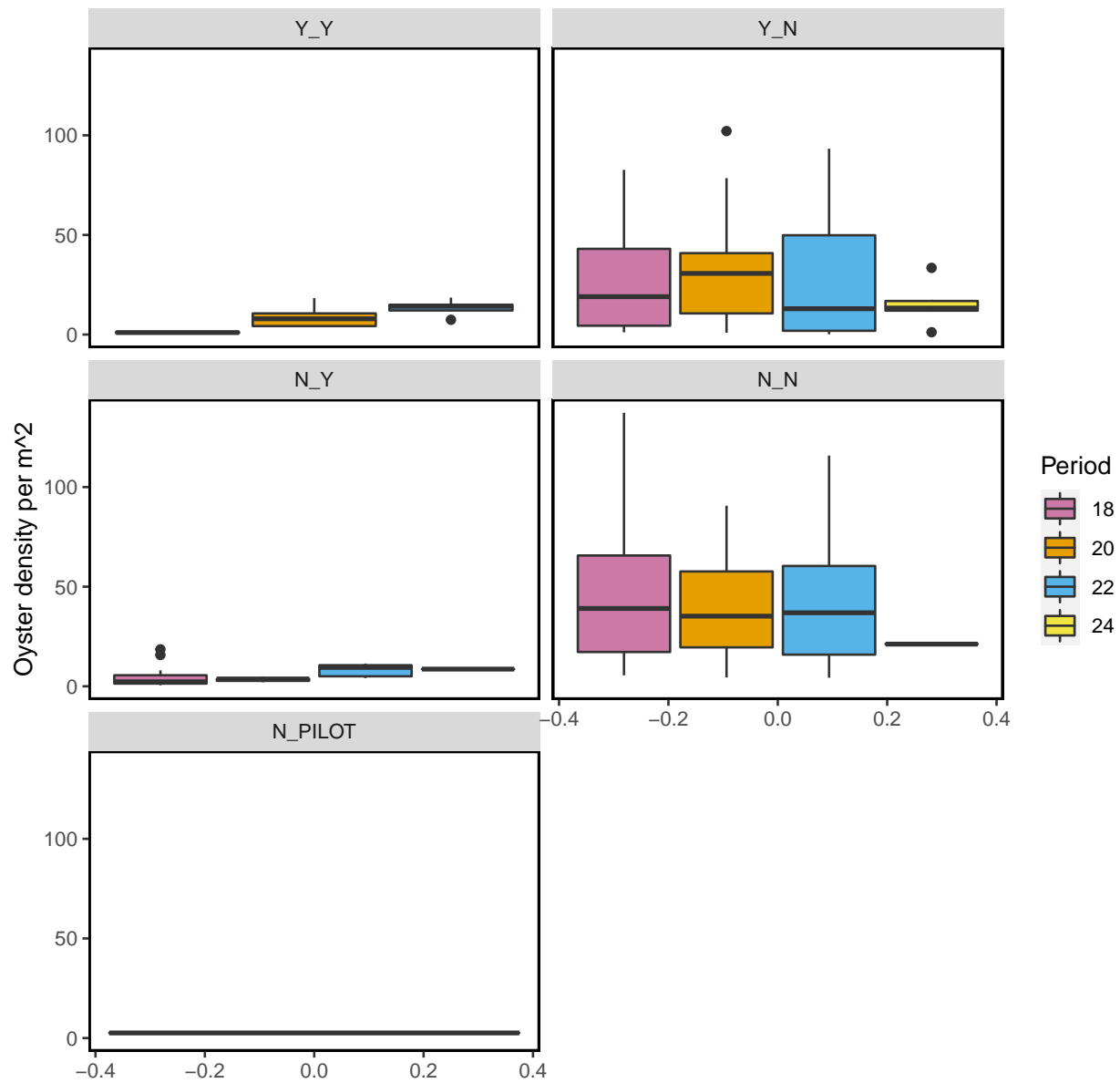


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-11-09.

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.

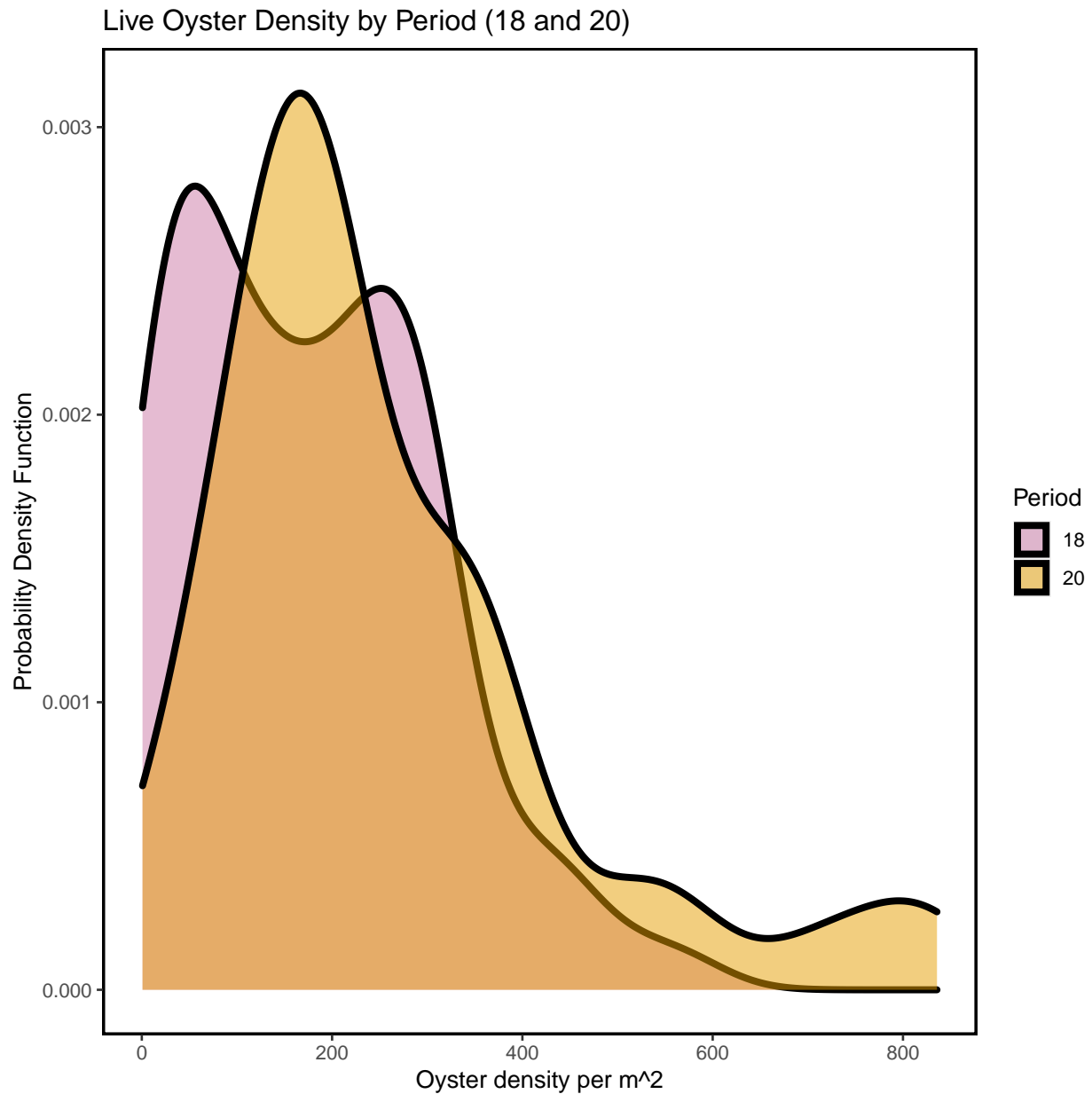


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-11-09.

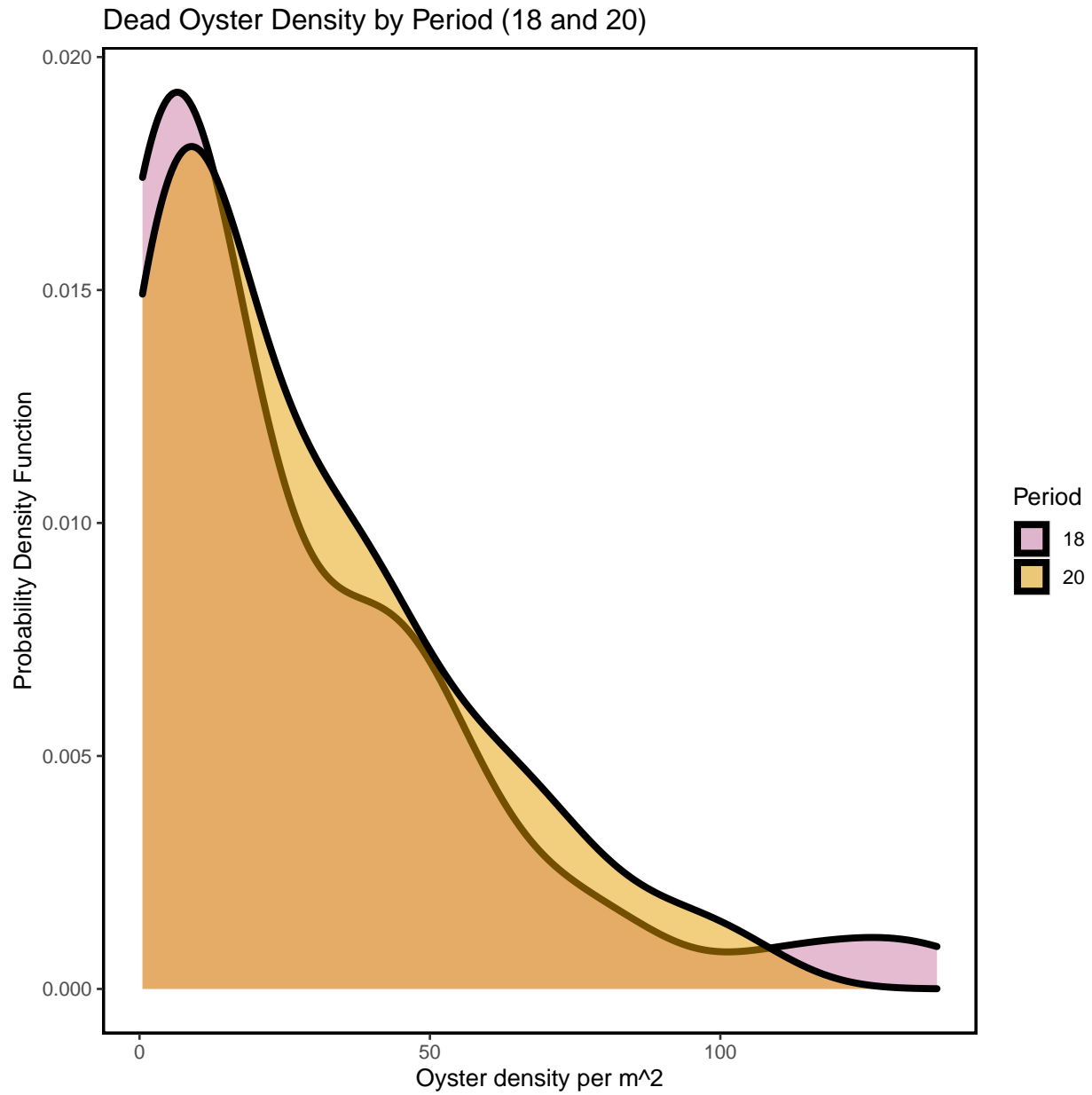


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-11-09.

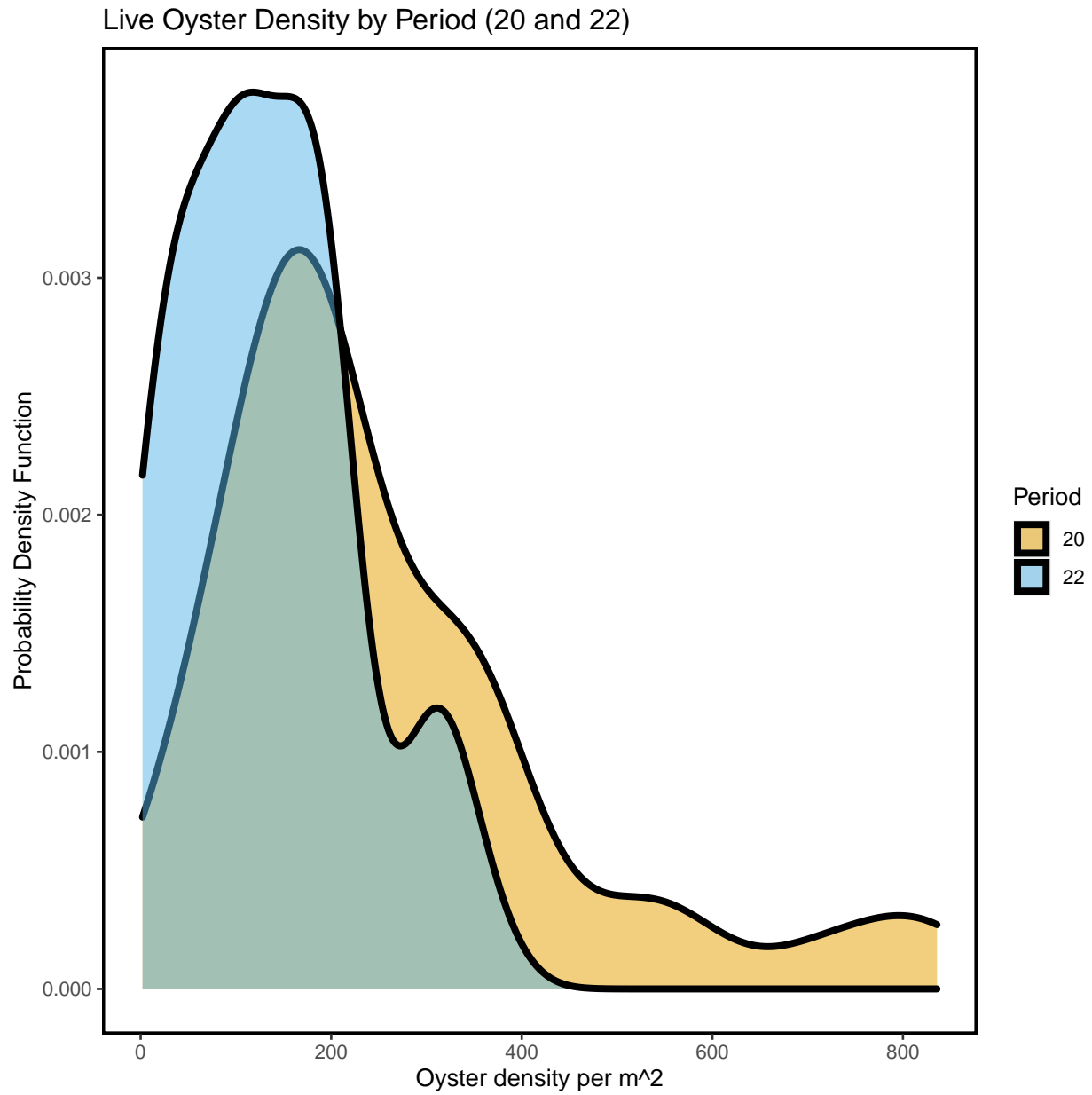


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-11-09.

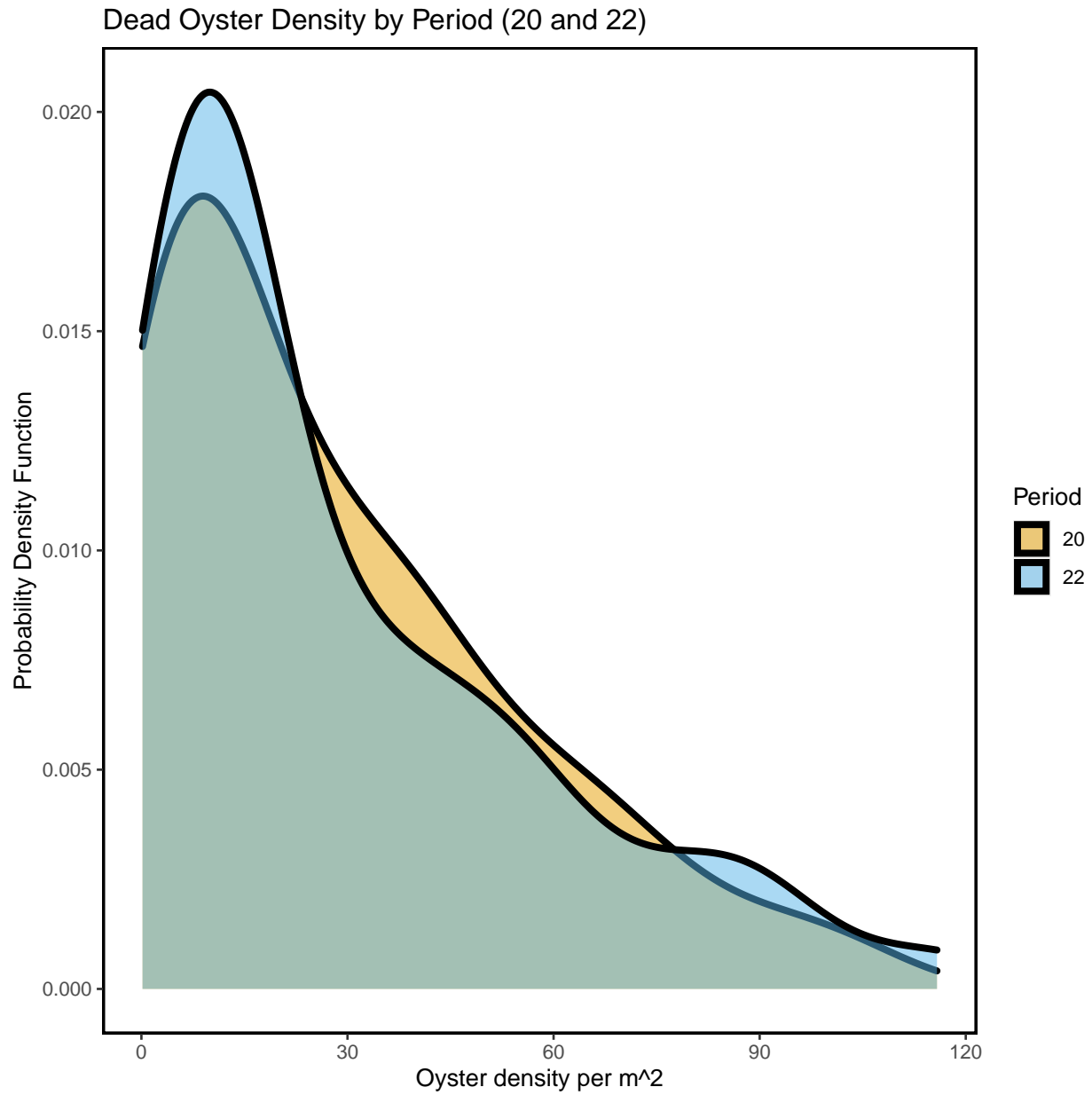


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-11-09.

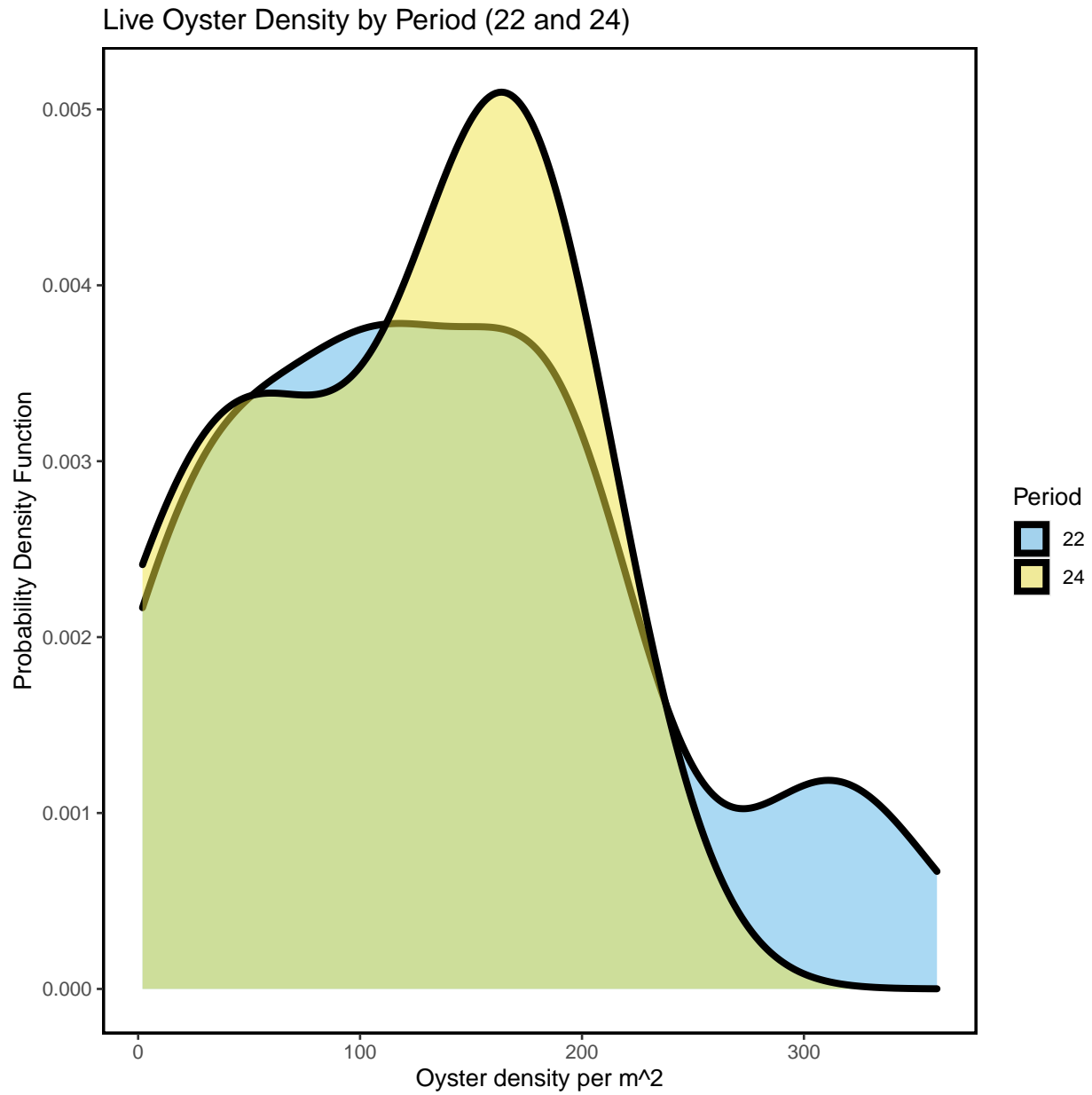


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-11-09.

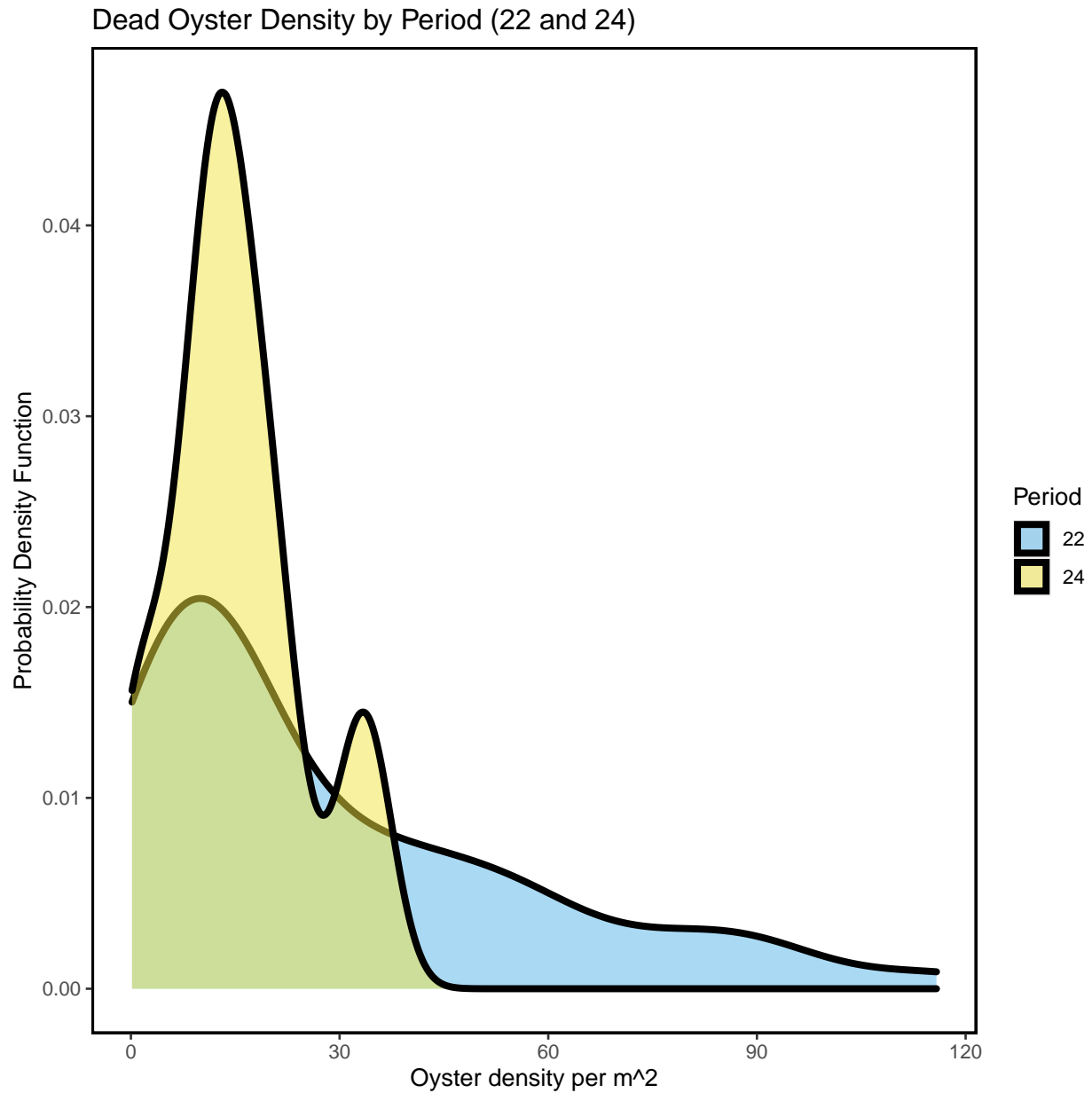


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-11-09.

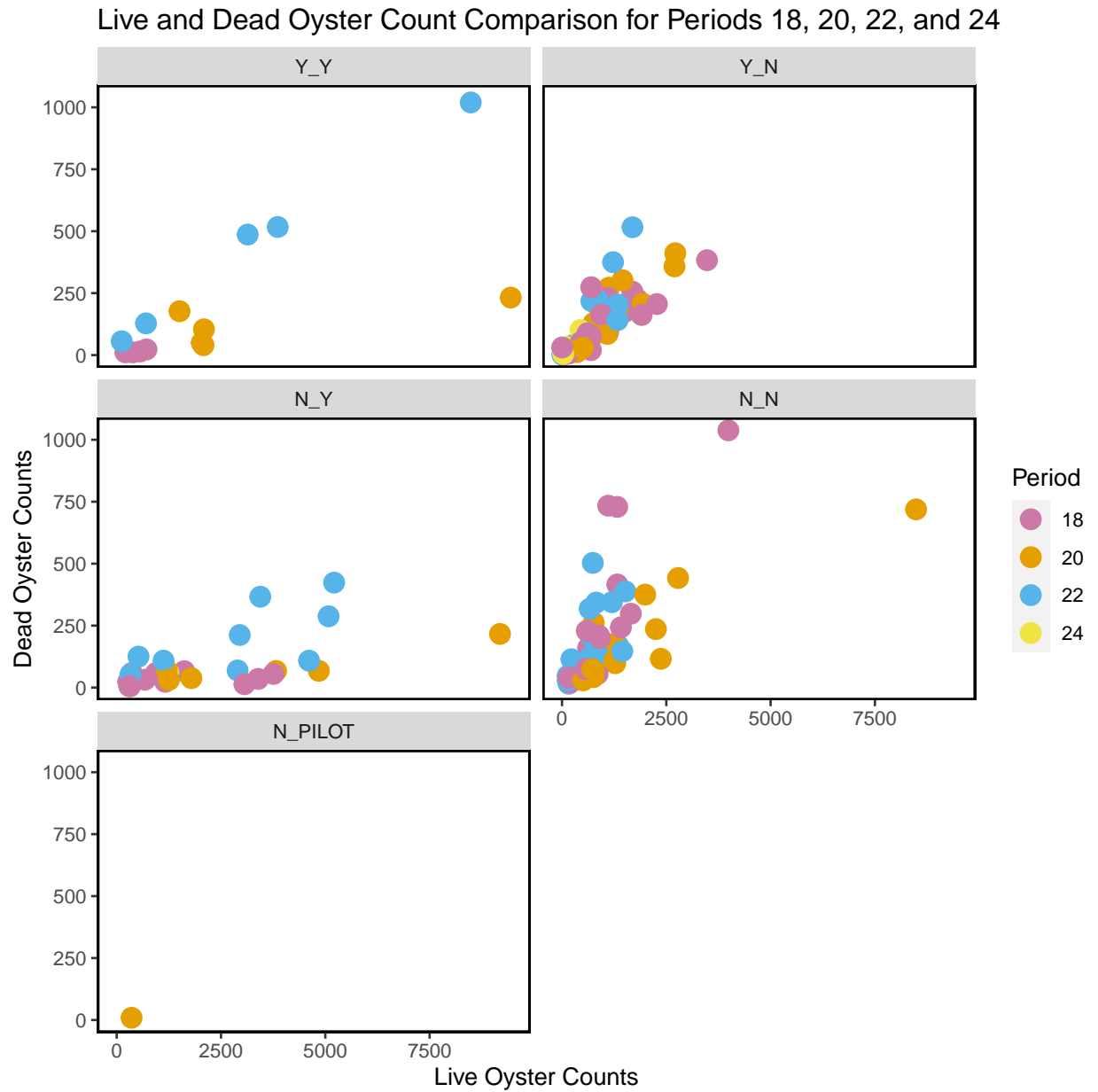


Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021) and 24 (Winter 2021-2022), last sample date of period 24 as 2021-11-09.

Live Counts Double Pass Results

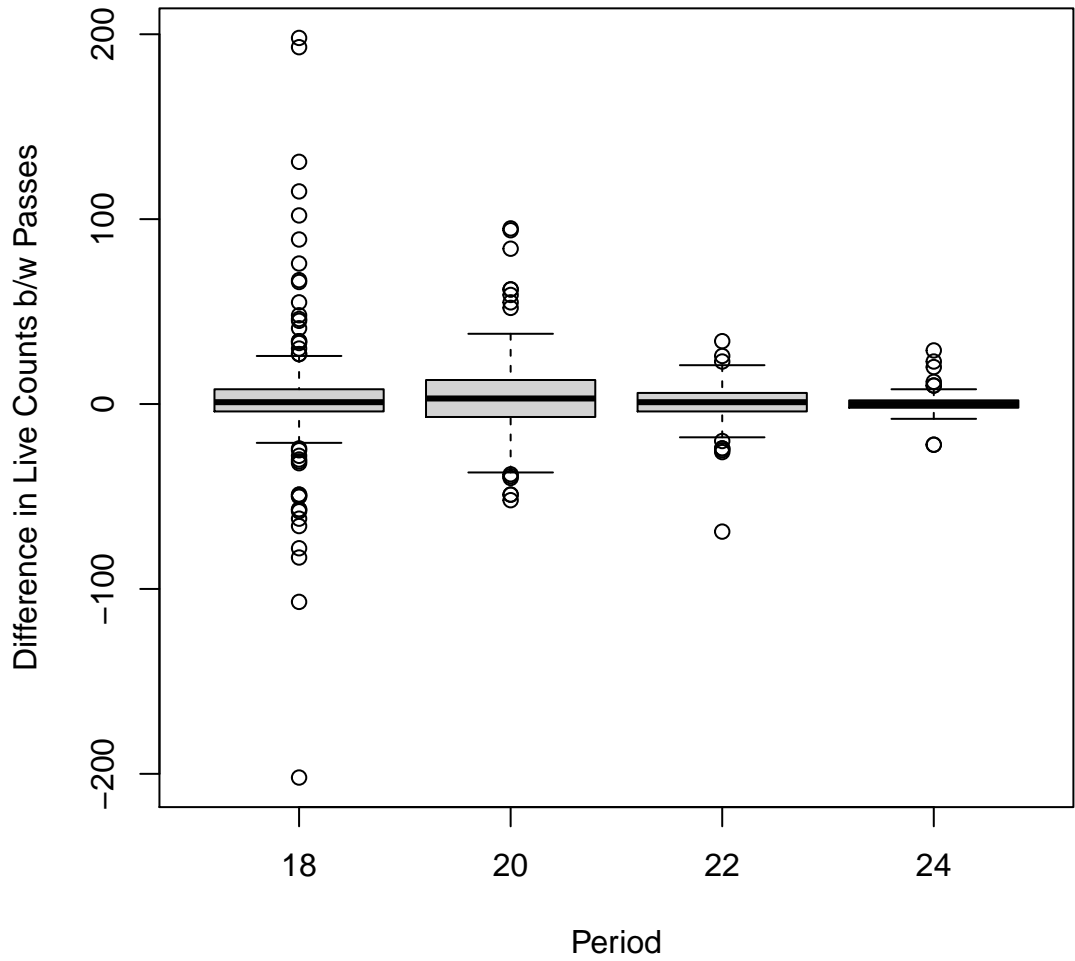


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, and 24

locality	period	CV_1	CV_2
BT	18	0.82	0.83
LC	18	1.34	1.43
NN	18	0.47	0.63
LC	20	0.83	0.80
LT	20	0.61	0.60
BT	22	0.39	0.52
LC	22	0.74	0.76
LT	22	0.49	0.50
LC	24	1.26	1.26

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

Dead Counts Double Pass Results

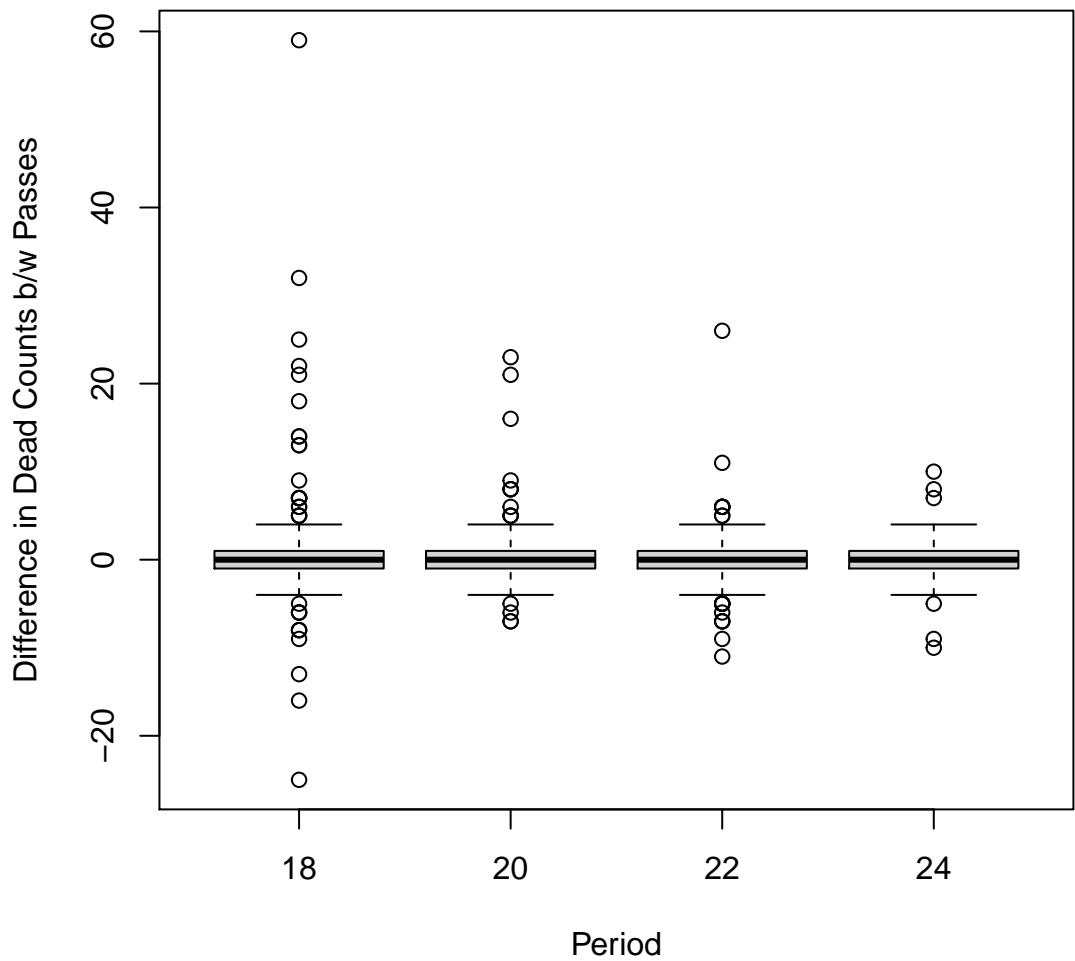


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, and 24

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	1.36	1.54

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 2021-11-09. 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	13	466
CK	26	734
CR	46	1375
HB	45	1129
LC	203	10908
LT	17	455
NN	11	288

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	114	3749
N_PILOT	13	799
N_Y	29	3249
Y_N	191	5570
Y_Y	14	1986

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	7	173

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	LC	7	173
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	1	19
24	N_Y	1	46
24	Y_N	5	108

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

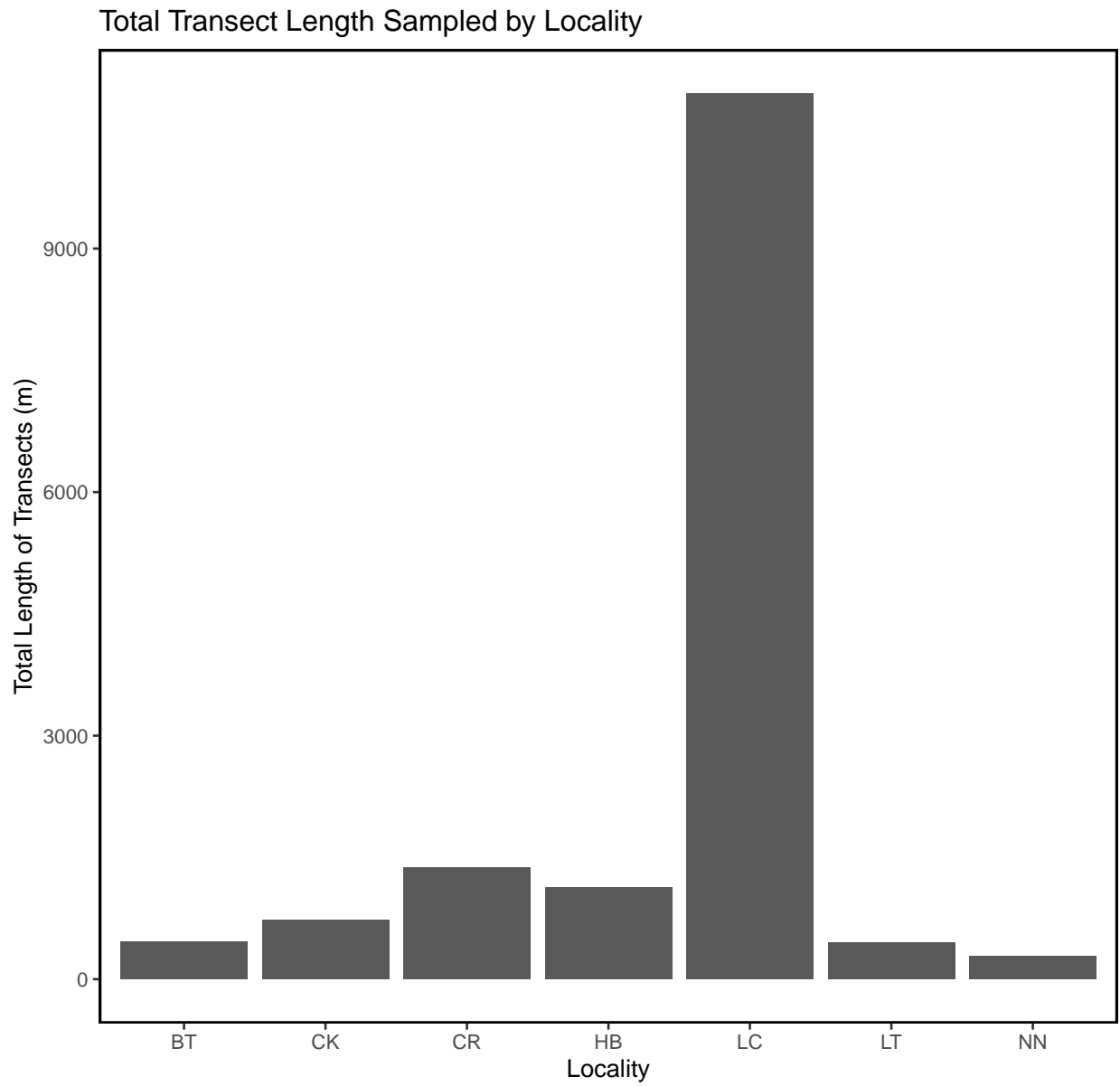


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

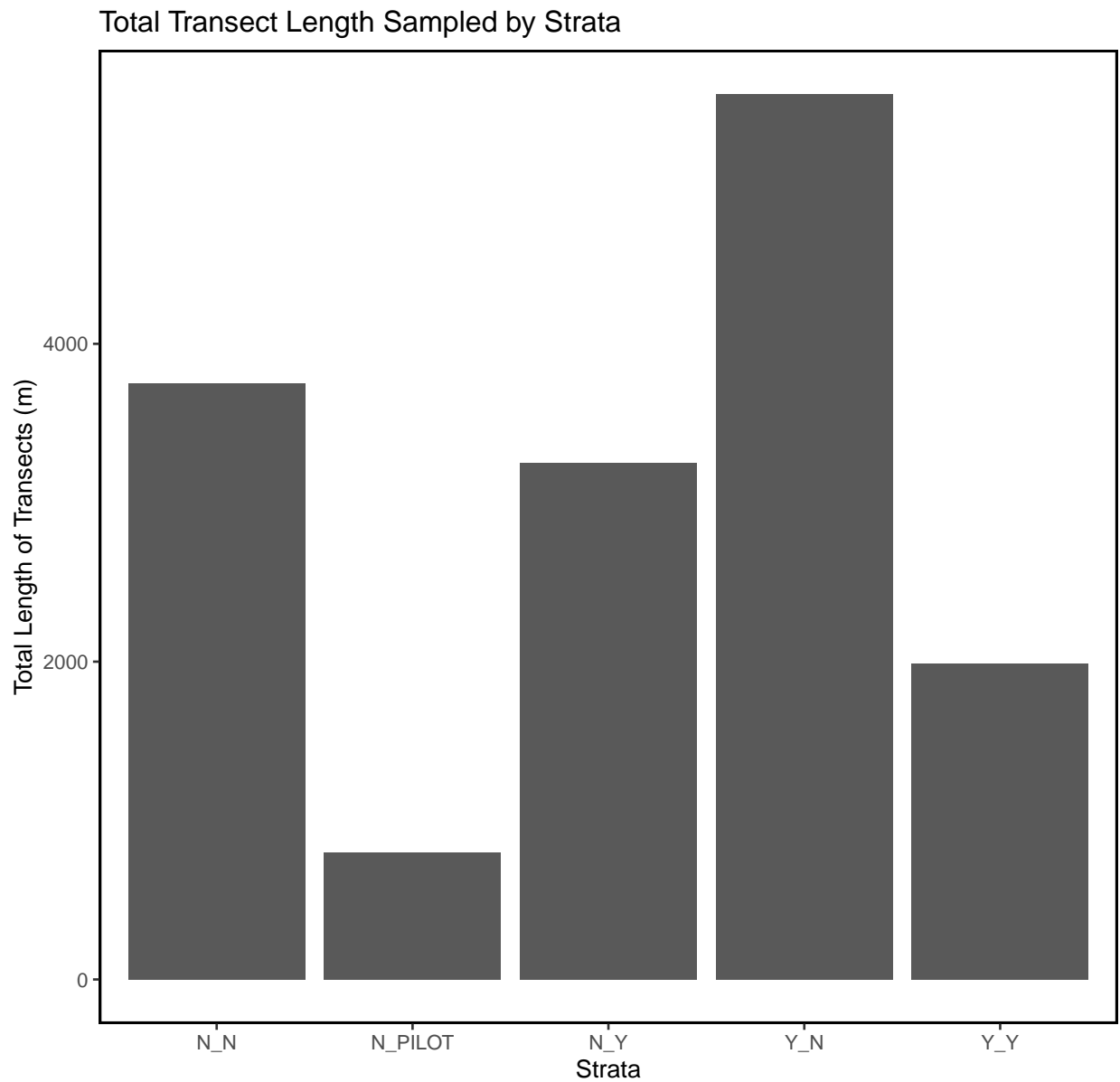
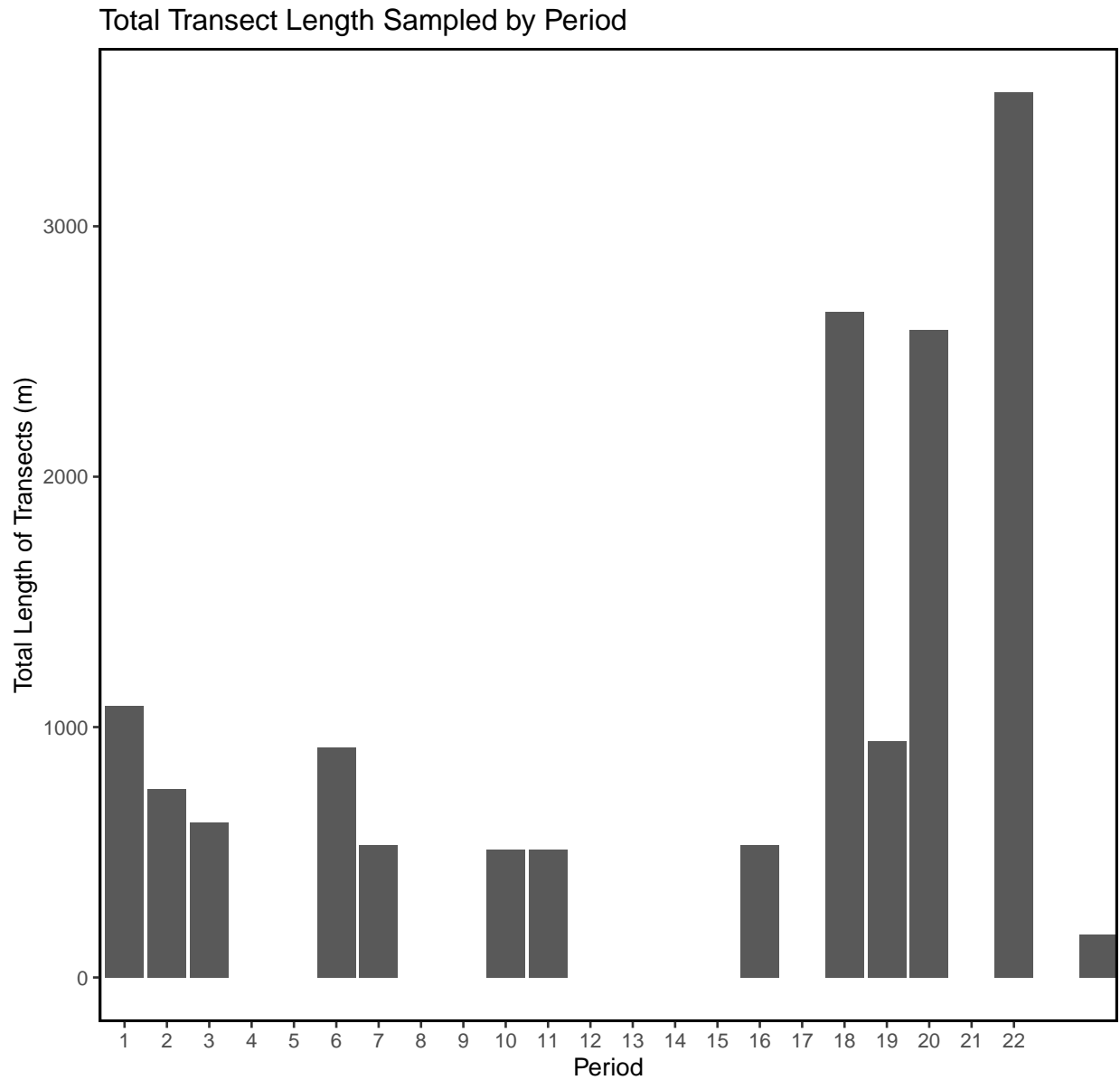


Figure – Bar plot of total transect length in meters sampled by strata for all periods.



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	1665	897	2257	5094708	1.36	626	438	2892	1656	737	3030
CK	857	444	1091	1190933	1.27	214	438	1277	854	490	1265
CR	1026	716	1035	1072162	1.01	153	727	1325	1034	769	1347
HB	902	364	1047	1095622	1.16	158	592	1211	909	607	1229
LC	1071	644	1430	2043716	1.33	101	873	1270	1069	888	1271
LT	1051	877	607	368075	0.58	147	762	1339	1052	810	1333
NN	786	727	649	420847	0.83	196	403	1169	789	467	1192

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	989	761	1051	1104747	1.06	99	796	1183	992	816	1200
N_PILLOT	1046	1109	627	392853	0.60	174	705	1386	1047	729	1364
N_Y	2299	1253	2100	4409483	0.91	390	1535	3063	2304	1672	3079
Y_N	767	431	909	825427	1.18	66	637	897	765	634	896
Y_Y	2524	1772	2954	8726548	1.17	790	976	4071	2489	1150	4170

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	1408	1040	1831
2	890	476	945	893727	1.06	176	546	1234	891	555	1230
3	738	296	817	668064	1.11	167	411	1065	744	444	1053
6	433	176	534	284791	1.23	96	245	621	435	268	627
7	50	29	56	3186	1.12	20	11	90	51	17	92
10	1207	1074	671	449607	0.56	237	743	1672	1208	815	1684
11	886	776	678	459708	0.77	240	416	1356	890	519	1349
16	494	366	467	217855	0.95	165	170	817	490	208	800
18	982	695	935	874733	0.95	120	748	1217	983	758	1235
19	555	329	573	328431	1.03	97	365	745	556	375	749
20	1844	1253	2125	4517189	1.15	310	1236	2451	1843	1291	2474
22	1334	702	1693	2867783	1.27	242	860	1808	1324	904	1806
24	462	441	407	165635	0.88	154	161	764	464	204	767

Live Density Statistics for all Periods

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	262	218	190	36278	0.73	53	158	365	260	177	372
CK	241	112	321	102927	1.33	63	118	364	238	127	365
CR	283	178	294	86605	1.04	43	198	368	283	207	374
HB	257	101	303	92052	1.18	46	168	347	257	180	351
LC	150	119	147	21661	0.98	10	130	170	151	131	170
LT	275	249	141	19819	0.51	34	208	342	275	212	342
NN	223	164	224	50283	1.01	68	90	355	222	121	369

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	260	188	255	64809	0.98	24	213	307	260	213	307
N_PILOT	111	111	60	3604	0.54	17	79	144	111	82	145
N_Y	142	125	92	8503	0.65	17	108	175	142	111	174
Y_N	184	108	216	46753	1.17	16	153	215	184	155	214
Y_Y	113	96	91	8301	0.80	24	65	161	114	72	166

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	396	287.4	504
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	255	160.4	367
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	234	135.6	346
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	121	71.6	176
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.8	9
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	123	83.0	168
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	90	47.4	143
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49	21.7	81
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	177	144.0	213
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	154	105.5	215
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	256	207.0	309
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	137	113.8	161
24	115	146.2	71.2	5063	0.62	27	62.1	167.5	114	64.2	160

Dead Count Statistics for all Periods

Dead Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	313	169	317	100240	1.01	88	140.8	485	308	163	487
CK	78	32	106	11170	1.36	37	4.3	151	77	19	150
CR	60	47	38	1444	0.63	13	35.2	85	60	40	87
HB	44	21	45	2000	1.02	15	14.8	73	44	18	73
LC	109	64	133	17809	1.23	10	88.3	129	108	89	130
LT	240	210	193	37090	0.80	47	148.1	331	241	161	329
NN	104	74	96	9216	0.92	29	47.6	161	104	59	162

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	155	82	189	35755	1.22	21	114	196	155	116	200
N_PILOT	82	87	46	2136	0.56	13	57	108	82	60	108
N_Y	95	59	106	11233	1.12	20	56	134	95	60	136
Y_N	100	50	112	12563	1.12	12	77	123	100	77	123
Y_Y	205	80	288	82752	1.40	77	54	356	201	75	353

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	28	9.4	47
10	80	88	65	4245	0.82	23.0	34.5	125	80	40.4	120
11	50	40	25	620	0.49	8.8	33.2	68	51	35.5	68
16	44	28	41	1708	0.93	14.6	15.6	73	45	18.4	72
18	133	55	192	36903	1.44	24.6	85.1	182	134	93.6	188
19	63	44	67	4548	1.08	11.6	40.0	85	63	41.9	86
20	148	107	140	19727	0.95	20.5	107.6	188	148	111.8	191
22	191	128	193	37399	1.01	27.6	137.2	245	190	141.5	247
24	52	60	30	921	0.58	11.5	29.7	75	52	29.5	73

Dead Density Statistics for all Periods

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	52	39.0	34	1162	0.65	9.5	33.9	71	52	35.2	73
CK	21	11.3	28	757	1.29	9.7	2.3	40	21	5.8	41
CR	18	10.8	16	247	0.87	5.2	7.8	28	18	9.2	29
HB	13	8.0	14	201	1.12	4.7	3.4	22	13	5.1	22
LC	17	8.7	20	404	1.20	1.6	13.7	20	17	13.9	20
LT	59	50.5	38	1415	0.64	9.1	41.0	77	59	41.5	76
NN	28	16.7	23	530	0.82	6.9	14.6	42	28	16.3	43

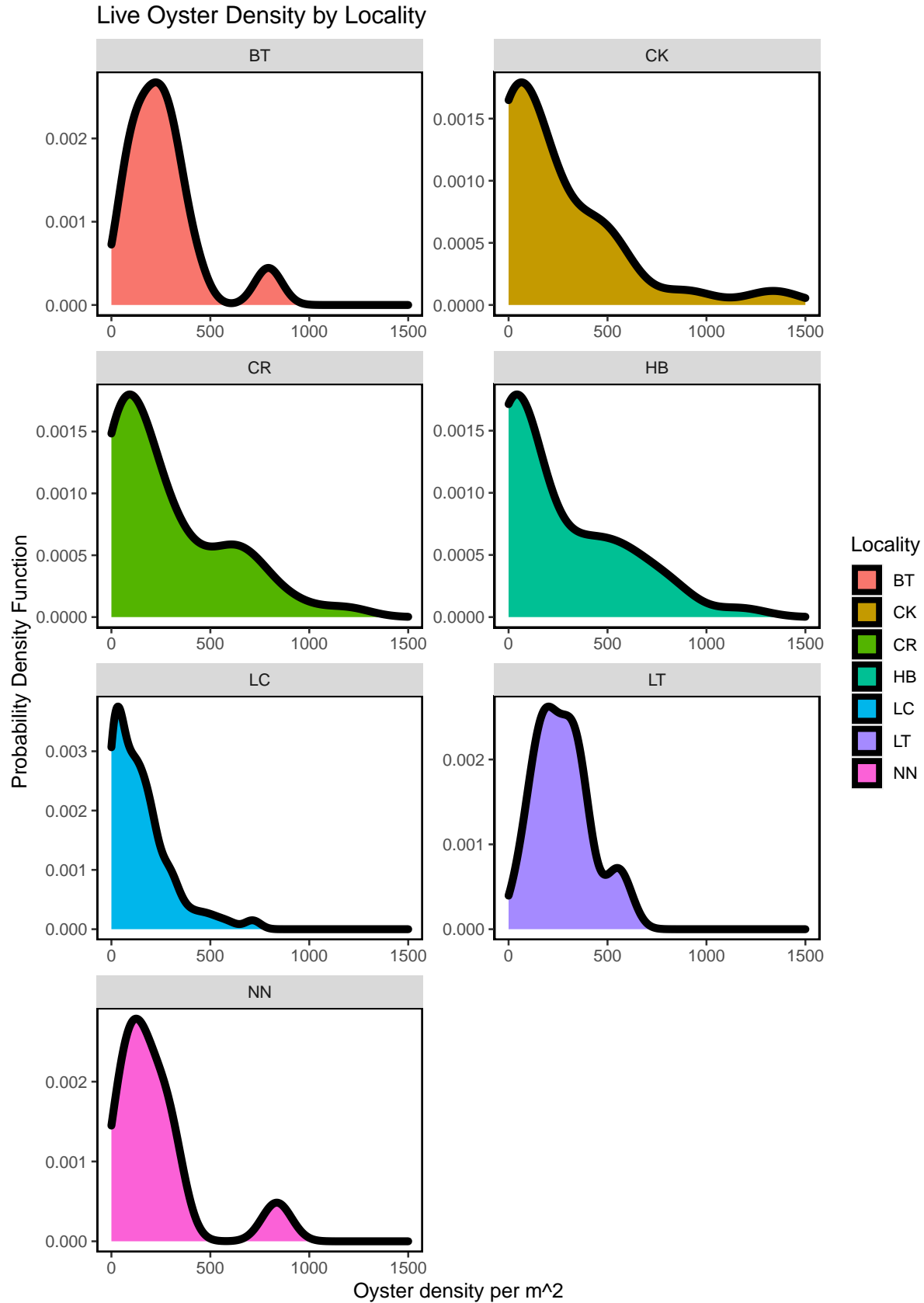
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	33.1	25.2	32.0	1024	0.97	3.53	26.2	40.0	33.1	26.2	40.1
N_PILOT	8.5	8.7	4.5	20	0.53	1.25	6.1	10.9	8.5	6.4	11.1
N_Y	5.8	4.1	4.5	21	0.78	0.84	4.2	7.5	5.8	4.3	7.6
Y_N	22.5	13.5	23.5	553	1.05	2.45	17.6	27.3	22.4	18.1	27.0
Y_Y	8.3	7.7	6.5	42	0.78	1.74	4.9	11.7	8.3	5.1	11.4

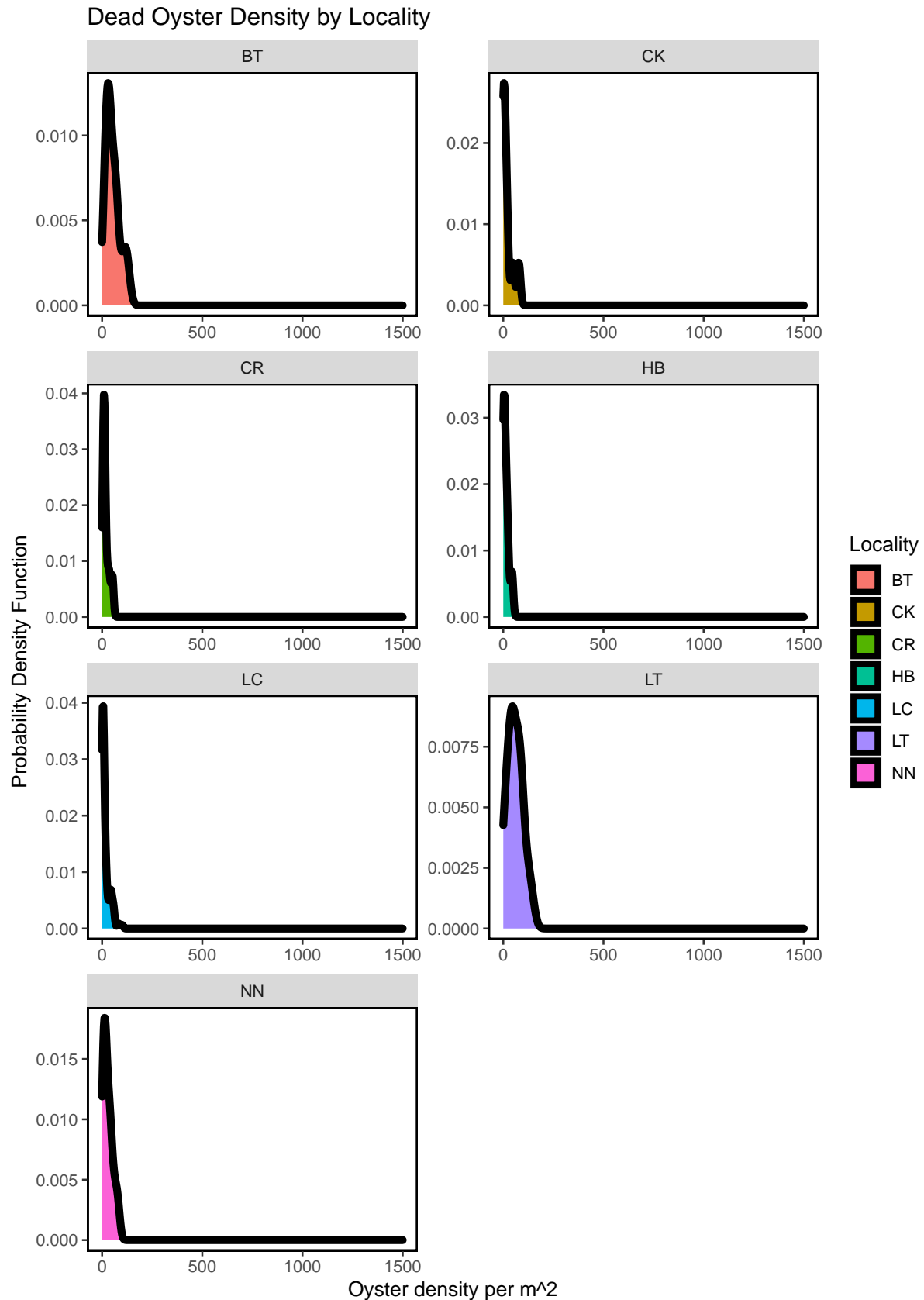
Dead Oyster Density by Period

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	4.7
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.0	3.9	12.7
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.7	6.9
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	1.8	7.1
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.4	19.3	34.1
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.5	11.3	24.1
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.7	20.8	35.3
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.5	21.2	36.8
24	15.2	13.3	10.2	104.4	0.67	3.86	7.66	22.8	15.1	8.8	22.4

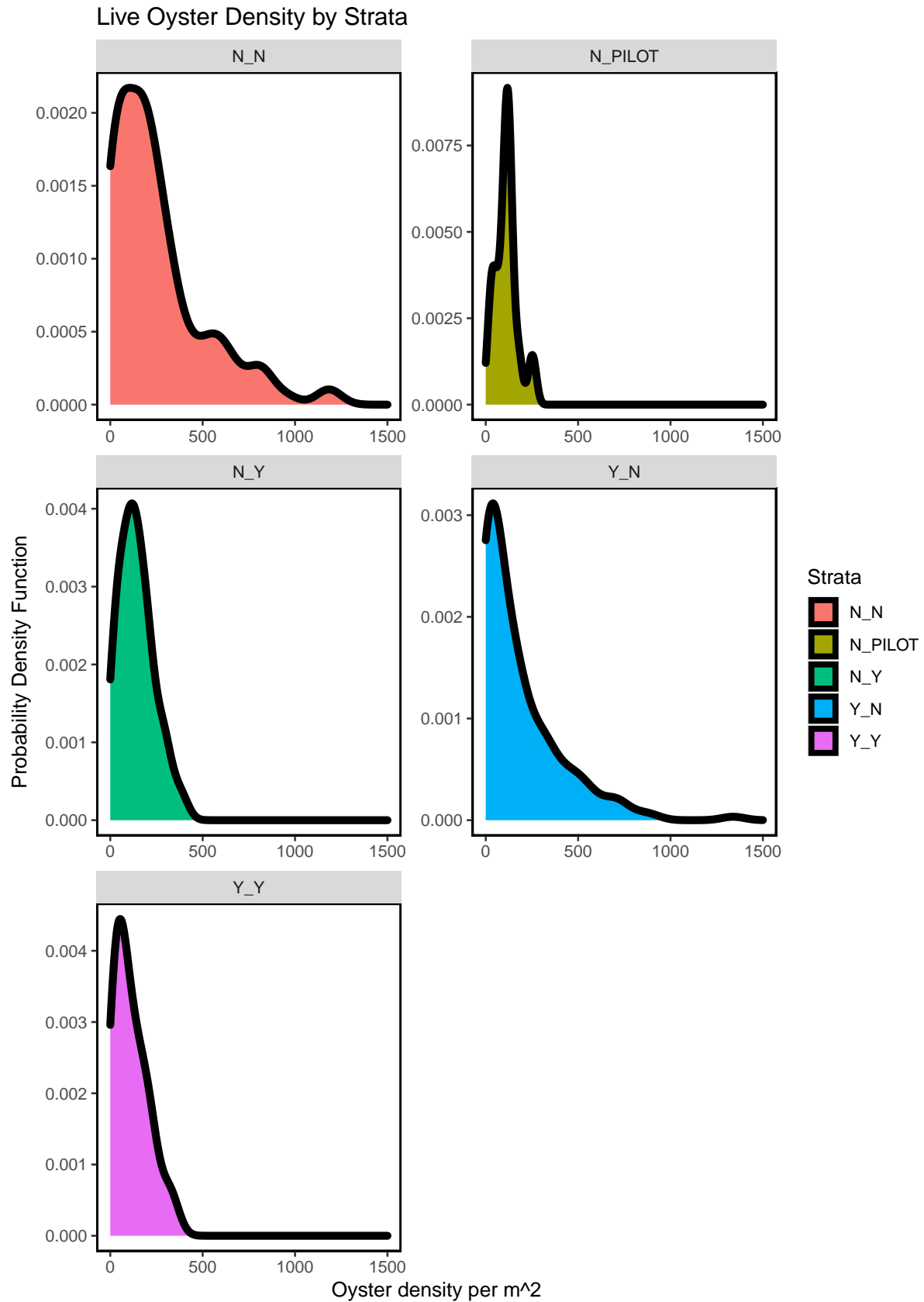
Summary Density Plots for all Periods



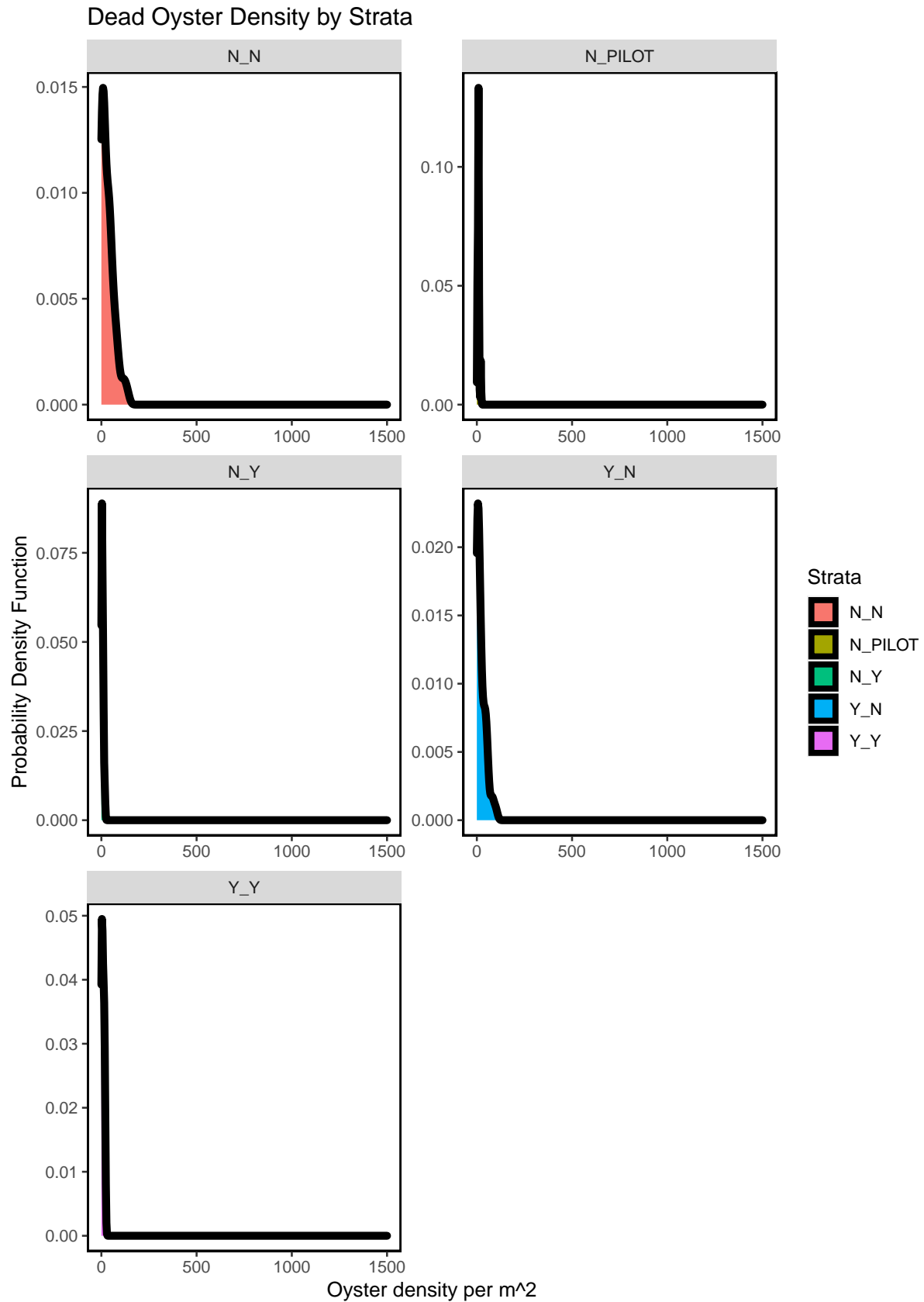
Figure– Calculated live oyster density by locality for all periods including period 22 (current period).



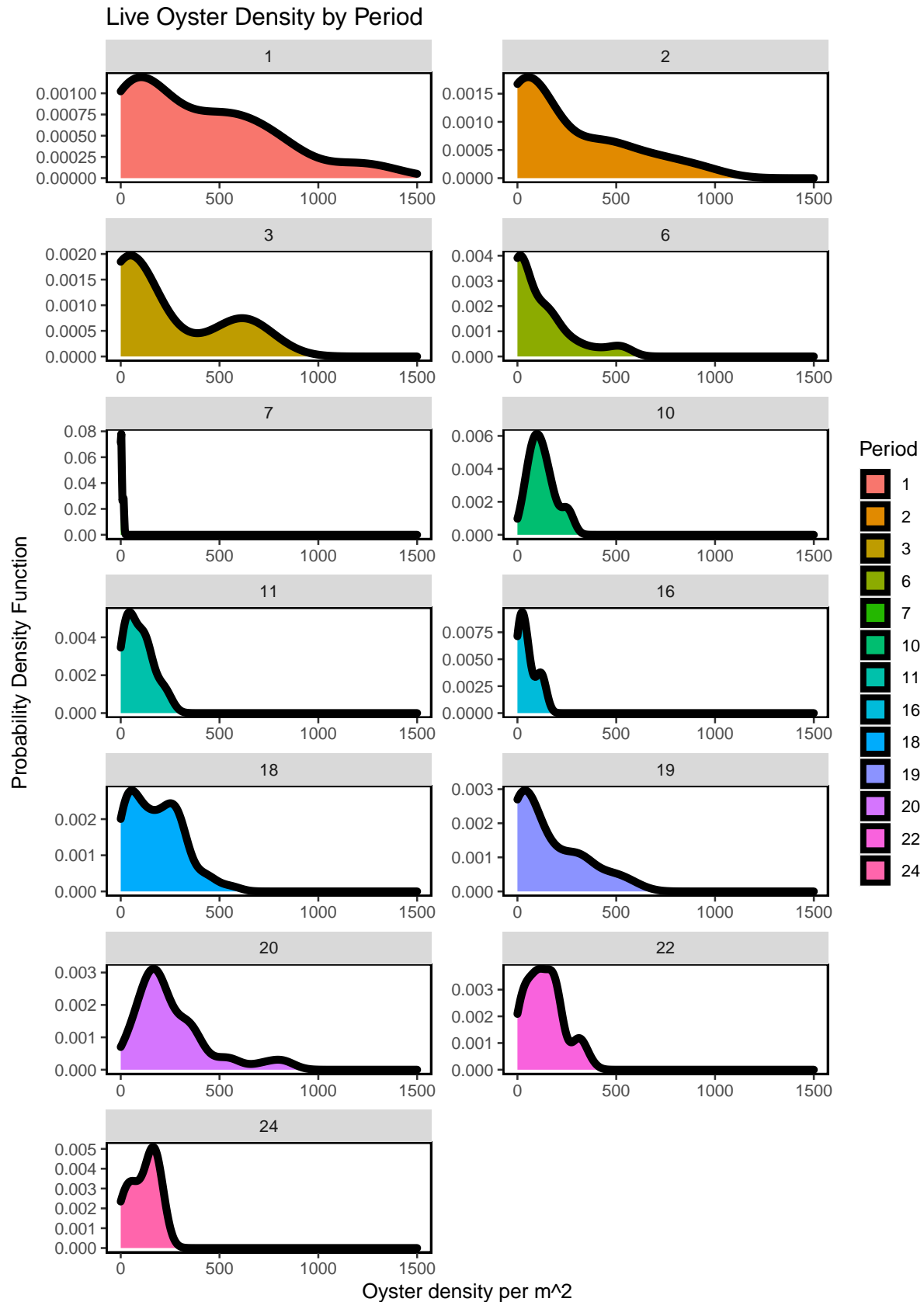
Figure– Calculated dead oyster density by locality for all periods including period 22 (current period).



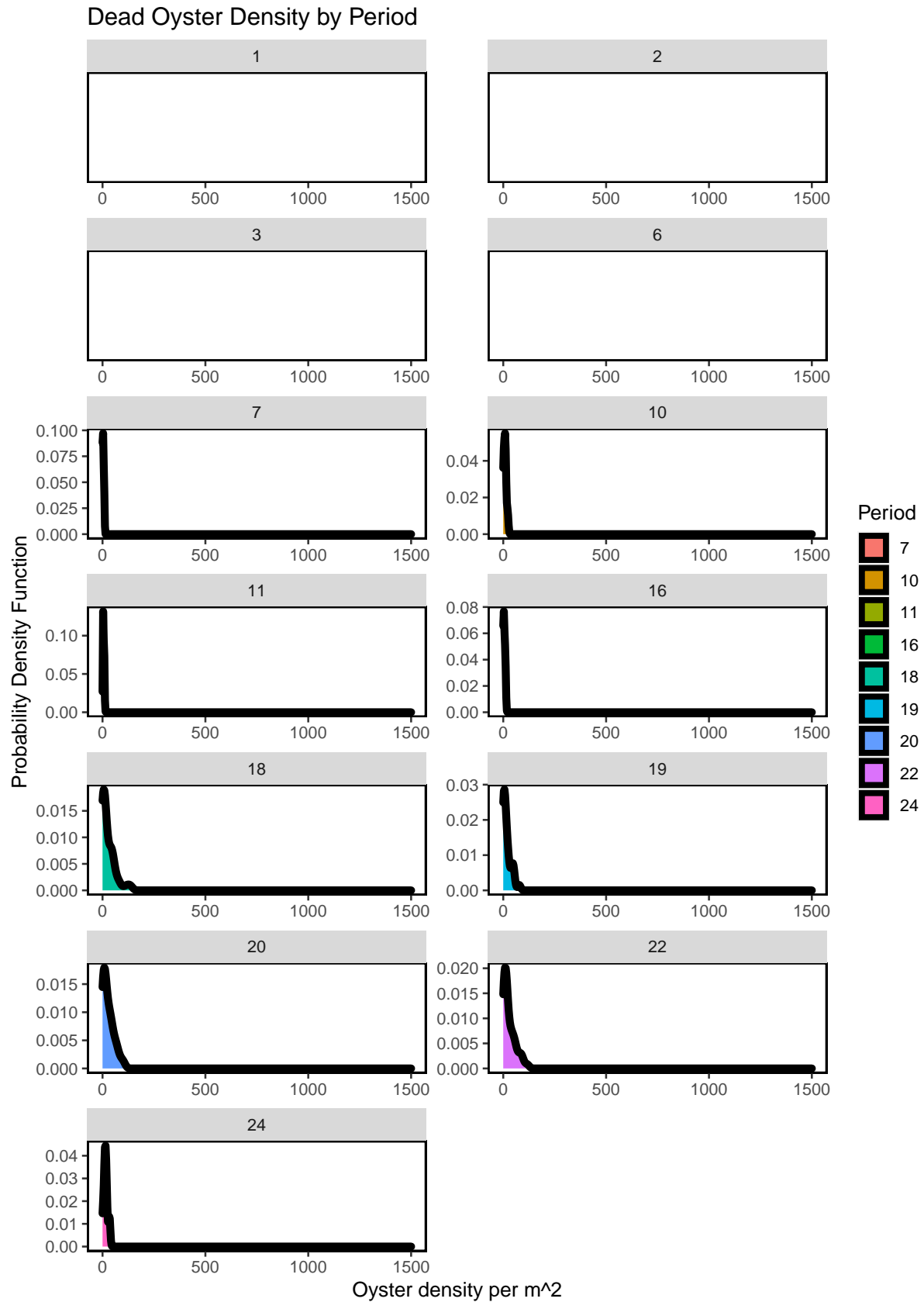
Figure– Calculated live oyster density by strata for all periods including period 22 (current period).



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

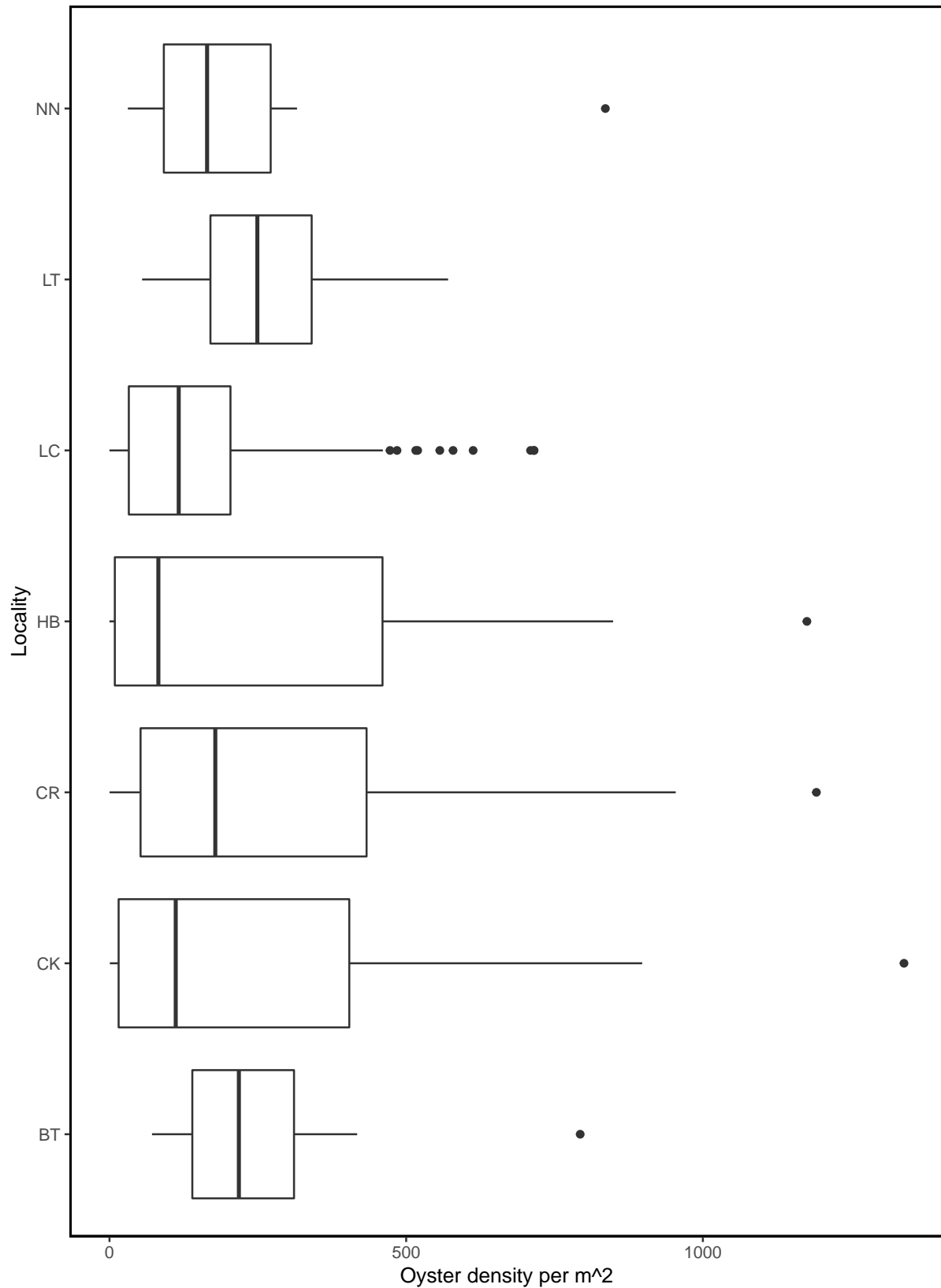


Figure– Calculated live oyster density for all periods including period 22 (current period) using a probability densi



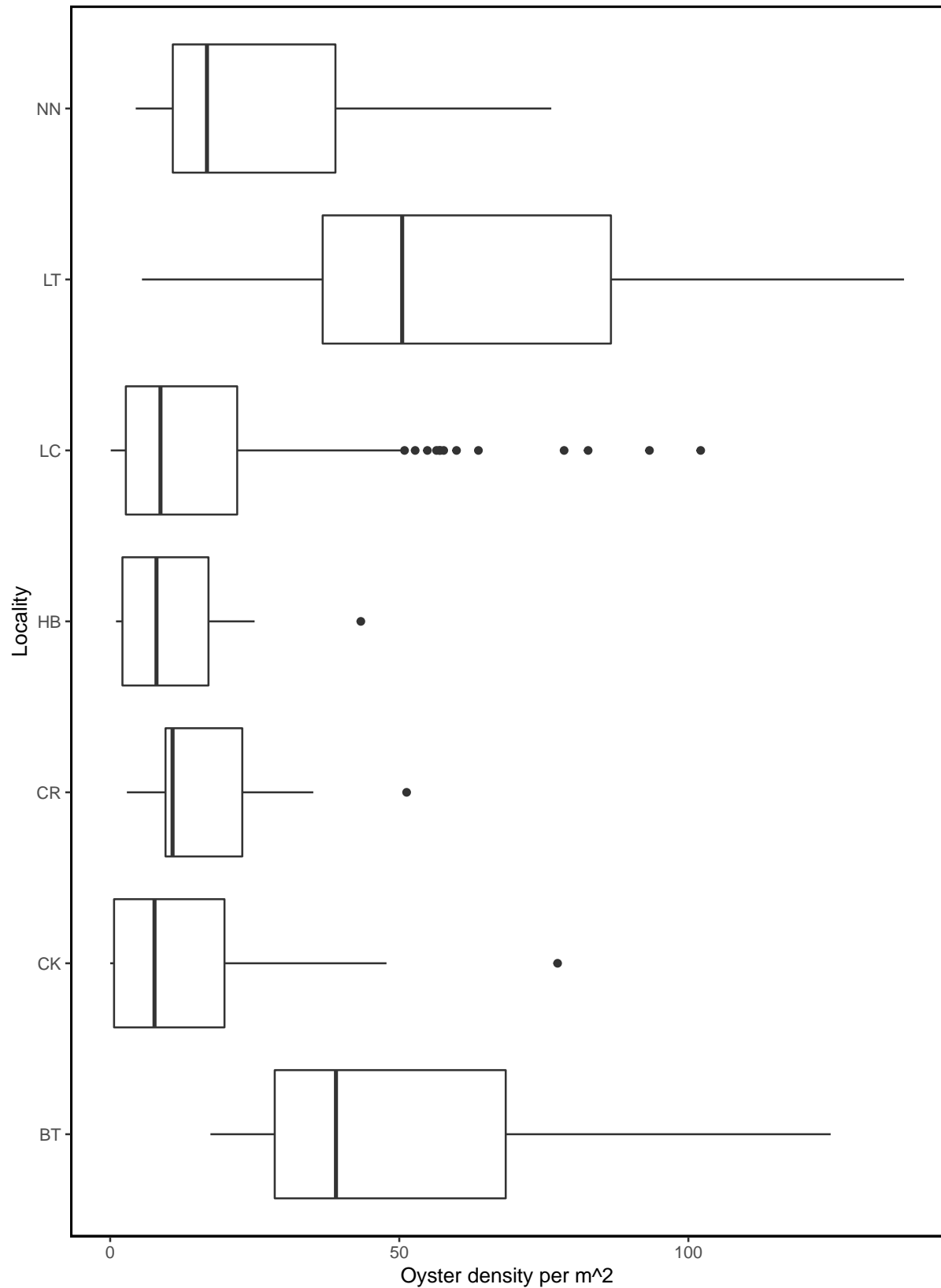
Figure– Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

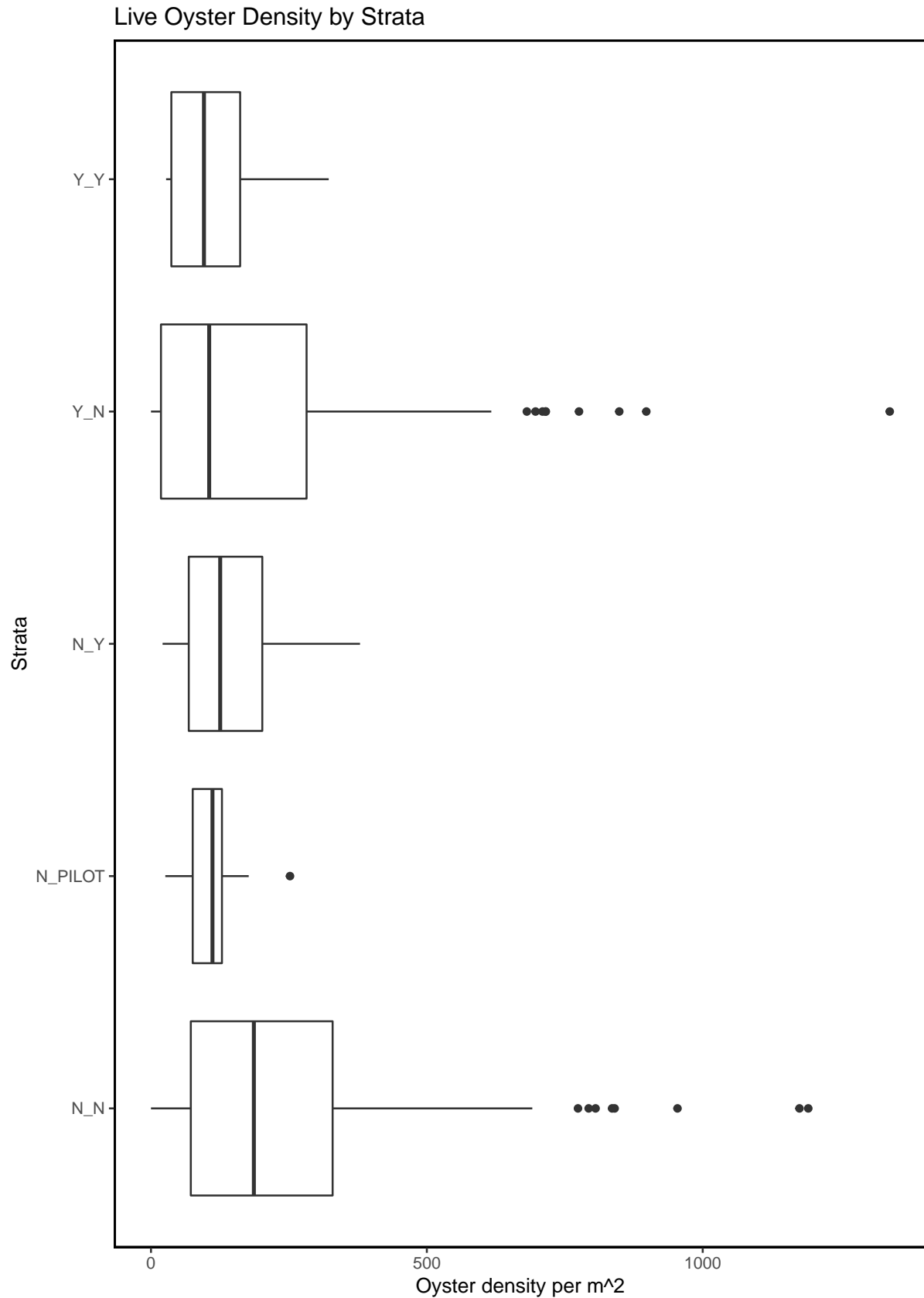


Figure– Box plot depicting live oyster density by locality for all periods including period 22 (current period).

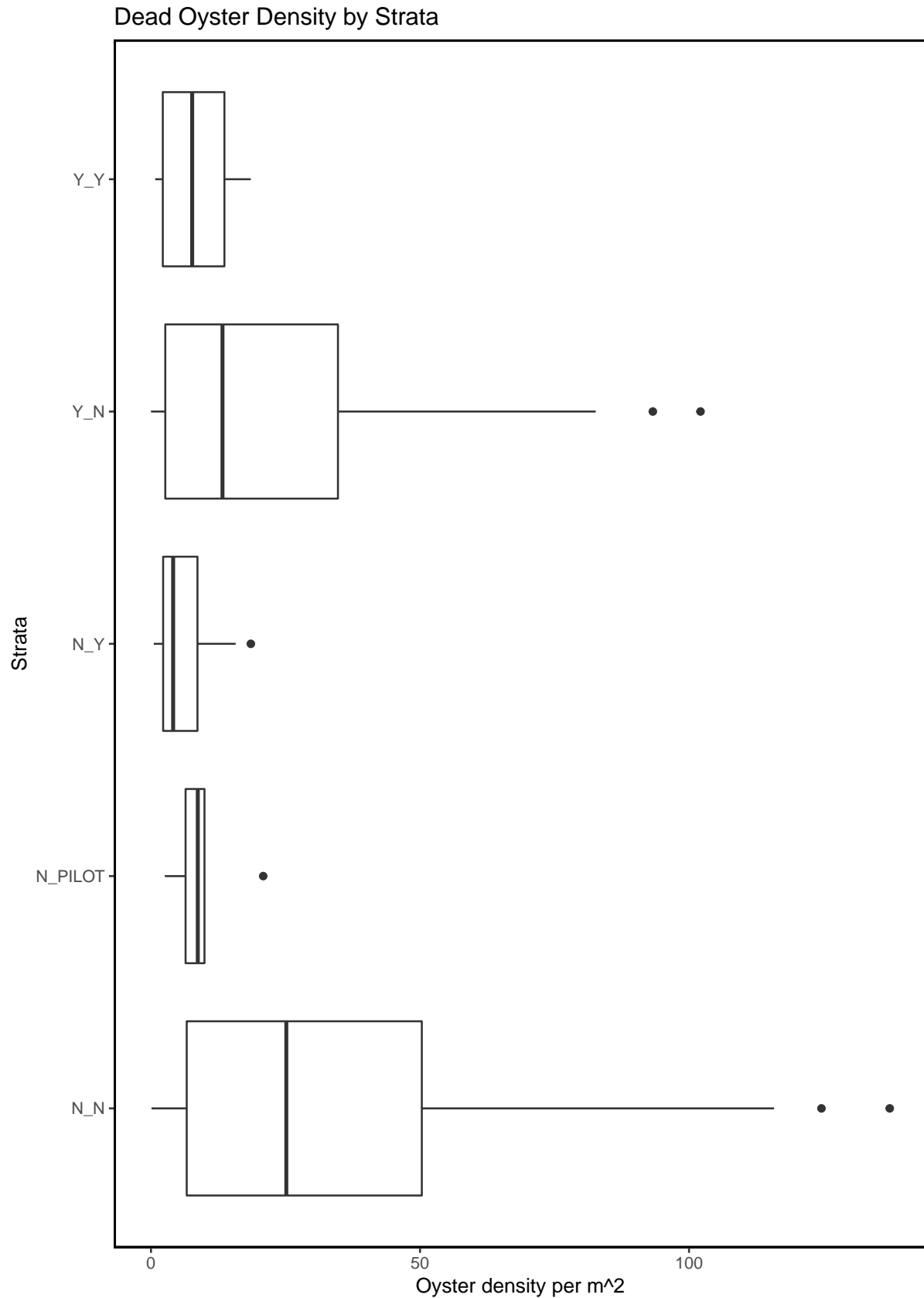
Dead Oyster Density by Locality



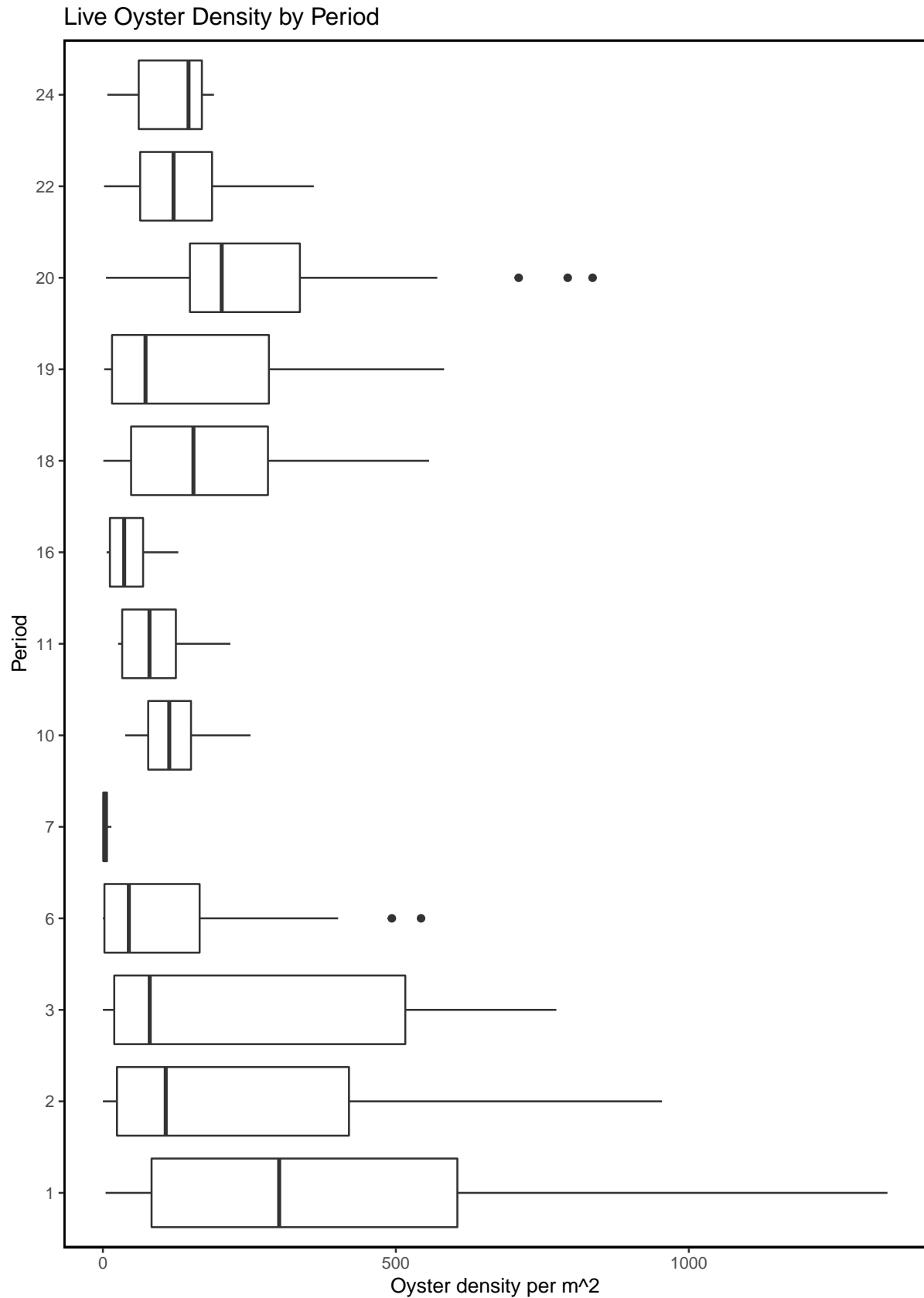
Figure– Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



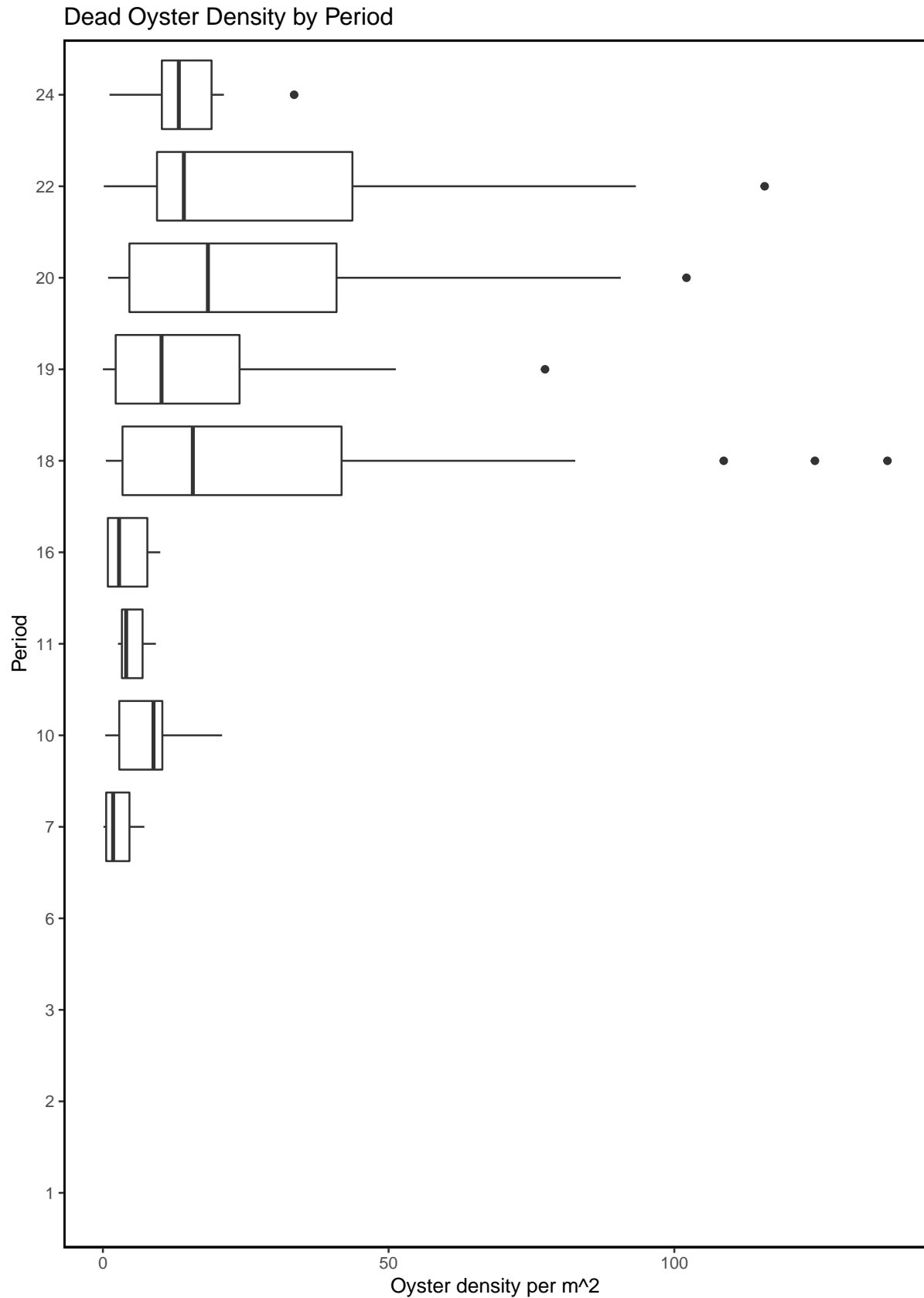
Figure– Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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

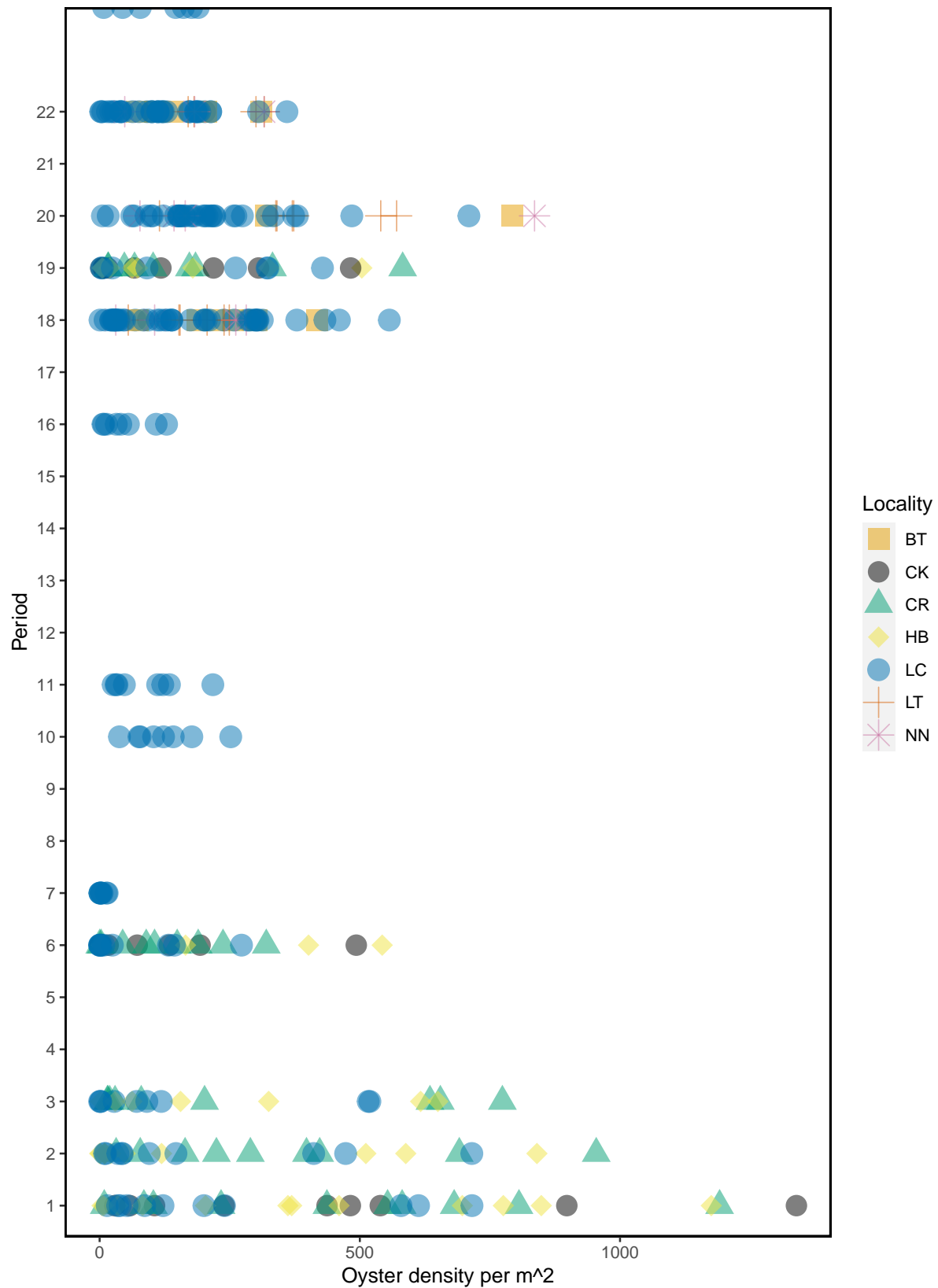
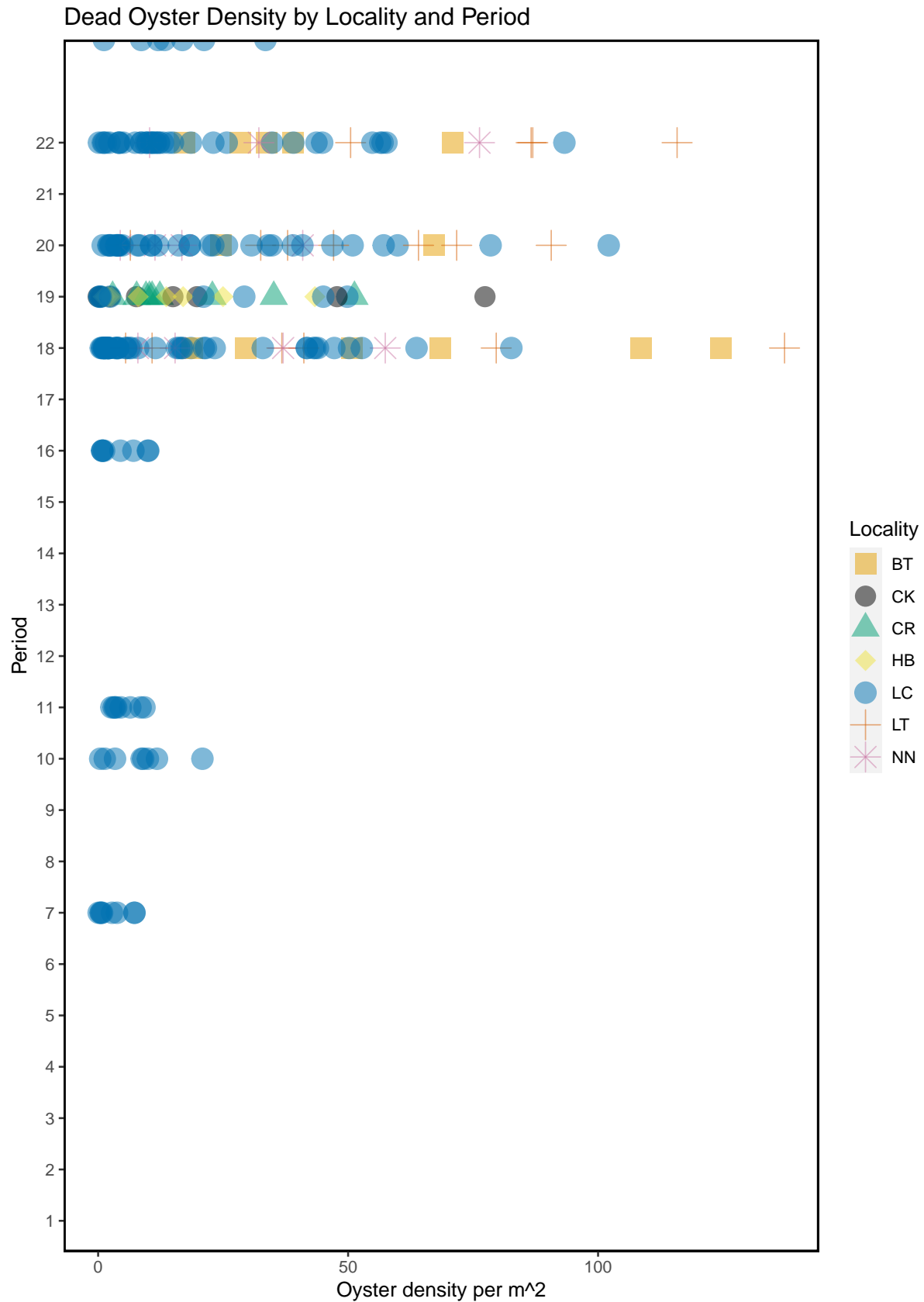


Figure – Live oyster density by locality and period for all periods including period 22 (current period).



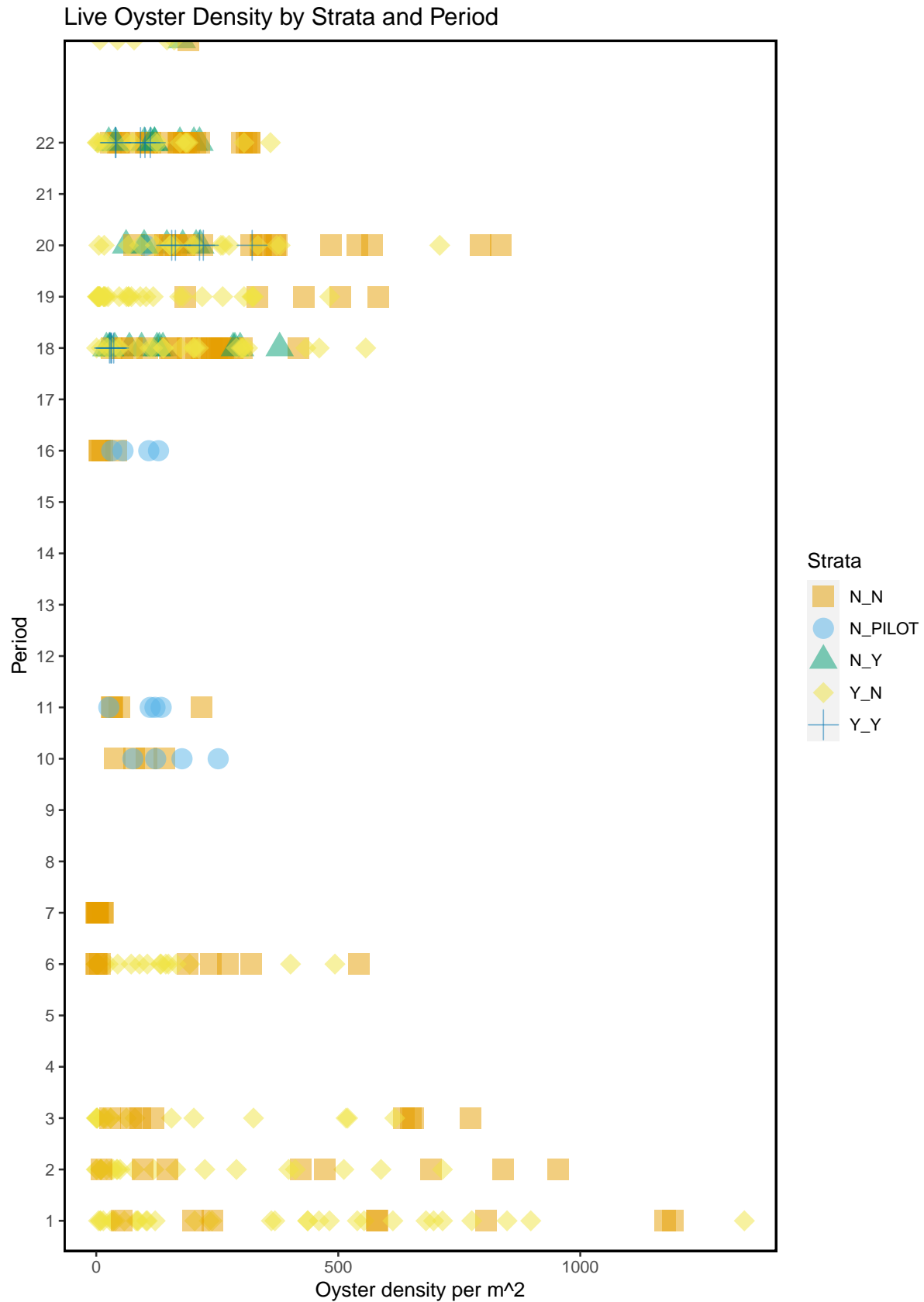


Figure – Live oyster density by strata and period for all periods including period 22 (current period).

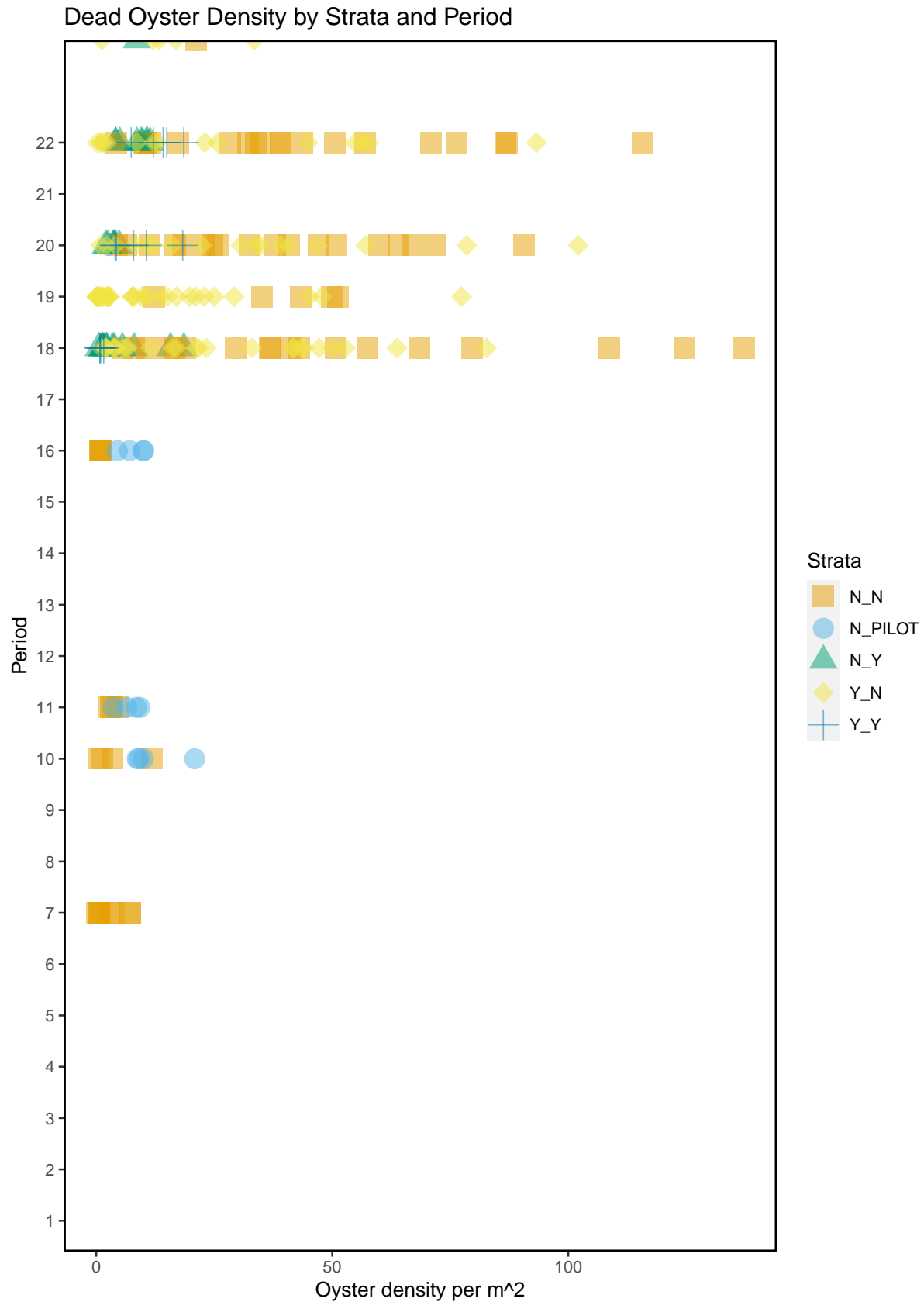


Figure – Dead oyster density by strata and period for all periods including period 22 (current period).

Live and Dead Count Comparison For All Periods

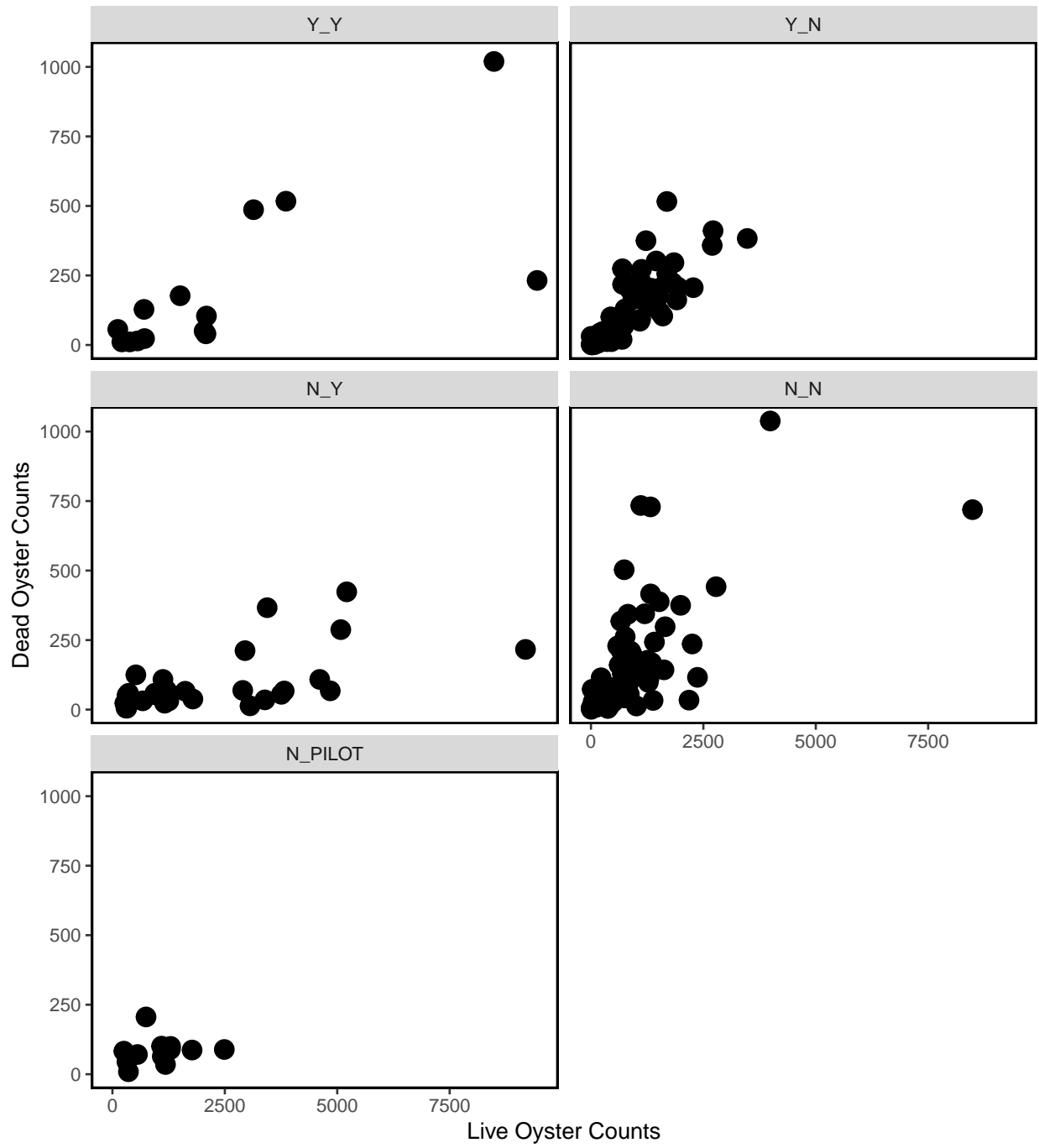


Figure- Live and dead oyster comparison for all periods, last sample date of period 24 is 2021-11-09.

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).

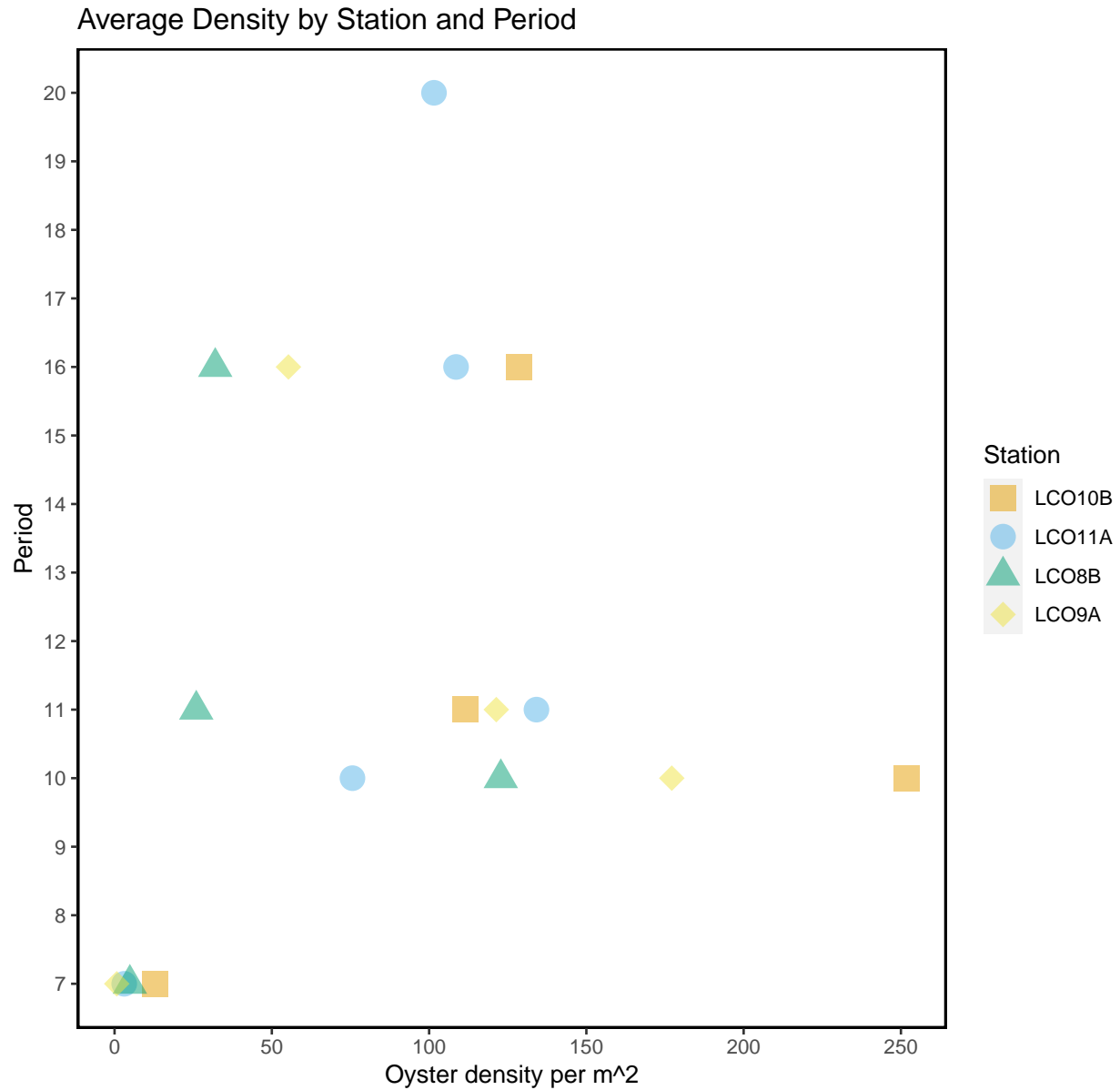


Figure – Average live oyster density comparison by station and period for all stations that were sampled during the pilc

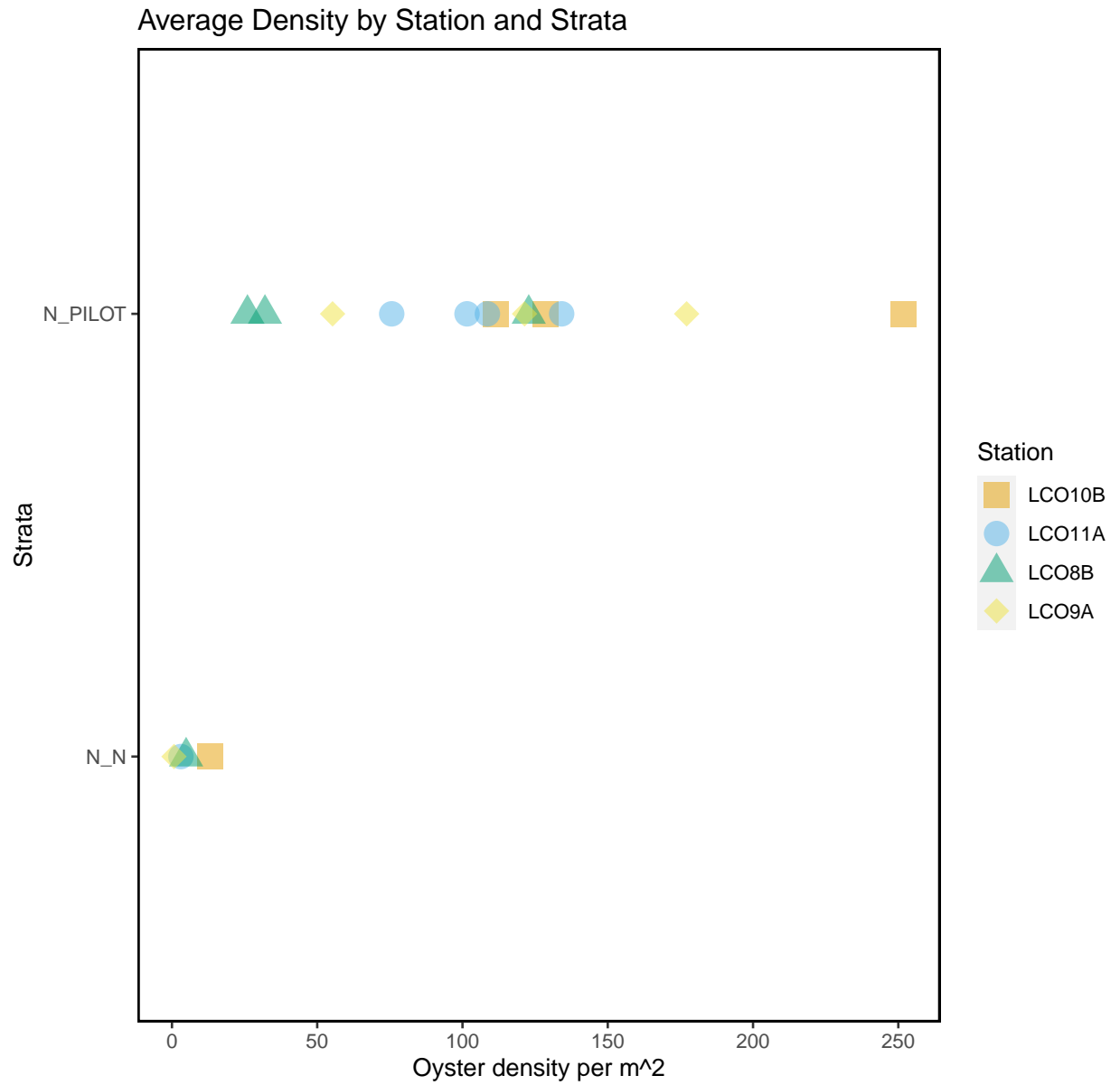


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

Latest Data Entered

Displayed are the entries for the last date of sampling (2021-11-09).

date	station	tran_length	count_live	count_dead	treatment	strata
2021-11-09	LCI37	2.5	15	3	control	Y_N
2021-11-09	LCI37	5.0	3	0	control	Y_N
2021-11-09	LCI37	7.5	29	5	control	Y_N
2021-11-09	LCI37	10.0	47	9	control	Y_N
2021-11-09	LCI37	12.5	60	17	control	Y_N
2021-11-09	LCI37	15.0	19	0	control	Y_N
2021-11-09	LCI37	17.5	38	2	control	Y_N
2021-11-09	LCI37	20.0	23	8	control	Y_N
2021-11-09	LCI37	2.5	13	2	control	Y_N
2021-11-09	LCI37	5.0	4	0	control	Y_N
2021-11-09	LCI37	7.5	34	2	control	Y_N
2021-11-09	LCI37	10.0	44	12	control	Y_N
2021-11-09	LCI37	12.5	54	14	control	Y_N
2021-11-09	LCI37	15.0	24	1	control	Y_N
2021-11-09	LCI37	17.5	41	2	control	Y_N
2021-11-09	LCI37	20.0	29	4	control	Y_N
2021-11-09	LCI51	2.5	0	0	control	Y_N
2021-11-09	LCI51	5.0	11	1	control	Y_N
2021-11-09	LCI51	7.5	1	0	control	Y_N
2021-11-09	LCI51	10.0	70	17	control	Y_N
2021-11-09	LCI51	12.5	90	28	control	Y_N
2021-11-09	LCI51	15.0	148	32	control	Y_N
2021-11-09	LCI51	17.5	79	8	control	Y_N
2021-11-09	LCI51	19.8	32	3	control	Y_N
2021-11-09	LCI51	2.5	0	0	control	Y_N
2021-11-09	LCI51	5.0	11	1	control	Y_N
2021-11-09	LCI51	7.5	0	2	control	Y_N
2021-11-09	LCI51	10.0	62	16	control	Y_N
2021-11-09	LCI51	12.5	93	38	control	Y_N
2021-11-09	LCI51	15.0	170	41	control	Y_N
2021-11-09	LCI51	17.5	80	12	control	Y_N
2021-11-09	LCI51	19.8	35	3	control	Y_N