

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 18 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, 136 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

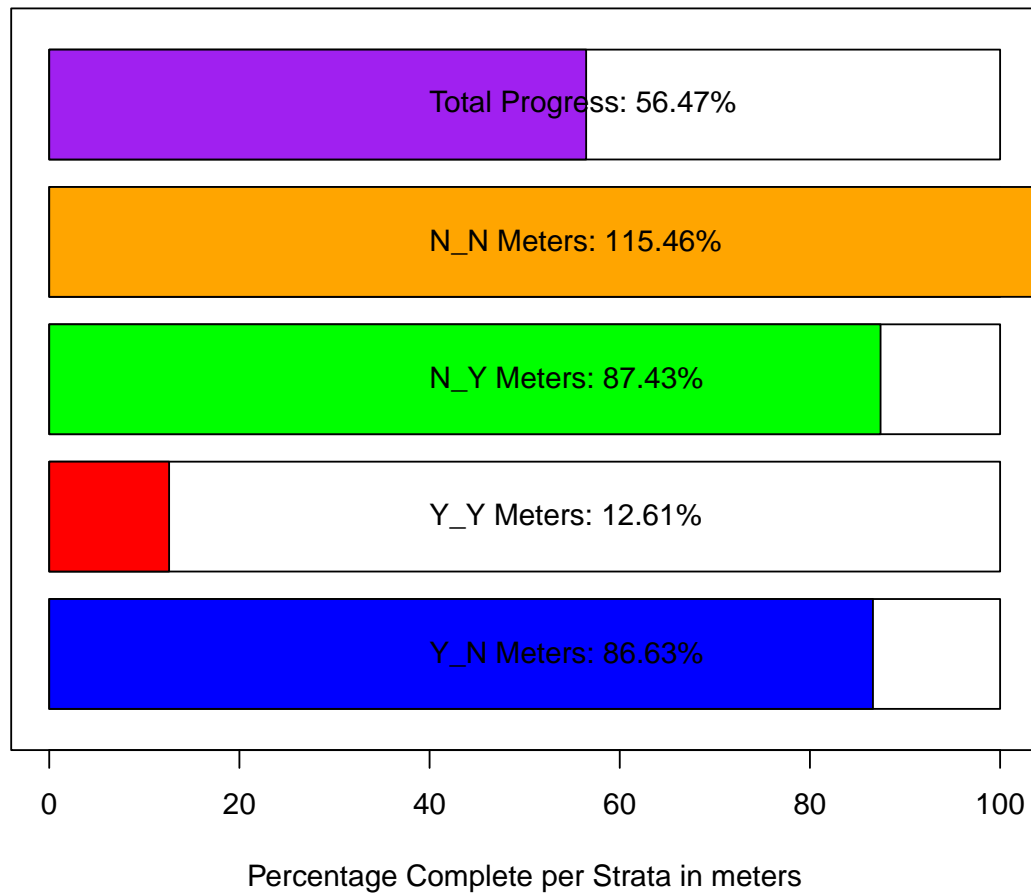
Definition of Strata

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	1451	897	2007	4026231	1.38	487	497	2405	1465	747	2490
LC	1477	903	1666	2776544	1.13	139	1205	1749	1478	1225	1775
LT	1037	877	574	329239	0.55	132	779	1295	1042	822	1322
NN	745	649	634	402430	0.85	183	386	1104	738	439	1094

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1105	853	1163	1351794	1.05	140	831	1380	1114	866	1413
N_PILLOT	2180	3009	1582	2501624	0.73	913	390	3970	2181	356	3174
N_Y	2556	2944	1954	3820043	0.76	330	1908	3203	2544	1949	3211
Y_N	788	632	741	549820	0.94	89	614	961	788	616	958
Y_Y	2577	2039	2854	8145494	1.11	737	1132	4021	2556	1282	4033

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	762	1223
20	1844	1253	2125	4517189	1.15	310	1236	2451	1850	1300	2497
22	1334	702	1693	2867783	1.27	242	860	1808	1332	917	1810
24	1545	987	1346	1811359	0.87	227	1099	1991	1546	1133	1988

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	248	218	173	29961	0.70	42	165	330	250	177	338
LC	166	158	120	14498	0.72	10	147	186	166	146	185
LT	285	300	137	18813	0.48	31	223	347	285	228	343
NN	209	154	219	47980	1.05	63	85	333	210	110	349

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	237	205	155	24018	0.65	19	201	274	237	203	274
N_PILLOT	143	147	39	1557	0.28	23	98	188	143	102	180

N_Y	154	146	88	7819	0.58	15	124	183	153	126	181
Y_N	174	153	143	20430	0.82	17	141	208	173	141	207
Y_Y	114	101	88	7717	0.77	23	70	158	113	75	157

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	144	208
20	256	203	187	35057	0.73	27	203	310	255	208	311
22	137	121	93	8638	0.68	13	111	163	137	112	164
24	187	180	99	9851	0.53	17	154	220	186	154	218

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	268	169	288	82962	1.07	70	131	405	266	151	411
LC	140	83	158	24863	1.13	13	114	166	139	114	166
LT	223	141	188	35484	0.84	43	138	308	225	144	315
NN	99	68	94	8757	0.95	27	46	152	99	55	152

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	203	135	212	44933	1.04	26	153	253	203	157	263
N_PILOT	136	127	131	17150	0.97	76	-13	284	132	9	270
N_Y	112	68	102	10463	0.92	17	78	145	111	77	148
Y_N	121	80	122	14884	1.01	15	92	149	121	94	150
Y_Y	223	104	286	81667	1.28	74	78	368	222	102	380

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	89	184
20	148	107	140	19727	0.95	20	108	188	147	108	190
22	191	128	193	37399	1.01	28	137	245	192	141	249
24	163	127	170	28807	1.04	29	106	219	164	116	229

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	49	37	33	1085	0.67	8.0	33	65	50	35	66
LC	21	12	22	489	1.07	1.8	17	24	21	17	24
LT	56	47	36	1331	0.65	8.4	40	72	56	39	72
NN	26	16	23	518	0.86	6.6	14	39	27	15	39

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	42.4	34.8	31.1	968	0.73	3.75	35.1	49.8	42.2	35.2	49.3
N_PILOT	7.6	7.6	5.0	25	0.66	2.88	1.9	13.2	7.7	2.6	12.5
N_Y	6.6	5.0	4.6	21	0.69	0.77	5.1	8.2	6.7	5.2	8.2
Y_N	26.7	19.0	25.0	624	0.94	2.99	20.8	32.5	26.7	21.3	33.3
Y_Y	9.0	7.9	6.7	45	0.75	1.73	5.6	12.4	8.9	5.7	11.9

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	34
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	28	21	37
24	25	17	23	531	0.92	3.9	17	33	25	18	34

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

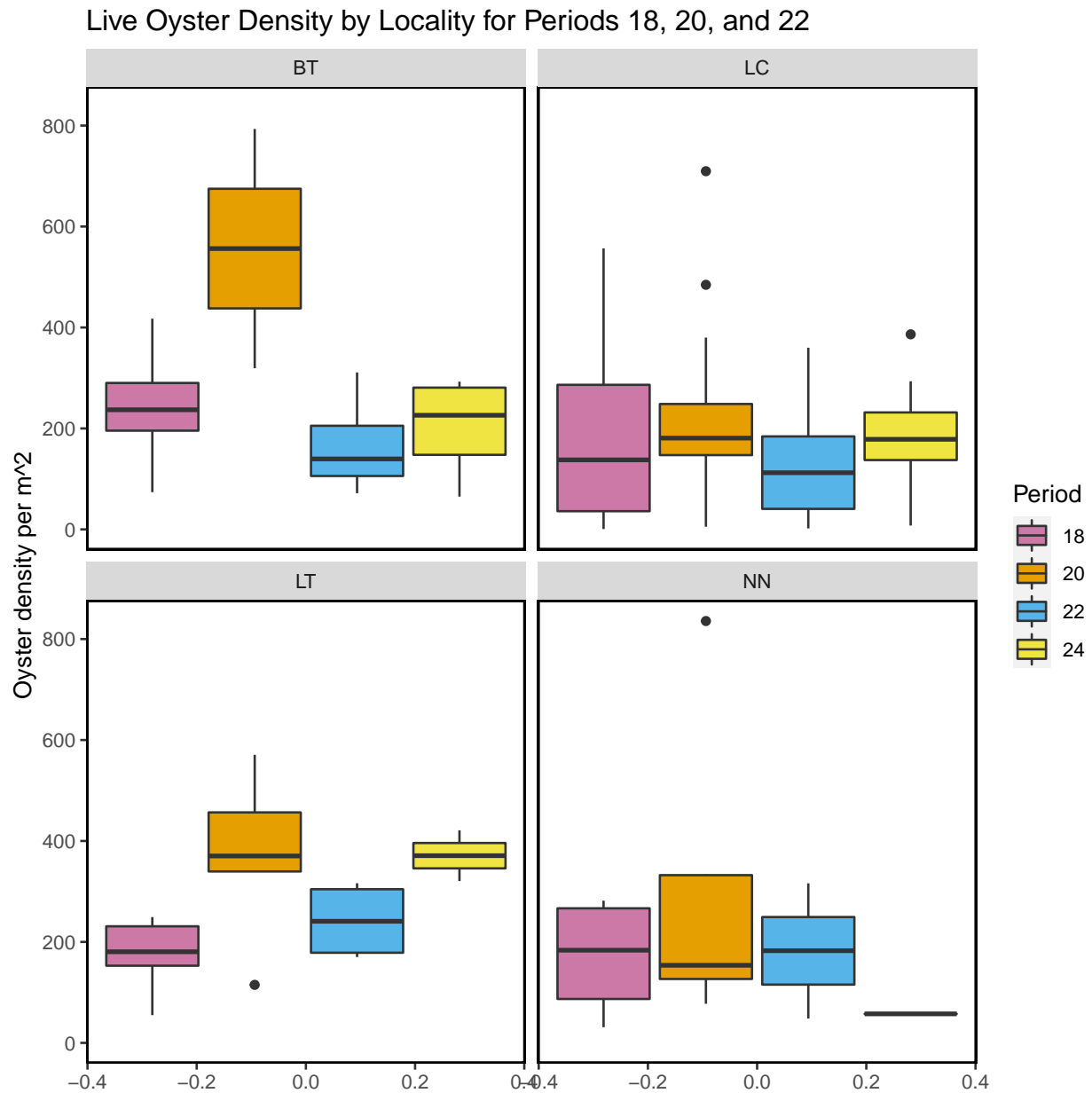


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-23.

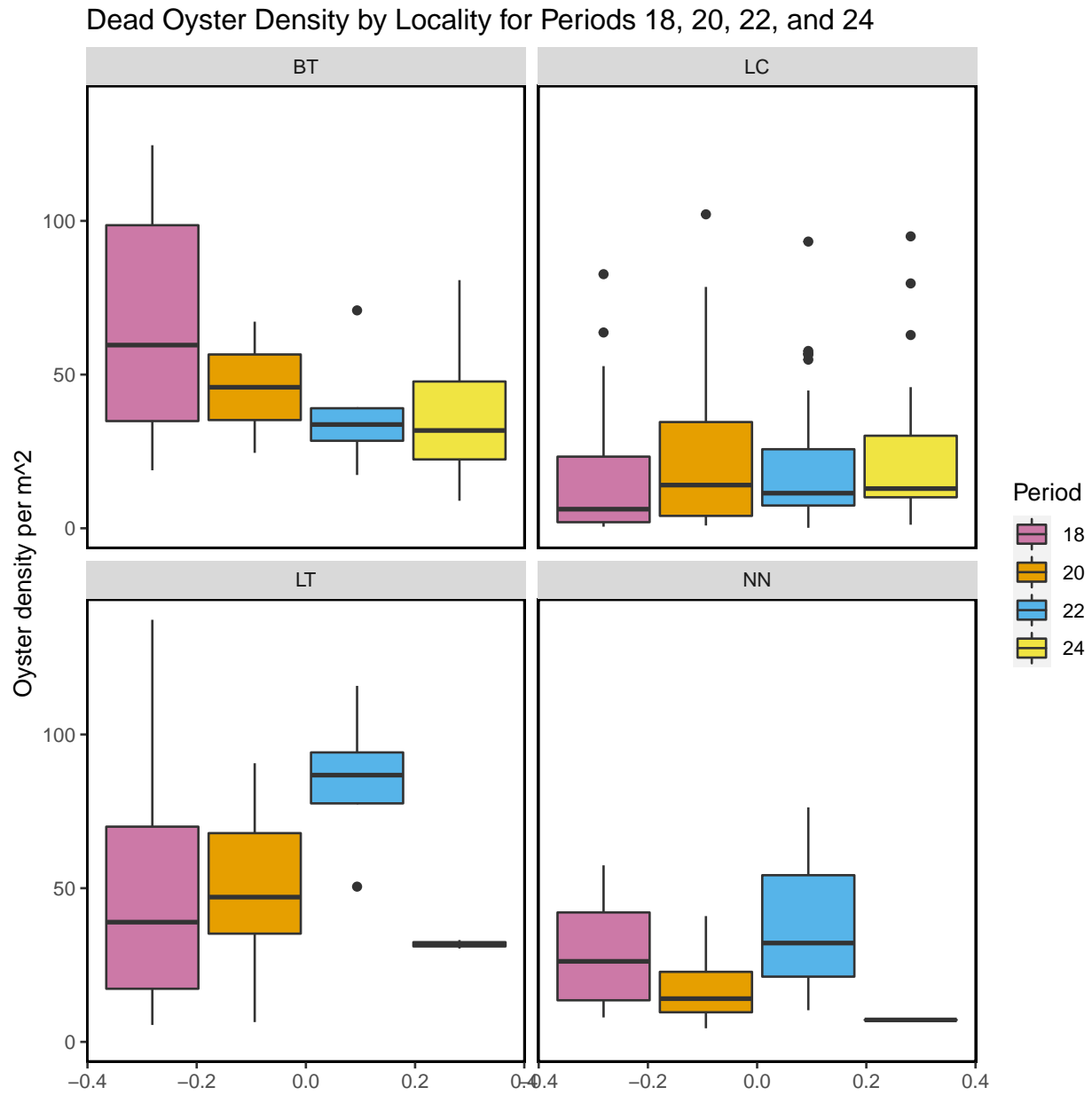


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-23.

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

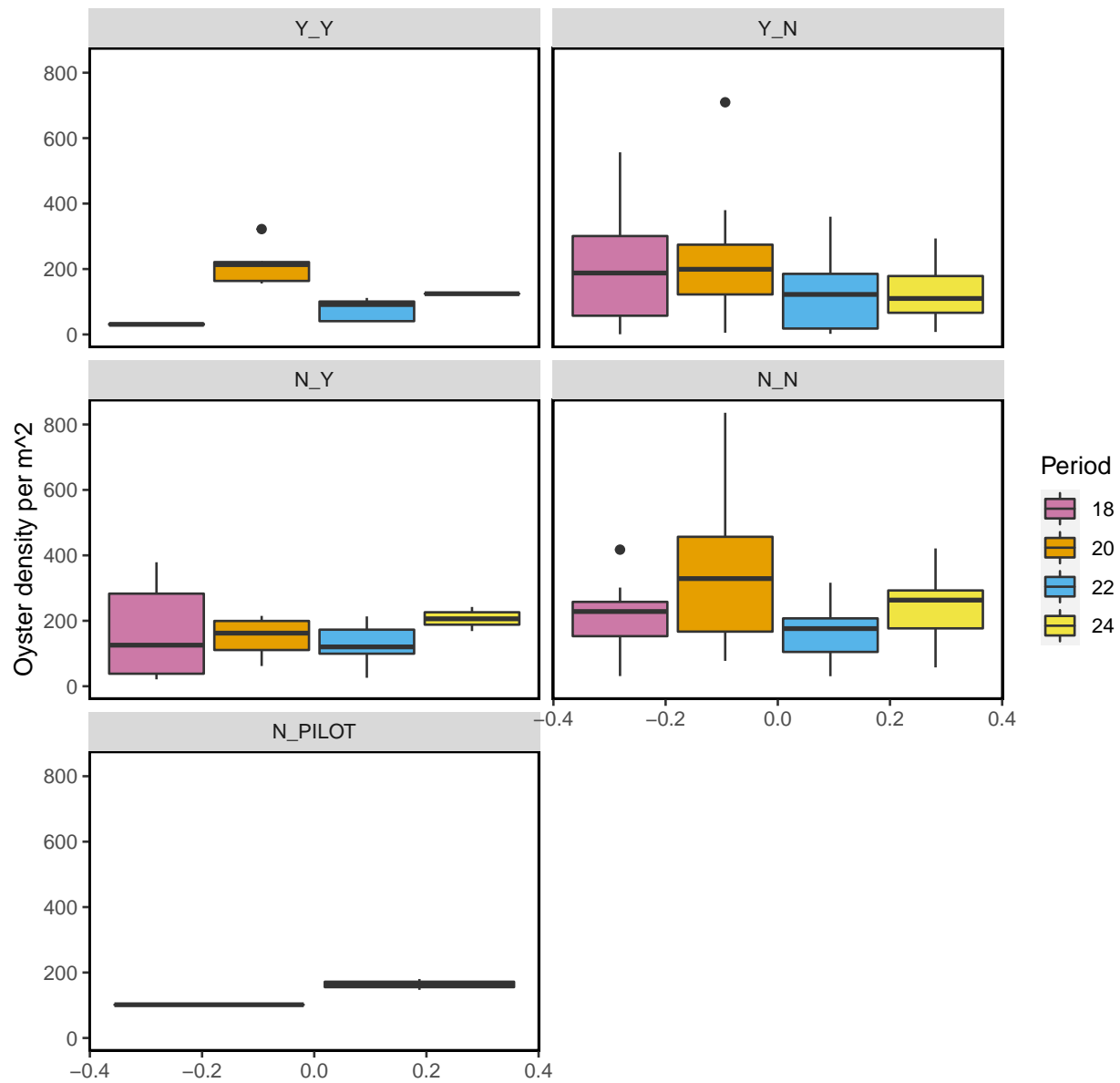


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-23.

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

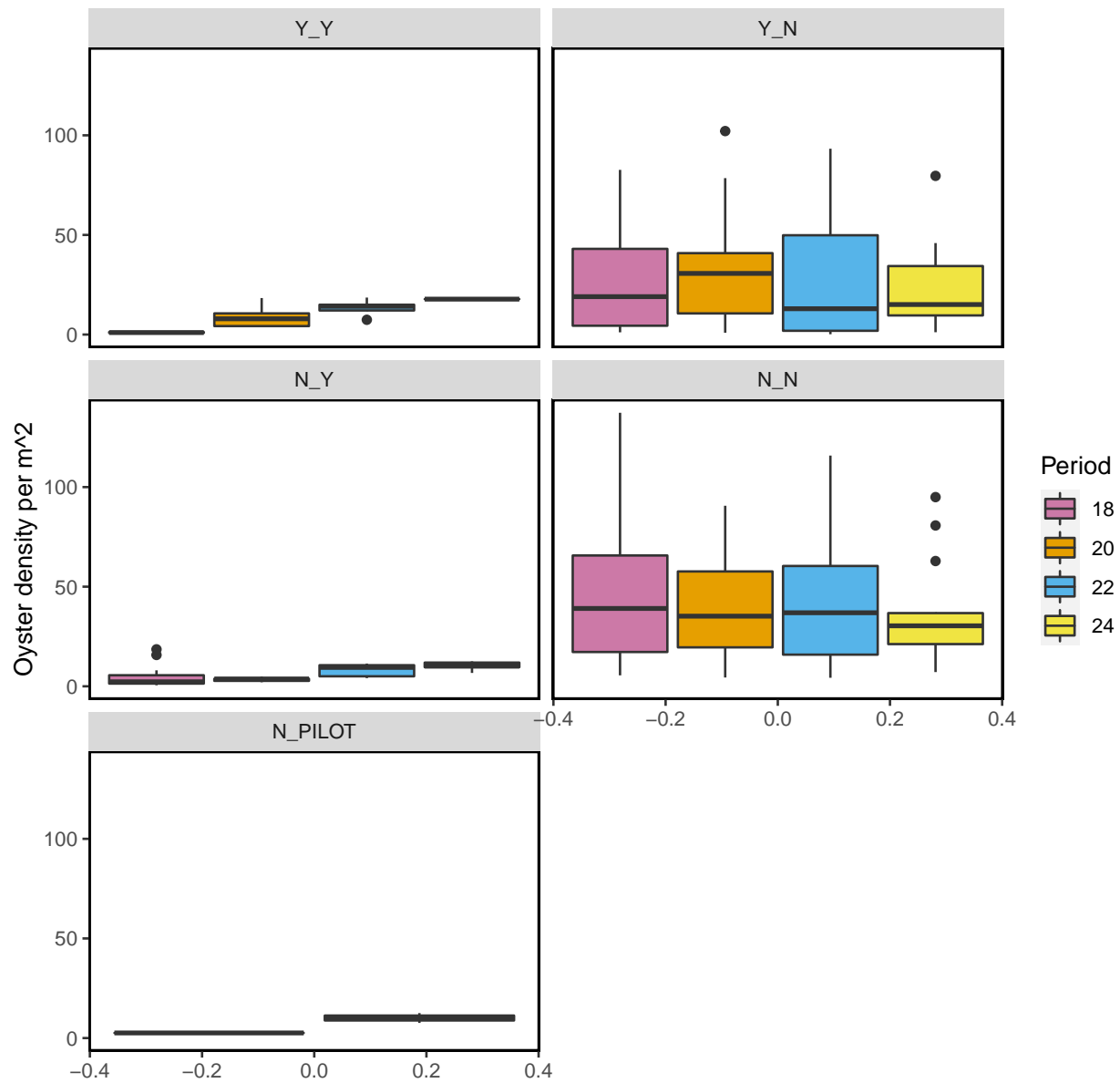


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-12-23.

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.

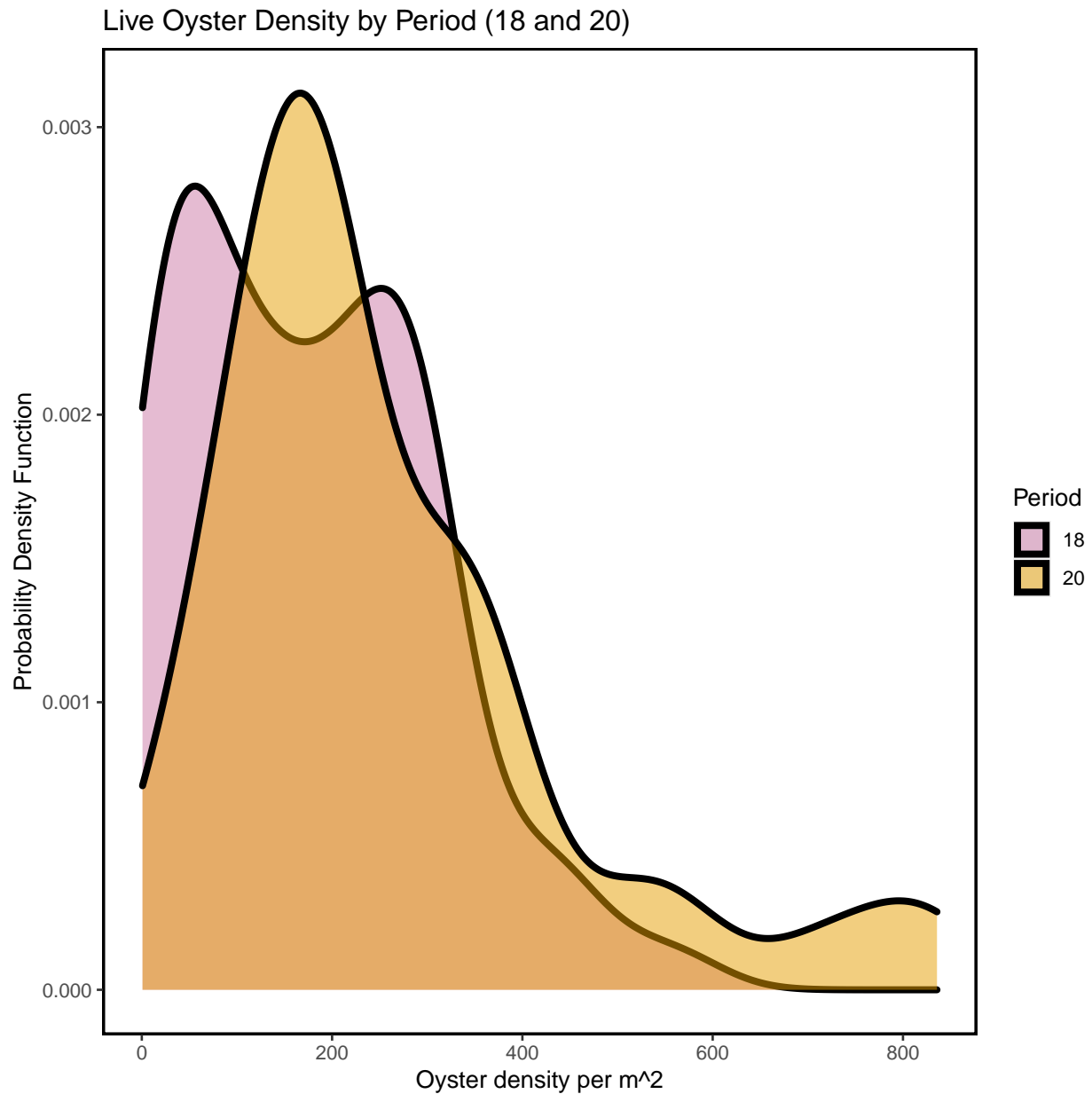


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-12-23.

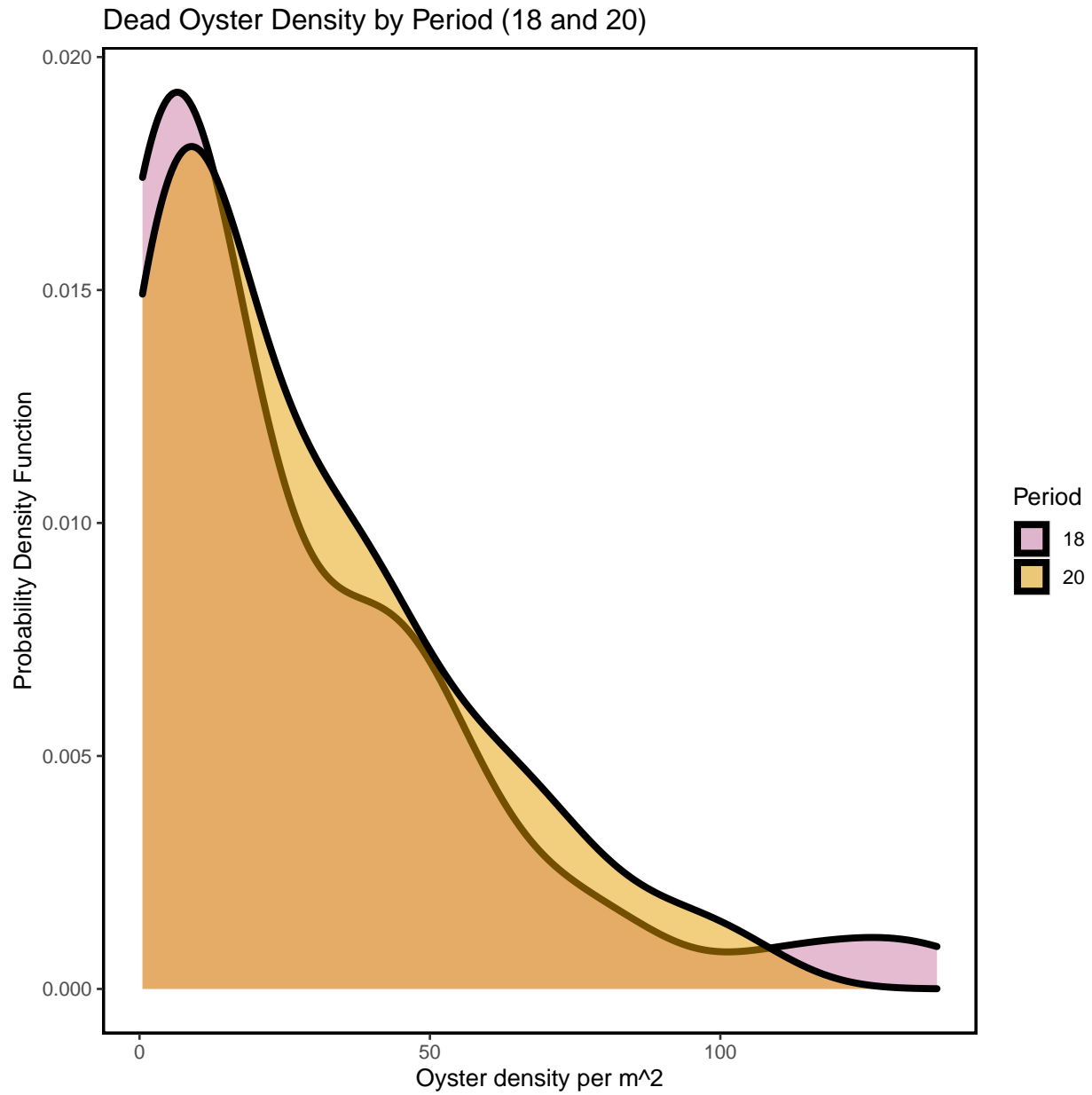


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-12-23.

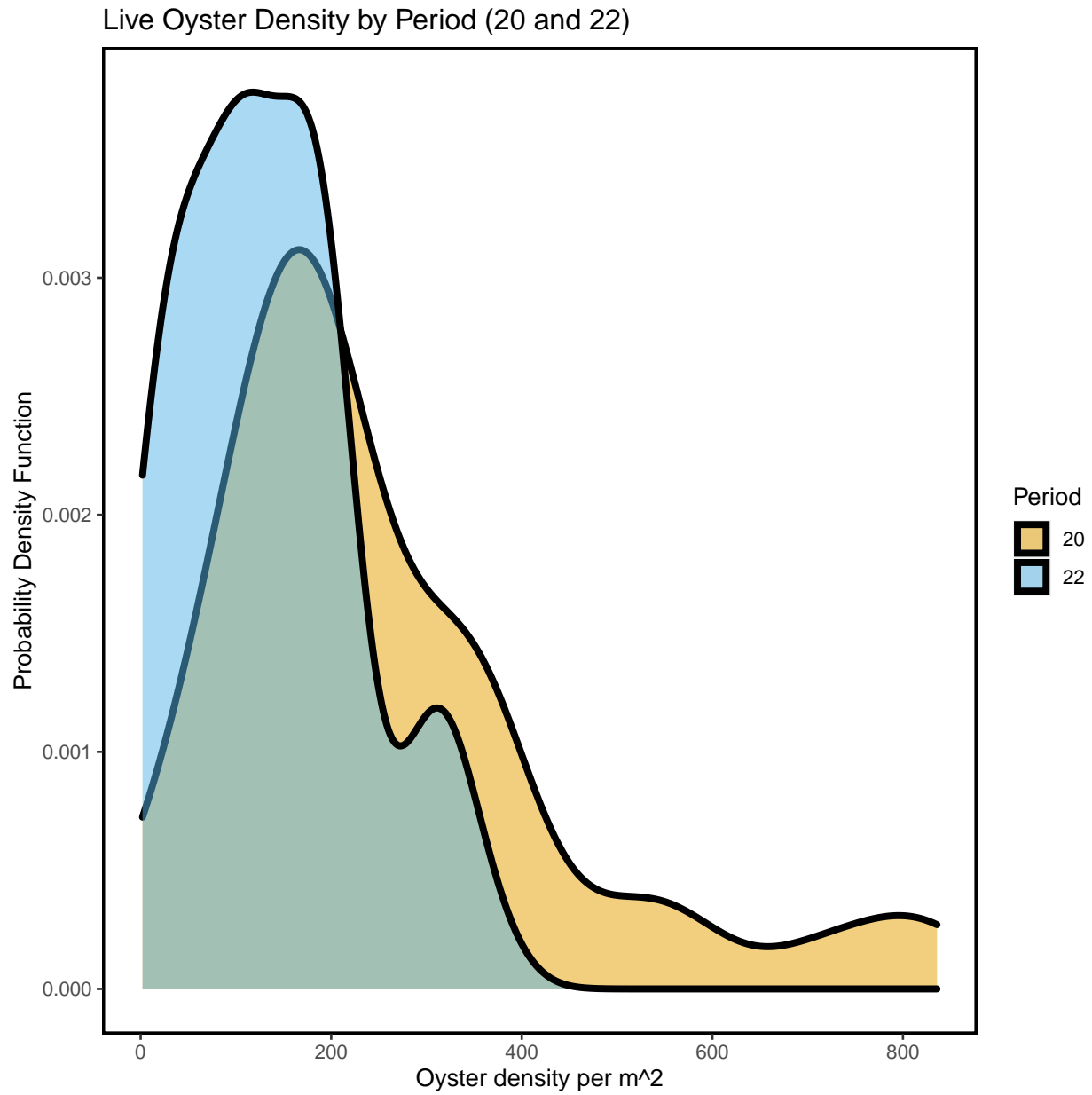


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-12-23.

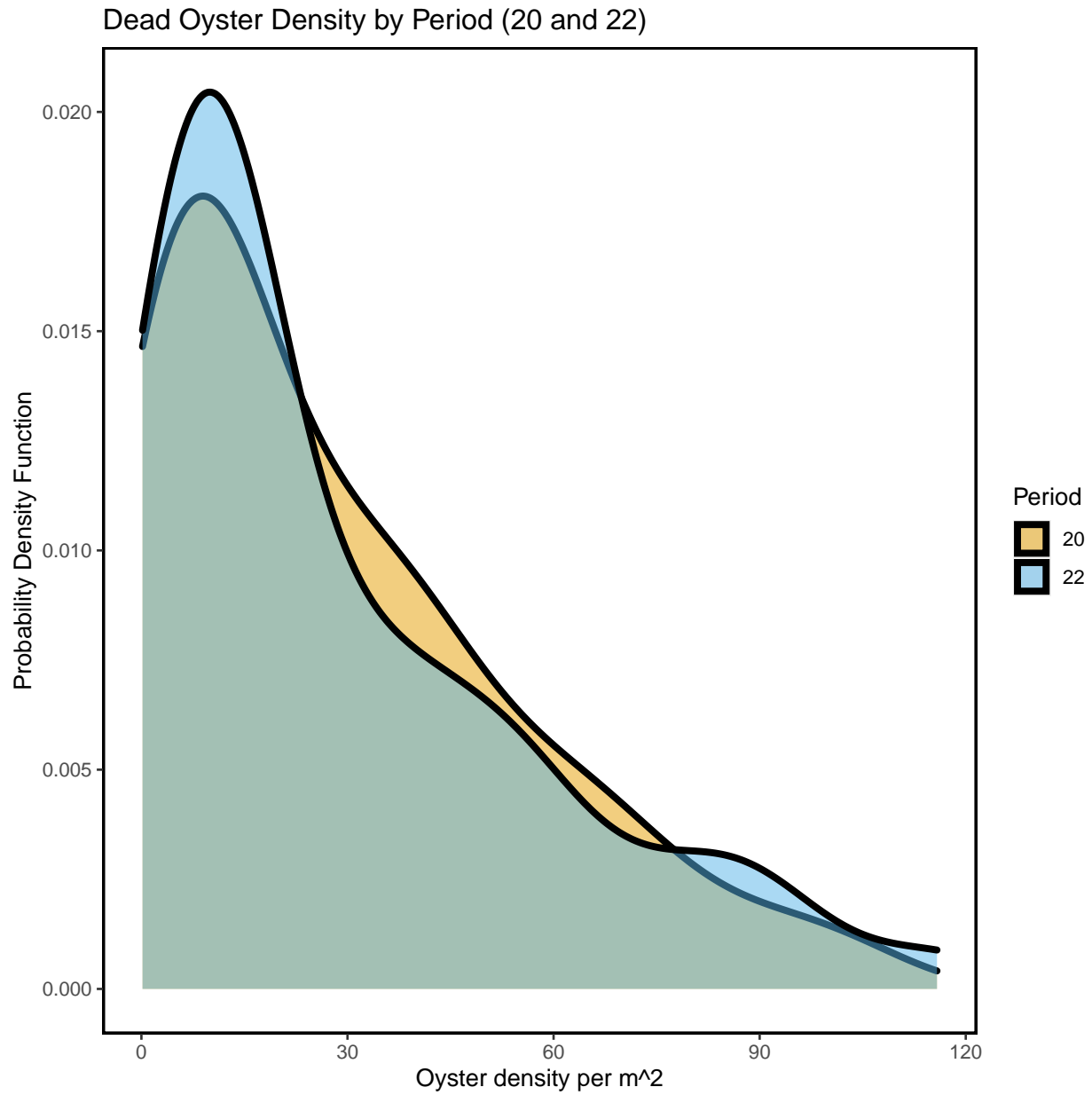


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-12-23.

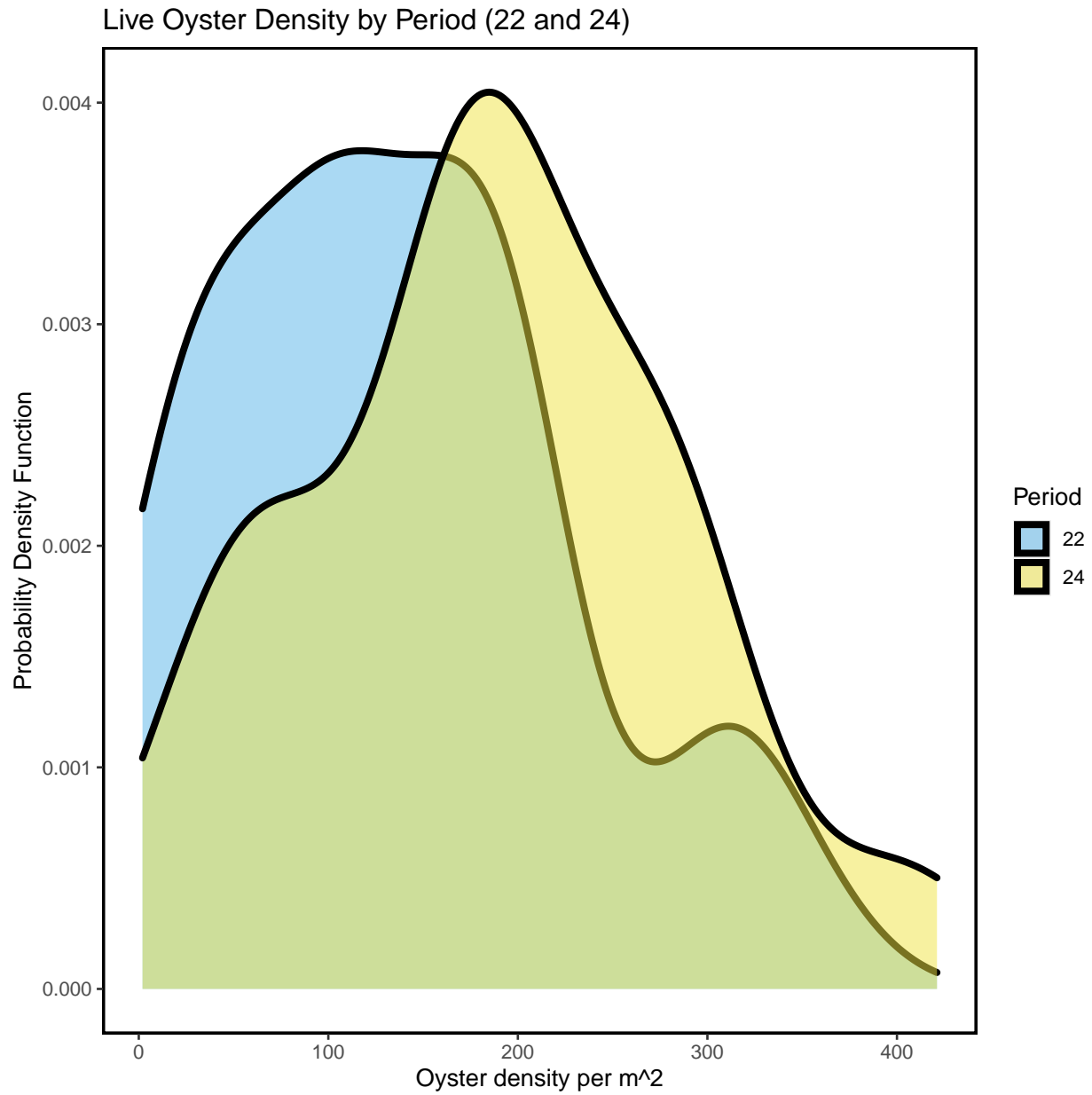


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-12-23.

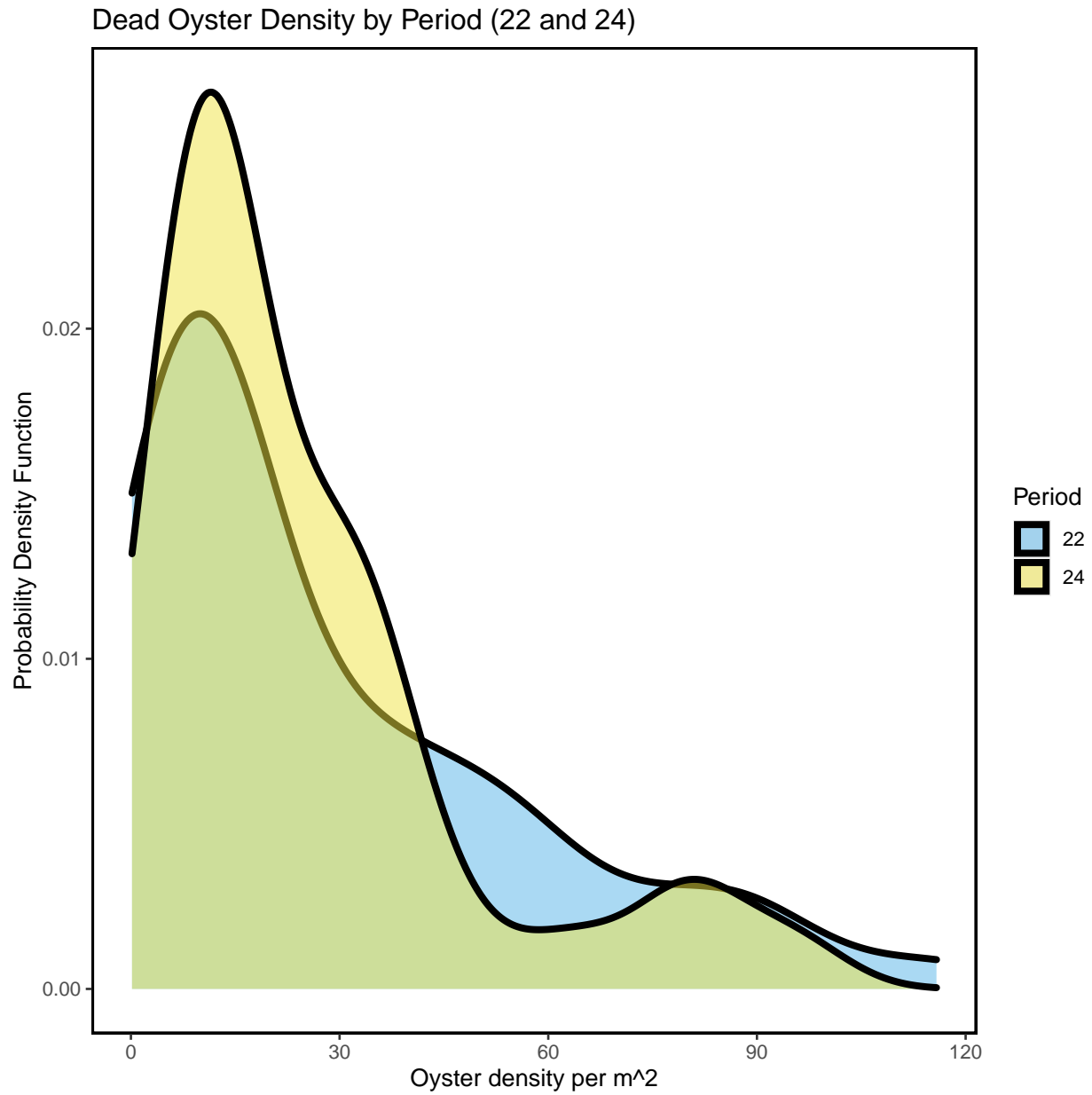


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-12-23.

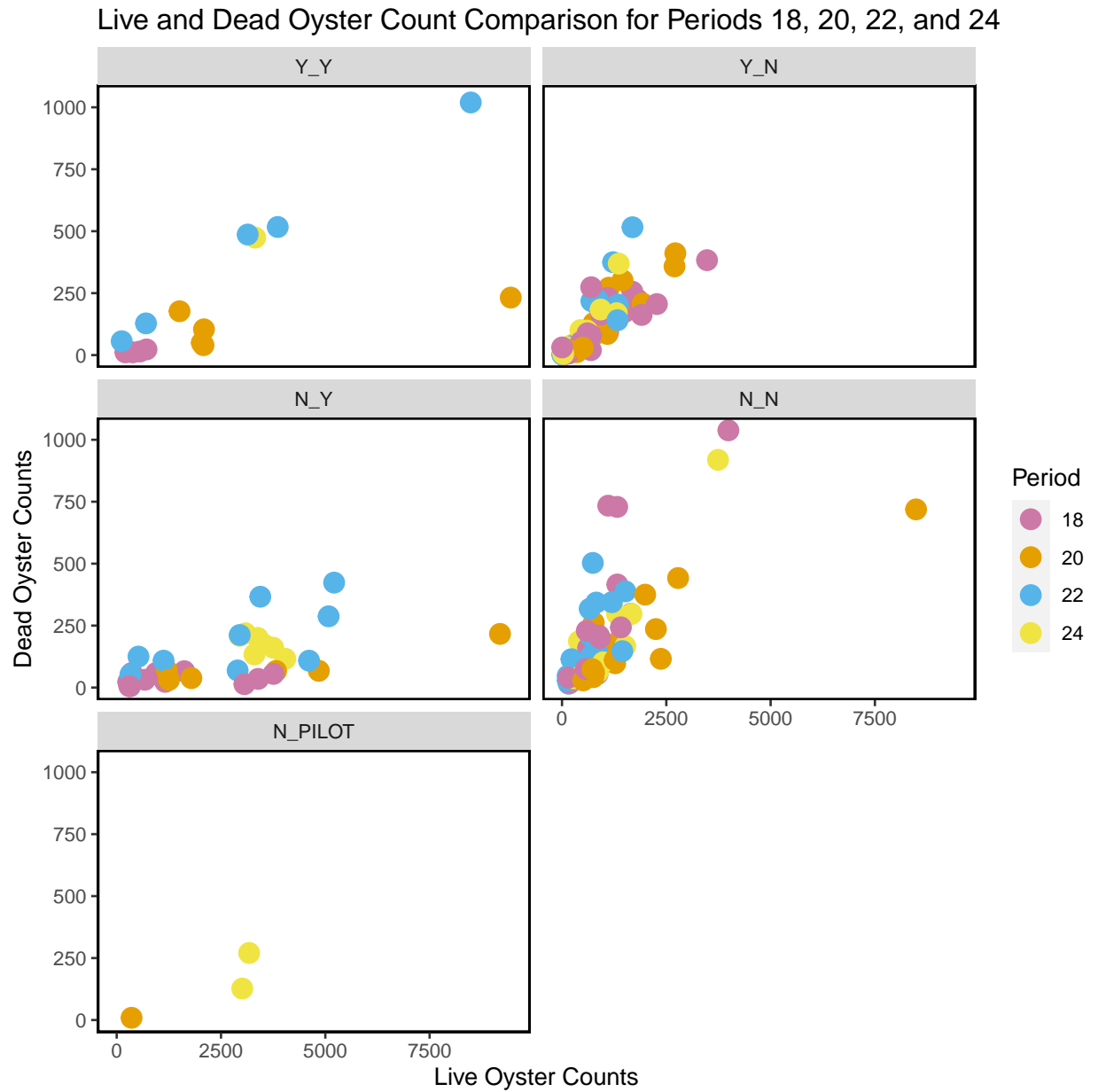


Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021) and 24 (Winter 2021-2022), last sample date of period 24 as 2021-12-23.

Live Counts Double Pass Results

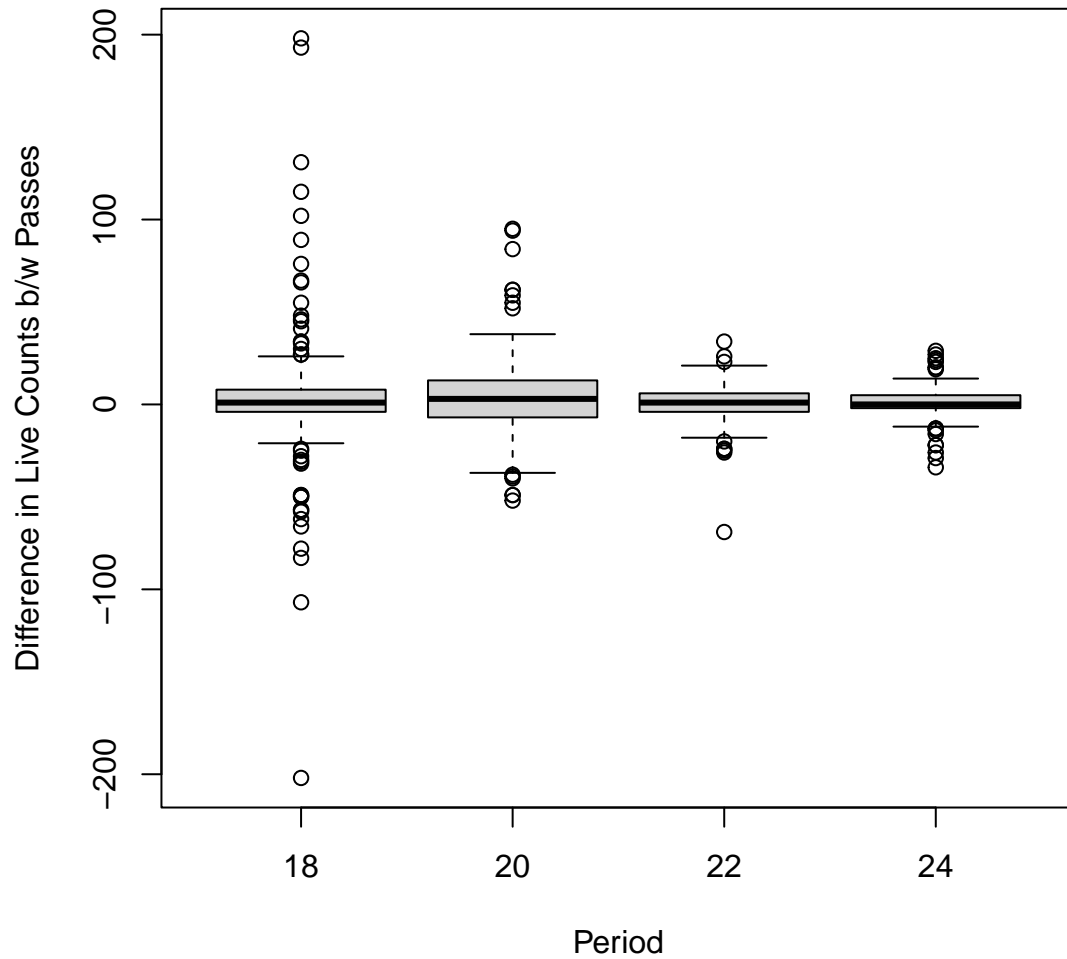


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, and 24

locality	period	mean_difference	sd_difference	CV
BT	18	-5.429	60.0	-11.1
LC	18	3.583	30.0	8.4
NN	18	13.167	15.5	1.2
LC	20	4.333	22.4	5.2
LT	20	2.636	39.2	14.9
BT	22	-1.000	18.9	-18.9
LC	22	0.141	9.0	63.6
LT	22	3.381	10.9	3.2
BT	24	9.231	14.0	1.5
LC	24	0.094	8.3	88.0

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

Dead Counts Double Pass Results

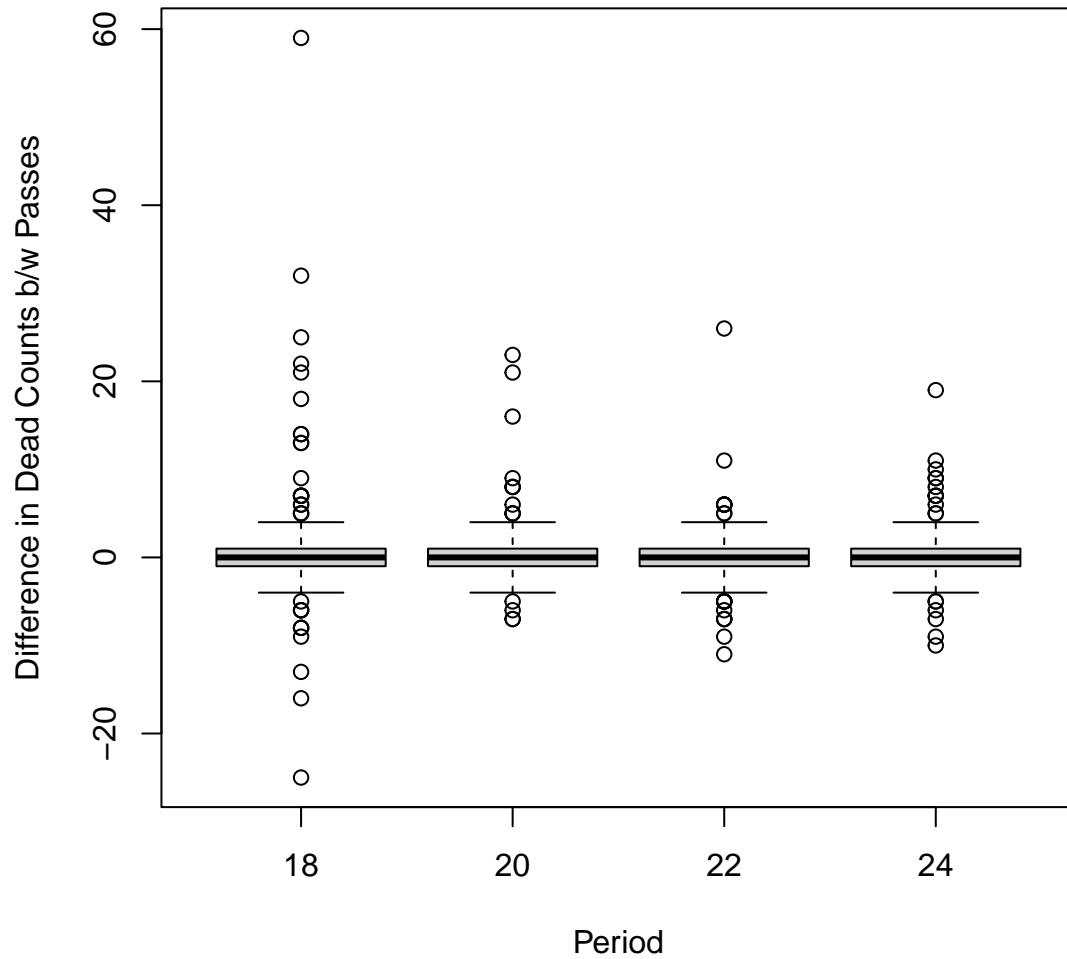


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, and 24

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
BT	24	0.54	0.51
LC	24	1.30	1.27

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 2021-12-23. 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	17	564
CK	26	734
CR	46	1375
HB	45	1129
LC	224	12442
LT	19	488
NN	12	322

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	126	4121
N_PILOT	15	1050
N_Y	35	3972
Y_N	198	5750
Y_Y	15	2161

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	35	1873

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	4	98
24	LC	28	1708
24	LT	2	34
24	NN	1	34
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	13	391
24	N_PILOT	2	251
24	N_Y	7	768
24	Y_N	12	288
24	Y_Y	1	175
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

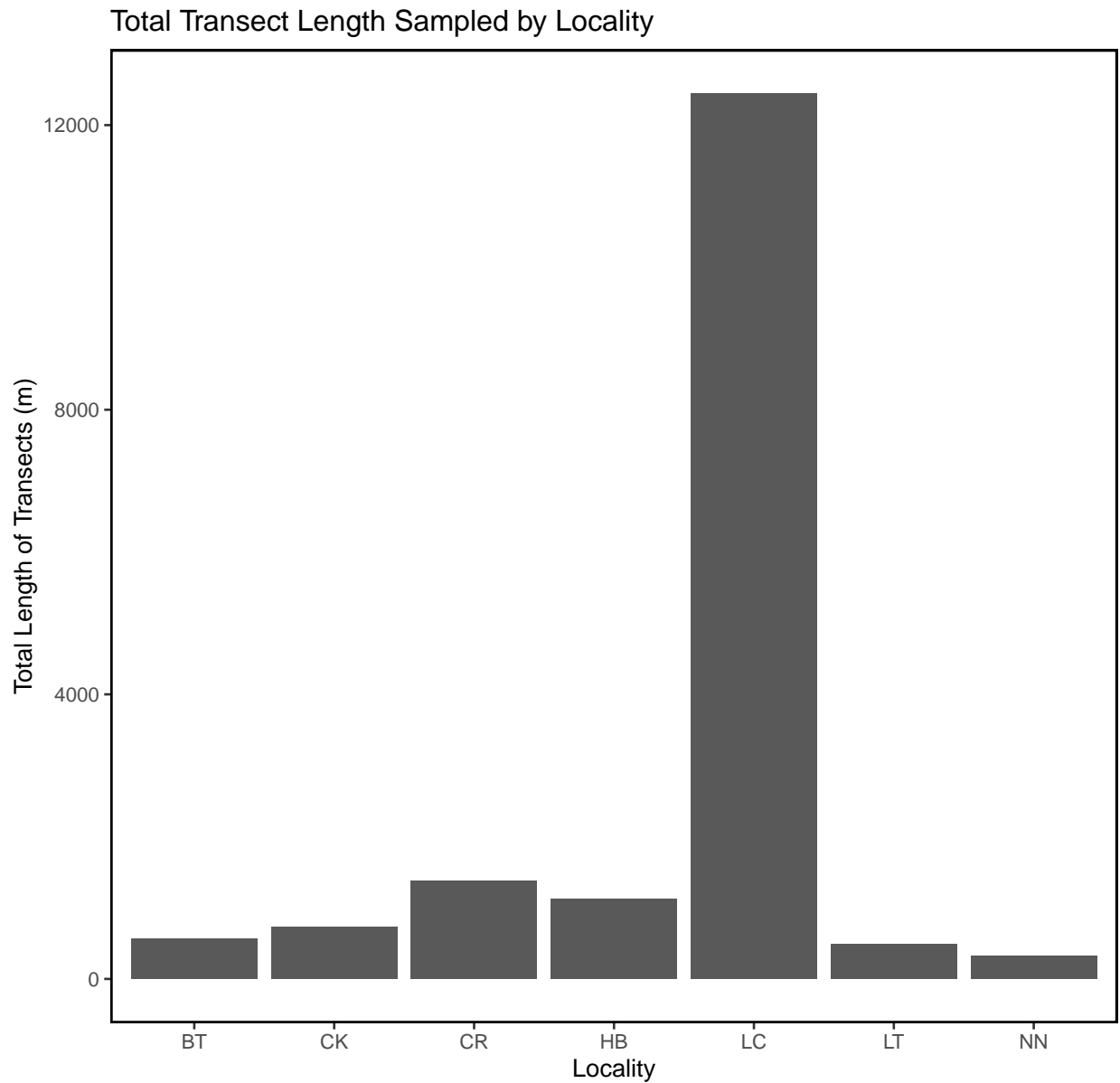


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

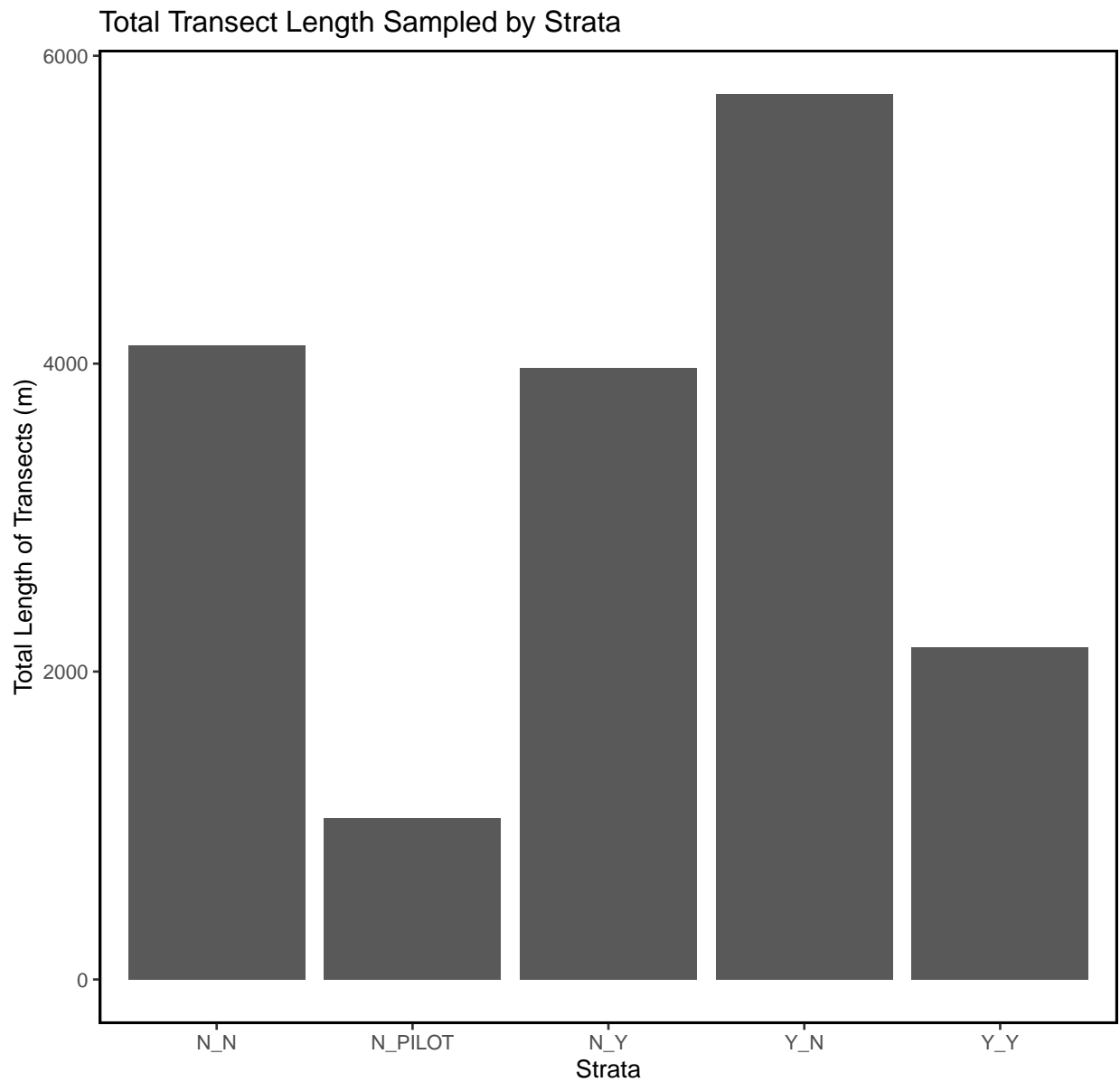
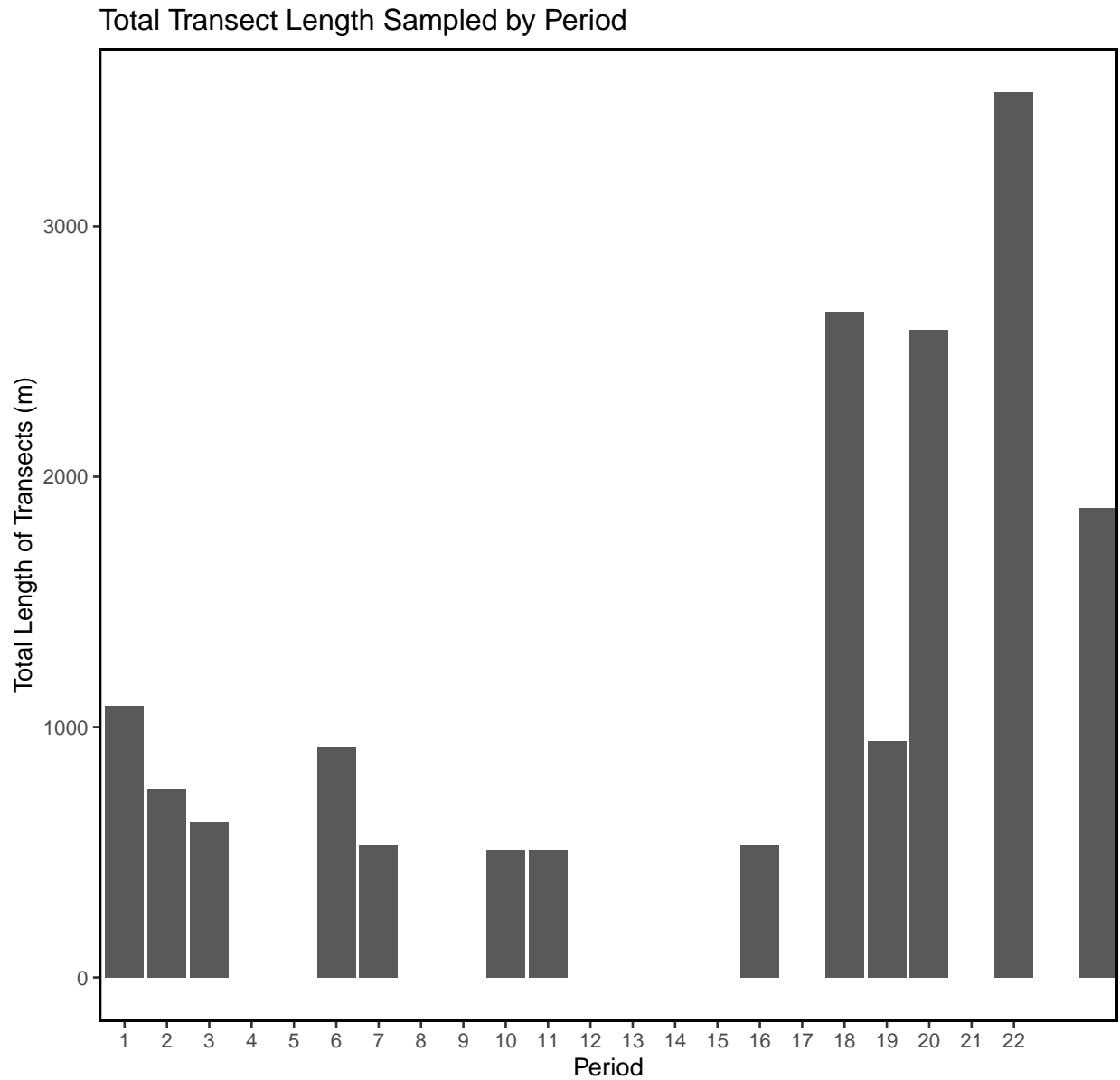


Figure – Bar plot of total transect length in meters sampled by strata for all periods.



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	1451	897	2007	4026231	1.38	487	497	2405	1452	743	2513
CK	857	444	1091	1190933	1.27	214	438	1277	850	491	1256
CR	1026	716	1035	1072162	1.01	153	727	1325	1021	737	1320
HB	902	364	1047	1095622	1.16	158	592	1211	905	609	1223
LC	1176	700	1459	2128707	1.24	98	984	1369	1180	997	1377
LT	1037	877	574	329239	0.55	132	779	1295	1031	817	1323
NN	745	649	634	402430	0.85	183	386	1104	748	438	1135

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1005	767	1039	1079372	1.03	93	823	1188	1006	846	1200
N_PILLOT	1318	1136	925	856059	0.70	239	850	1787	1323	928	1800
N_Y	2556	2944	1954	3820043	0.76	330	1908	3203	2559	1932	3253
Y_N	764	435	897	804996	1.18	64	638	890	762	643	882
Y_Y	2577	2039	2854	8145494	1.11	737	1132	4021	2586	1333	4031

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	1396	1013	1803
2	890	476	945	893727	1.06	176	546	1234	885	575	1228
3	738	296	817	668064	1.11	167	411	1065	735	435	1063
6	433	176	534	284791	1.23	96	245	621	433	253	620
7	50	29	56	3186	1.12	20	11	90	50	17	91
10	1207	1074	671	449607	0.56	237	743	1672	1185	799	1630
11	886	776	678	459708	0.77	240	416	1356	895	537	1352
16	494	366	467	217855	0.95	165	170	817	494	226	818
18	982	695	935	874733	0.95	120	748	1217	982	745	1235
19	555	329	573	328431	1.03	97	365	745	555	383	740
20	1844	1253	2125	4517189	1.15	310	1236	2451	1856	1325	2440
22	1334	702	1693	2867783	1.27	242	860	1808	1322	887	1853
24	1545	987	1346	1811359	0.87	227	1099	1991	1546	1074	1973

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	248	218	173	29961	0.70	42.0	165	330	247	178	339
CK	241	112	321	102927	1.33	62.9	118	364	242	137	376
CR	283	178	294	86605	1.04	43.4	198	368	284	204	378
HB	257	101	303	92052	1.18	45.7	168	347	256	171	346
LC	155	124	143	20432	0.92	9.6	136	173	155	136	175
LT	285	300	137	18813	0.48	31.5	223	347	284	225	342
NN	209	154	219	47980	1.05	63.2	85	333	211	115	340

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	258	190	244	59704	0.95	22	215	301	258	220	303
N_PILOT	118	121	59	3467	0.50	15	88	148	118	91	146
N_Y	154	146	88	7819	0.58	15	124	183	153	123	183
Y_N	183	111	213	45460	1.16	15	154	213	184	156	216
Y_Y	114	101	88	7717	0.77	23	70	158	114	75	161

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	393	290.5	508.0
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	256	161.4	362.9
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	234	135.9	346.8
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	120	74.3	174.3
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.7	8.8
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	123	85.4	168.6
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	90	50.3	136.8
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49	22.8	78.1
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	176	145.9	207.1
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	155	100.5	215.4
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	257	208.3	308.7
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	137	111.1	165.6
24	187	180.2	99.3	9851	0.53	17	154.5	220.2	187	156.3	217.4

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	268	169	288	82962	1.07	70	131.3	405	270	151	427
CK	78	32	106	11170	1.36	37	4.3	151	78	20	150
CR	60	47	38	1444	0.63	13	35.2	85	60	39	86
HB	44	21	45	2000	1.02	15	14.8	73	45	20	73
LC	122	70	146	21234	1.20	11	100.5	143	122	102	142
LT	223	141	188	35484	0.84	43	138.4	308	221	144	311
NN	99	68	94	8757	0.95	27	45.8	152	99	53	154

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	161	96	196	38407	1.22	20	121	200	160	122	203
N_PILLOT	98	89	65	4243	0.67	17	65	131	98	70	132
N_Y	112	68	102	10463	0.92	17	78	145	112	80	148
Y_N	102	53	113	12718	1.11	11	80	124	102	81	125
Y_Y	223	104	286	81667	1.28	74	78	368	222	102	379

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	12	50
10	80	88	65	4245	0.82	23.0	34.5	125	80	37	126
11	50	40	25	620	0.49	8.8	33.2	68	51	36	67
16	44	28	41	1708	0.93	14.6	15.6	73	44	18	70
18	133	55	192	36903	1.44	24.6	85.1	182	133	91	184
19	63	44	67	4548	1.08	11.6	40.0	85	63	43	86
20	148	107	140	19727	0.95	20.5	107.6	188	148	112	191
22	191	128	193	37399	1.01	27.6	137.2	245	191	142	251
24	163	127	170	28807	1.04	28.7	106.5	219	163	114	224

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	49	36.8	33	1085	0.67	8.0	33.5	65	49	34.0	65
CK	21	11.3	28	757	1.29	9.7	2.3	40	21	5.4	40
CR	18	10.8	16	247	0.87	5.2	7.8	28	18	9.7	29
HB	13	8.0	14	201	1.12	4.7	3.4	22	13	4.8	22
LC	18	9.9	21	437	1.17	1.5	14.8	21	18	15.0	21
LT	56	47.1	36	1331	0.65	8.4	39.6	72	56	41.3	72
NN	26	16.1	23	518	0.86	6.6	13.5	39	26	14.7	40

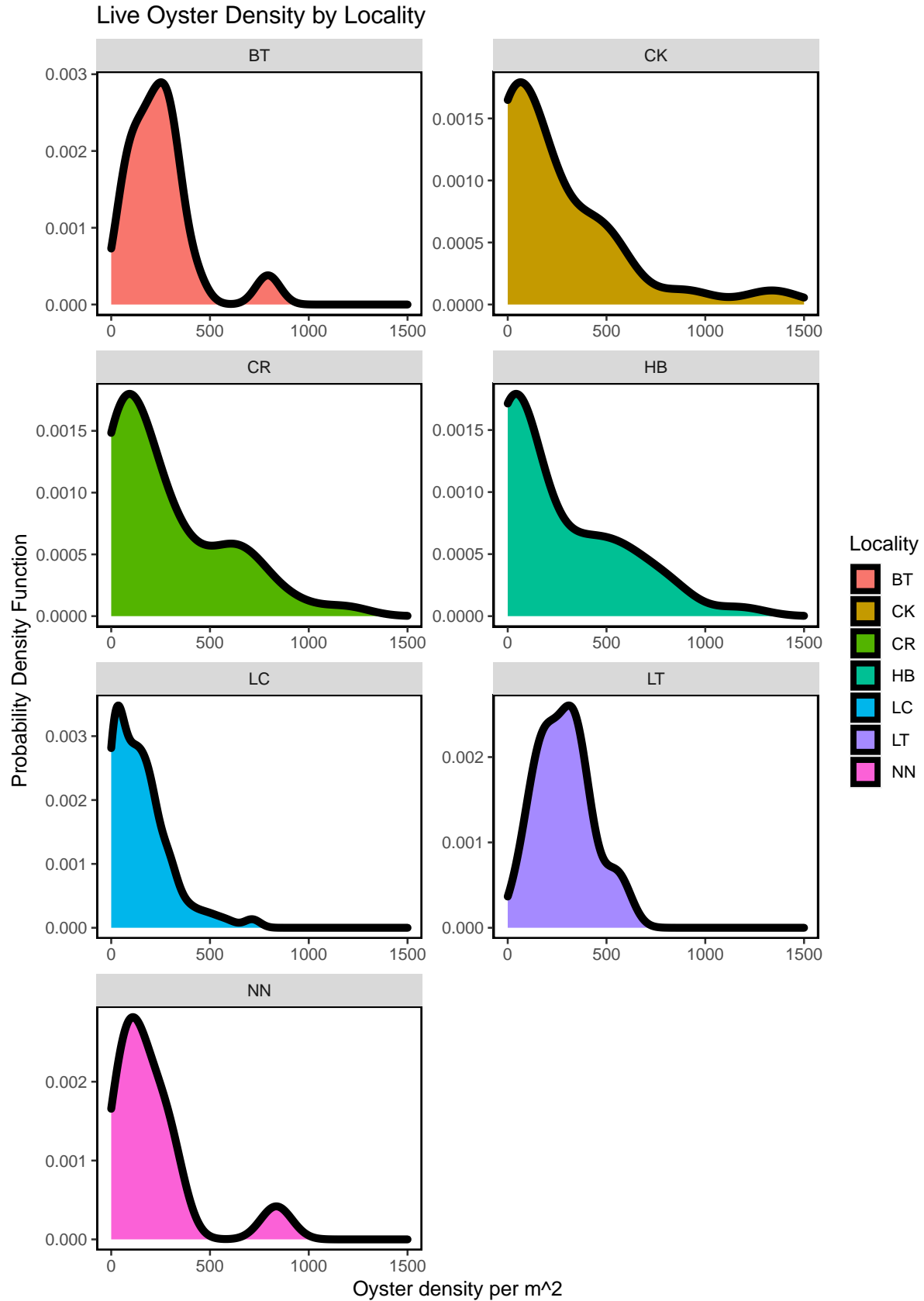
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	33.8	28.7	31.3	983	0.93	3.23	27.5	40.1	33.8	28.0	40.3
N_PILOT	8.7	8.7	4.3	18	0.49	1.11	6.5	10.9	8.7	6.8	10.9
N_Y	6.6	5.0	4.6	21	0.69	0.77	5.1	8.2	6.6	5.2	8.1
Y_N	23.0	13.6	23.7	562	1.03	2.38	18.3	27.6	23.0	18.5	27.9
Y_Y	9.0	7.9	6.7	45	0.75	1.73	5.6	12.4	9.0	5.7	12.6

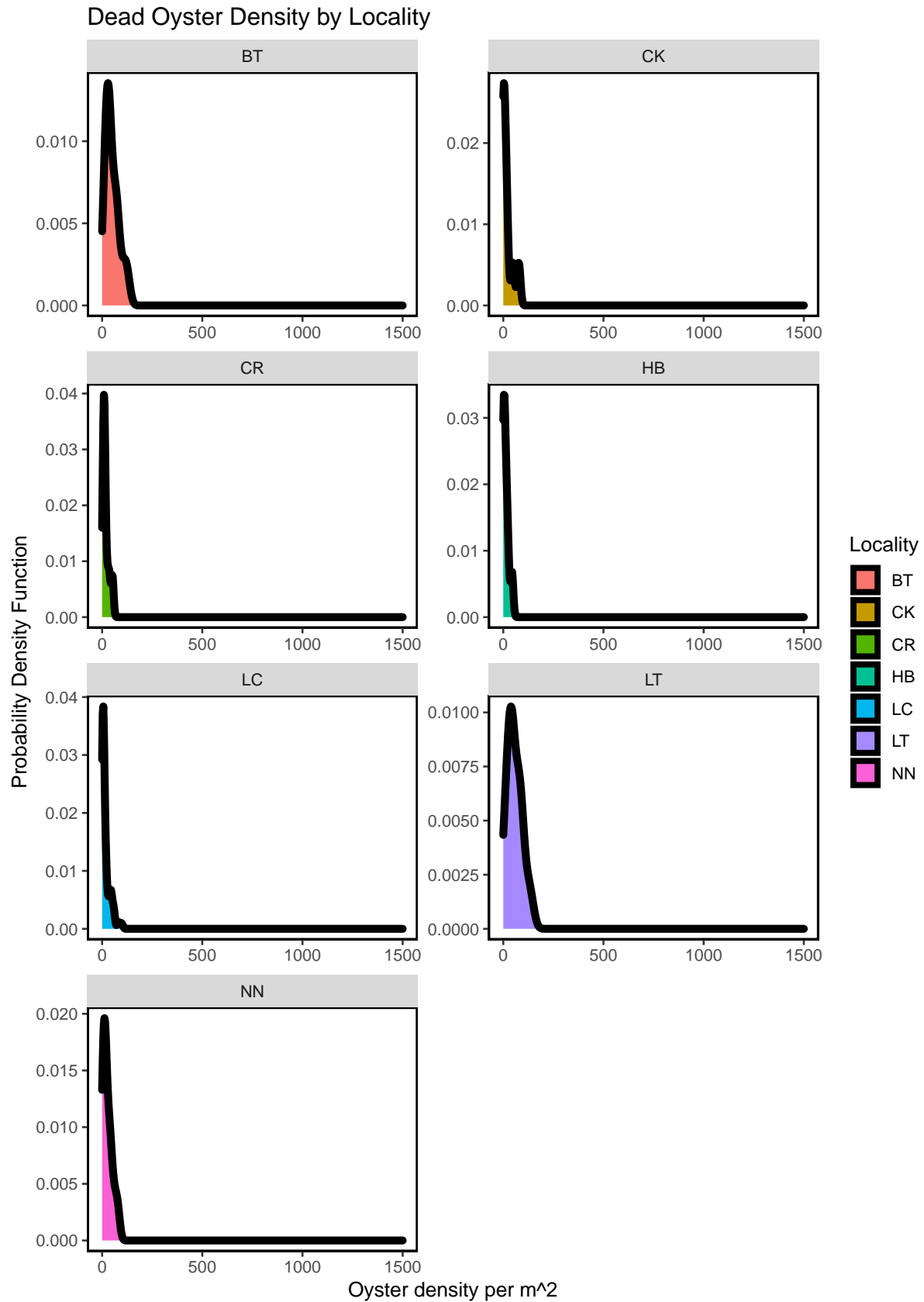
Dead Oyster Density by Period

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	2.8	1.0	4.8
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.0	3.9	12.5
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.1	3.7	6.8
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	2.0	7.0
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.5	19.1	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	27.6	20.9	35.0
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.4	20.5	37.1
24	25.1	16.9	23.0	530.7	0.92	3.89	17.47	32.7	25.2	18.3	33.8

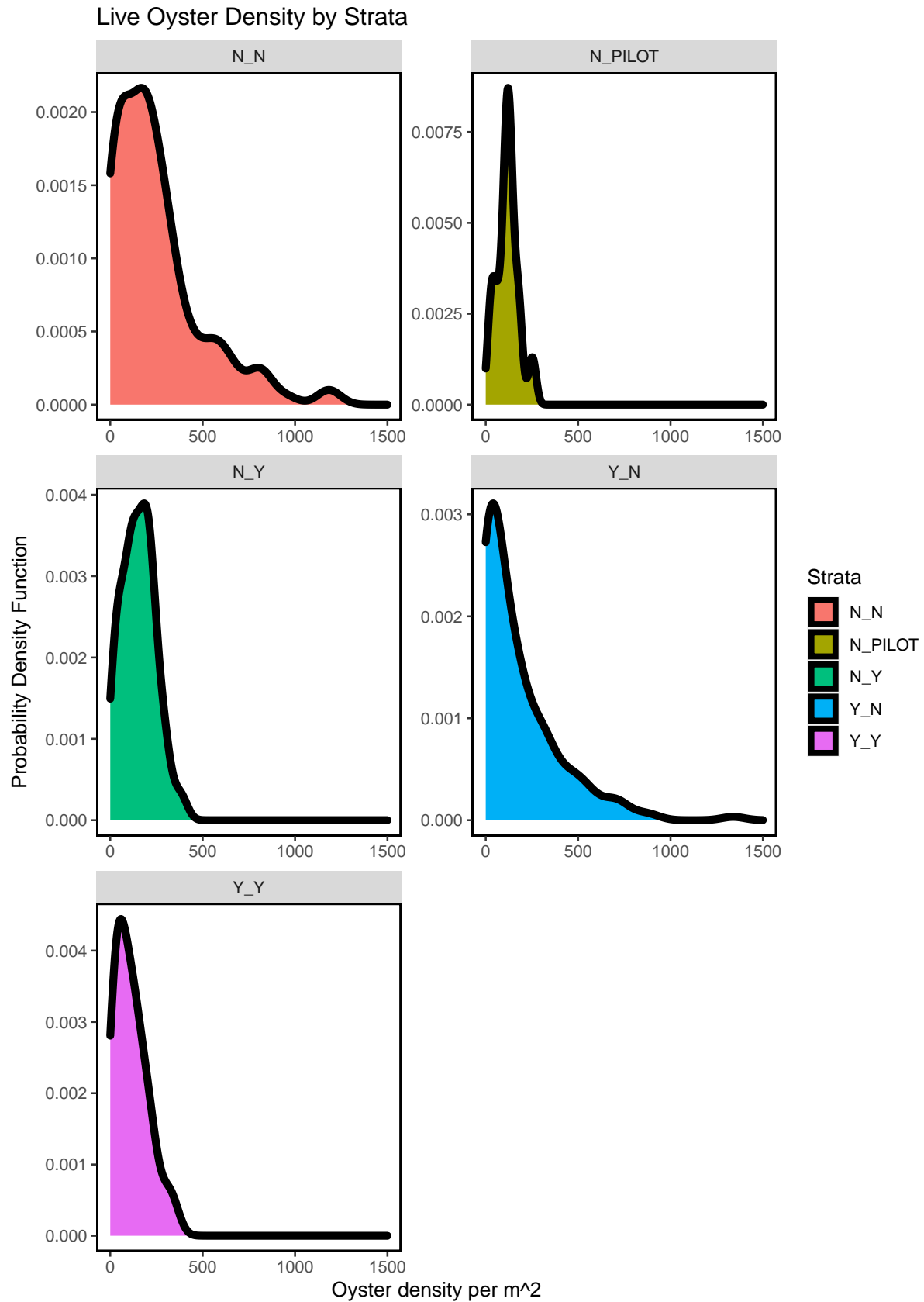
Summary Density Plots for all Periods



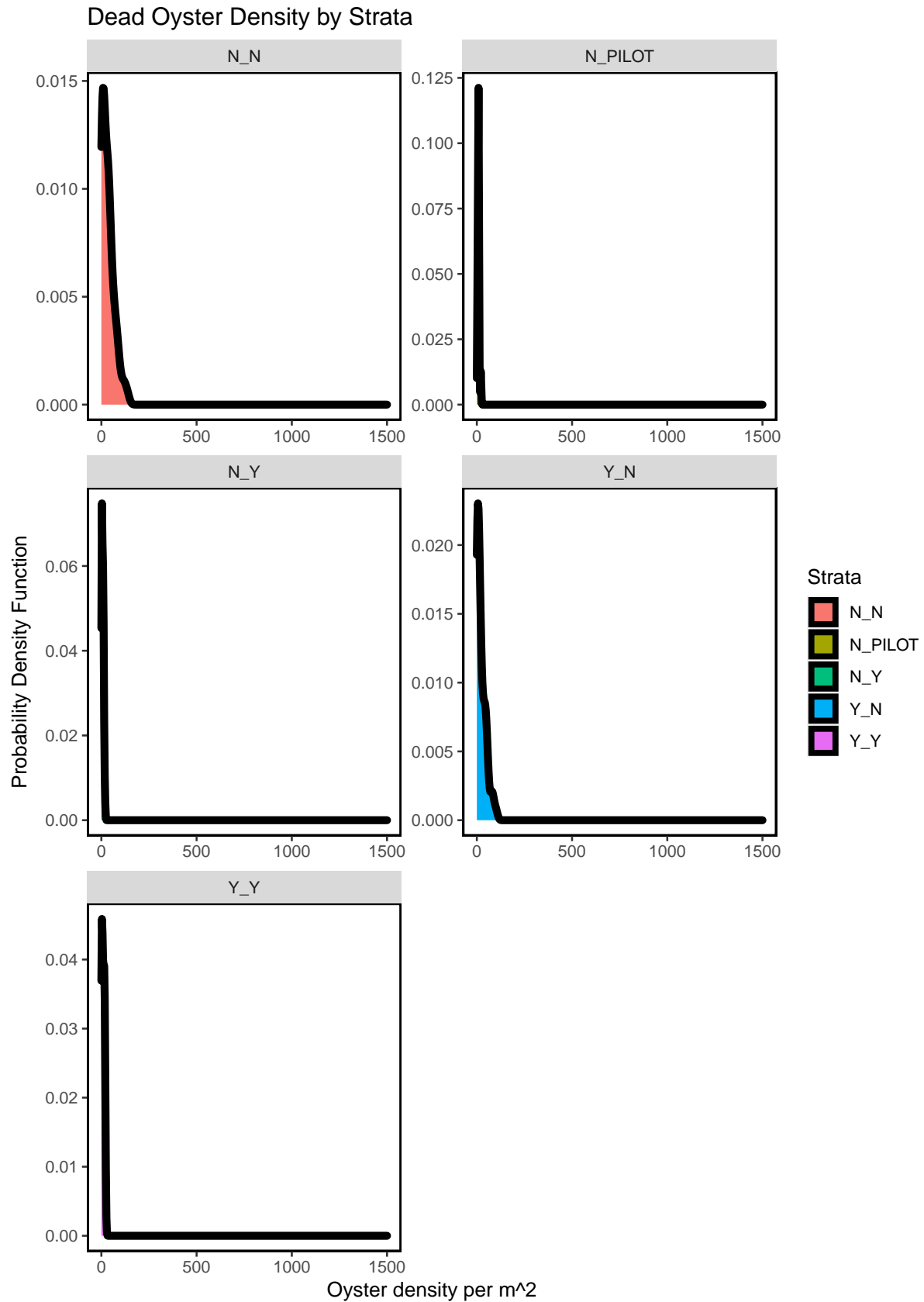
Figure– Calculated live oyster density by locality for all periods including period 22 (current period).



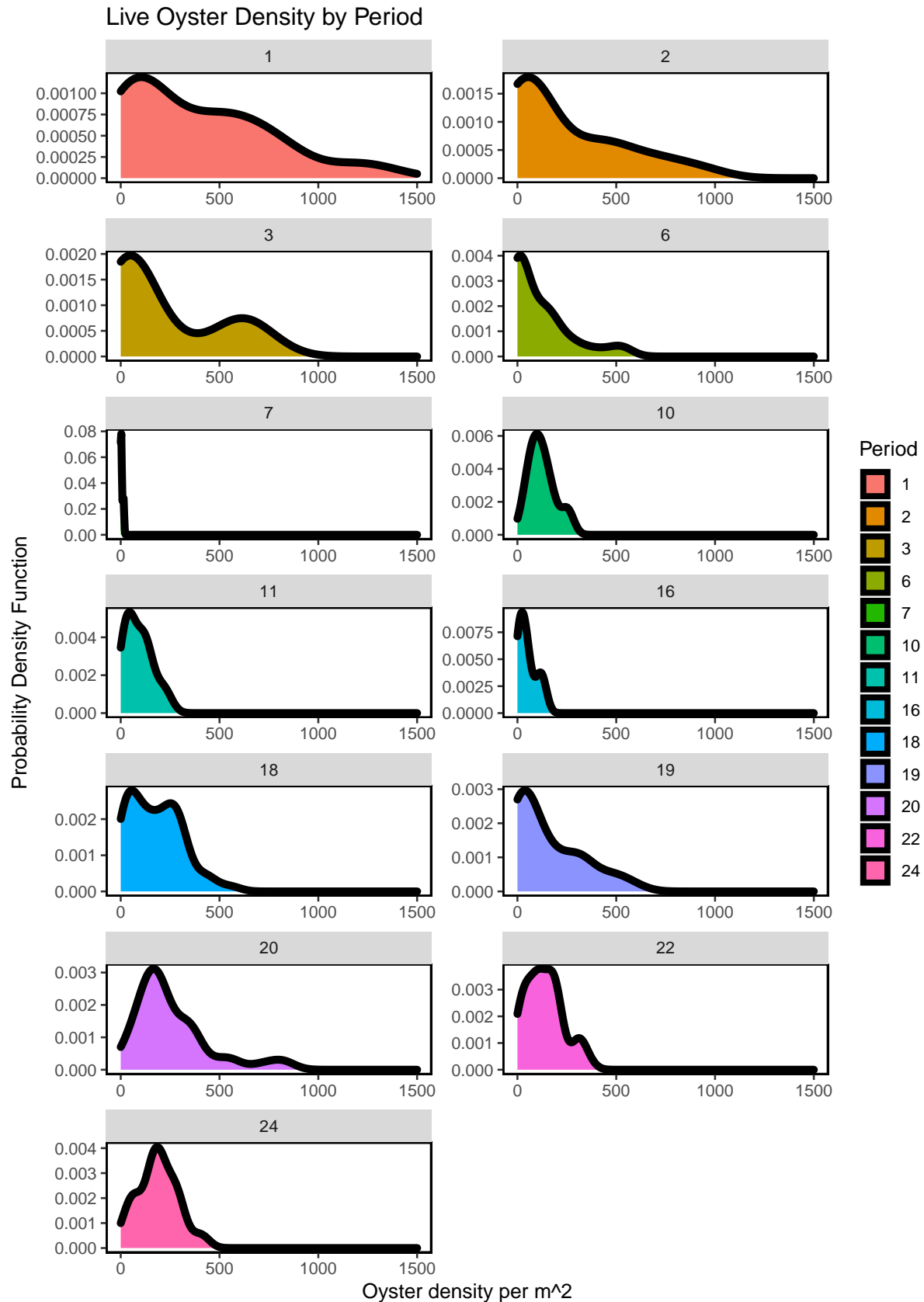
Figure– Calculated dead oyster density by locality for all periods including period 22 (current period).



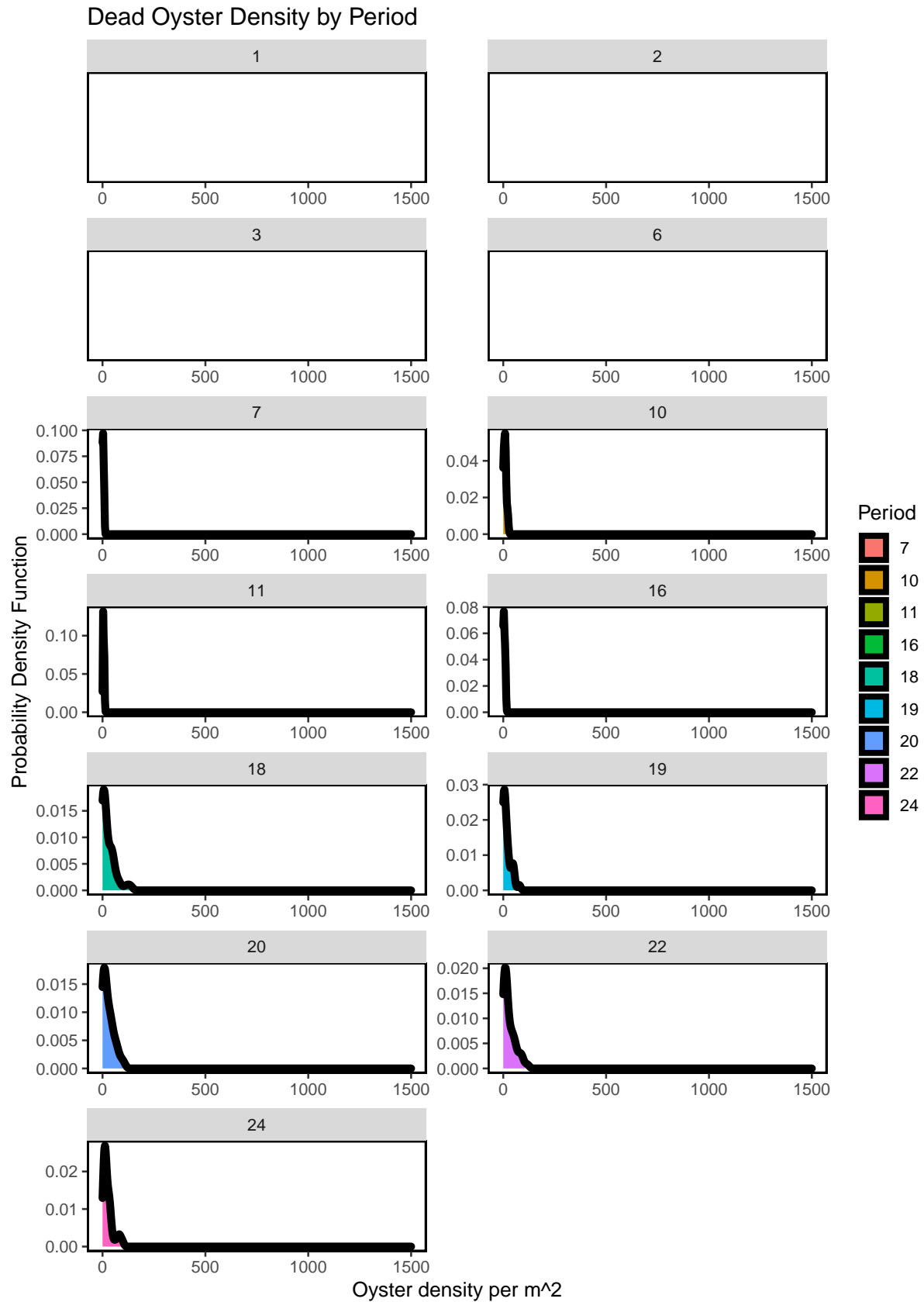
Figure– Calculated live oyster density by strata for all periods including period 22 (current period).



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

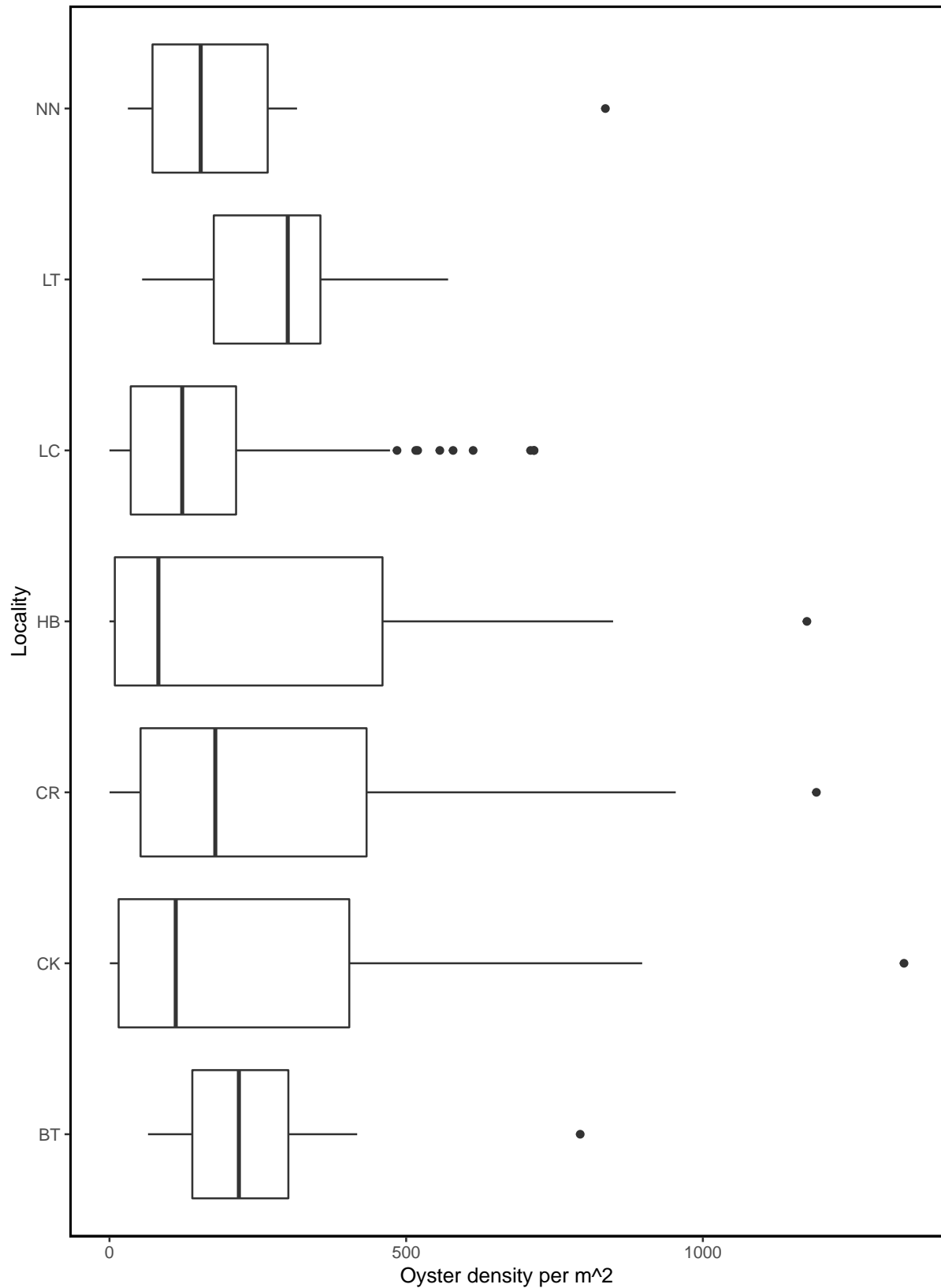


Figure– Calculated live oyster density for all periods including period 22 (current period) using a probability densi



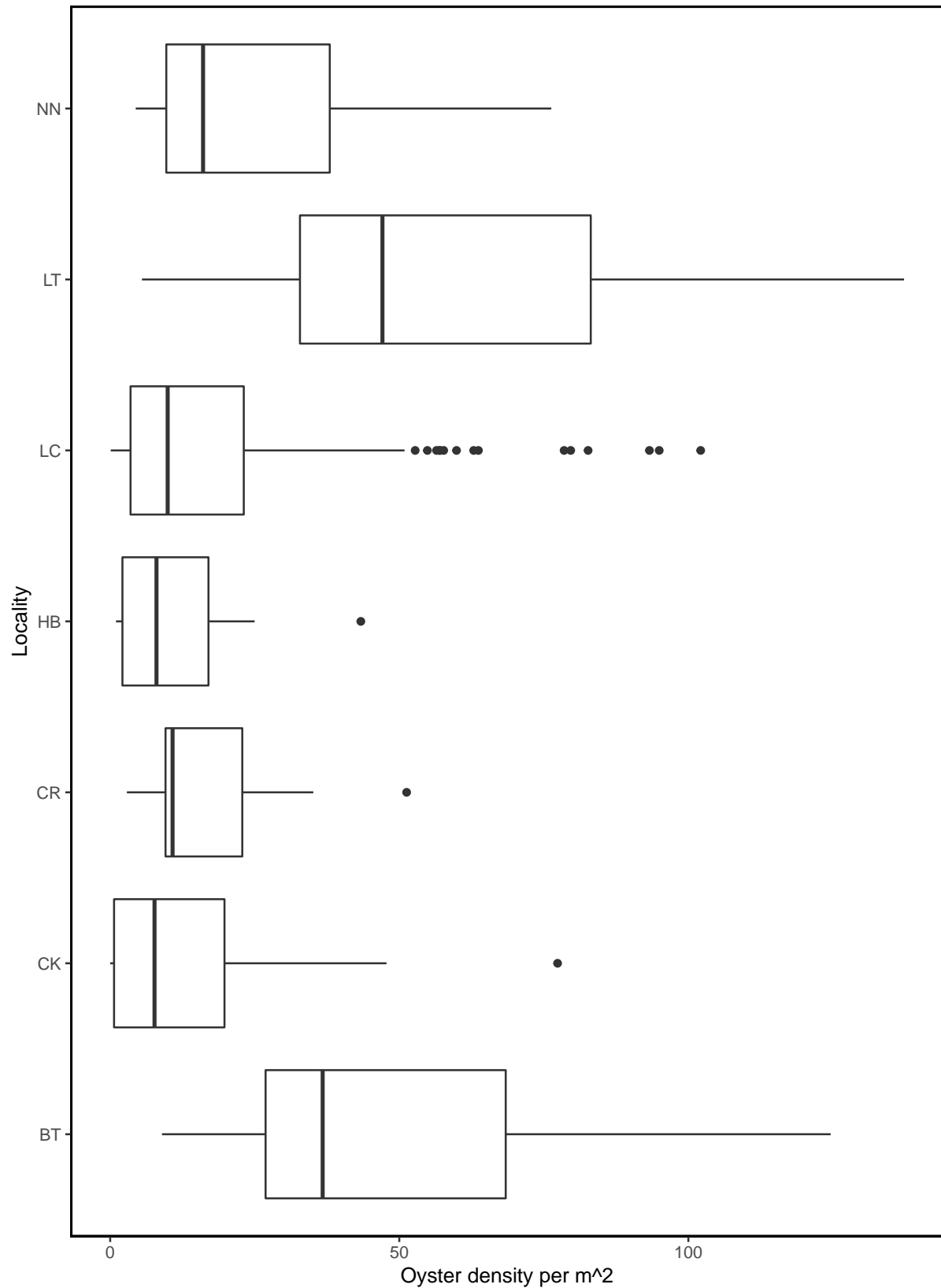
Figure– Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

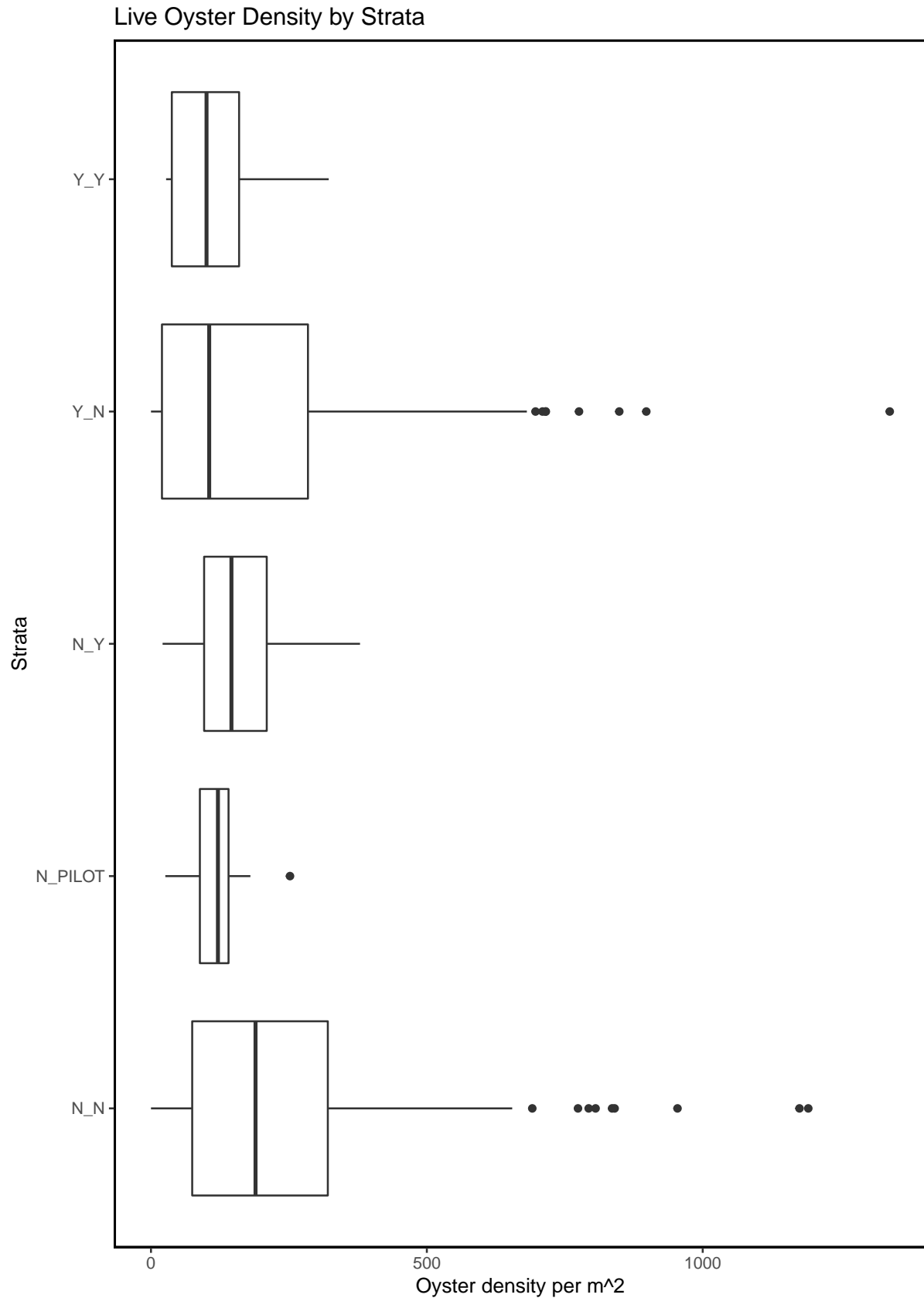


Figure– Box plot depicting live oyster density by locality for all periods including period 22 (current period).

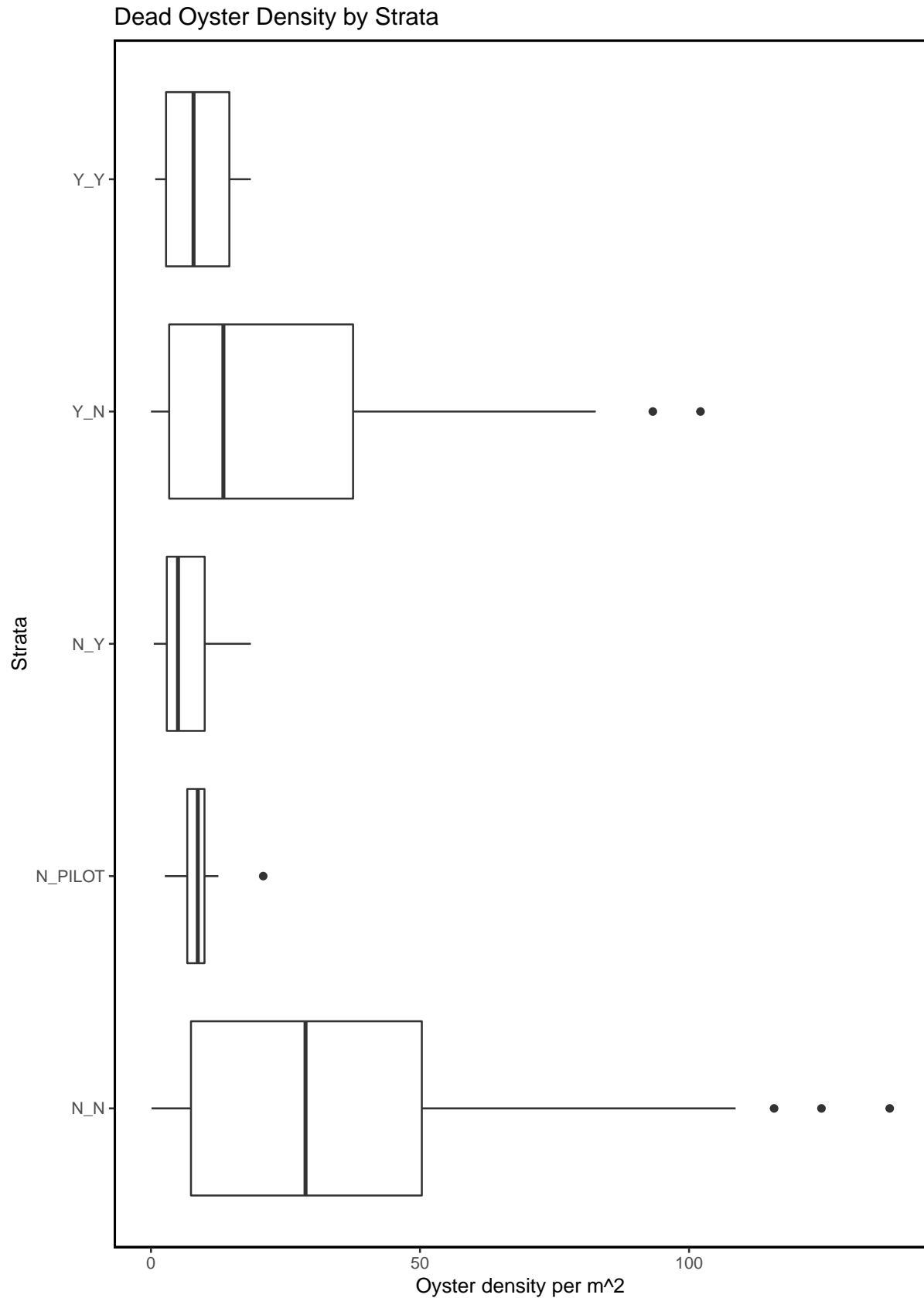
Dead Oyster Density by Locality



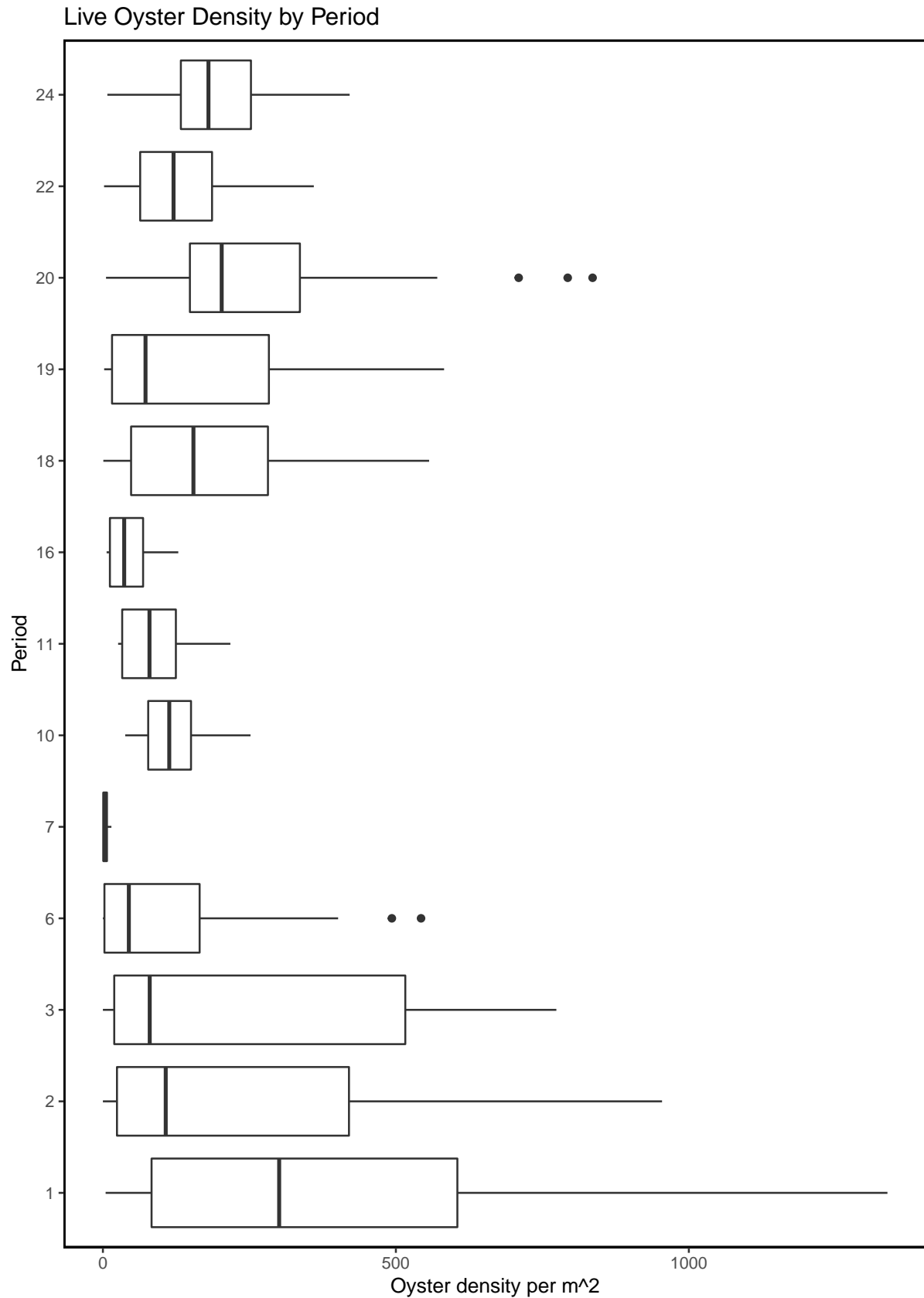
Figure– Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



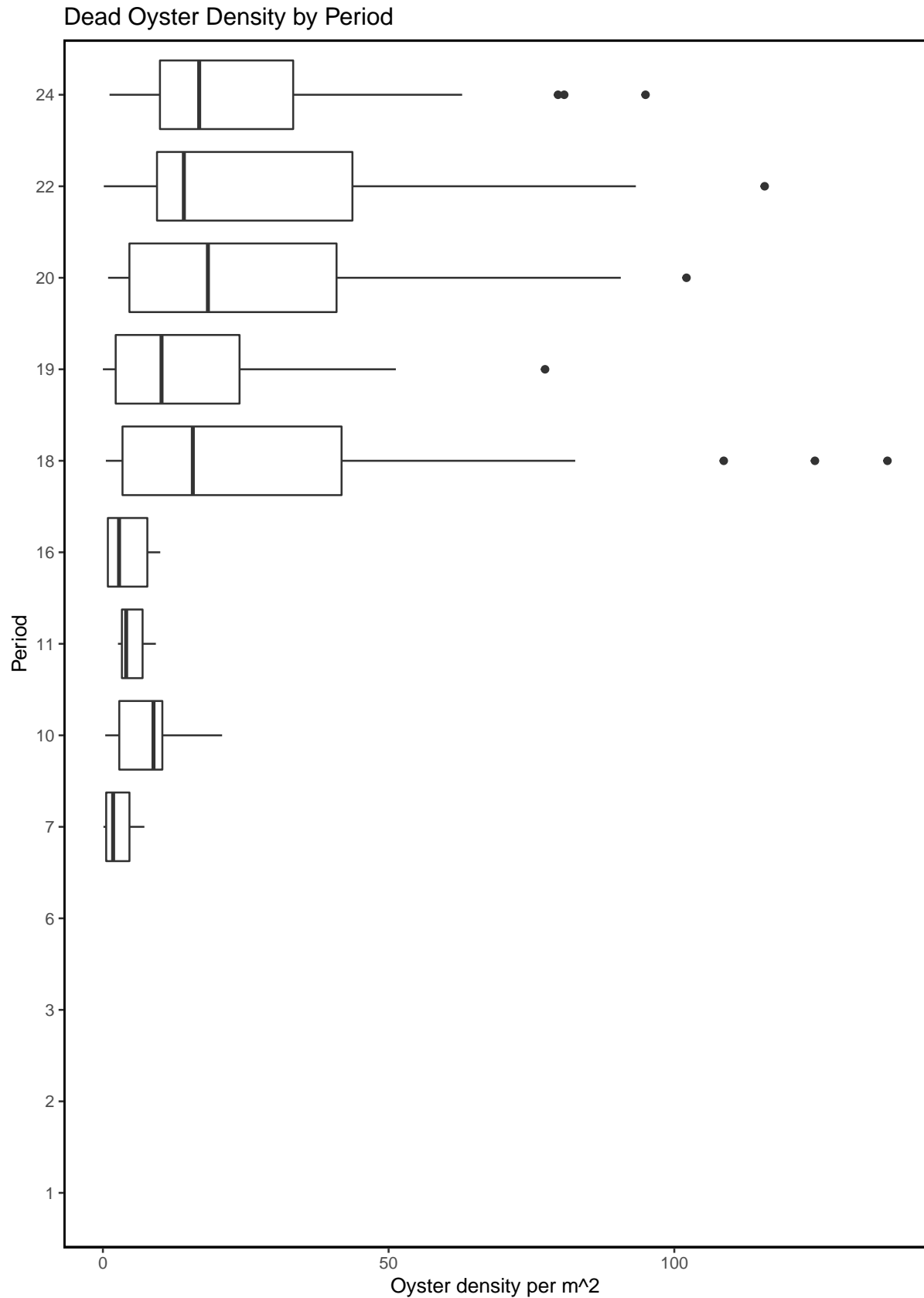
Figure– Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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

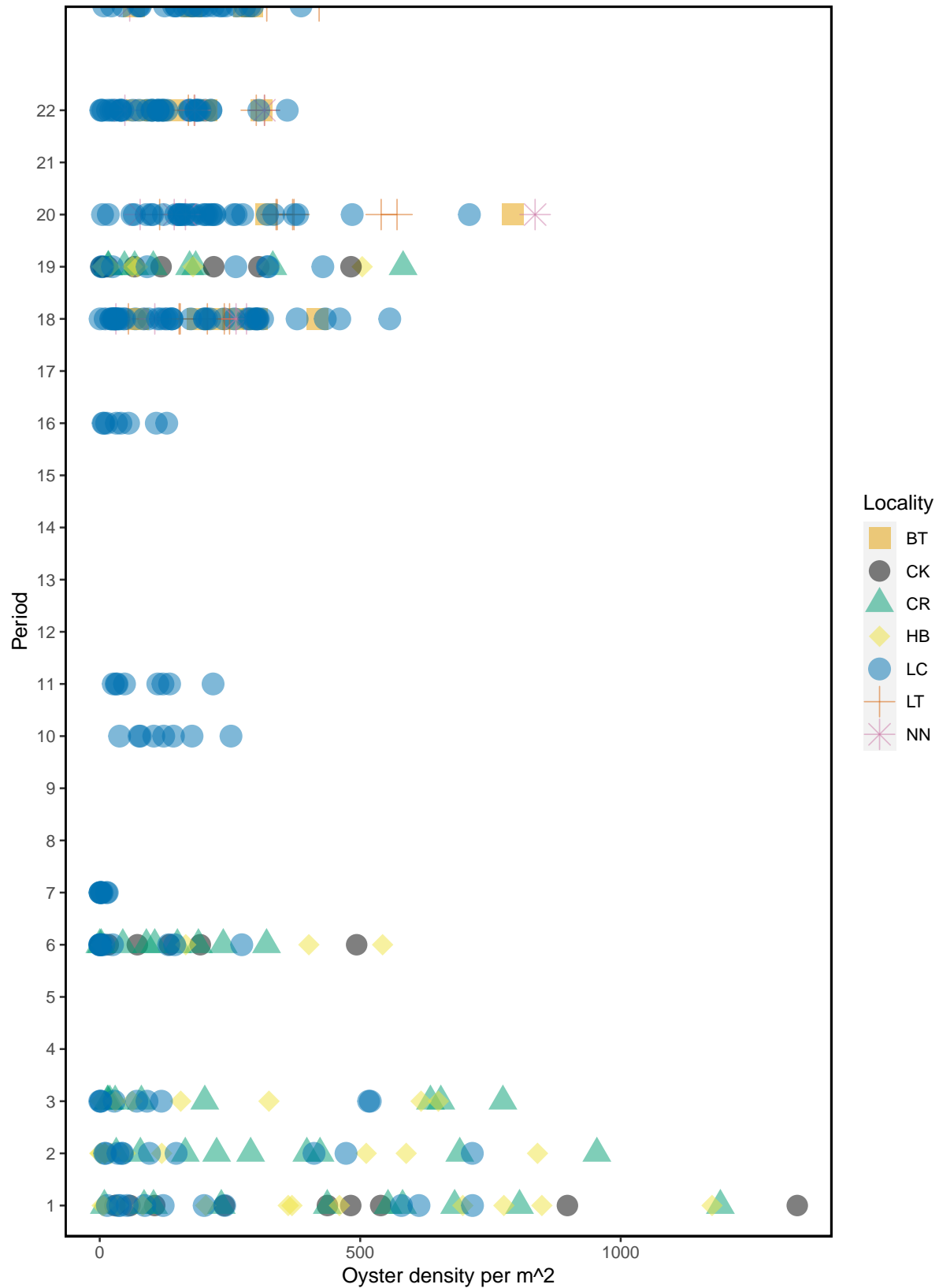
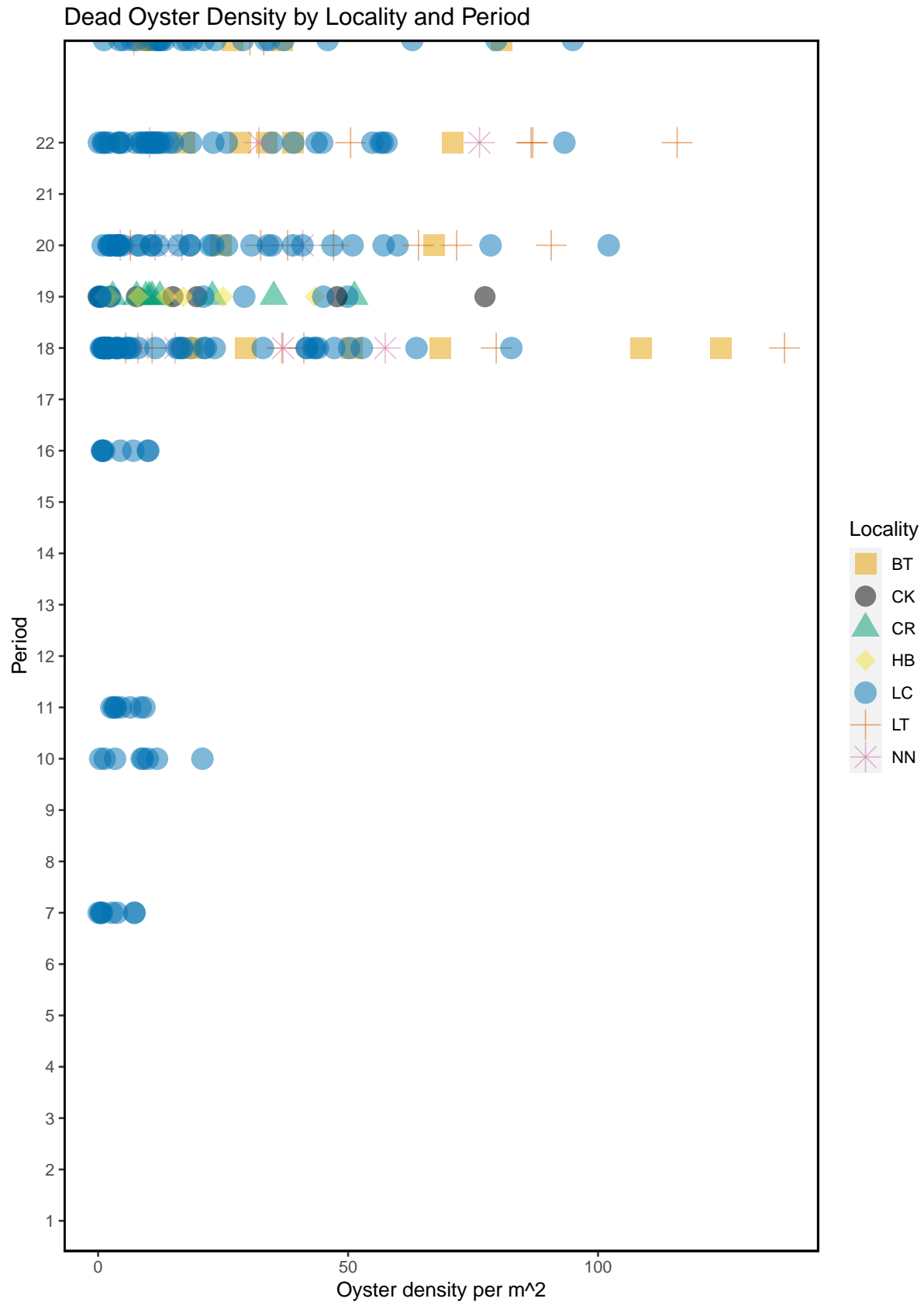


Figure – Live oyster density by locality and period for all periods including period 22 (current period).



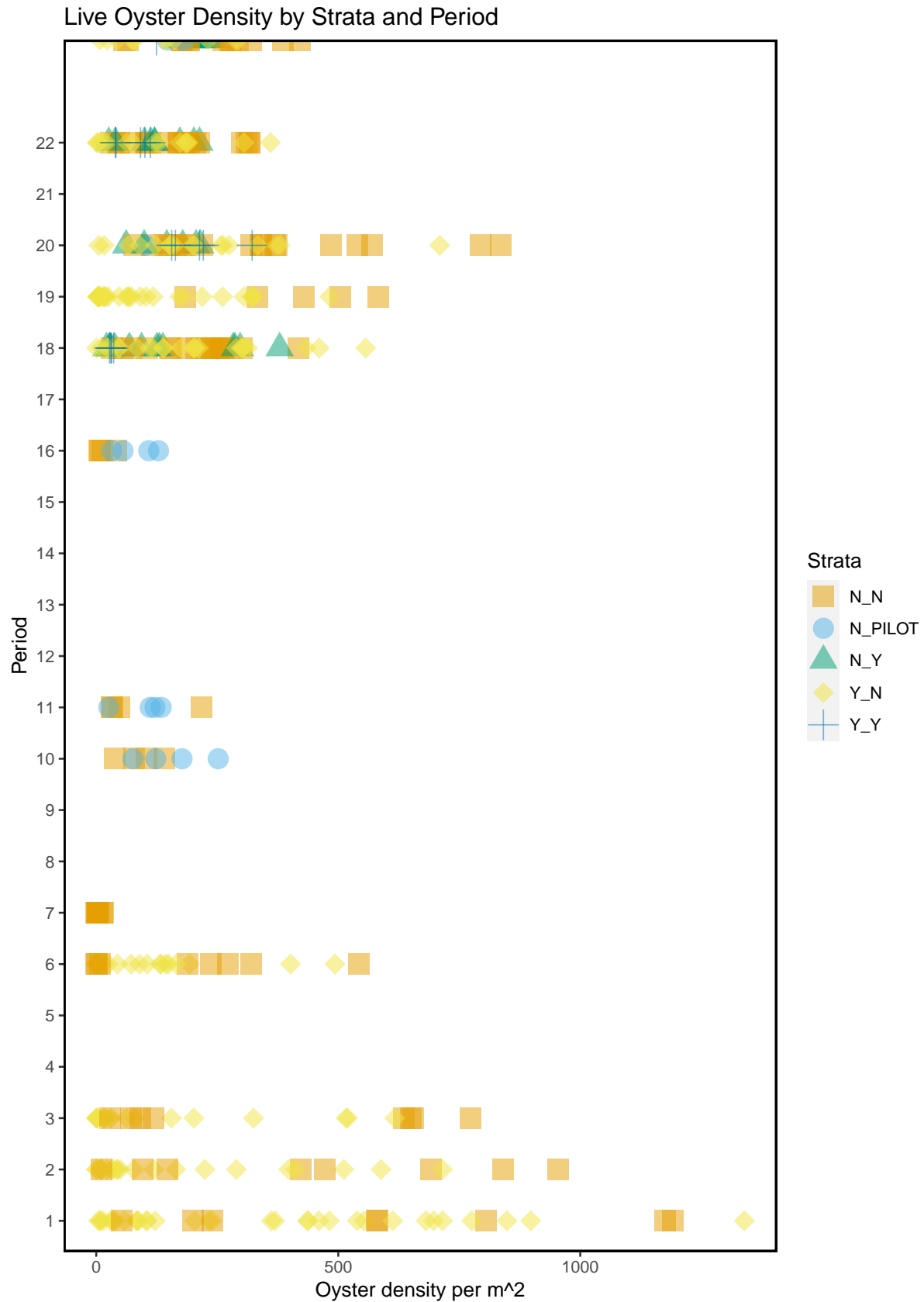
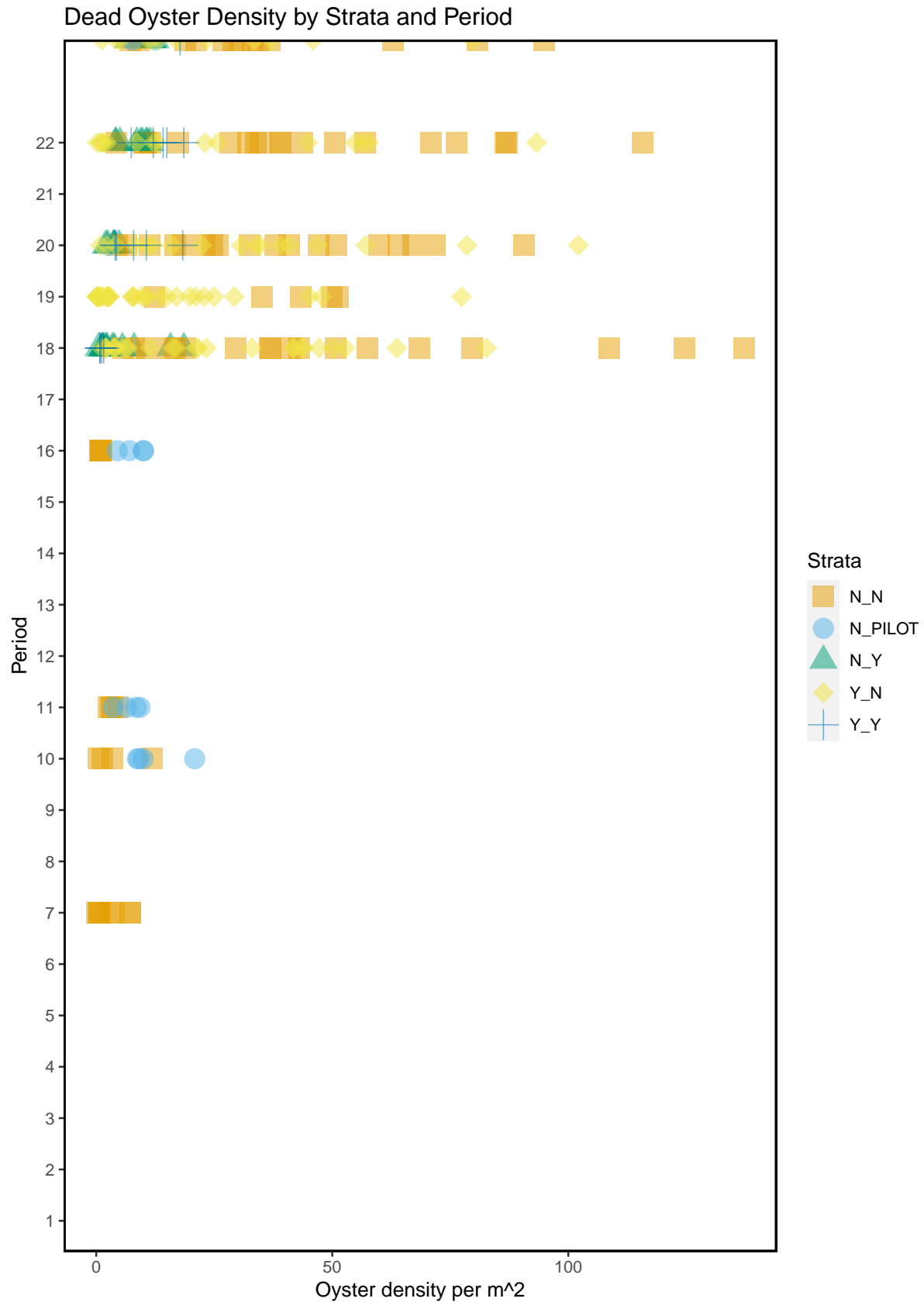


Figure – Live oyster density by strata and period for all periods including period 22 (current period).



Live and Dead Count Comparison For All Periods

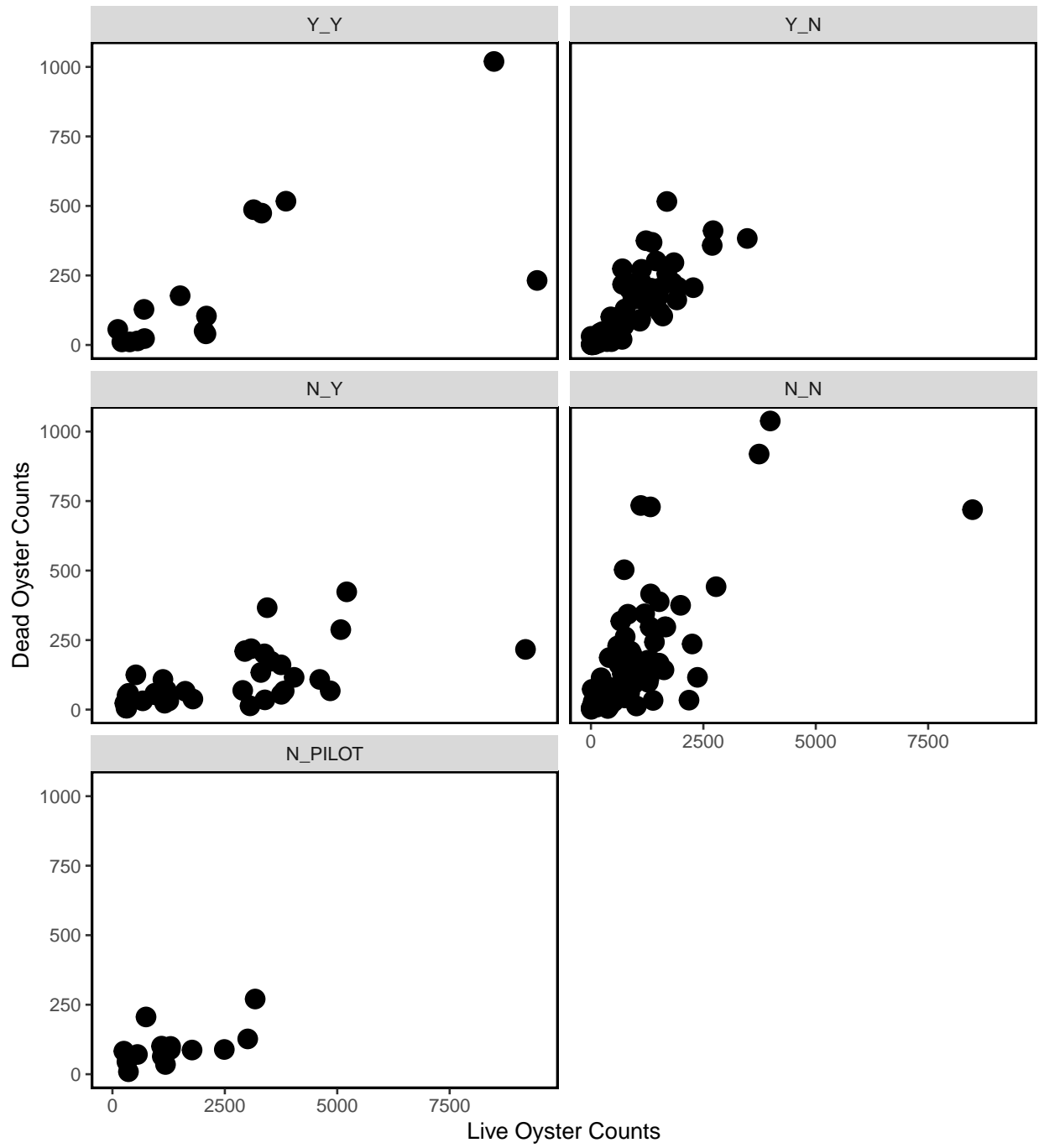


Figure- Live and dead oyster comparison for all periods, last sample date of period 24 is 2021-12-23.

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).

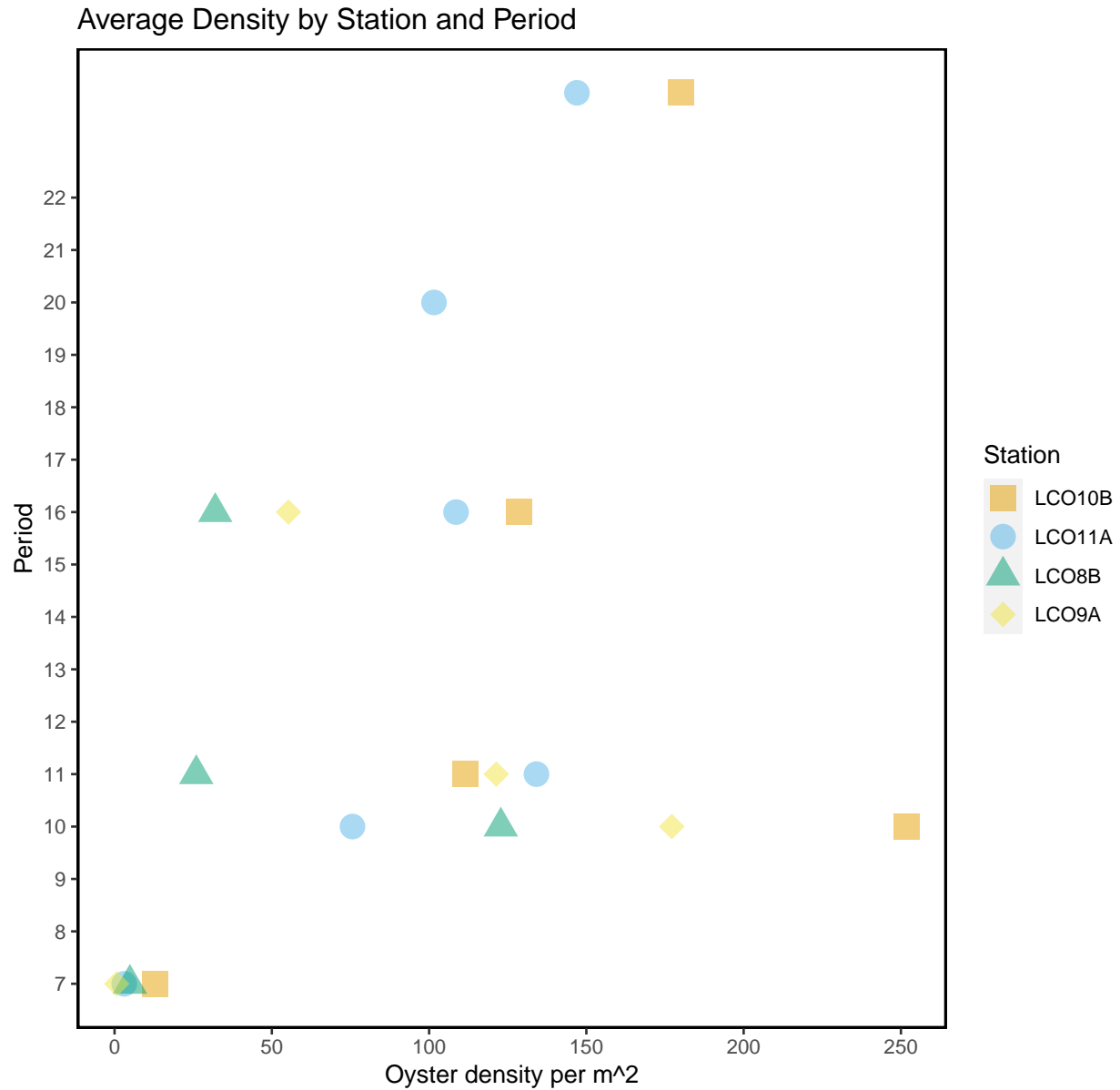


Figure – Average live oyster density comparison by station and period for all stations that were sampled during the pilc

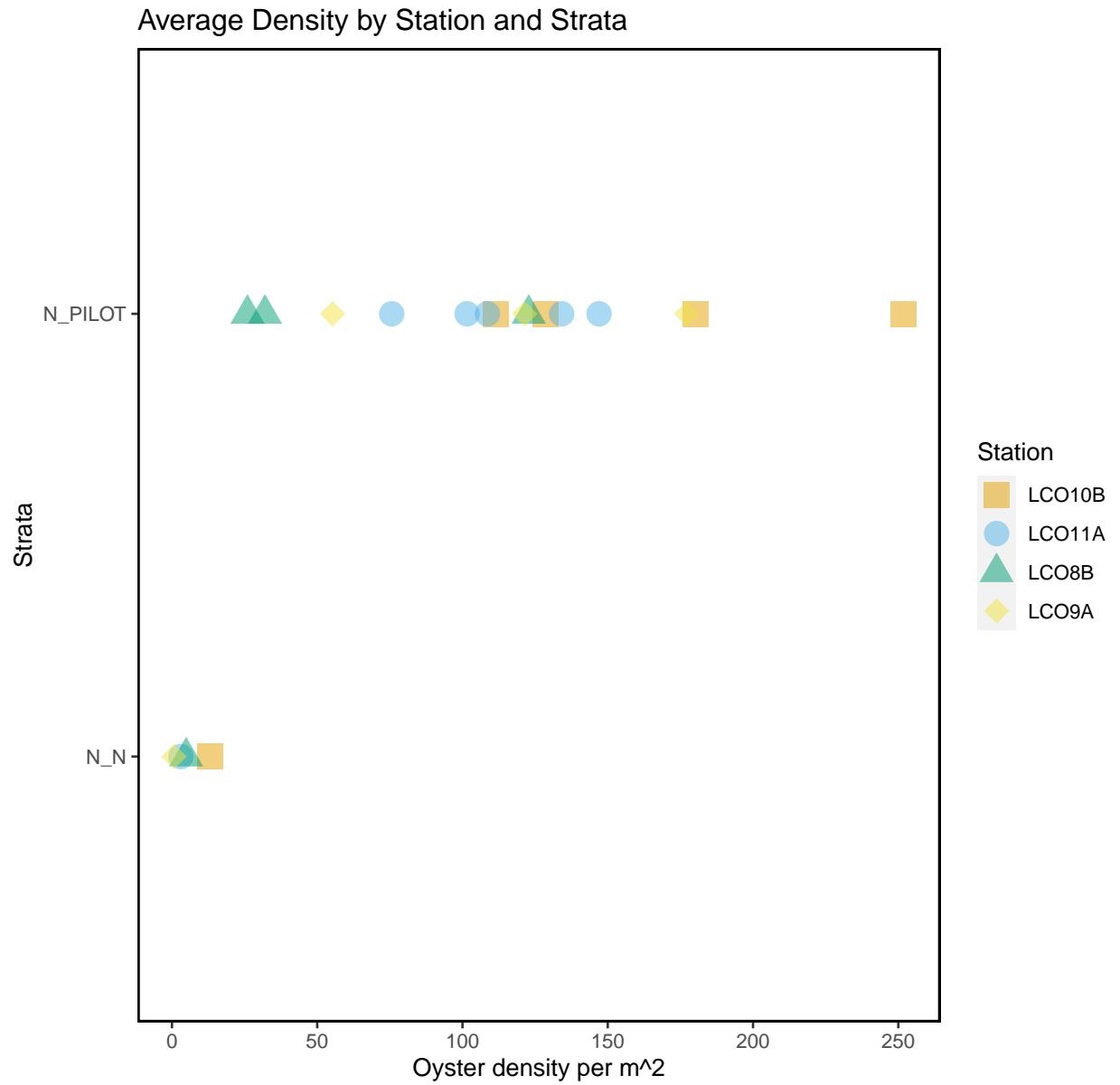


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

Latest Data Entered

Displayed are the entries for the last date of sampling (2021-12-23).

date	station	tran_length	count_live	count_dead	treatment	strata
2021-12-23	LC07	2.5	62	2	rocks	N_Y
2021-12-23	LC07	5.0	46	0	rocks	N_Y
2021-12-23	LC07	7.5	56	2	rocks	N_Y
2021-12-23	LC07	10.0	10	2	rocks	N_Y
2021-12-23	LC07	12.5	31	1	rocks	N_Y
2021-12-23	LC07	15.0	51	3	rocks	N_Y
2021-12-23	LC07	17.5	38	0	rocks	N_Y
2021-12-23	LC07	20.0	43	0	rocks	N_Y
2021-12-23	LC07	22.5	43	3	rocks	N_Y
2021-12-23	LC07	25.0	127	2	rocks	N_Y
2021-12-23	LC07	27.5	63	3	rocks	N_Y
2021-12-23	LC07	27.6	0	0	rocks	N_Y
2021-12-23	LC07	2.5	34	2	rocks	N_Y
2021-12-23	LC07	5.0	54	4	rocks	N_Y
2021-12-23	LC07	7.5	32	0	rocks	N_Y
2021-12-23	LC07	10.0	58	4	rocks	N_Y
2021-12-23	LC07	12.5	85	4	rocks	N_Y
2021-12-23	LC07	15.0	81	4	rocks	N_Y
2021-12-23	LC07	17.5	57	5	rocks	N_Y
2021-12-23	LC07	20.0	53	2	rocks	N_Y
2021-12-23	LC07	22.5	42	1	rocks	N_Y
2021-12-23	LC07	25.0	89	4	rocks	N_Y
2021-12-23	LC07	27.5	68	4	rocks	N_Y
2021-12-23	LC07	28.2	36	5	rocks	N_Y
2021-12-23	LC07	2.5	37	3	rocks	N_Y
2021-12-23	LC07	5.0	52	4	rocks	N_Y
2021-12-23	LC07	7.5	29	1	rocks	N_Y
2021-12-23	LC07	10.0	58	4	rocks	N_Y
2021-12-23	LC07	12.5	78	9	rocks	N_Y
2021-12-23	LC07	15.0	91	2	rocks	N_Y
2021-12-23	LC07	17.5	65	5	rocks	N_Y
2021-12-23	LC07	20.0	47	2	rocks	N_Y
2021-12-23	LC07	22.5	48	2	rocks	N_Y
2021-12-23	LC07	25.0	93	5	rocks	N_Y
2021-12-23	LC07	27.5	57	7	rocks	N_Y
2021-12-23	LC07	28.2	38	6	rocks	N_Y
2021-12-23	LC07	2.5	103	10	rocks	N_Y
2021-12-23	LC07	5.0	64	12	rocks	N_Y
2021-12-23	LC07	7.5	59	8	rocks	N_Y
2021-12-23	LC07	10.0	54	2	rocks	N_Y
2021-12-23	LC07	12.5	39	2	rocks	N_Y
2021-12-23	LC07	15.0	71	8	rocks	N_Y
2021-12-23	LC07	17.5	142	14	rocks	N_Y
2021-12-23	LC07	20.0	77	2	rocks	N_Y
2021-12-23	LC07	22.5	40	3	rocks	N_Y
2021-12-23	LC07	25.0	112	11	rocks	N_Y
2021-12-23	LC07	27.5	78	7	rocks	N_Y
2021-12-23	LC07	27.8	13	1	rocks	N_Y
2021-12-23	LC07	2.5	158	4	rocks	N_Y

2021-12-23	LC07	5.0	73	2	rocks	N_Y
2021-12-23	LC07	7.5	84	1	rocks	N_Y
2021-12-23	LC07	10.0	74	4	rocks	N_Y
2021-12-23	LC07	12.5	110	7	rocks	N_Y
2021-12-23	LC07	15.0	174	12	rocks	N_Y
2021-12-23	LC07	17.5	119	2	rocks	N_Y
2021-12-23	LC07	20.0	193	9	rocks	N_Y
2021-12-23	LC07	22.5	123	9	rocks	N_Y
2021-12-23	LC07	25.0	119	6	rocks	N_Y
2021-12-23	LC07	27.5	39	2	rocks	N_Y