

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 0 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, 118 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.**

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	1658	779	2962
LC	1412	854	1719	2953527	1.22	160	1099	1725	1418	1120	1775
LT	1051	877	607	368075	0.58	147	762	1339	1045	781	1361
NN	786	727	649	420847	0.83	196	403	1169	788	449	1178

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1104	818	1219	1486772	1.10	163	785	1424	1099	845	1460
N_PILOT	356	356	NA	NA	NA	NA	NA	NA	176	10	345
N_Y	2337	1436	2128	4529713	0.91	402	1548	3125	2351	1591	3133
Y_N	845	694	777	603969	0.92	102	645	1045	848	662	1049
Y_Y	2524	1772	2954	8726548	1.17	790	976	4071	2488	1152	3976

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	764	1216
20	1844	1253	2125	4517189	1.15	310	1236	2451	1850	1315	2488
22	1334	702	1693	2867783	1.27	242	860	1808	1339	906	1842

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	259	180	365
LC	165	148	128	16298	0.78	12	141	188	165	140	189
LT	278	249	143	20392	0.51	35	210	346	277	213	343
NN	224	164	224	50174	1.00	68	92	356	223	123	369

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	238	202	165	27289	0.69	22	195	282	239	199	284
N_PILOT	102	102	NA	NA	NA	NA	NA	NA	51	3	99
N_Y	142	125	95	9027	0.67	18	106	177	141	108	175

Y_N	184	167	150	22472	0.82	20	145	222	183	148	224
Y_Y	116	97	93	8707	0.81	25	67	164	115	72	166

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
18	177	155	131	17117	0.74	17	144	210	177	144	210
20	258	203	188	35185	0.73	27	204	312	258	209	312
22	138	121	93	8671	0.68	13	112	164	138	113	165

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	316	164	496
LC	131	70	150	22448	1.15	14	103	158	131	105	160
LT	240	210	193	37090	0.80	47	148	331	238	157	333
NN	104	74	96	9216	0.92	29	48	161	105	59	166

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	206	136	208	43319	1.01	28	152	261	206.0	156	267
N_PILOT	9	9	NA	NA	NA	NA	NA	NA	4.9	1	9
N_Y	96	59	108	11604	1.12	20	56	136	96.2	61	135
Y_N	127	83	125	15698	0.99	16	94	159	127.0	97	160
Y_Y	205	80	288	82752	1.40	77	54	356	204.1	85	366

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	91	185
20	148	107	140	19727	0.95	20	108	188	148	113	188
22	191	128	193	37399	1.01	28	137	245	191	140	248

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	37	70
LC	20	11	22	484	1.10	2.0	16	24	20	16	24
LT	59	50	38	1426	0.64	9.2	42	77	59	42	77
NN	29	17	25	602	0.85	7.4	14	43	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	43.9	37.5	32.5	1054	0.74	4.34	35.4	52.4	44.1	35.9	53.0
N_PILOT	2.6	2.6	NA	NA	NA	NA	NA	NA	1.5	1.0	2.0
N_Y	5.8	4.0	4.6	21	0.80	0.87	4.1	7.4	5.7	4.2	7.4
Y_N	27.4	21.4	25.6	655	0.94	3.36	20.8	33.9	27.5	20.5	34.1
Y_Y	8.4	7.7	6.5	42	0.77	1.73	5.0	11.8	8.4	5.2	12.0

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	698	0.95	3.9	20	35	28	21	36
22	29	14	29	822	1.00	4.1	21	37	29	20	37

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

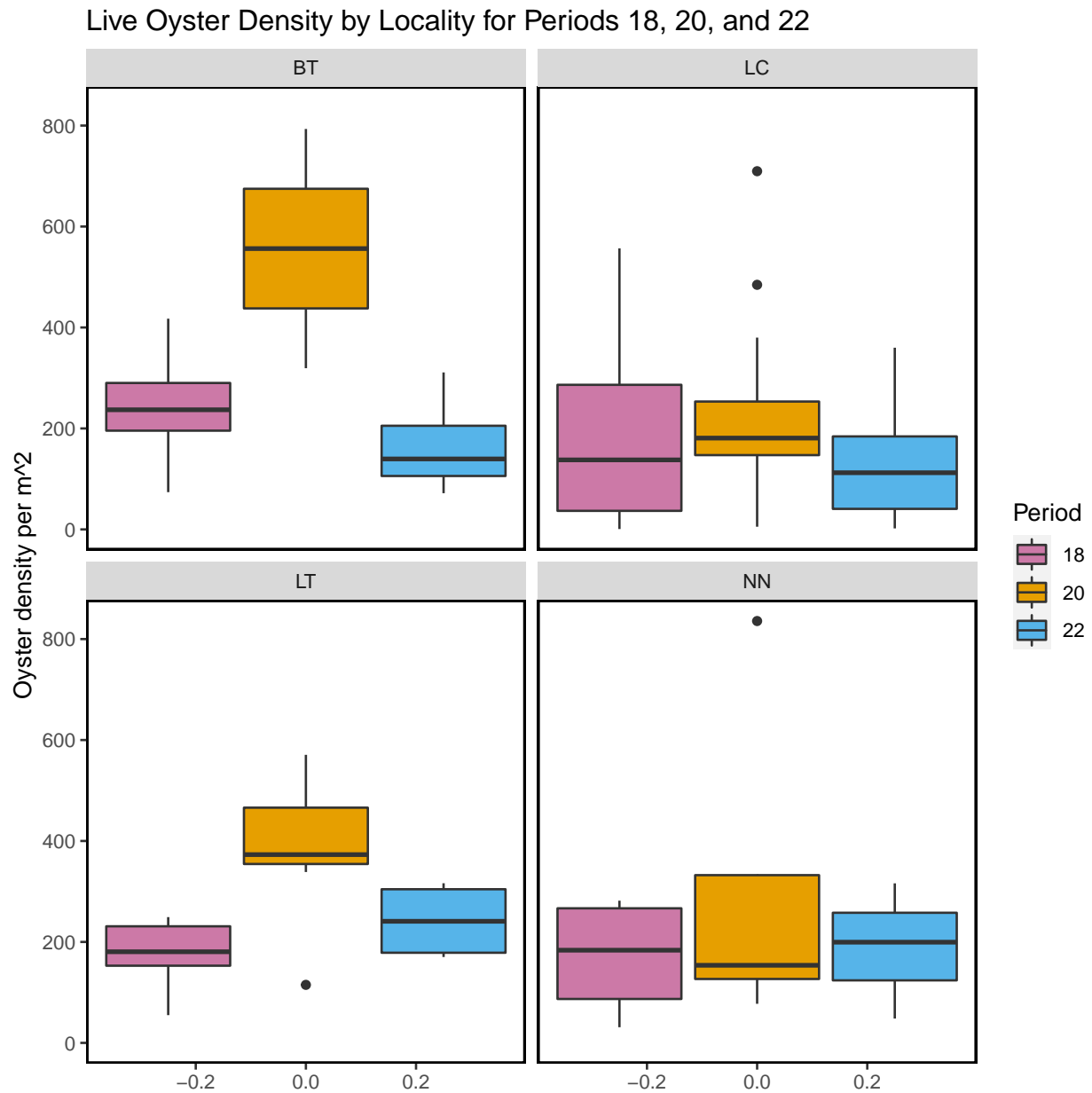


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-02-26.

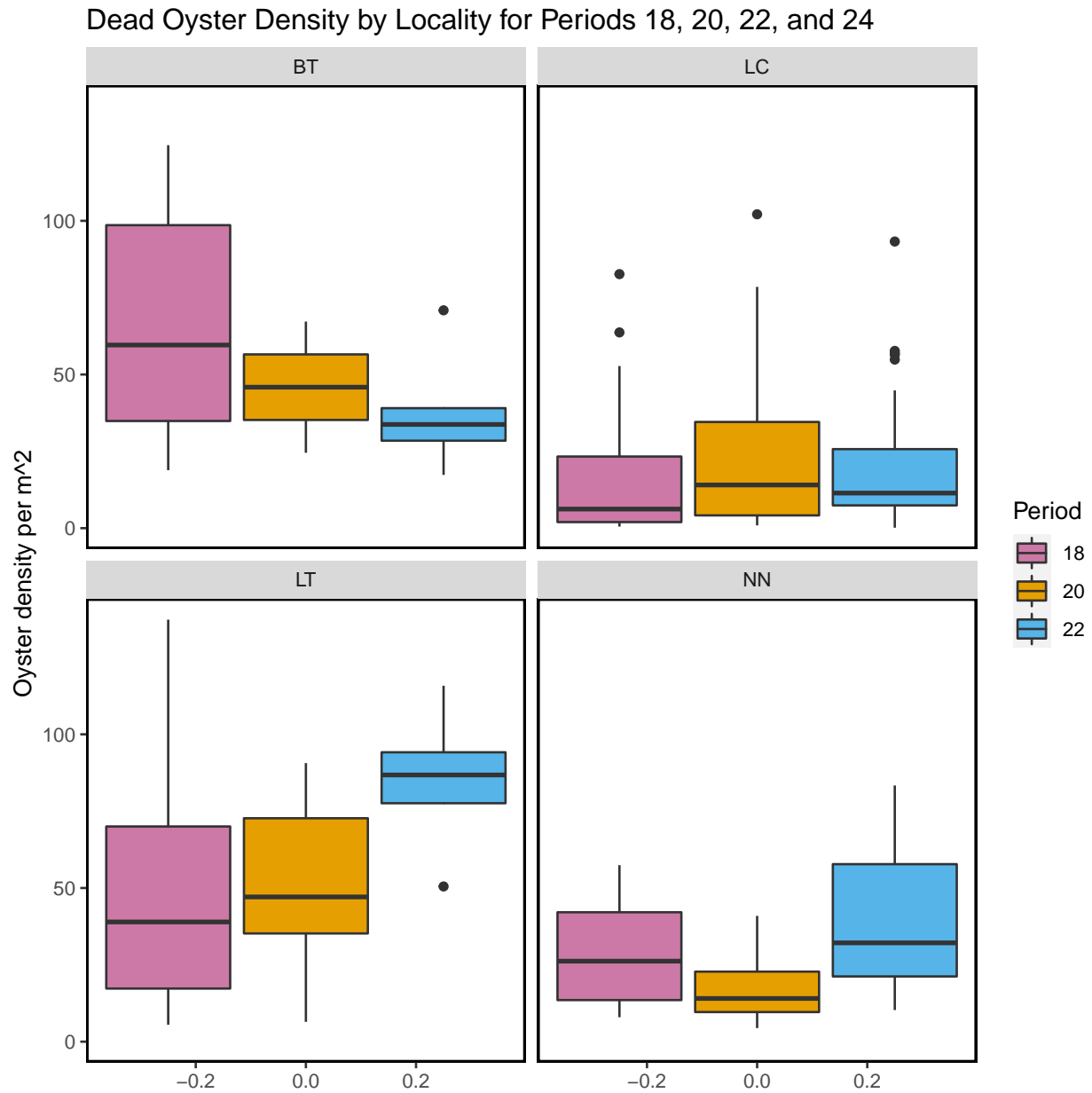


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-02-26.

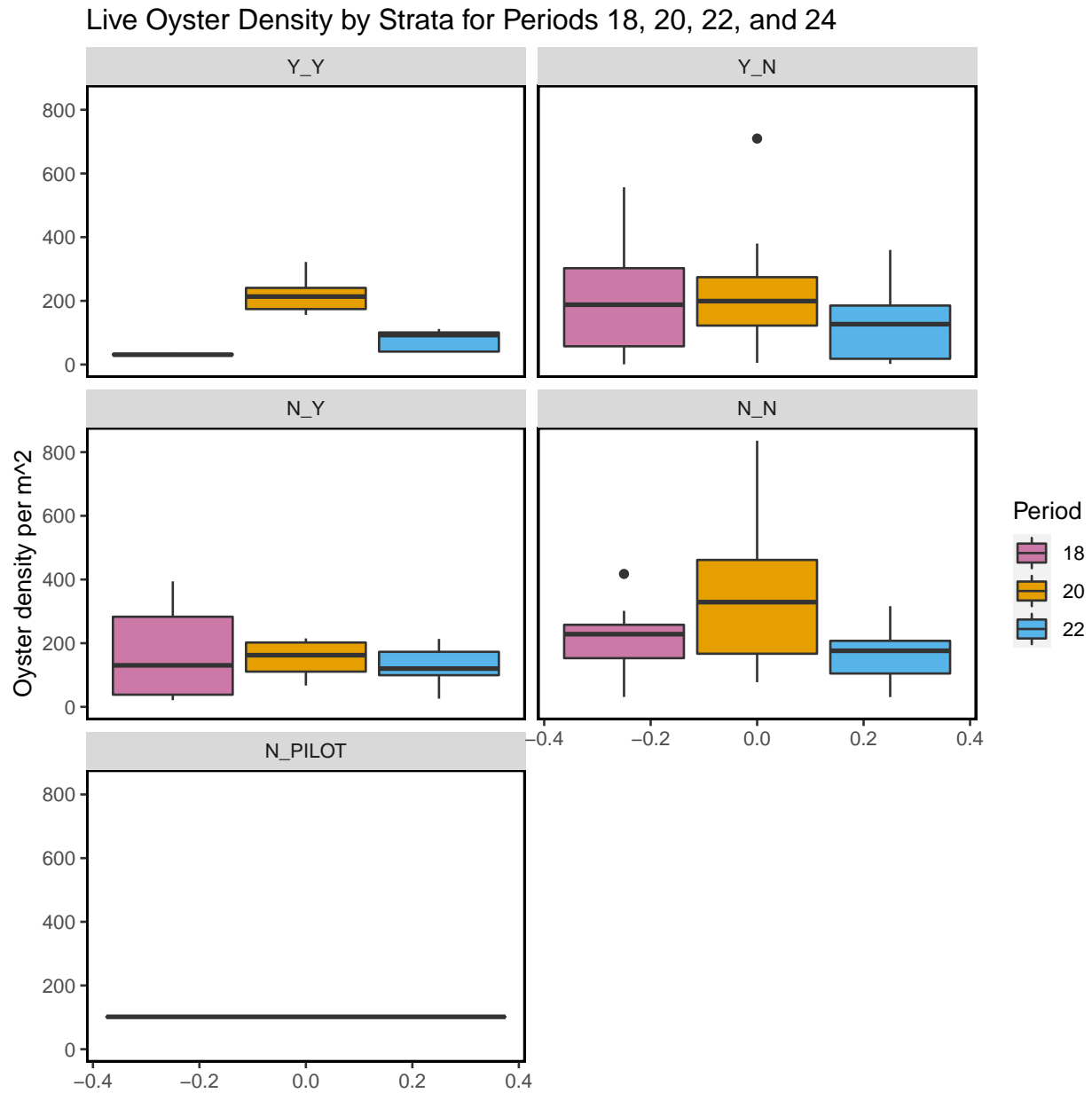


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-02-26.

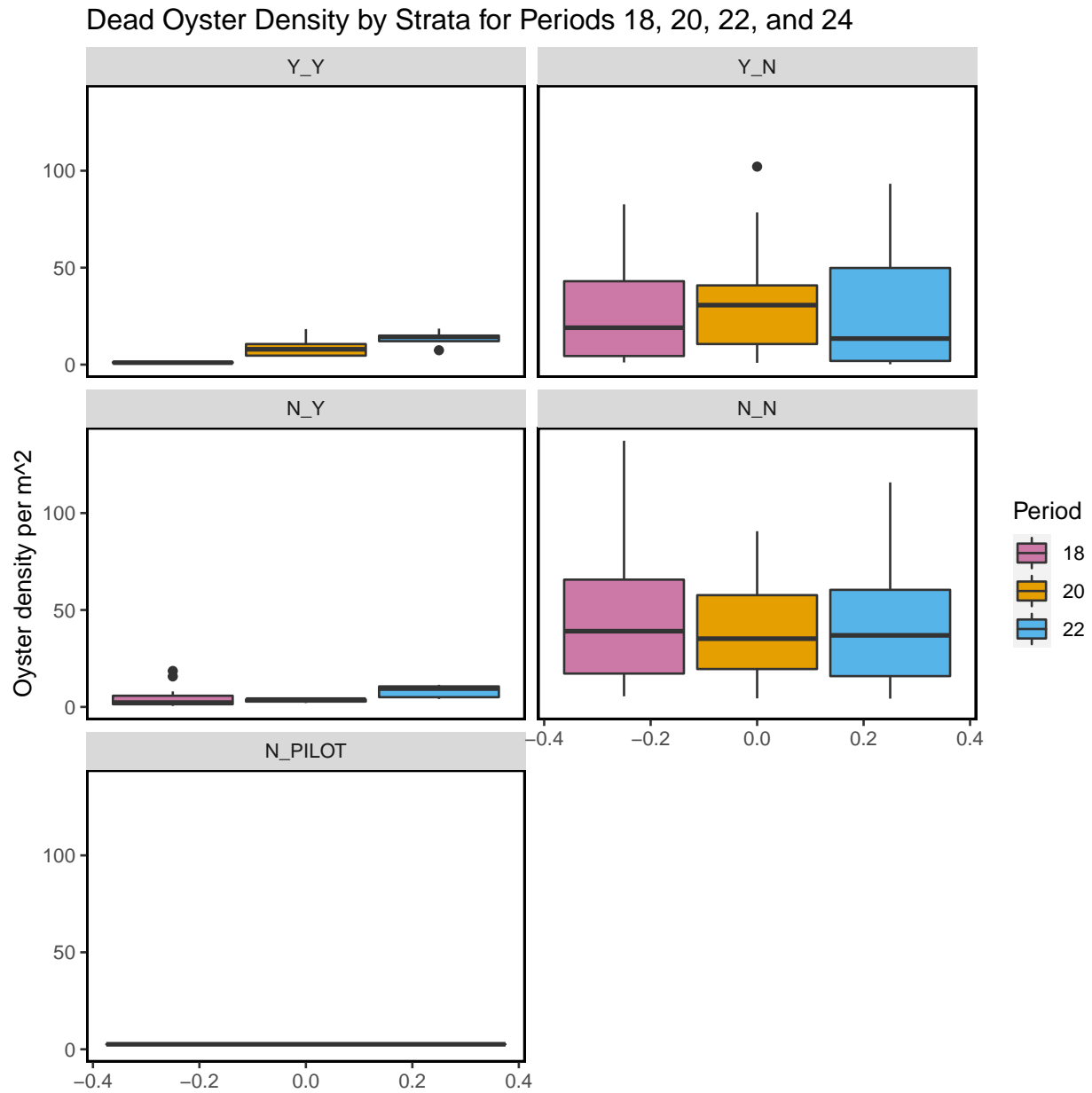


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2021-02-26.

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.

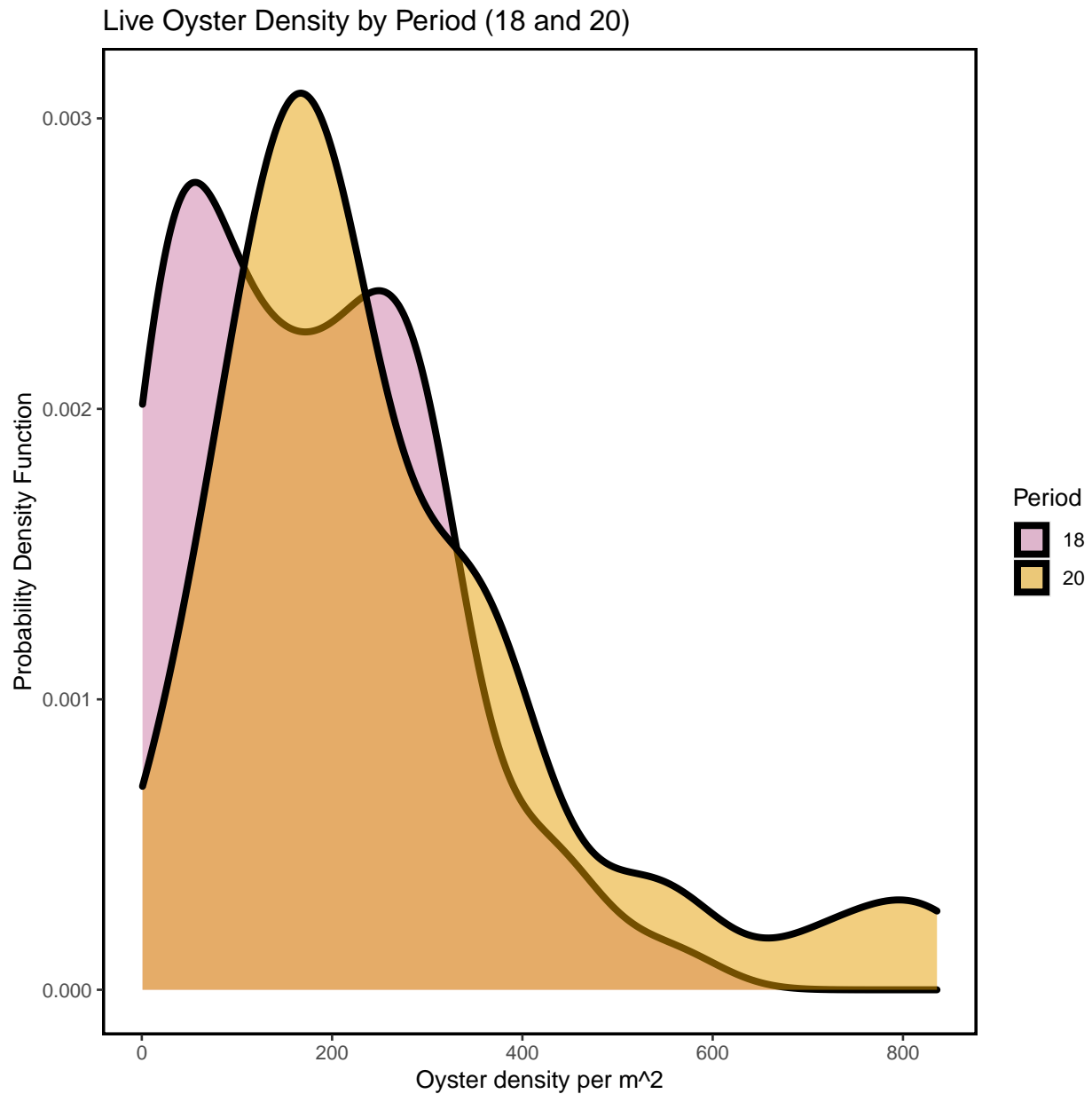


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-02-26.

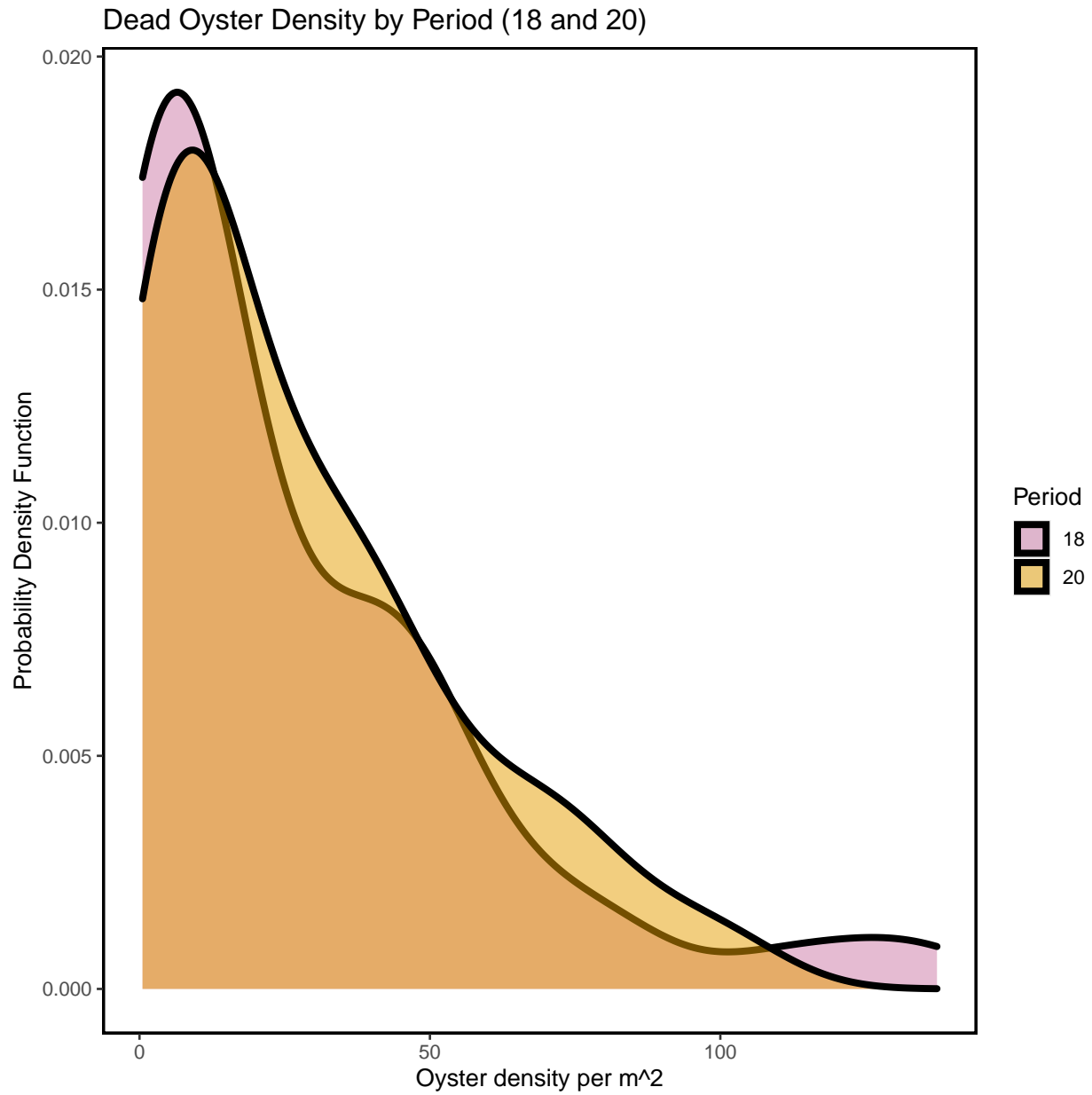


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-02-26.

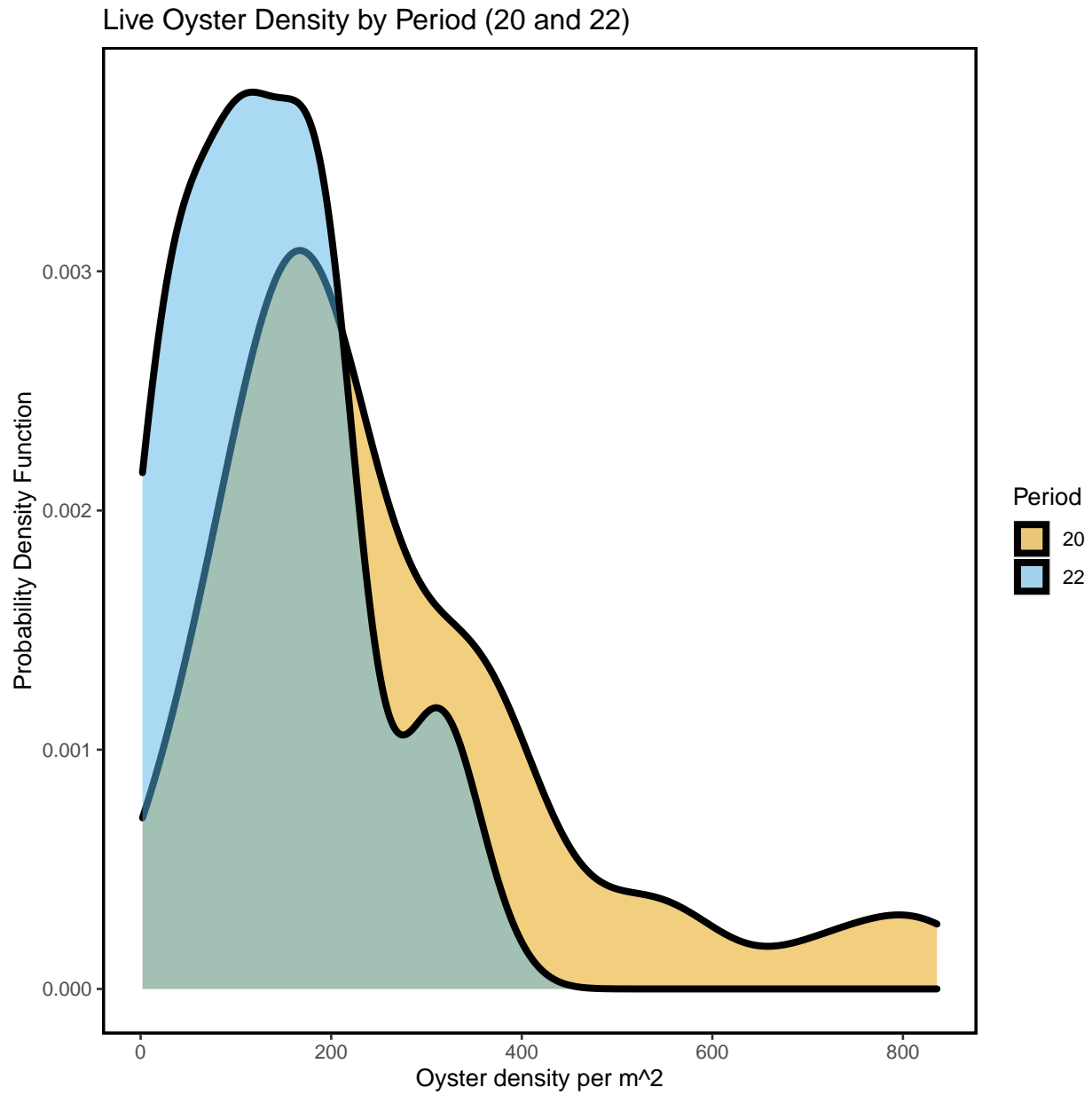


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-02-26.

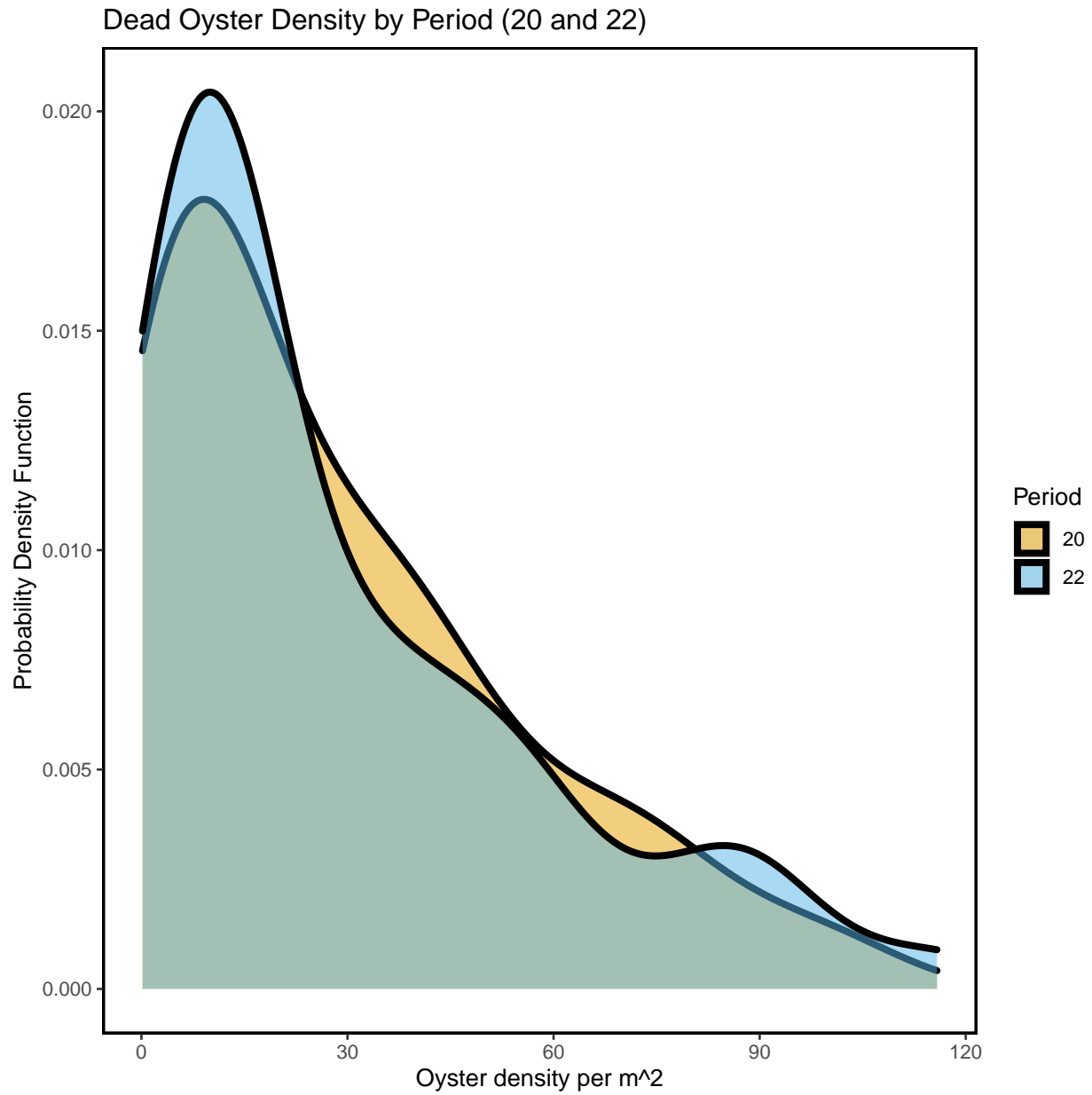


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-02-26.

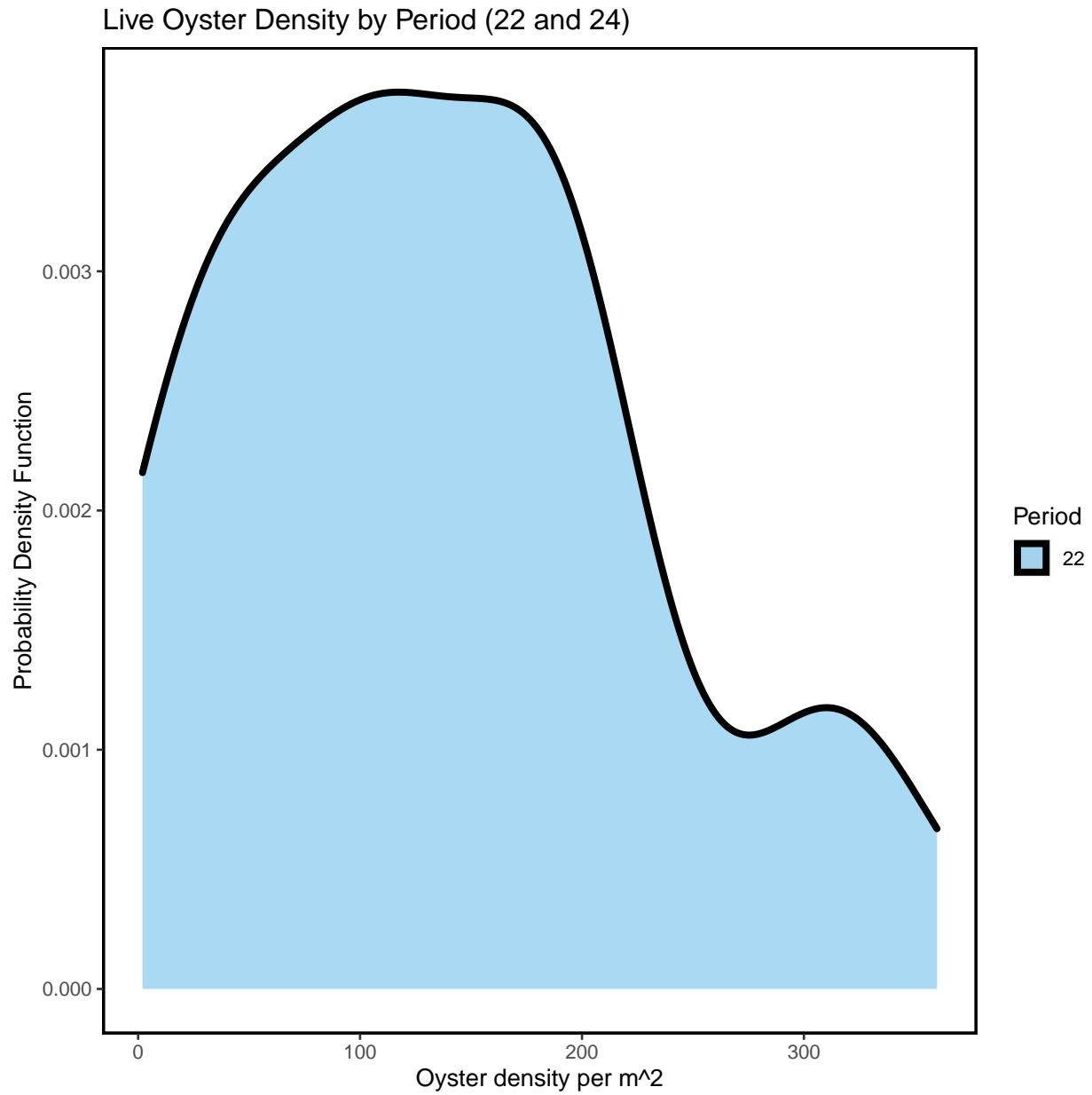


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-02-26.

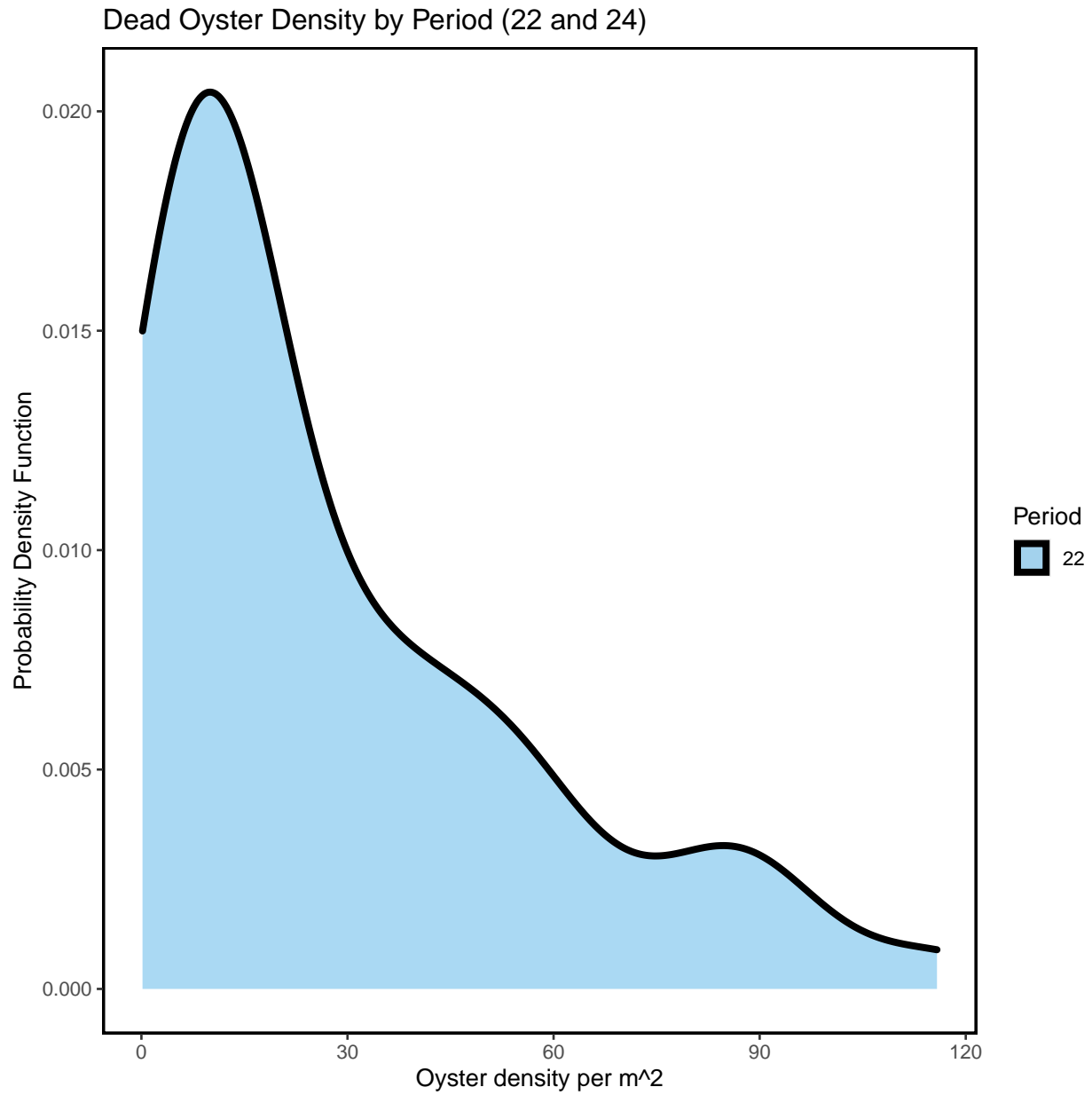


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2021-02-26.

Figure 1 consists of six scatter plots arranged in a 3x2 grid, showing the relationship between Live Oyster Counts (X-axis) and Dead Oyster Counts (Y-axis) for three different periods (18, 20, 22). The plots are labeled as follows:

- Top Left (Y_Y):** Shows a positive correlation between Live and Dead Oyster Counts. Data points are clustered at low counts (below 2500) and at high counts (above 5000).
- Top Right (Y_N):** Shows a positive correlation between Live and Dead Oyster Counts. Data points are clustered at low counts (below 2500) and at high counts (above 5000).
- Middle Left (N_Y):** Shows a positive correlation between Live and Dead Oyster Counts. Data points are clustered at low counts (below 2500) and at high counts (above 5000).
- Middle Right (N_N):** Shows a positive correlation between Live and Dead Oyster Counts. Data points are clustered at low counts (below 2500) and at high counts (above 5000).
- Bottom Left (N_PILOT):** Shows a positive correlation between Live and Dead Oyster Counts. Data points are clustered at low counts (below 2500) and at high counts (above 5000).
- Bottom Right (N_PILOT):** Shows a positive correlation between Live and Dead Oyster Counts. Data points are clustered at low counts (below 2500) and at high counts (above 5000).

The X-axis for all plots is 'Live Oyster Counts' (ranging from 0 to 10,000) and the Y-axis is 'Dead Oyster Counts' (ranging from 0 to 1,000). The legend indicates that the color of the points represents the Period: 18 (pink), 20 (orange), and 22 (blue).

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Live Counts Double Pass Results

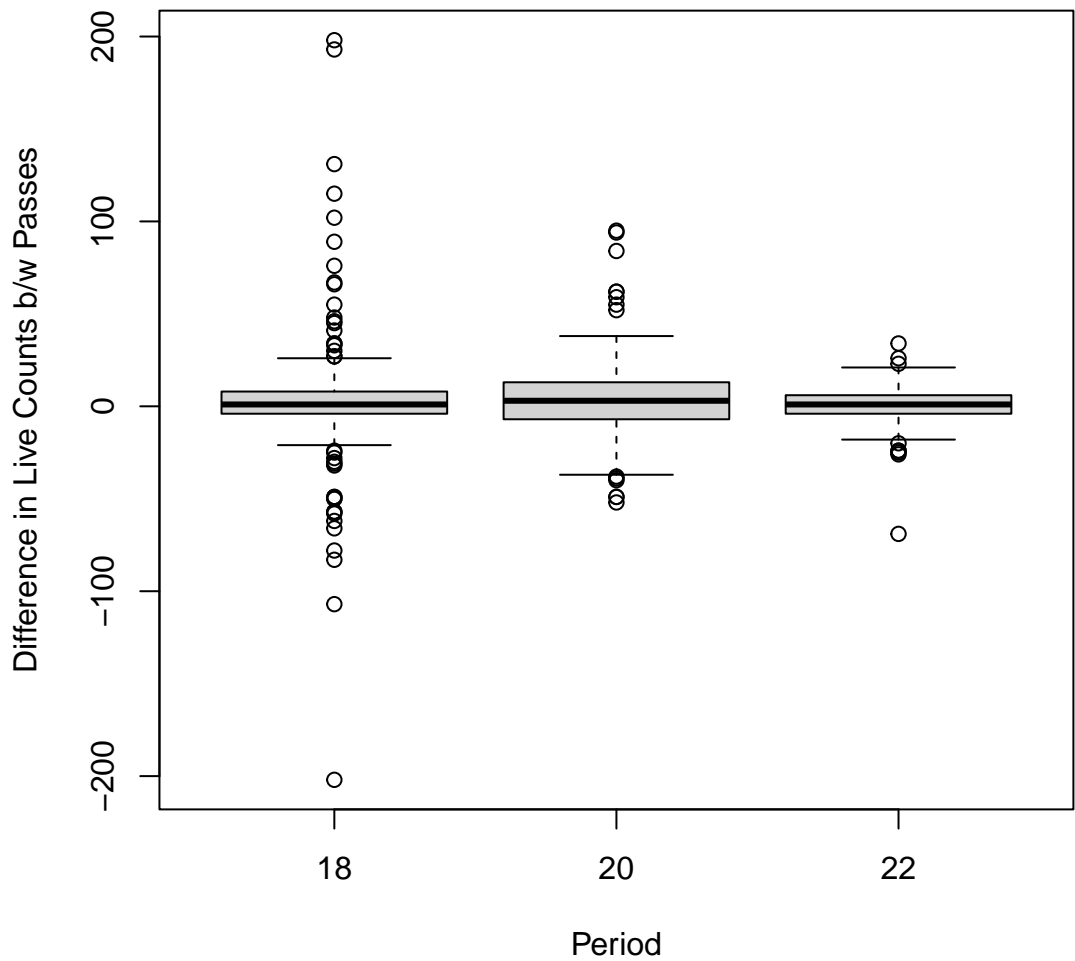


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, and 24

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

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

Dead Counts Double Pass Results

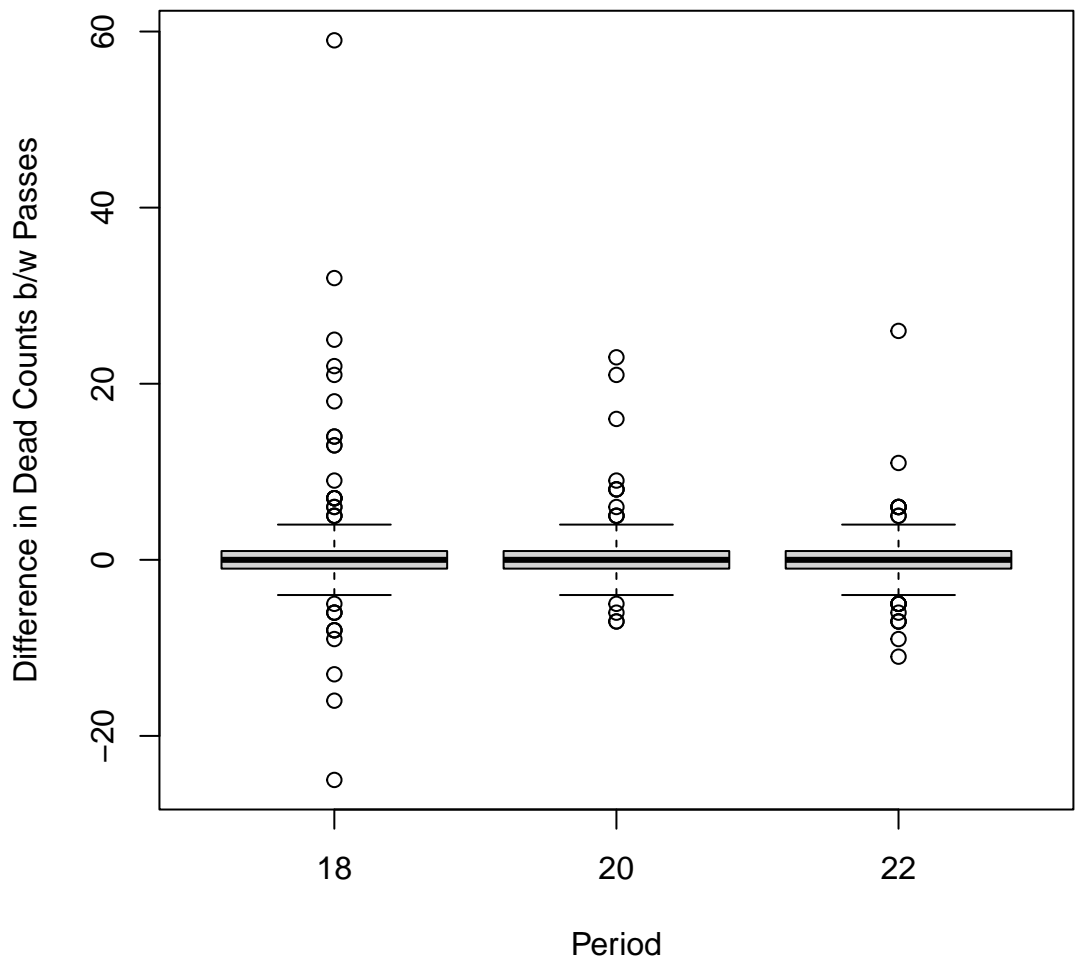


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, and 24

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

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 2021-02-26. 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	712
CR	46	1330
HB	45	1129
LC	196	10677
LT	17	450
NN	11	285

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	113	3710
N_PILOT	13	799
N_Y	28	3173
Y_N	186	5400
Y_Y	14	1966

Effort by Period

Period	Number of Transects	Total Length (m)
1	42	1086
2	30	753
3	25	619
6	33	874
7	8	528
10	8	512
11	8	511
16	8	528
18	61	2632
19	35	921
20	47	2556
22	49	3527

Effort by Locality and Period

Period	Locality	Number of Transects	Total Length (m)
1	CK	9	242
1	CR	10	300
1	HB	12	293
1	LC	11	250
10	LC	8	512
11	LC	8	511
16	LC	8	528
18	BT	6	238
18	LC	45	2128
18	LT	6	182
18	NN	4	84
19	CK	9	221
19	CR	9	227

19	HB	9	247
19	LC	8	226
2	CR	9	283
2	HB	11	271
2	LC	10	199
20	BT	2	96
20	LC	34	2163
20	LT	7	171
20	NN	4	126
22	BT	5	132
22	LC	37	3223
22	LT	4	96
22	NN	3	76
3	CR	9	269
3	HB	7	184
3	LC	9	167
6	CK	8	248
6	CR	9	250
6	HB	6	134
6	LC	10	242
7	LC	8	528

Effort by Strata and Period

Period	Strata	Number of Transects	Total Length (m)
1	N_N	8	149
1	Y_N	34	937
10	N_N	4	256
10	N_PILOT	4	256
11	N_N	4	255
11	N_PILOT	4	256
16	N_N	4	264
16	N_PILOT	4	264
18	N_N	18	571
18	N_Y	13	962
18	Y_N	26	723
18	Y_Y	4	376
19	N_N	5	80
19	Y_N	30	841
2	N_N	8	148
2	Y_N	22	605
20	N_N	18	590
20	N_PILOT	1	23
20	N_Y	6	888
20	Y_N	17	602
20	Y_Y	5	454
22	N_N	20	544
22	N_Y	9	1324
22	Y_N	15	524
22	Y_Y	5	1136
3	N_N	8	147
3	Y_N	17	472
6	N_N	8	178
6	Y_N	25	695
7	N_N	8	528

Effort Plot Summaries for all Periods

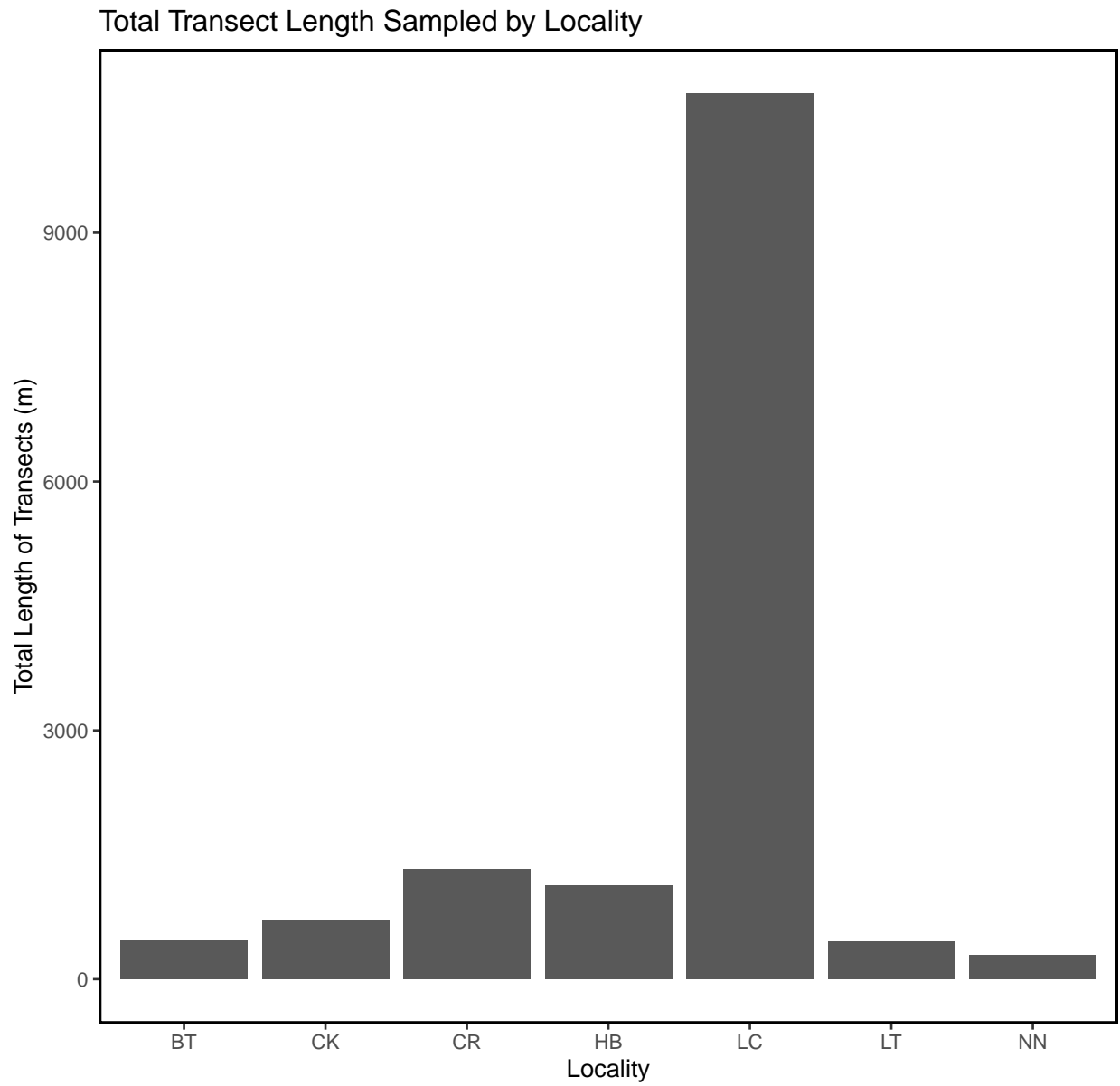


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

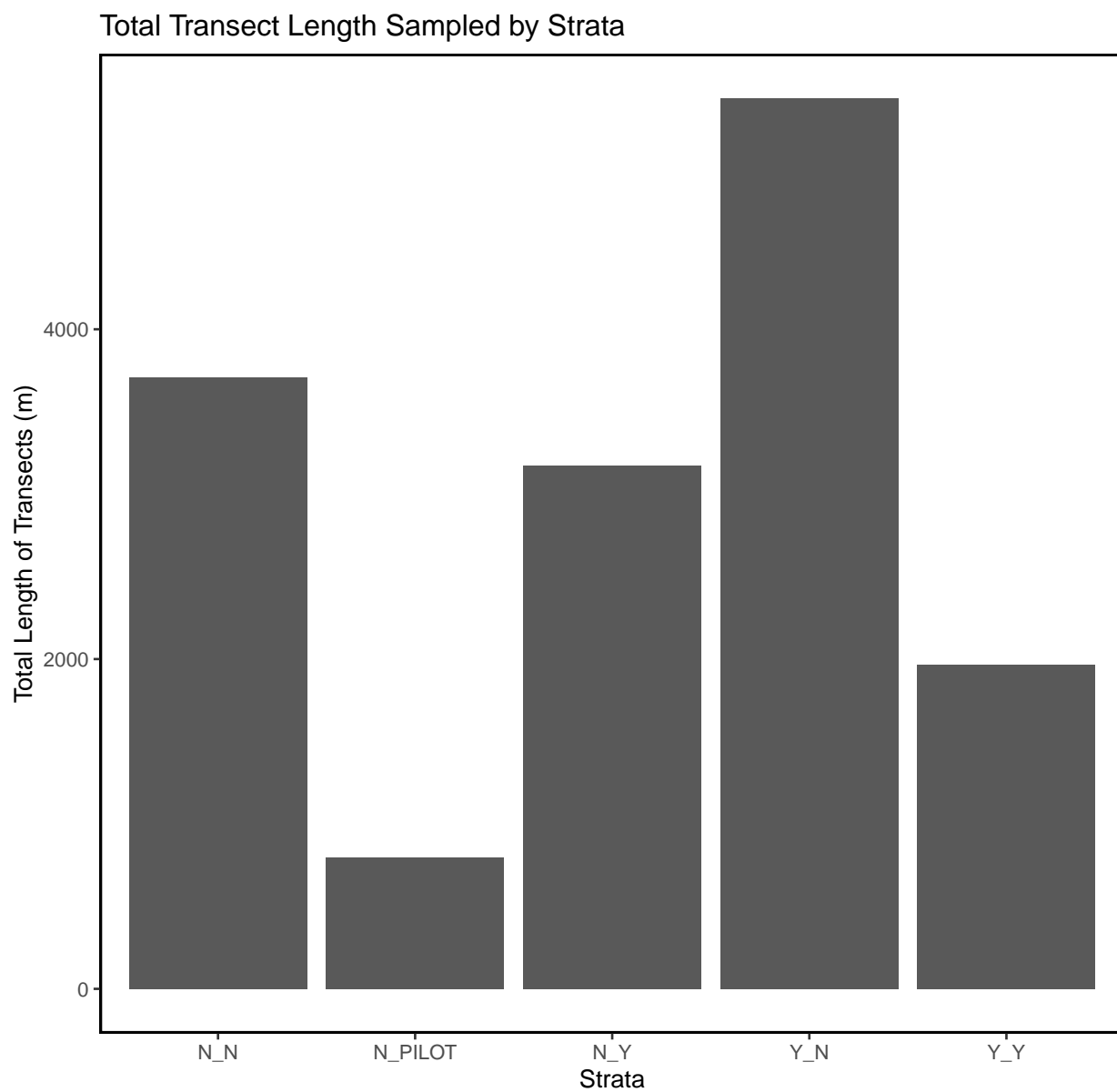
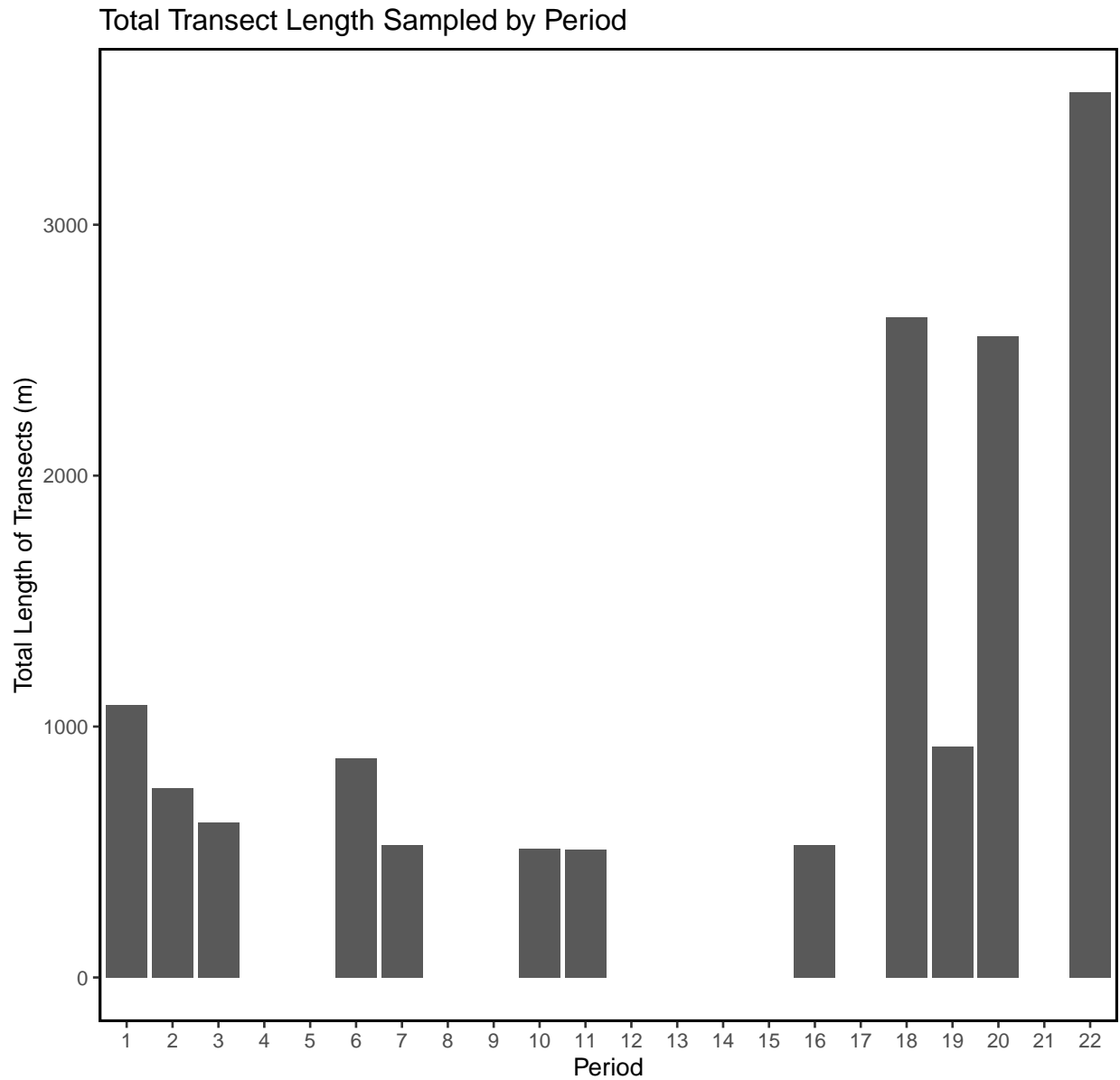


Figure – Bar plot of total transect length in meters sampled by strata for all periods.



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

Summary Tables for all Periods

These summaries display summary statistics of live oysters by locality, strata, and period. These contain all data collected on the oyster transects.

The summary statistics include:

- Locality or Strata or Period - Mean
- Median
- Standard Deviation (SD)
- Variance (Var)
- Coefficient of variation (CV)
- Standard Error (SE)
- Lower 95% Confidence Interval assuming normal distribution (L95)
- Upper 95% Confidence Interval assuming normal distribution (U95)
- Bootstrap Mean (Bstrap Mean)
- Lower 95% Confidence Interval from Bootstrap Values (L95 Bstrap)
- Upper 95% Confidence Interval from Bootstrap Values (U95 Bstrap)

Live Count Statistics for all Periods

Live Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	1665	897	2257	5094708	1.36	626	438	2892	1678	727	3085
CK	857	444	1091	1190933	1.27	214	438	1277	853	491	1303
CR	1026	716	1035	1072162	1.01	153	727	1325	1033	758	1355
HB	902	364	1047	1095622	1.16	158	592	1211	904	607	1206
LC	1094	679	1449	2099038	1.32	104	889	1298	1096	912	1304
LT	1051	877	607	368075	0.58	147	762	1339	1054	790	1376
NN	786	727	649	420847	0.83	196	403	1169	787	461	1183

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	993	764	1055	1112913	1.06	100	798	1189	995	804	1211
N_PILLOT	1046	1109	627	392853	0.60	174	705	1386	1043	744	1372
N_Y	2337	1436	2128	4529713	0.91	402	1548	3125	2342	1616	3159
Y_N	780	435	917	840395	1.18	68	647	913	783	660	910
Y_Y	2524	1772	2954	8726548	1.17	790	976	4071	2528	1211	4229

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	1407	1030	1807
2	890	476	945	893727	1.06	176	546	1234	897	546	1239
3	738	296	817	668064	1.11	167	411	1065	731	413	1062
6	433	176	534	284791	1.23	96	245	621	433	274	622
7	50	29	56	3186	1.12	20	11	90	51	18	91
10	1207	1074	671	449607	0.56	237	743	1672	1202	802	1679
11	886	776	678	459708	0.77	240	416	1356	869	497	1289
16	494	366	467	217855	0.95	165	170	817	489	218	816
18	982	695	935	874733	0.95	120	748	1217	983	761	1220
19	555	329	573	328431	1.03	97	365	745	554	380	742
20	1844	1253	2125	4517189	1.15	310	1236	2451	1842	1264	2536
22	1334	702	1693	2867783	1.27	242	860	1808	1334	905	1851

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	261	176	367
CK	241	112	321	102795	1.33	63	118	365	241	135	377
CR	288	181	294	86231	1.02	43	203	373	288	204	378
HB	257	101	303	92052	1.18	46	168	347	256	170	348
LC	152	118	149	22325	0.98	11	131	173	152	133	174
LT	278	249	143	20392	0.51	35	210	346	276	216	337
NN	224	164	224	50174	1.00	68	92	356	226	126	370

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	263	191	256	65472	0.97	24	215	310	263	216	311
N_PILOT	111	111	60	3604	0.54	17	79	144	112	82	146
N_Y	142	125	95	9027	0.67	18	106	177	141	109	175
Y_N	187	111	218	47653	1.17	16	156	219	188	156	221
Y_Y	116	97	93	8707	0.81	25	67	164	116	73	163

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	292.9	515
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	252	157.8	356
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	231	127.0	344
6	122	72.2	150.9	22769	1.24	27	68.6	174.9	121	68.8	178
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.7	9
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	122	81.8	166
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	91	45.7	137
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49	20.8	82
18	177	154.5	130.8	17117	0.74	17	144.3	210.0	177	144.6	209
19	160	85.6	171.9	29552	1.08	29	102.9	216.8	160	104.1	219
20	258	202.8	187.6	35185	0.73	27	204.4	311.7	258	210.5	312
22	138	120.6	93.1	8671	0.68	13	111.6	163.8	138	112.1	162

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	314	165	497
CK	78	32	106	11170	1.36	37	4.3	151	77	17	154
CR	60	47	38	1444	0.63	13	35.2	85	61	39	85
HB	44	21	45	2000	1.02	15	14.8	73	44	19	76
LC	111	66	136	18427	1.22	11	90.0	133	112	92	135
LT	240	210	193	37090	0.80	47	148.1	331	238	151	334
NN	104	74	96	9216	0.92	29	47.6	161	105	56	161

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	156	83	190	36091	1.22	21	114	197	156	118	200
N_PILOT	82	87	46	2136	0.56	13	57	108	82	60	109
N_Y	96	59	108	11604	1.12	20	56	136	96	62	138
Y_N	103	53	114	13070	1.11	12	79	127	102	79	124
Y_Y	205	80	288	82752	1.40	77	54	356	201	72	364

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	10	48
10	80	88	65	4245	0.82	23.0	34.5	125	79	39	124
11	50	40	25	620	0.49	8.8	33.2	68	50	35	66
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	132	86	182
19	63	44	67	4548	1.08	11.6	40.0	85	62	42	86
20	148	107	140	19727	0.95	20.5	107.6	188	148	111	191
22	191	128	193	37399	1.01	27.6	137.2	245	192	144	252

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	34.5	71
CK	21	11.3	28	757	1.29	9.7	2.3	40	22	5.2	42
CR	20	13.8	15	235	0.77	5.1	10.0	30	20	11.8	30
HB	13	8.0	14	201	1.12	4.7	3.4	22	13	4.6	22
LC	17	8.6	20	418	1.21	1.6	13.7	20	17	13.8	20
LT	59	50.5	38	1426	0.64	9.2	41.5	77	60	43.7	77
NN	29	16.7	25	602	0.85	7.4	14.3	43	28	16.1	42

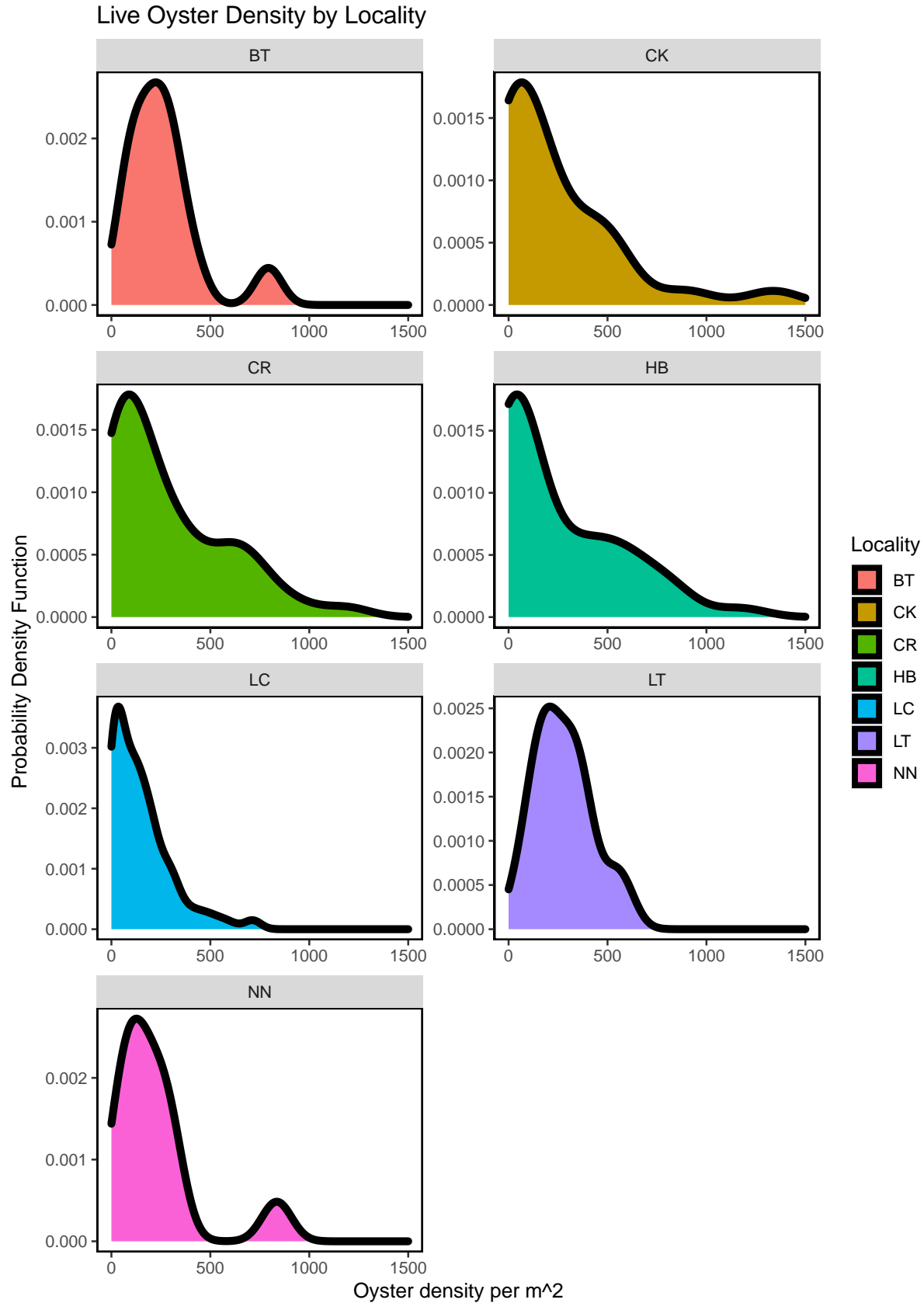
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	33.6	25.8	32.4	1047	0.96	3.59	26.5	40.6	33.6	26.7	41.1
N_PILOT	8.5	8.7	4.5	20	0.53	1.25	6.1	10.9	8.5	6.5	10.9
N_Y	5.8	4.0	4.6	21	0.80	0.87	4.1	7.4	5.7	4.1	7.6
Y_N	23.0	13.8	24.0	575	1.04	2.57	17.9	28.0	22.8	17.8	27.7
Y_Y	8.4	7.7	6.5	42	0.77	1.73	5.0	11.8	8.4	5.4	11.6

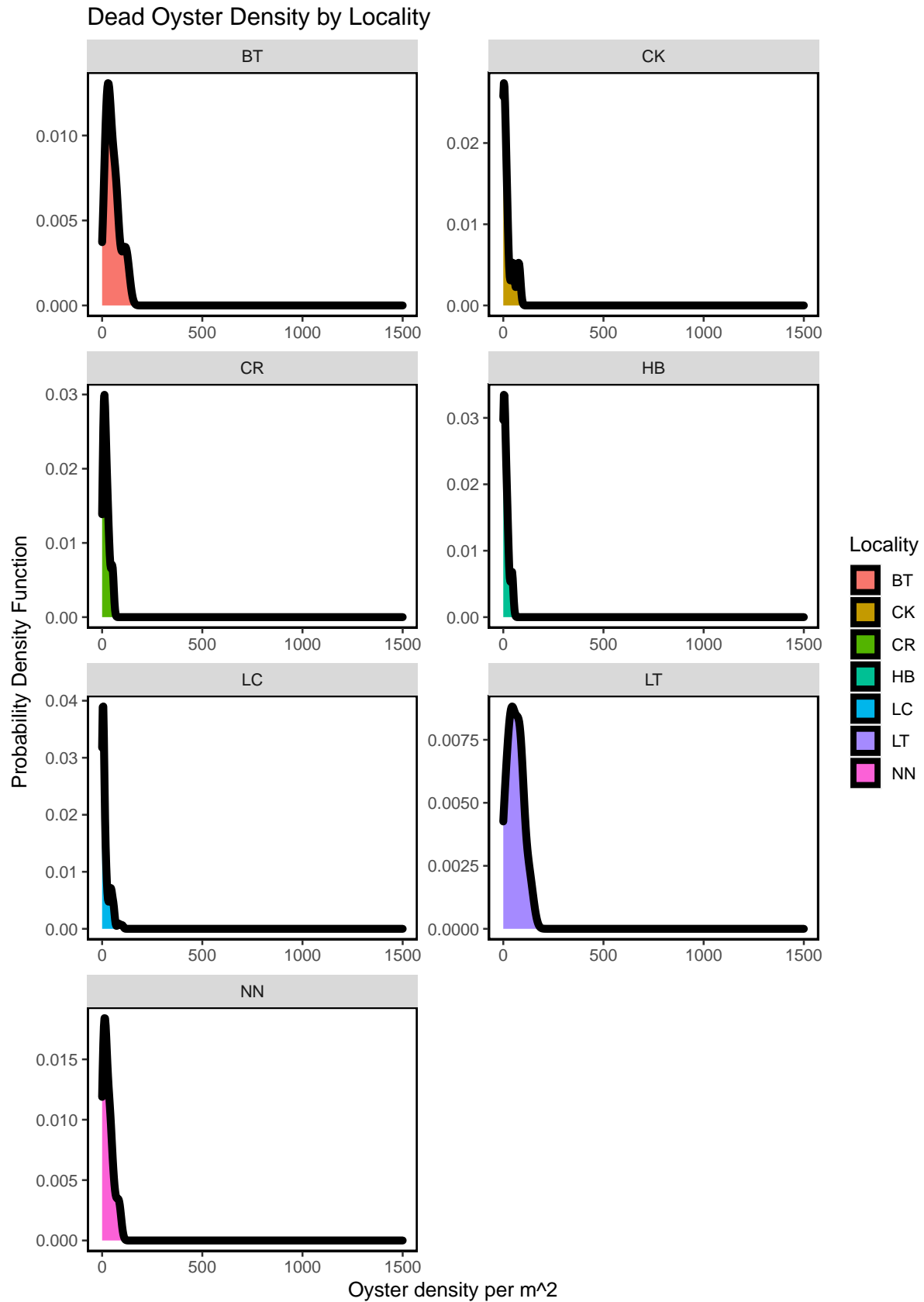
Dead Oyster Density by Period

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	2.9	1.1	5.0
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.2	4.3	12.6
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	980.1	1.19	4.01	18.54	34.3	26.5	19.0	34.9
19	18.1	13.1	19.3	370.6	1.07	3.30	11.59	24.5	18.1	12.0	24.5
20	27.9	18.4	26.4	697.6	0.95	3.85	20.38	35.5	27.8	21.0	35.6
22	28.6	14.3	28.7	821.7	1.00	4.09	20.62	36.7	28.4	20.8	37.2

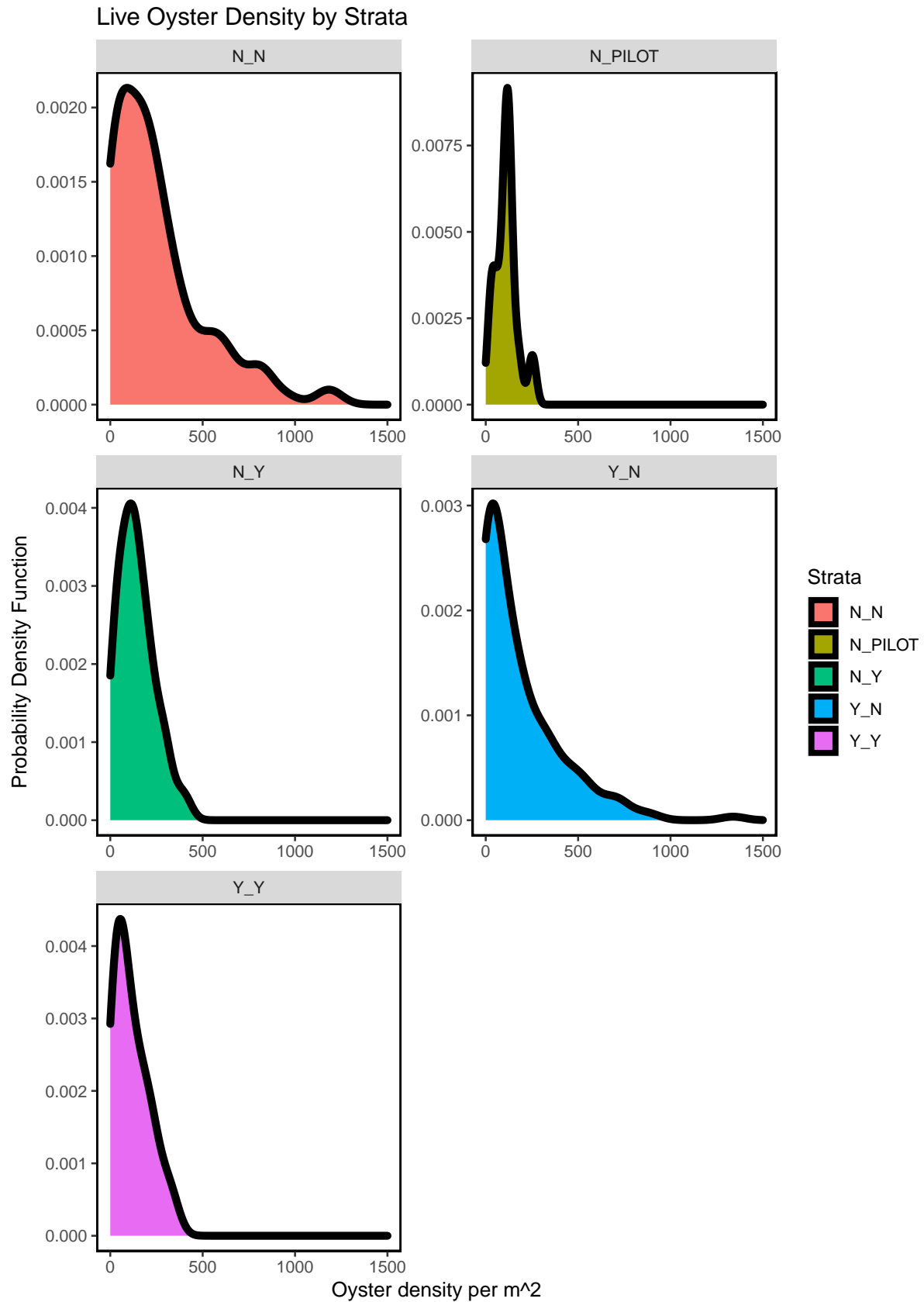
Summary Density Plots for all Periods



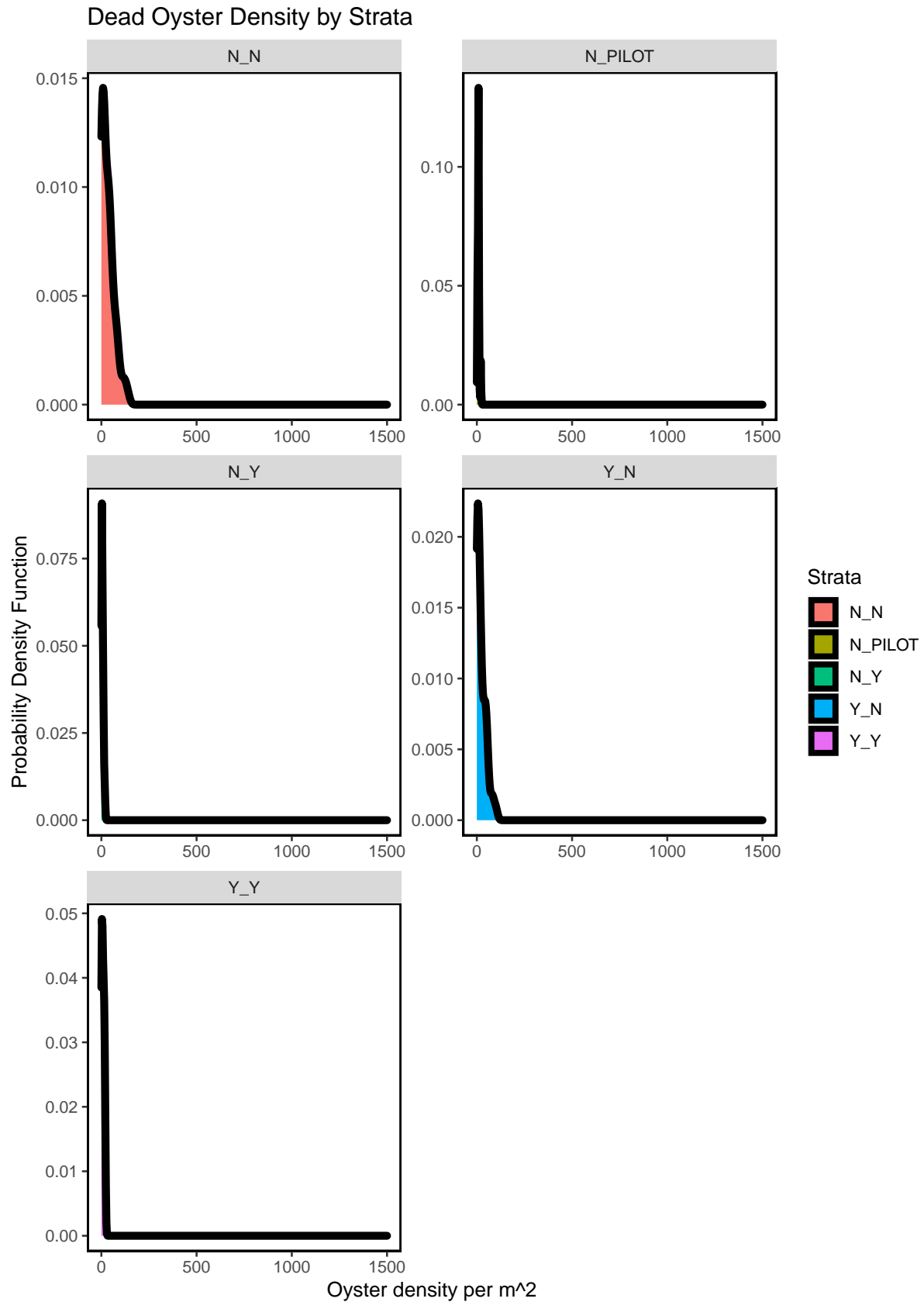
Figure– Calculated live oyster density by locality for all periods including period 22 (current period).



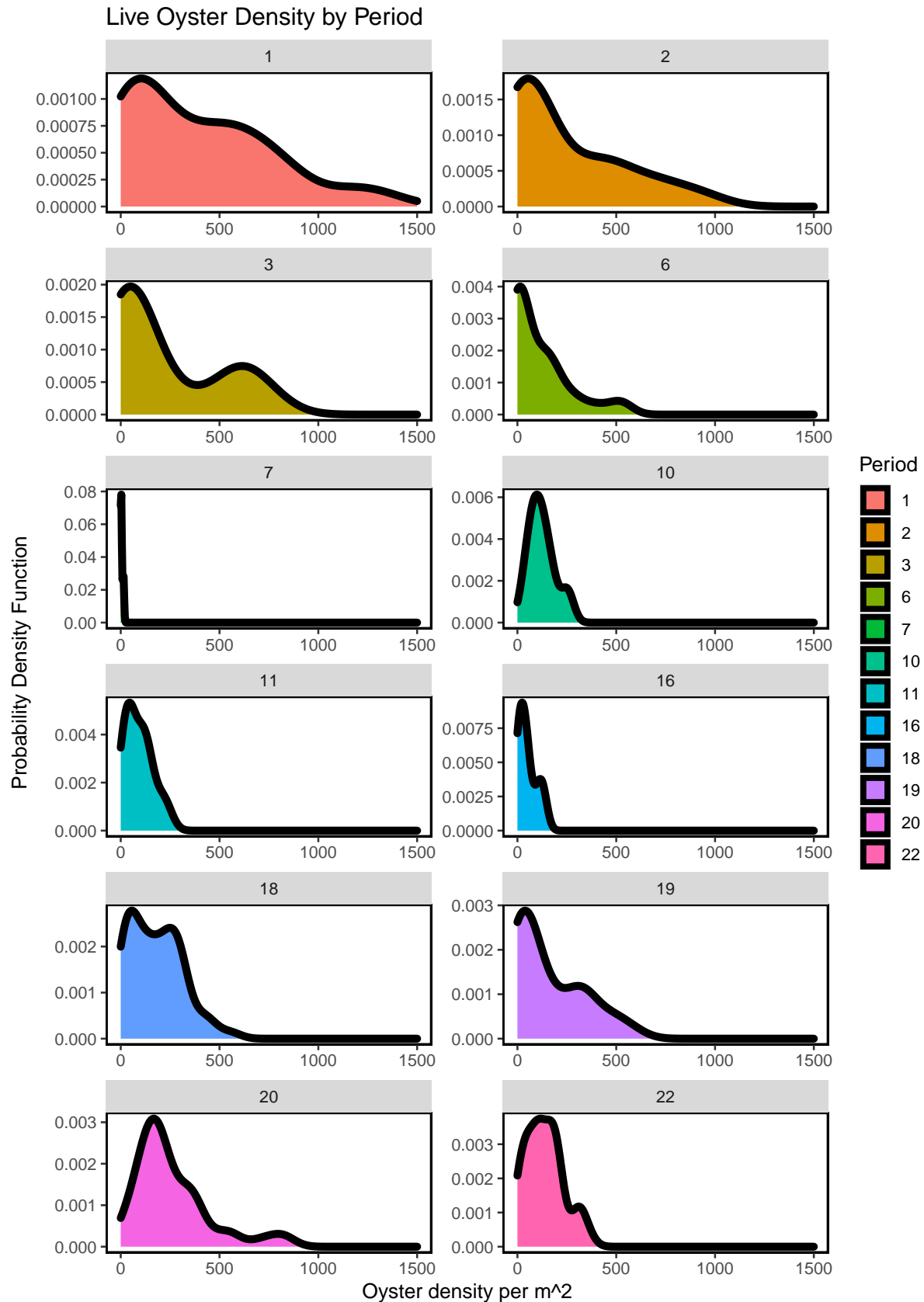
Figure– Calculated dead oyster density by locality for all periods including period 22 (current period).



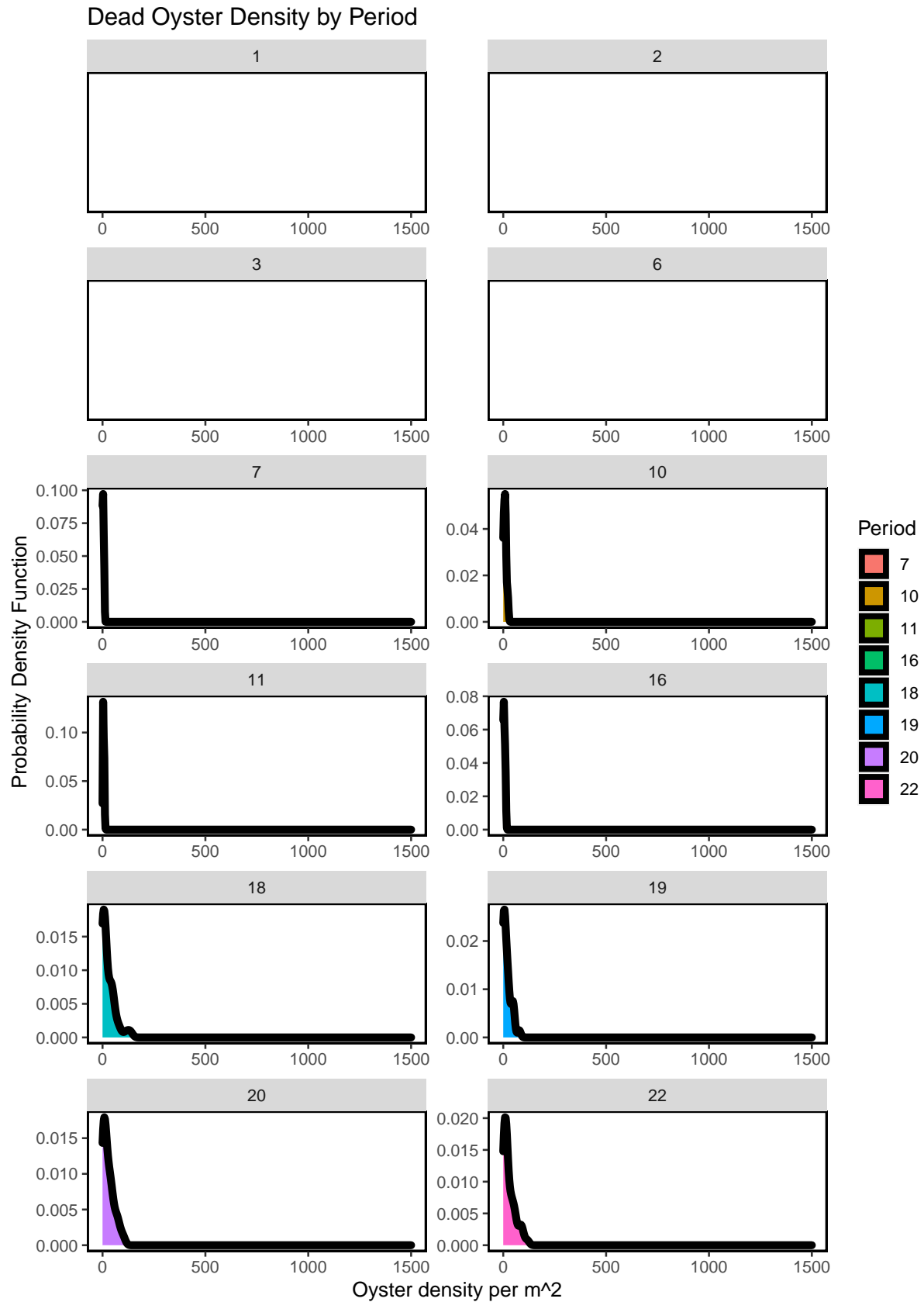
Figure– Calculated live oyster density by strata for all periods including period 22 (current period).



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

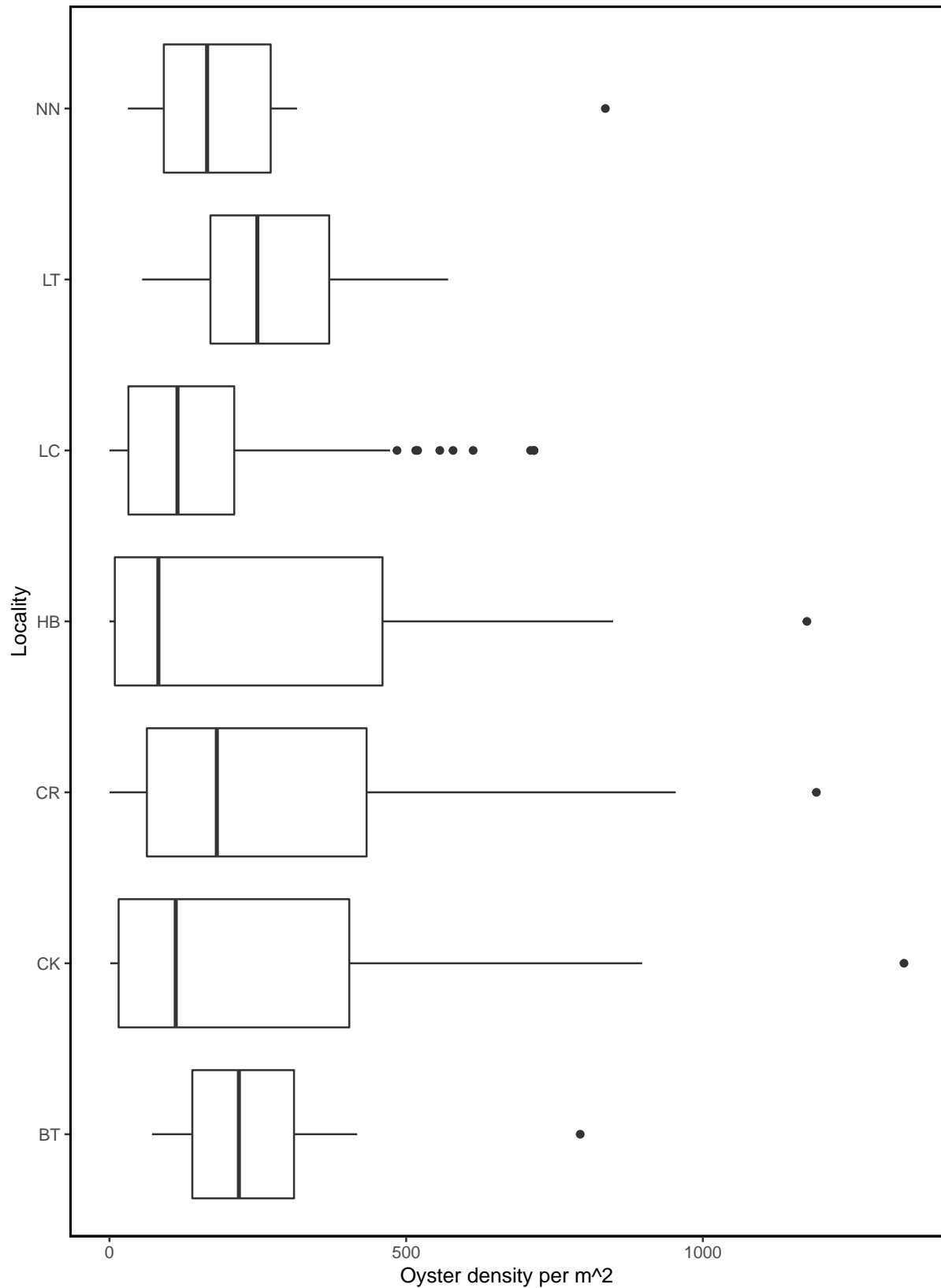


Figure– Calculated live oyster density for all periods including period 22 (current period) using a probability densi



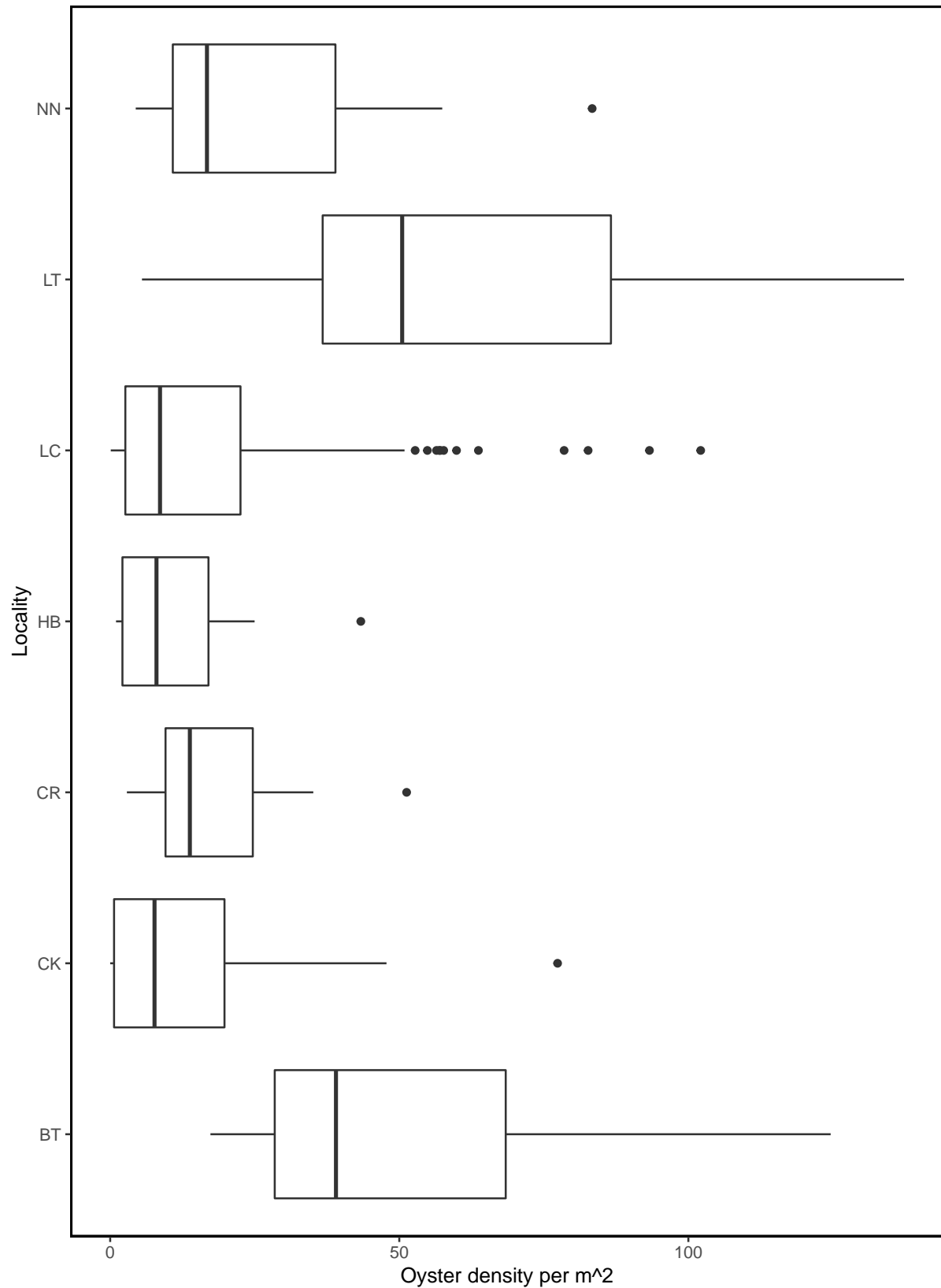
Figure– Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

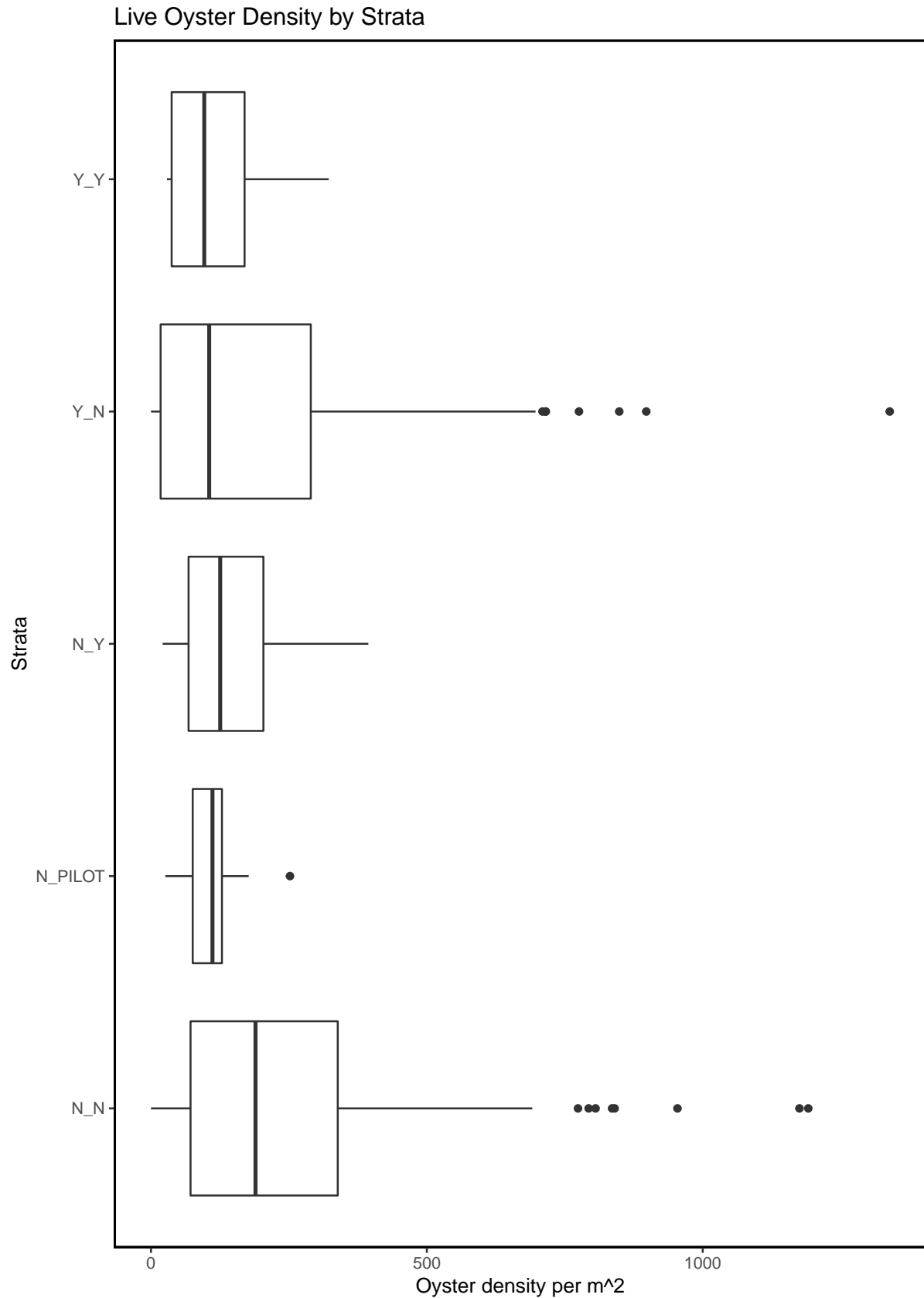


Figure– Box plot depicting live oyster density by locality for all periods including period 22 (current period).

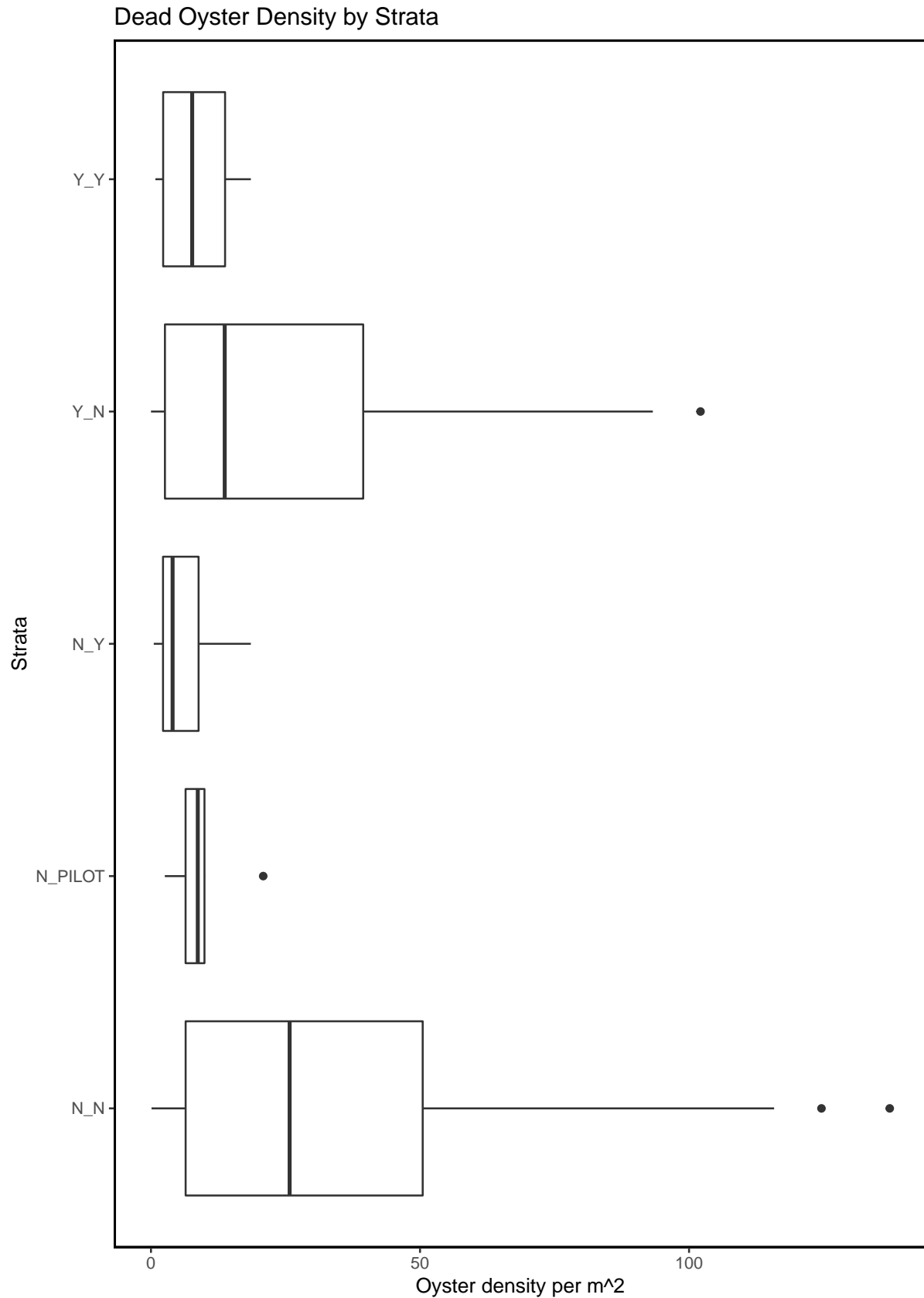
Dead Oyster Density by Locality



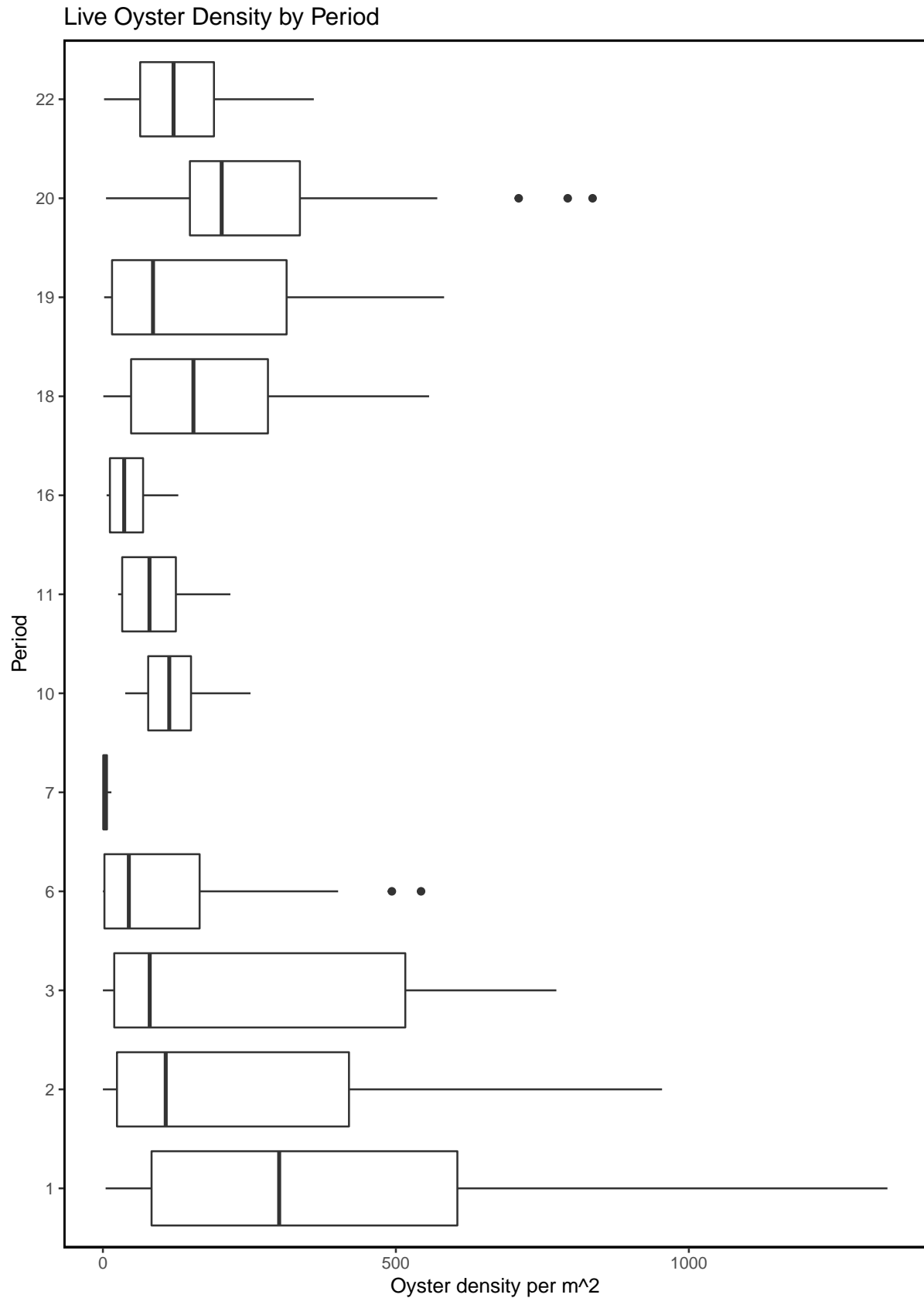
Figure– Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



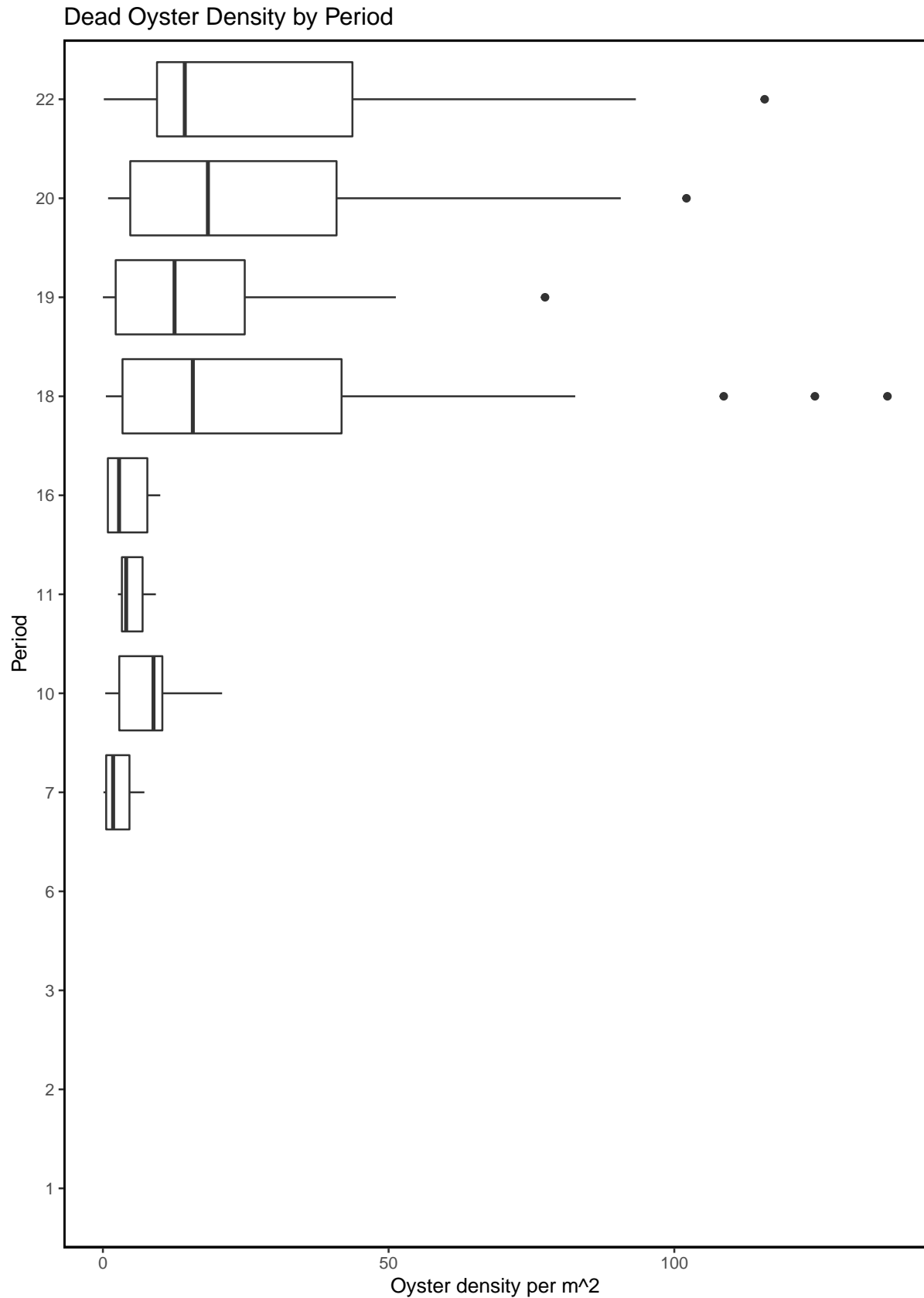
Figure– Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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).

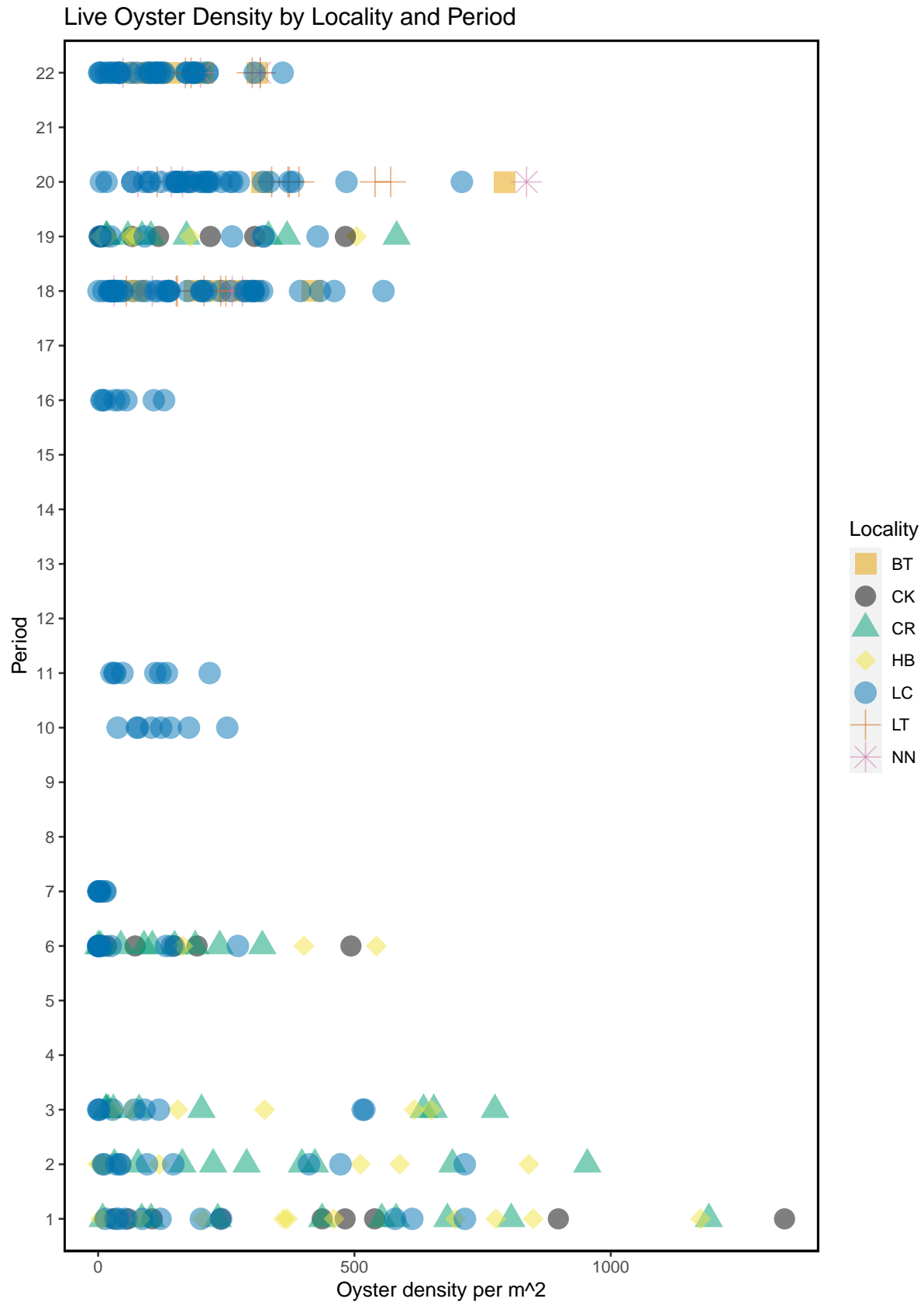


Figure – Live oyster density by locality and period for all periods including period 22 (current period).

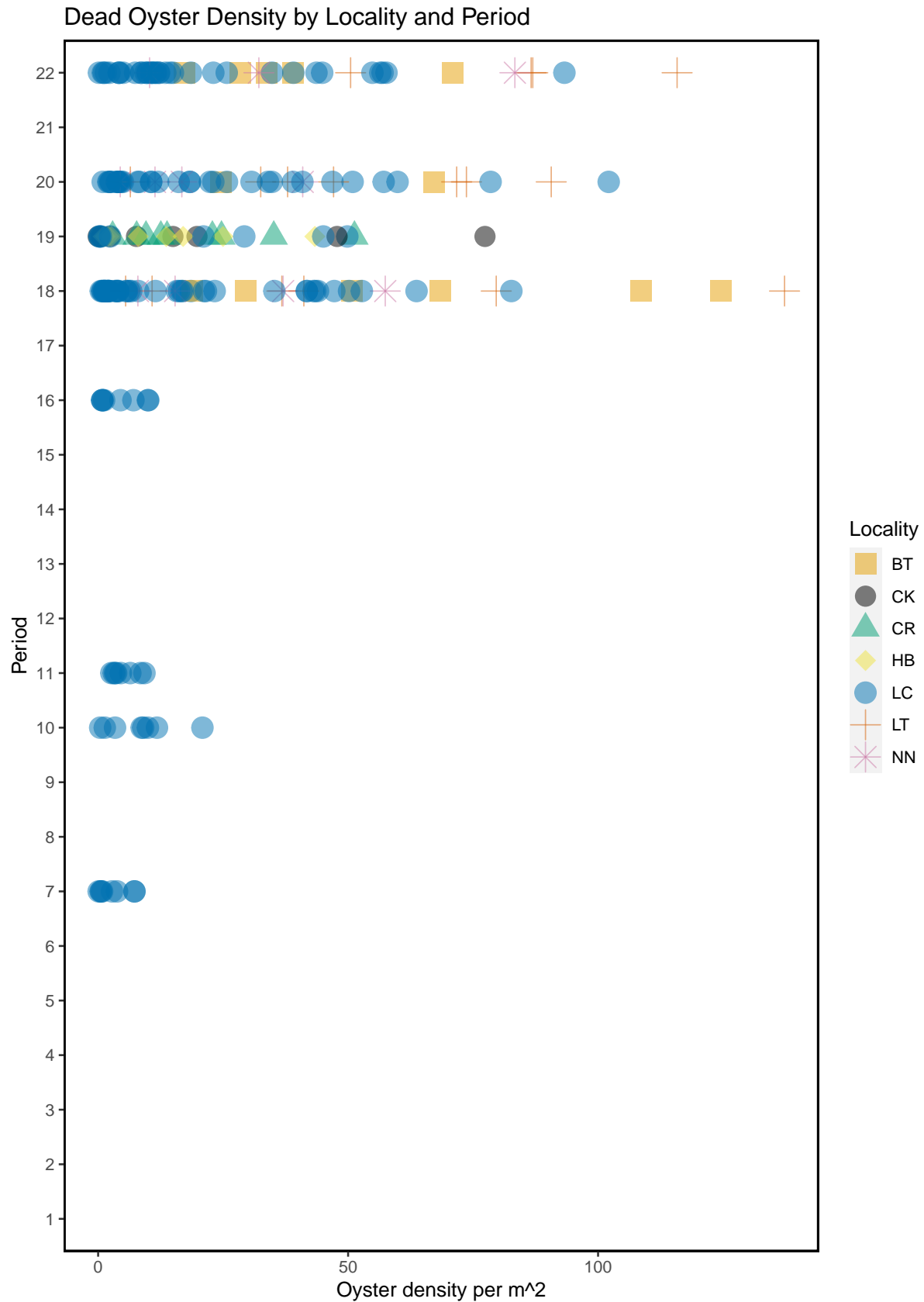
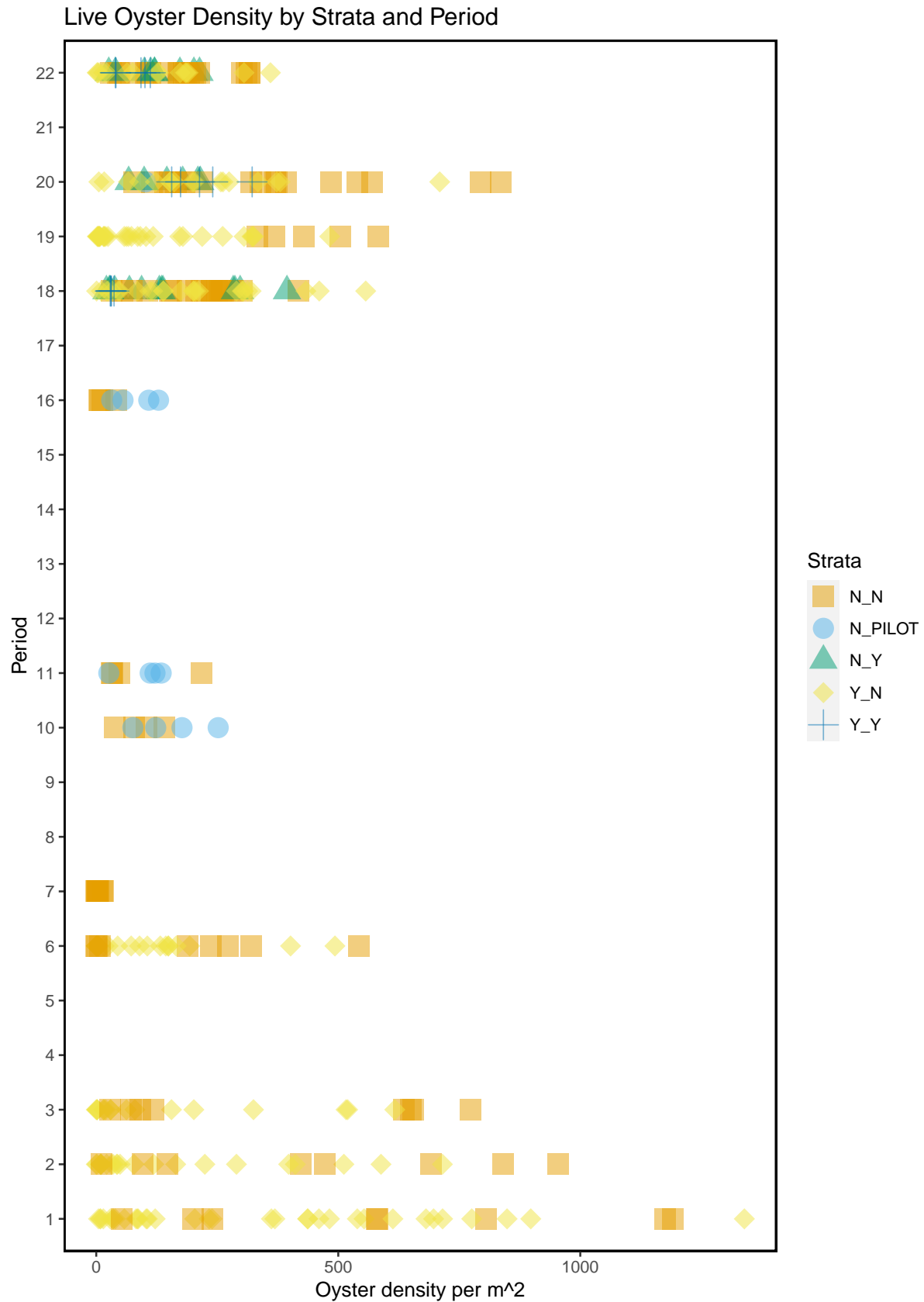
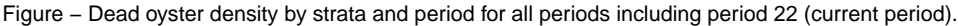


Figure – Dead oyster density by locality and period for all periods including period 22 (current period).





Live and Dead Count Comparison For All Periods

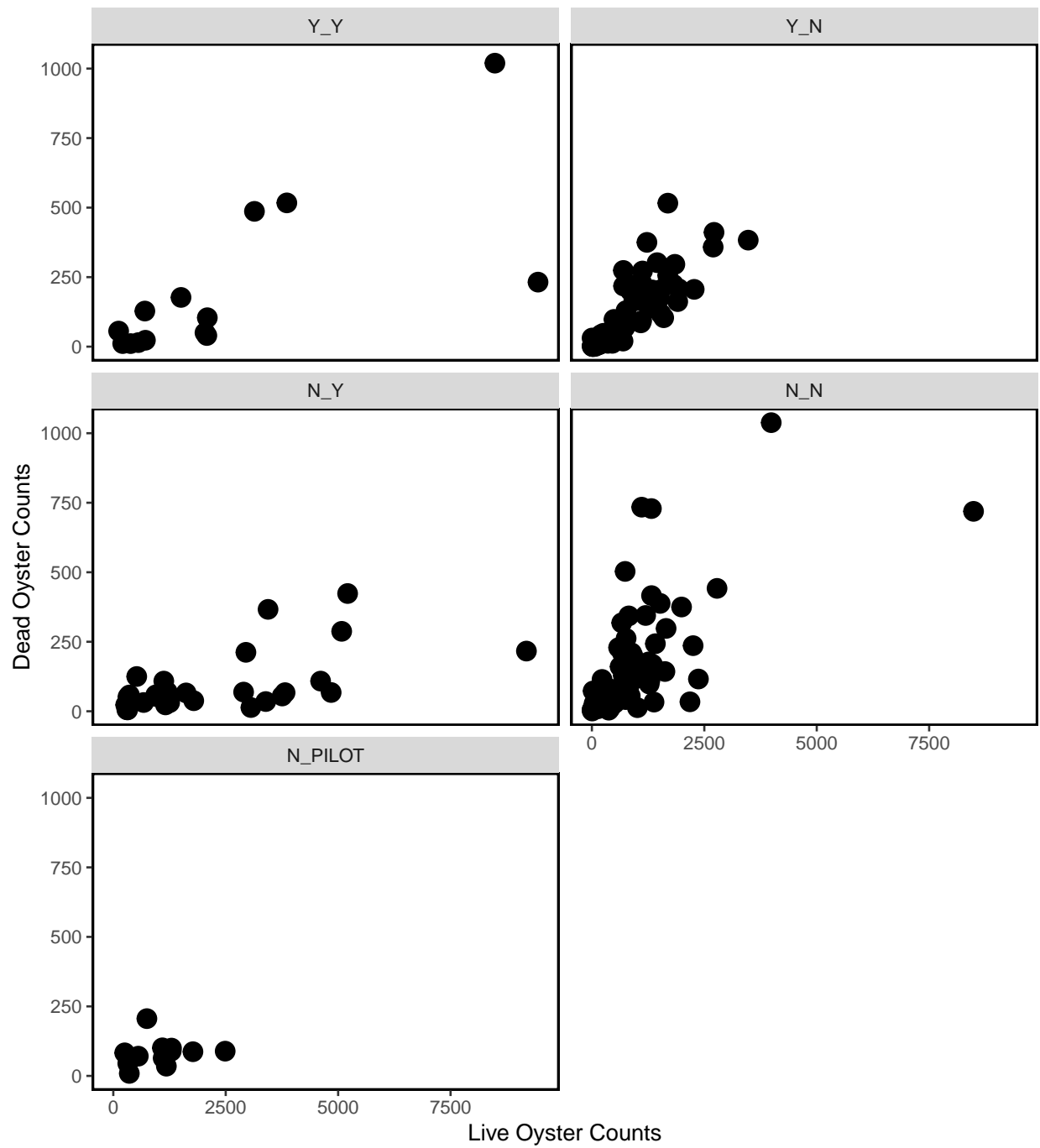


Figure- Live and dead oyster comparison for all periods, last sample date of period 24 is 2021-02-26.

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).

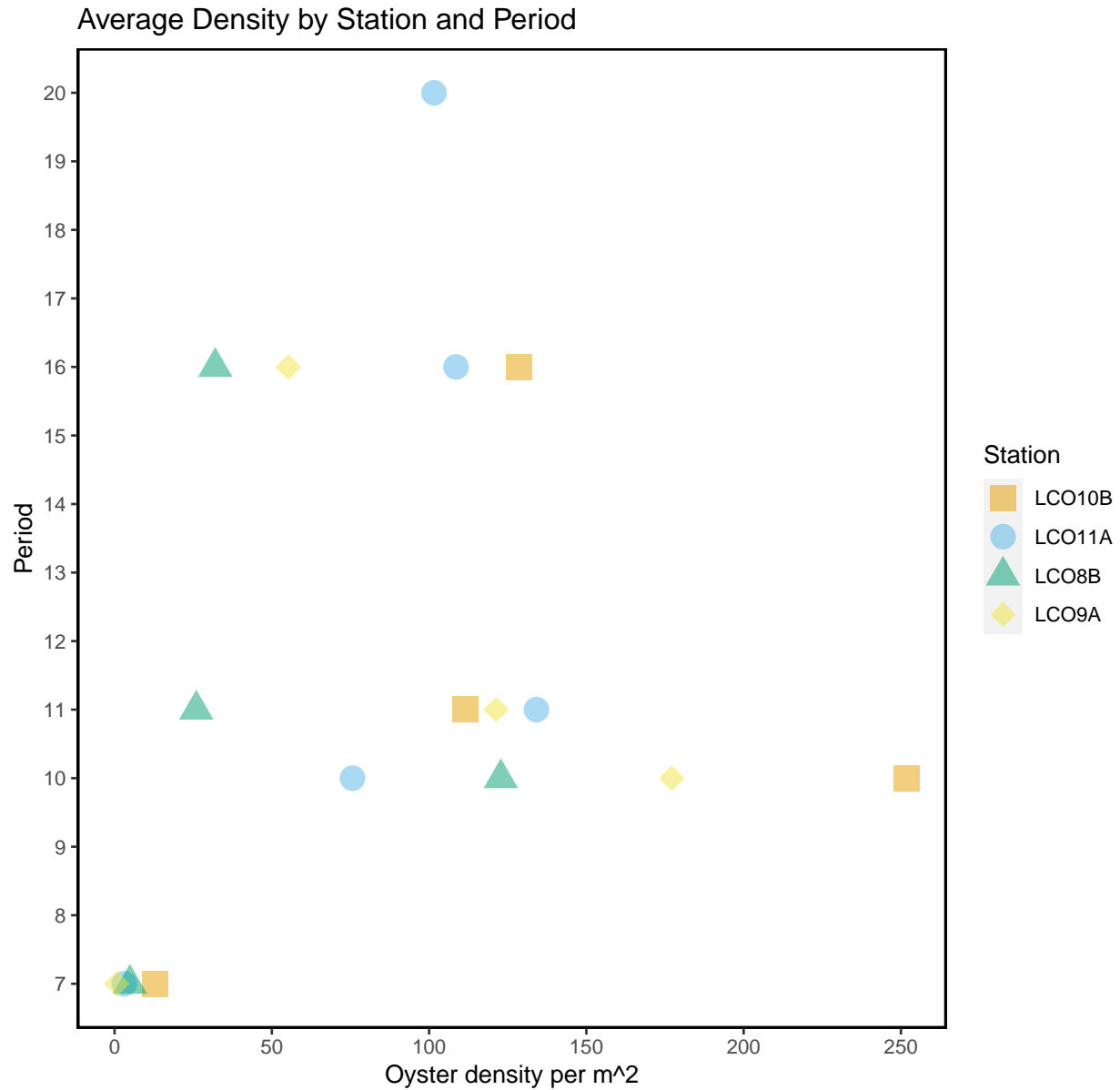


Figure – Average live oyster density comparison by station and period for all stations that were sampled during the pilc

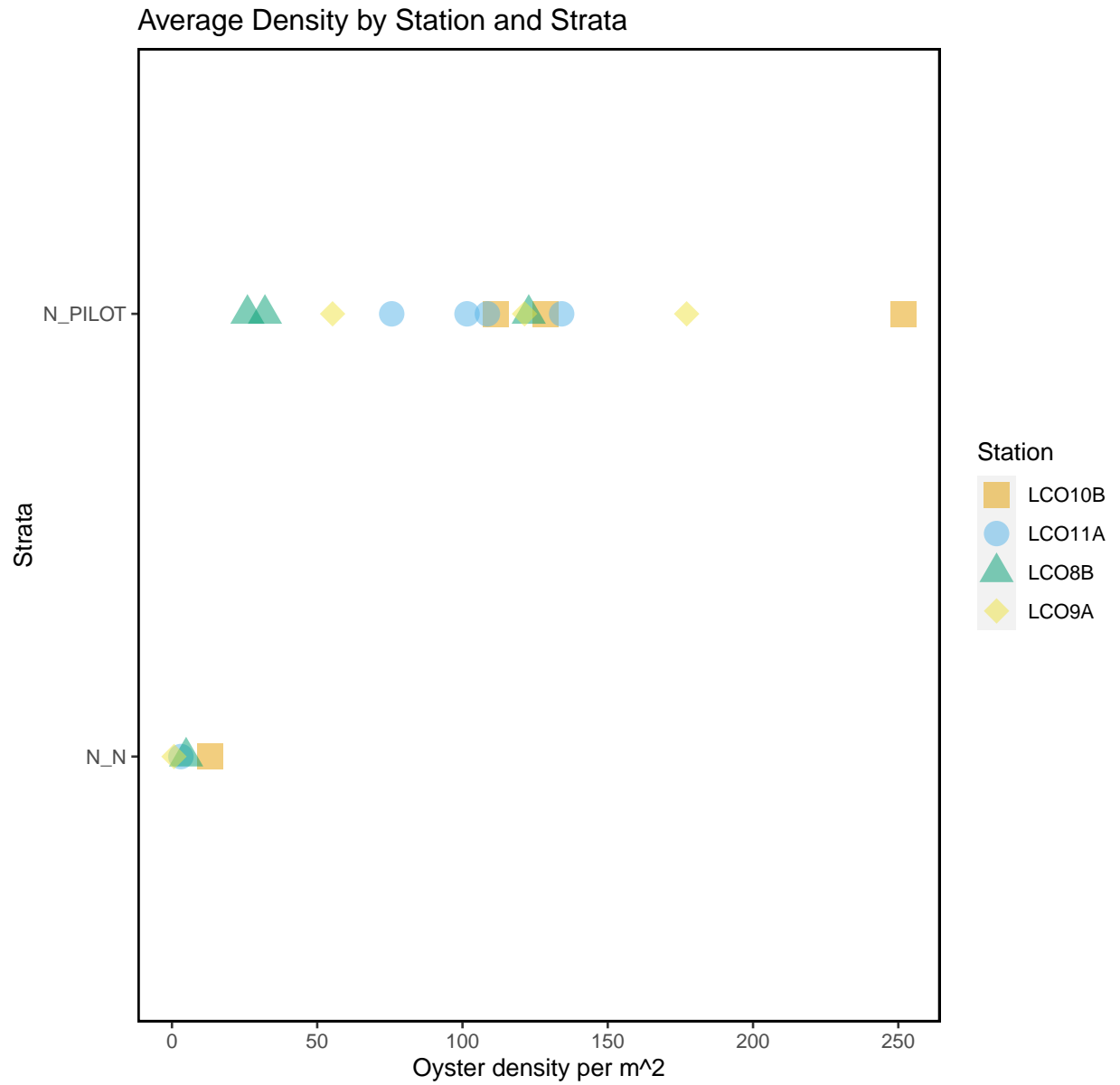


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

Latest Data Entered

Displayed are the entries for the last date of sampling (2021-02-26).

date	station	tran_length	count_live	count_dead	treatment	strata
2021-02-26	LC021	2.5	11	1	rocks	Y_Y
2021-02-26	LC021	5.0	42	5	rocks	Y_Y
2021-02-26	LC021	7.5	50	7	rocks	Y_Y
2021-02-26	LC021	10.0	14	2	rocks	Y_Y
2021-02-26	LC021	12.5	51	9	rocks	Y_Y
2021-02-26	LC021	15.0	61	7	rocks	Y_Y
2021-02-26	LC021	17.5	96	12	rocks	Y_Y
2021-02-26	LC021	20.0	141	11	rocks	Y_Y
2021-02-26	LC021	22.5	35	7	rocks	Y_Y
2021-02-26	LC021	24.4	27	3	rocks	Y_Y
2021-02-26	LC021	2.5	12	2	rocks	Y_Y
2021-02-26	LC021	5.0	32	8	rocks	Y_Y
2021-02-26	LC021	7.5	44	6	rocks	Y_Y
2021-02-26	LC021	10.0	15	2	rocks	Y_Y
2021-02-26	LC021	12.5	51	8	rocks	Y_Y
2021-02-26	LC021	15.0	63	9	rocks	Y_Y
2021-02-26	LC021	17.5	91	13	rocks	Y_Y
2021-02-26	LC021	20.0	139	14	rocks	Y_Y
2021-02-26	LC021	22.5	43	6	rocks	Y_Y
2021-02-26	LC021	24.4	28	4	rocks	Y_Y
2021-02-26	LC021	2.5	59	7	rocks	Y_Y
2021-02-26	LC021	5.0	41	6	rocks	Y_Y
2021-02-26	LC021	7.5	62	8	rocks	Y_Y
2021-02-26	LC021	10.0	71	6	rocks	Y_Y
2021-02-26	LC021	12.5	55	10	rocks	Y_Y
2021-02-26	LC021	15.0	49	5	rocks	Y_Y
2021-02-26	LC021	17.5	58	3	rocks	Y_Y
2021-02-26	LC021	20.0	59	3	rocks	Y_Y
2021-02-26	LC021	22.5	50	7	rocks	Y_Y
2021-02-26	LC021	2.5	57	8	rocks	Y_Y
2021-02-26	LC021	5.0	40	6	rocks	Y_Y
2021-02-26	LC021	7.5	58	8	rocks	Y_Y
2021-02-26	LC021	10.0	69	7	rocks	Y_Y
2021-02-26	LC021	12.5	59	9	rocks	Y_Y
2021-02-26	LC021	15.0	52	8	rocks	Y_Y
2021-02-26	LC021	17.5	54	3	rocks	Y_Y
2021-02-26	LC021	20.0	56	4	rocks	Y_Y
2021-02-26	LC021	22.5	57	7	rocks	Y_Y