

Transect Report

Overview

This report provides summary statistics and figures for ongoing transect sampling. The first section of the report focuses on the current sampling (Winter 2020-2021) and how the collected data compare to last year's sampling (Winter 2019-2020). So far 20 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, 113 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

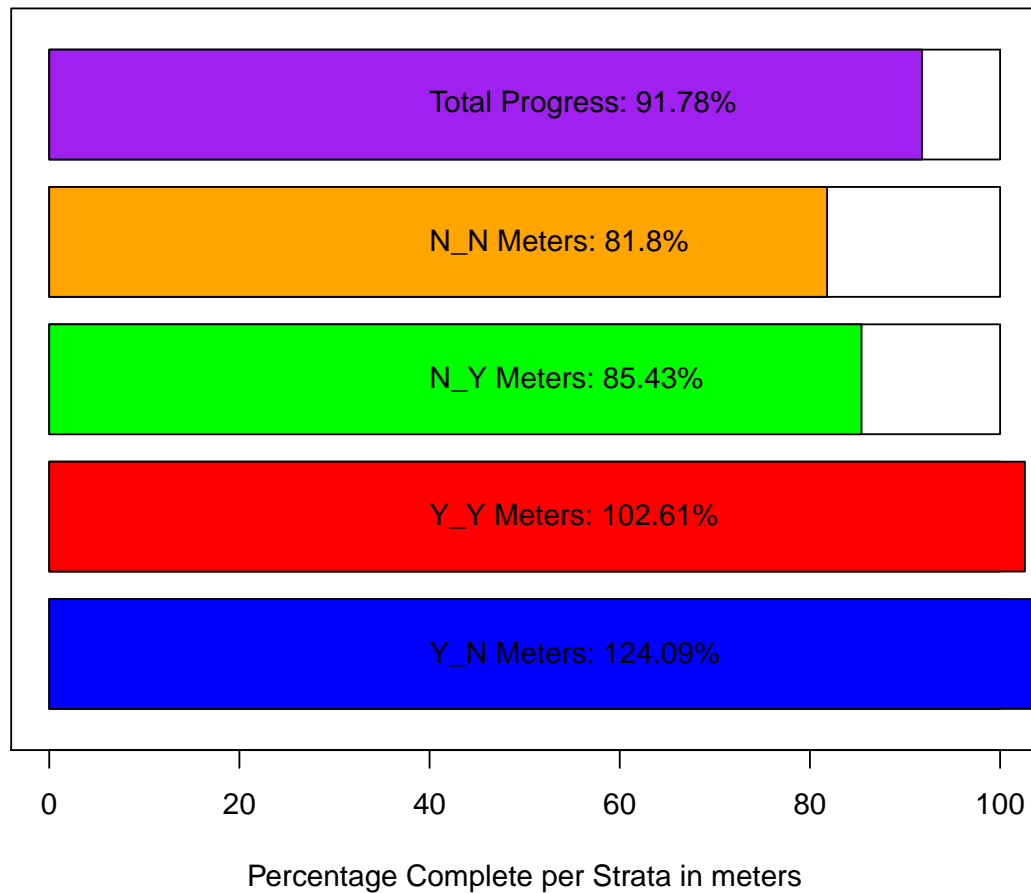
Definition of Strata

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 22, and last year's sampling period is period 20.**

Field Sites– Strata Progress



Summary Tables for Periods 18, 20 and 22

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

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 and 22

Live Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	1691	856	2355	5547854	1.39	680	359	3024	1710	688	3170
LC	1400	855	1684	2834794	1.20	157	1093	1708	1403	1097	1719
LT	1054	877	645	416505	0.61	167	728	1381	1072	777	1417
NN	720	649	644	414522	0.89	204	321	1119	724	402	1158

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1096	766	1264	1598540	1.15	175	752	1440	1090	810	1458
N_PILOT	356	356	NA	NA	NA	NA	NA	NA	182	9	347
N_Y	2433	1619	2207	4871839	0.91	441	1568	3299	2420	1634	3322
Y_N	845	694	777	603969	0.92	102	645	1045	847	639	1043
Y_Y	2322	1772	2636	6949983	1.14	659	1031	3614	2301	1200	3762

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	984	754	1230
20	1844	1253	2125	4517189	1.15	310	1236	2451	1862	1321	2526
22	1313	671	1675	2806625	1.28	253	818	1808	1316	892	1855

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	257	212	198	39335	0.77	57	145	370	259	169	384
LC	166	151	128	16279	0.77	12	143	189	166	144	190
LT	274	239	152	23145	0.56	39	197	351	274	204	349
NN	215	154	234	54714	1.09	74	70	360	213	108	362

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	233	190	170	28981	0.73	24	187	279	233	187	282
N_PILOT	102	102	NA	NA	NA	NA	NA	NA	51	3	100
N_Y	148	135	98	9629	0.66	20	109	186	147	111	185
Y_N	184	167	150	22472	0.82	20	145	222	183	148	222

Y_Y	117	112	87	7533	0.74	22	75	160	118	81	161
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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	178	148	210
20	258	203	188	35185	0.73	27	204	312	258	212	312
22	125	120	80	6458	0.64	12	101	148	125	103	149

Summary of Dead Counts for Periods 18, 20 and 22

Dead Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	325	169	328	107312	1.01	95	140	510	325	160	523
LC	128	69	142	20028	1.10	13	102	154	129	105	153
LT	240	210	202	40850	0.84	52	137	342	240	142	341
NN	100	68	100	10018	1.00	32	38	162	100	50	164

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	207	125	215	46152	1.04	30	148	265	208.0	153	270
N_PILOT	9	9	NA	NA	NA	NA	NA	NA	4.9	1	9
N_Y	90	55	111	12413	1.24	22	46	134	90.7	53	135
Y_N	127	83	125	15698	0.99	16	94	159	128.1	98	160
Y_Y	181	106	234	54804	1.29	59	66	296	183.1	91	297

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	134	90	184
20	148	107	140	19727	0.95	20	108	188	148	113	191
22	185	112	187	34848	1.01	28	130	241	188	136	251

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	54	42	35	1250	0.66	10.2	34	74	54	36	75
LC	20	11	22	486	1.10	2.1	16	24	20	16	24
LT	58	47	40	1570	0.68	10.2	38	78	58	39	78
NN	28	16	26	668	0.91	8.2	12	45	29	15	44

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	43.3	36.9	33.1	1097	0.77	4.59	34.3	52.3	43.5	34.8	53.0
N_PILOT	2.6	2.6	NA	NA	NA	NA	NA	NA	1.5	1.0	2.0
N_Y	5.3	3.8	4.6	21	0.88	0.93	3.5	7.1	5.3	3.7	7.2
Y_N	27.4	21.4	25.6	655	0.94	3.36	20.8	33.9	27.3	20.8	34.2
Y_Y	8.9	9.1	6.4	41	0.72	1.60	5.8	12.1	8.9	5.7	11.8

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	35
22	27	13	28	810	1.05	4.3	19	35	27	19	36

Summary Plots for Periods 18, 20 and 22

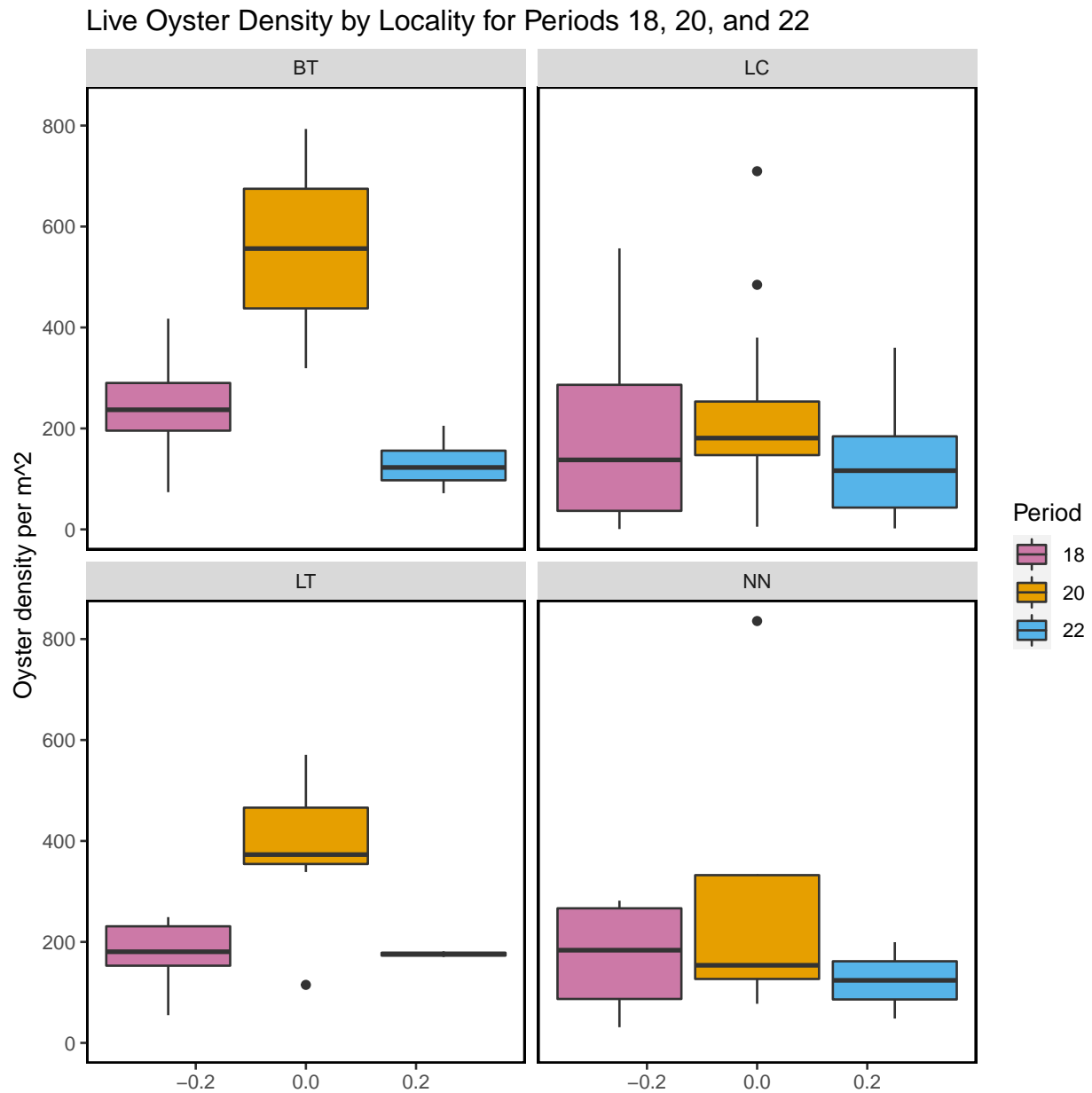


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-01-30.

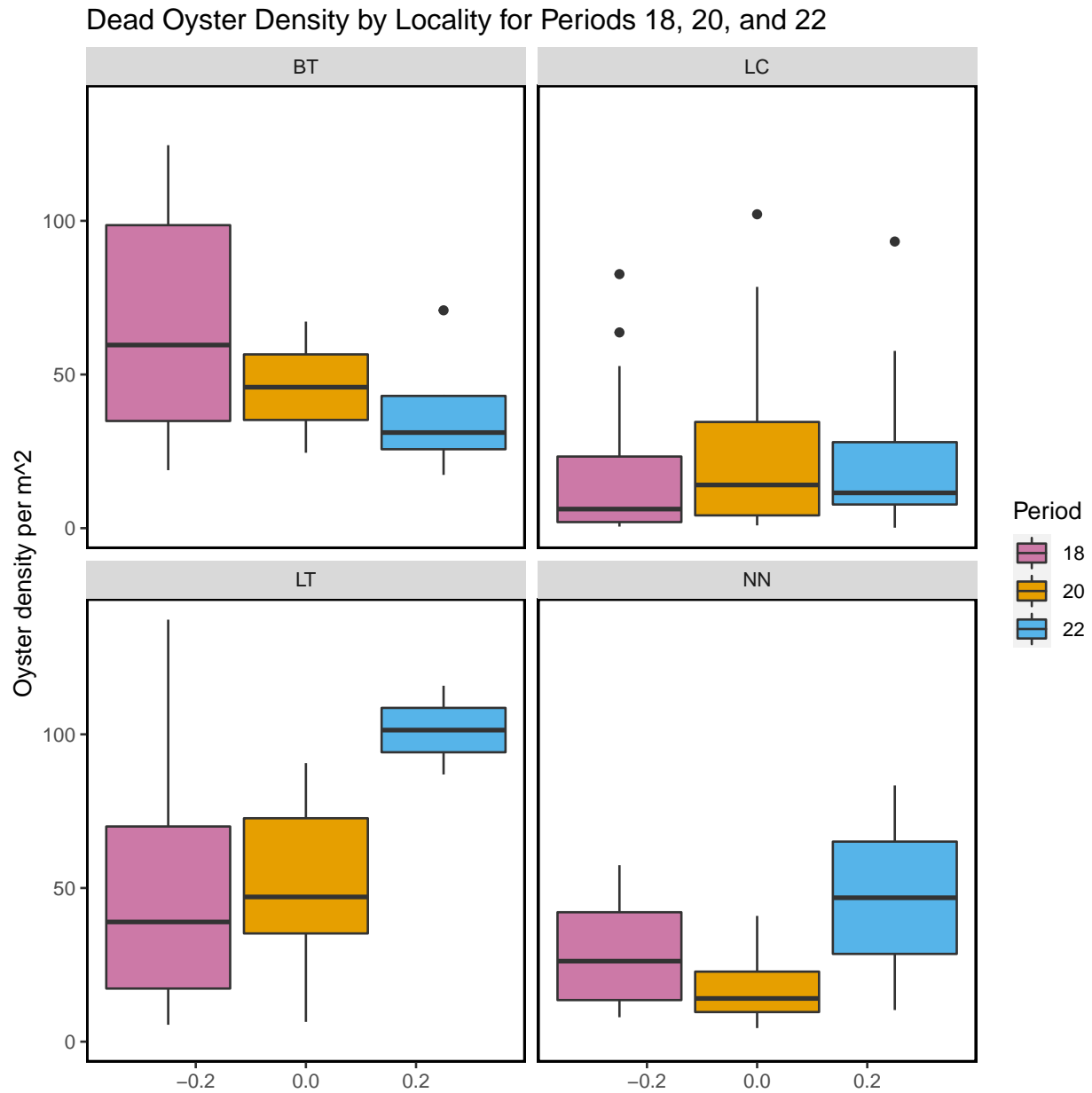


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-01-30.

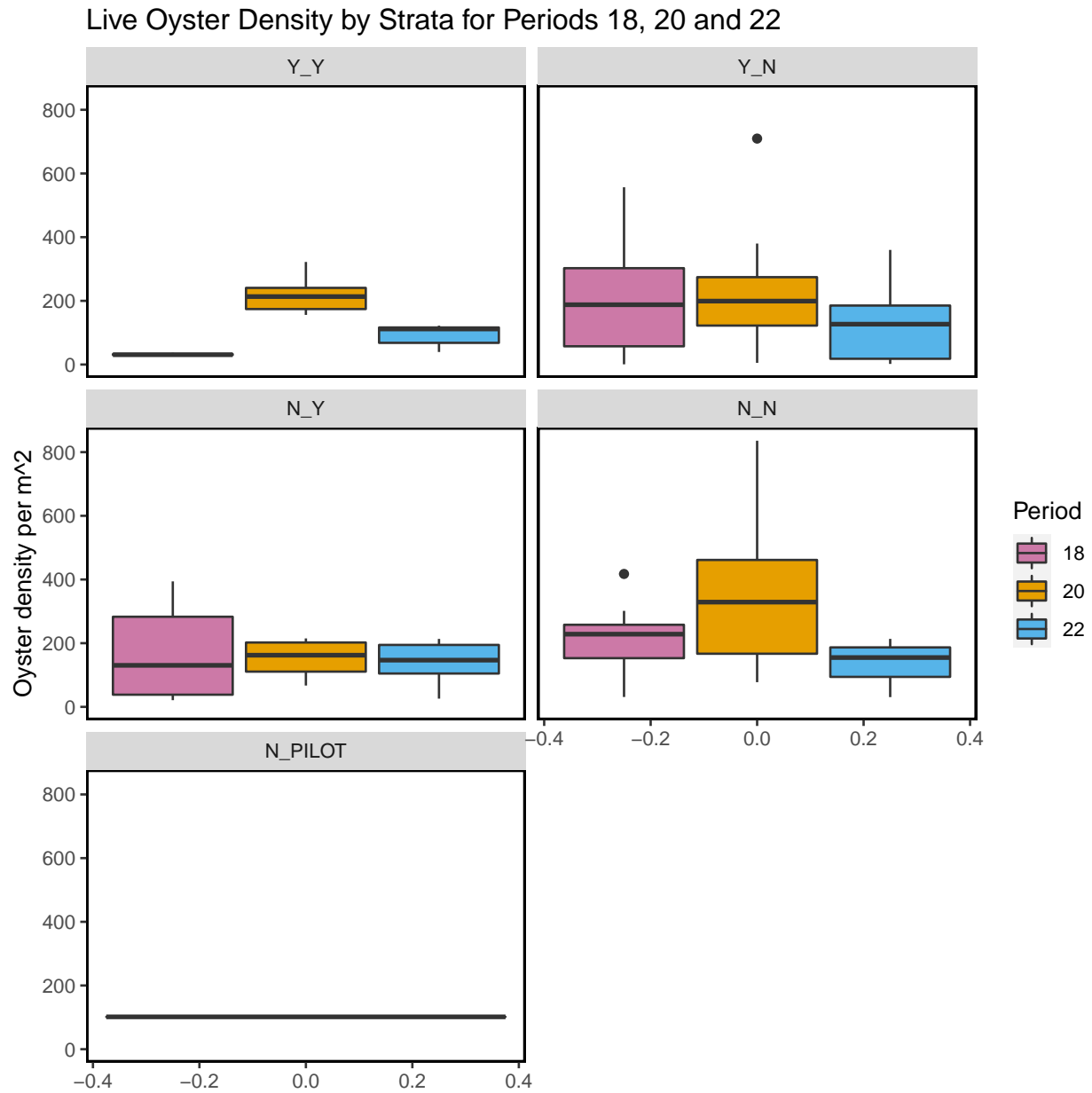


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-01-30.

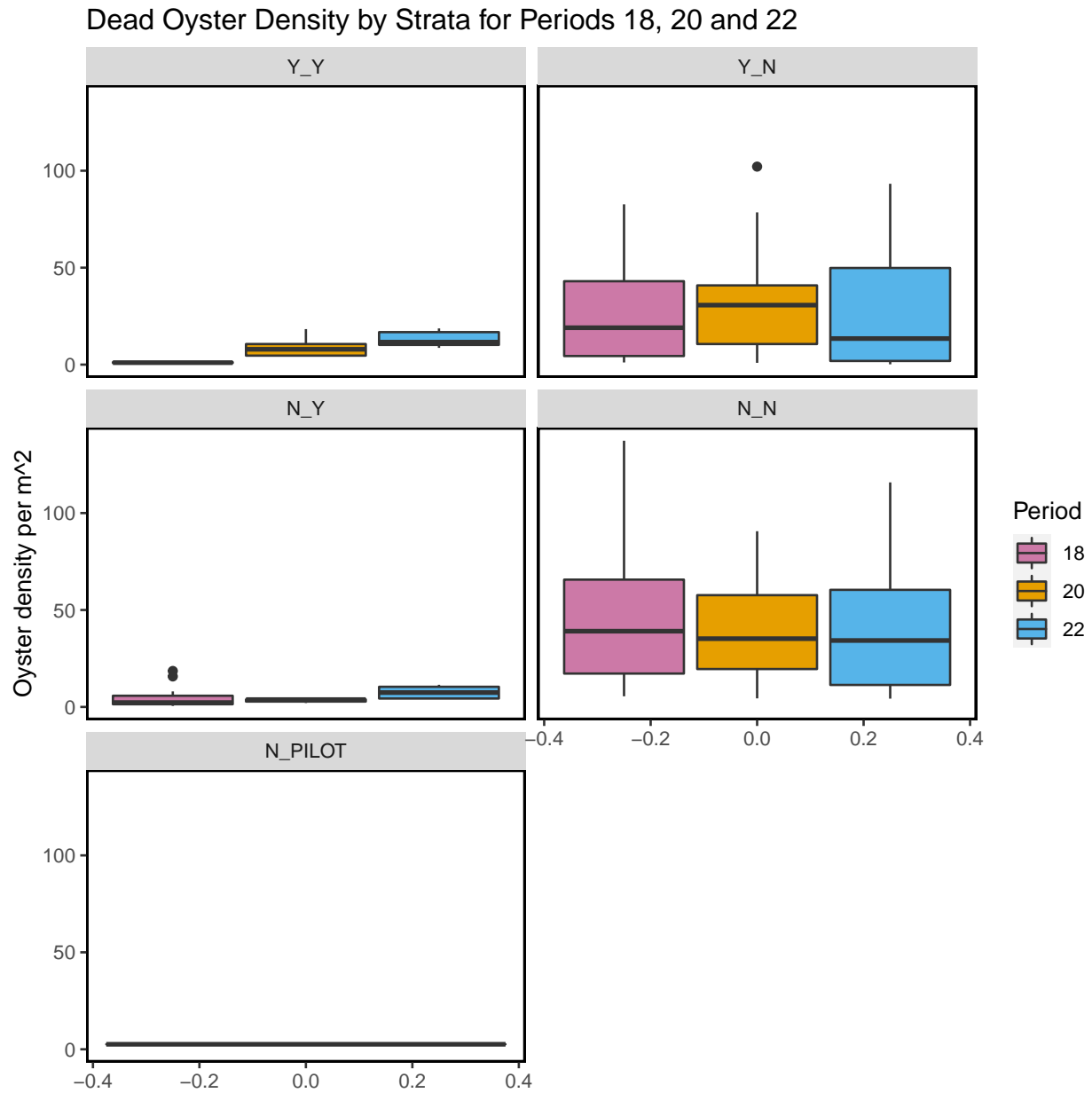


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021) with the last sample date of period 22 as 2021-01-30.

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.

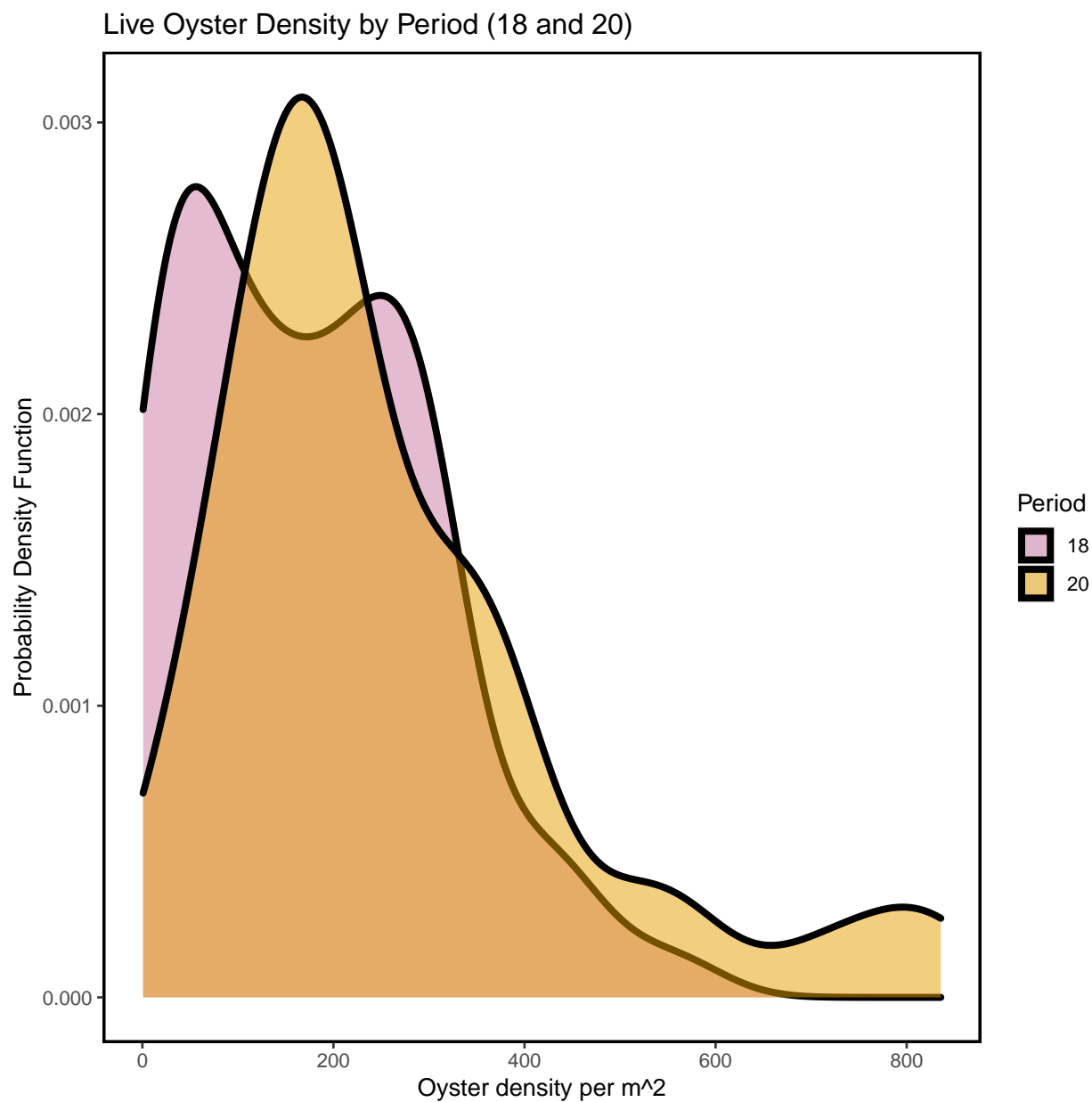


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-01-30.

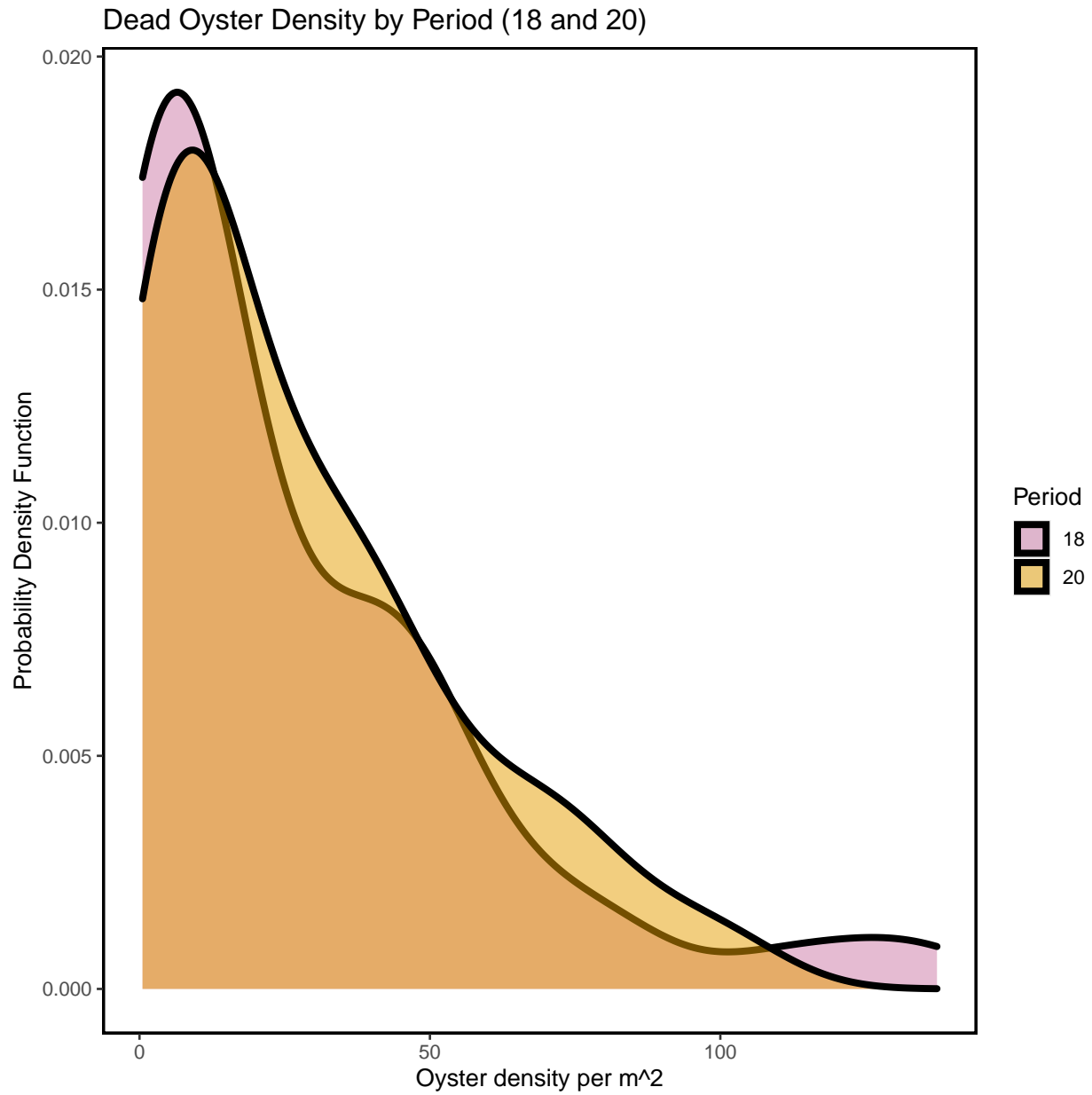


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2021-01-30.

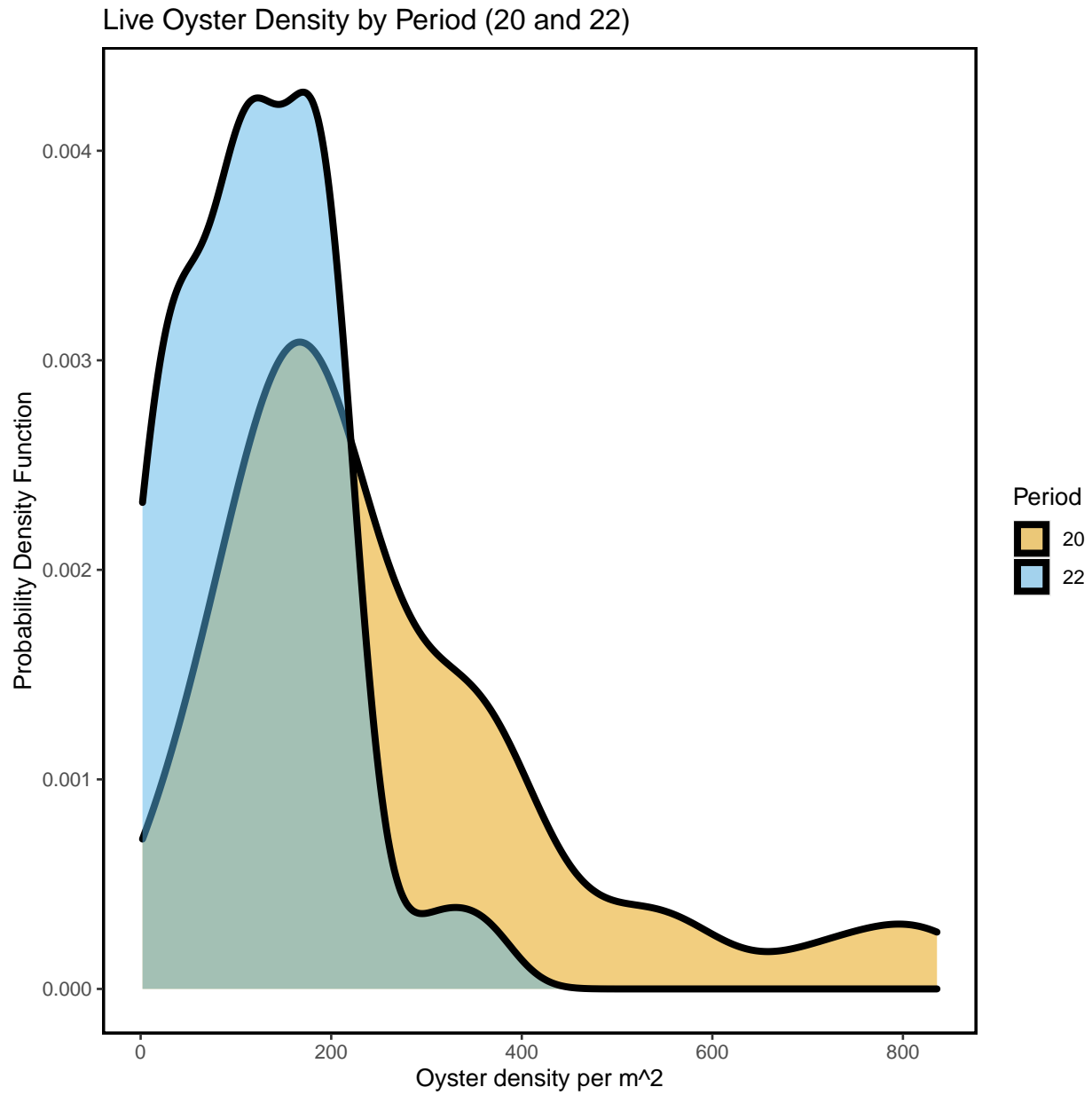


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-01-30.

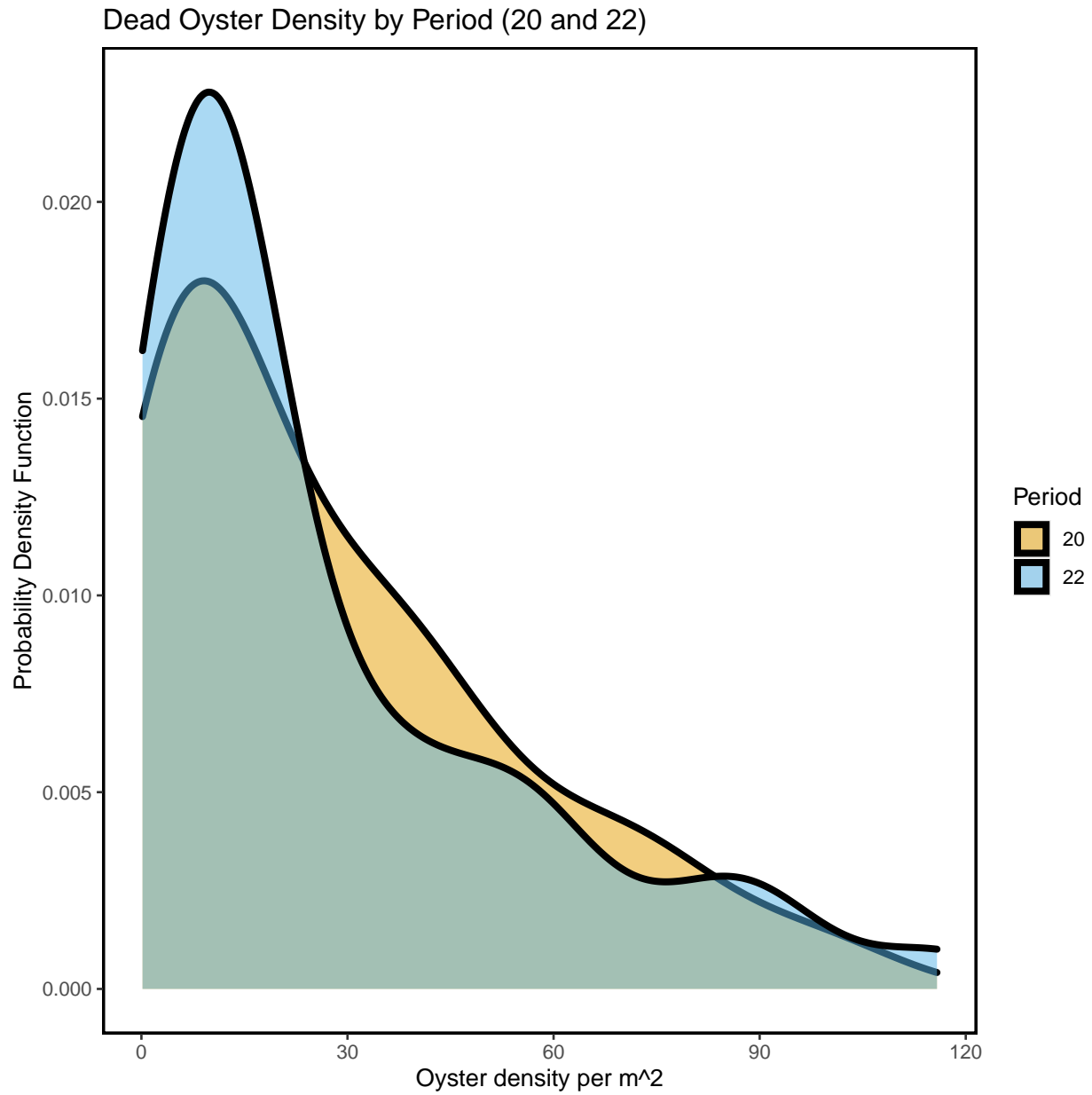


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2021-01-30.

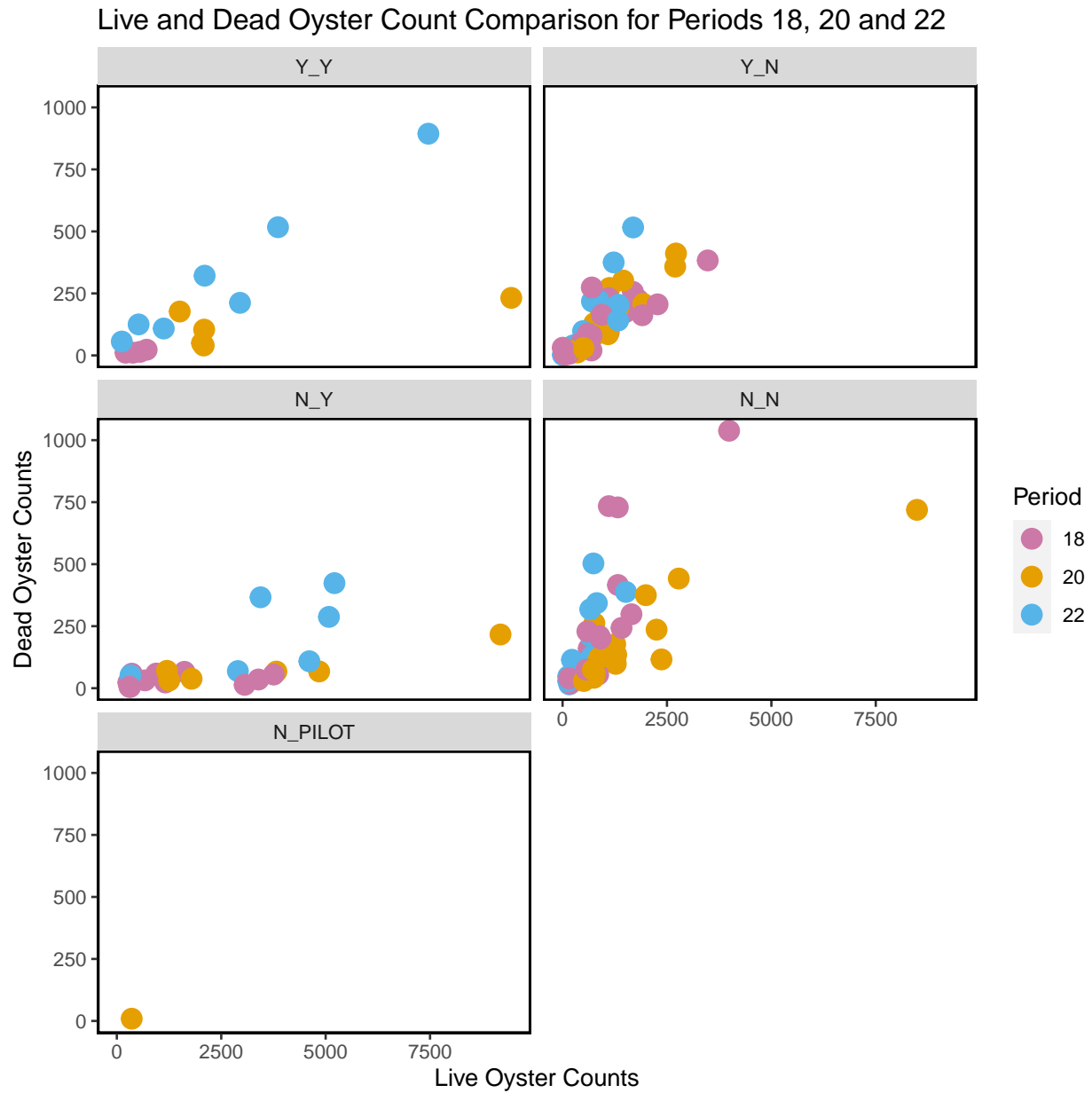


Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020) and 22 (Winter 2020-2021), last sample date of period 22 as 2021-01-30.

Live Counts Double Pass Results

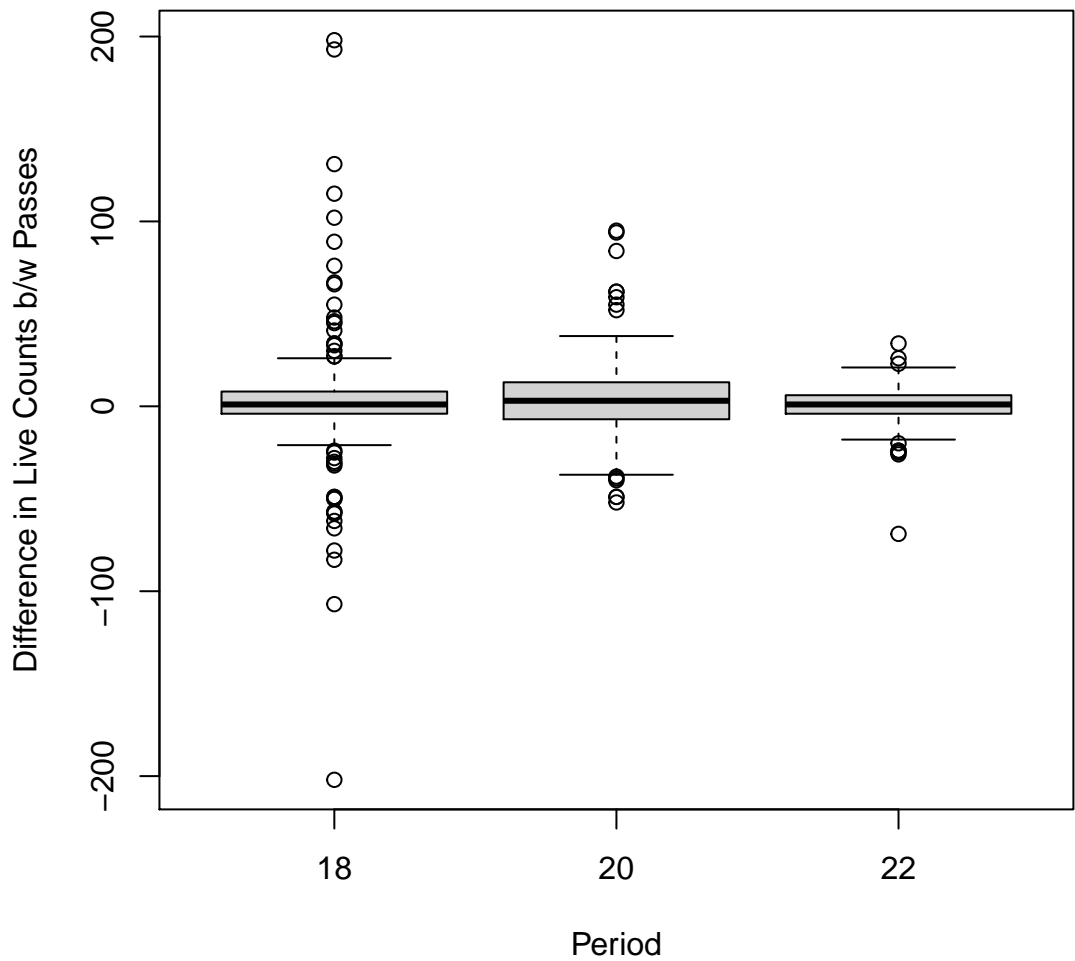


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, and 22

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	0.76	0.78
LT	22	0.47	0.43

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

Dead Counts Double Pass Results

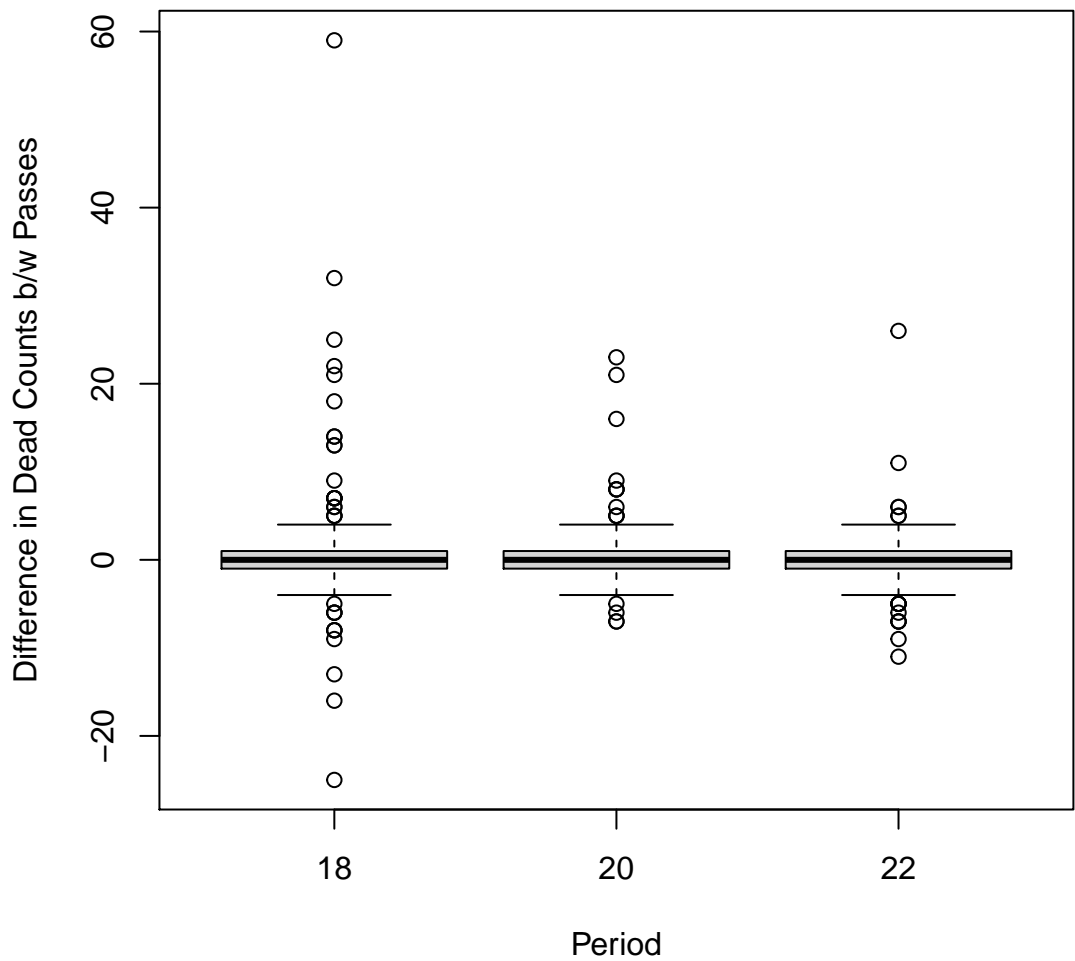


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, and 22

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	1.13	1.12
LT	22	0.79	0.74

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 2021-01-30. 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

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	12	438
CK	26	712
CR	46	1330
HB	45	1129
LC	195	10407
LT	15	406
NN	10	255

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	109	3608
N_PILOT	13	799
N_Y	25	2860
Y_N	186	5400
Y_Y	16	2009

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	44	3155

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	4	104
22	LC	36	2953
22	LT	2	52
22	NN	2	46
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	16	442
22	N_Y	6	1011
22	Y_N	15	524
22	Y_Y	7	1179
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

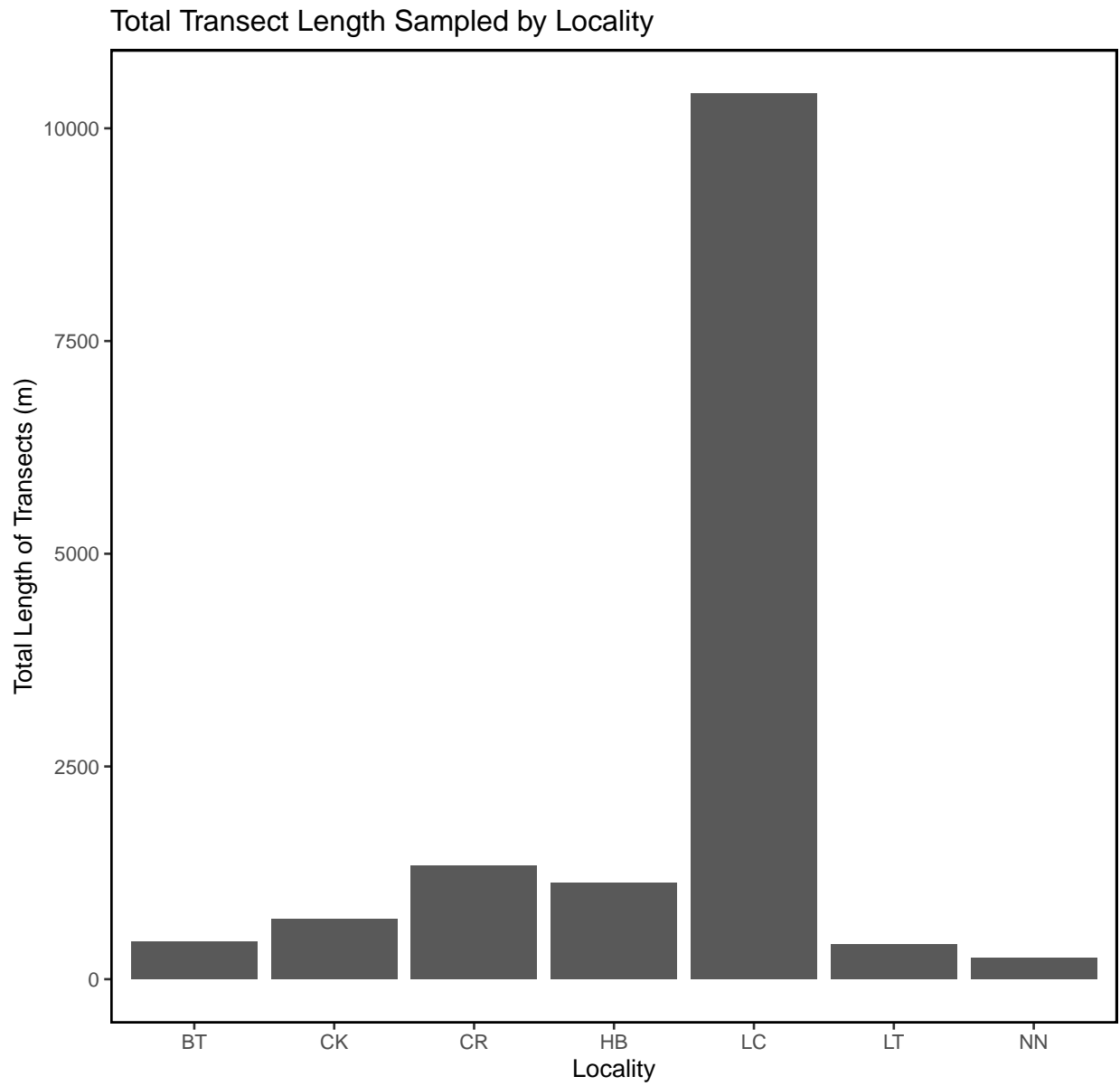


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

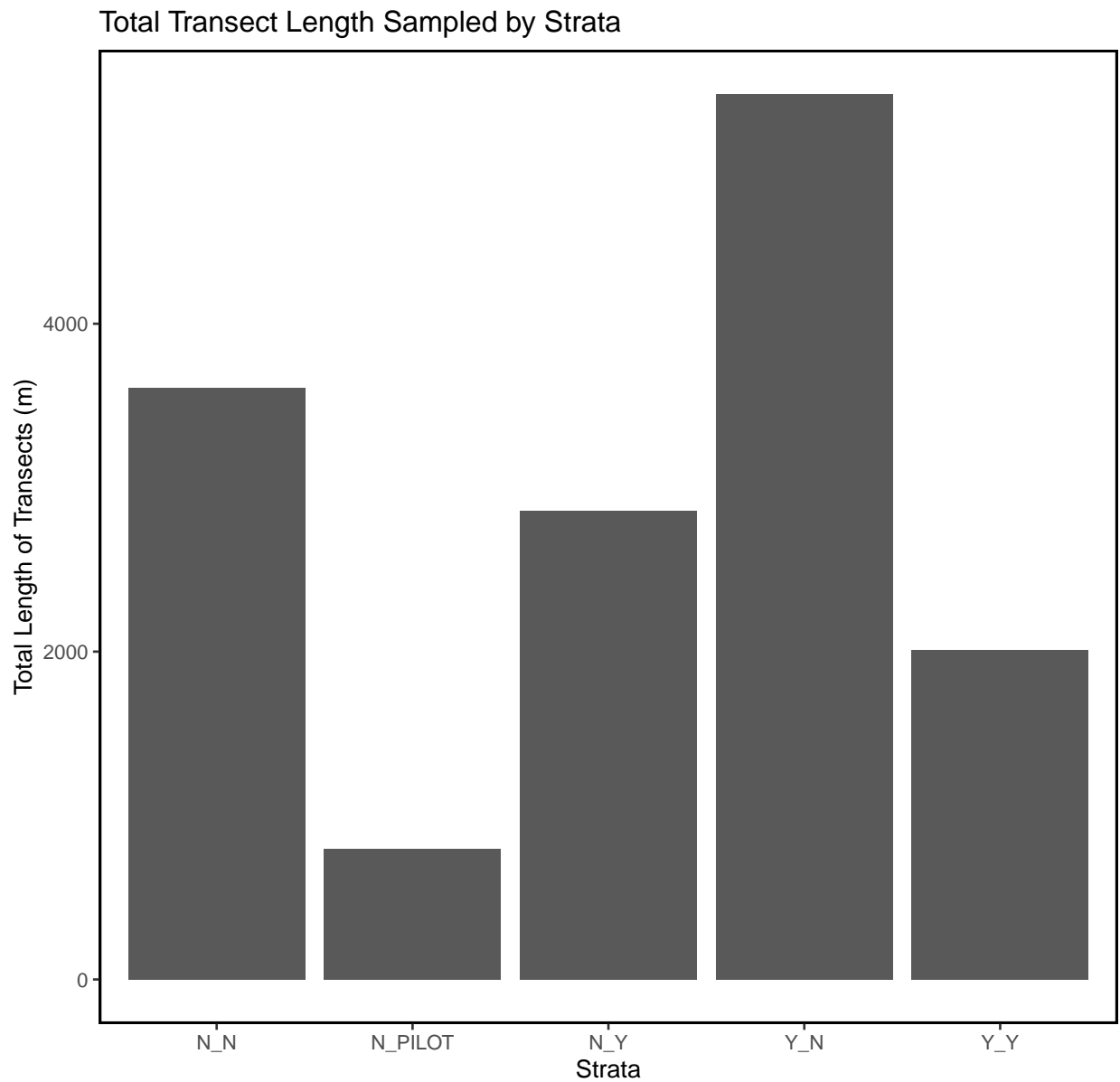
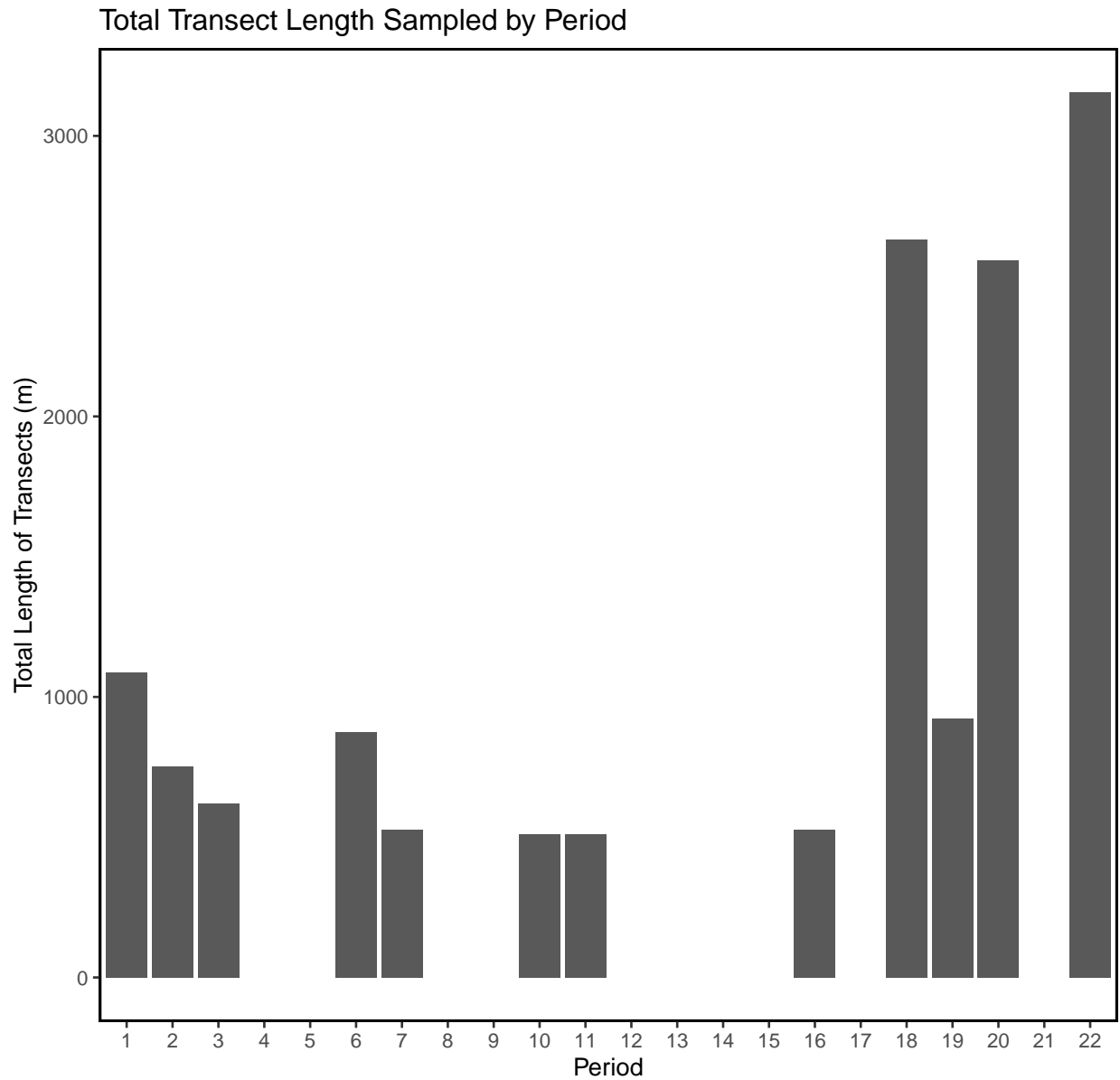


Figure – Bar plot of total transect length in meters sampled by strata for all periods.



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	1691	856	2355	5547854	1.39	680	359	3024	1680	707	3214
CK	857	444	1091	1190933	1.27	214	438	1277	857	463	1303
CR	1026	716	1035	1072162	1.01	153	727	1325	1033	737	1334
HB	902	364	1047	1095622	1.16	158	592	1211	901	609	1232
LC	1085	677	1421	2018660	1.31	103	884	1286	1081	884	1302
LT	1054	877	645	416505	0.61	167	728	1381	1057	763	1394
NN	720	649	644	414522	0.89	204	321	1119	706	392	1129

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	985	749	1073	1150831	1.09	103	783	1188	987	792	1194
N_PILLOT	1046	1109	627	392853	0.60	174	705	1386	1046	750	1393
N_Y	2433	1619	2207	4871839	0.91	441	1568	3299	2428	1640	3292
Y_N	780	435	917	840395	1.18	68	647	913	782	650	909
Y_Y	2322	1772	2636	6949983	1.14	659	1031	3614	2304	1222	3546

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	1406	1033	1798
2	890	476	945	893727	1.06	176	546	1234	892	574	1217
3	738	296	817	668064	1.11	167	411	1065	738	435	1067
6	433	176	534	284791	1.23	96	245	621	432	266	632
7	50	29	56	3186	1.12	20	11	90	50	15	86
10	1207	1074	671	449607	0.56	237	743	1672	1216	831	1653
11	886	776	678	459708	0.77	240	416	1356	889	454	1352
16	494	366	467	217855	0.95	165	170	817	499	220	840
18	982	695	935	874733	0.95	120	748	1217	990	765	1236
19	555	329	573	328431	1.03	97	365	745	554	368	759
20	1844	1253	2125	4517189	1.15	310	1236	2451	1838	1277	2520
22	1313	671	1675	2806625	1.28	253	818	1808	1316	843	1871

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	257	212	198	39335	0.77	57	145	370	255	163	363
CK	241	112	321	102795	1.33	63	118	365	243	130	367
CR	288	181	294	86231	1.02	43	203	373	288	213	372
HB	257	101	303	92052	1.18	46	168	347	258	176	352
LC	153	120	150	22365	0.98	11	131	174	153	134	174
LT	274	239	152	23145	0.56	39	197	351	276	206	351
NN	215	154	234	54714	1.09	74	70	360	215	112	366

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	261	186	260	67828	1.00	25	212	310	261	216	314
N_PILOT	111	111	60	3604	0.54	17	79	144	111	81	143
N_Y	148	135	98	9629	0.66	20	109	186	148	113	188
Y_N	187	111	218	47653	1.17	16	156	219	188	157	223
Y_Y	117	112	87	7533	0.74	22	75	160	117	77	158

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
1	393	300.8	362.6	131444	0.92	56	283.8	503.1	392	290.9	506.9
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	255	161.2	371.0
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	232	127.9	342.9
6	122	72.2	150.9	22769	1.24	27	68.6	174.9	123	74.2	177.4
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.9	9.3
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	124	83.5	166.5
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	90	51.8	134.9
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49	21.5	81.8
18	177	154.5	130.8	17117	0.74	17	144.3	210.0	177	145.7	208.5
19	160	85.6	171.9	29552	1.08	29	102.9	216.8	158	103.3	215.7
20	258	202.8	187.6	35185	0.73	27	204.4	311.7	258	207.8	312.3
22	125	120.4	80.4	6458	0.64	12	101.0	148.5	125	102.0	147.4

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	325	169	328	107312	1.01	95	139.6	510	320	169	504
CK	78	32	106	11170	1.36	37	4.3	151	77	19	152
CR	60	47	38	1444	0.63	13	35.2	85	60	39	85
HB	44	21	45	2000	1.02	15	14.8	73	44	20	73
LC	109	66	129	16536	1.18	10	89.1	130	109	90	132
LT	240	210	202	40850	0.84	52	137.2	342	239	151	338
NN	100	68	100	10018	1.00	32	38.1	162	100	52	168

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	154	79	194	37509	1.26	22	110	197	153	114	196
N_PILOT	82	87	46	2136	0.56	13	57	108	83	62	111
N_Y	90	55	111	12413	1.24	22	46	134	90	53	137
Y_N	103	53	114	13070	1.11	12	79	127	103	81	129
Y_Y	181	106	234	54804	1.29	59	66	296	180	81	305

Dead Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
7	29	18	30	898	1.03	10.6	8.2	50	29	11	50
10	80	88	65	4245	0.82	23.0	34.5	125	80	41	126
11	50	40	25	620	0.49	8.8	33.2	68	51	36	68
16	44	28	41	1708	0.93	14.6	15.6	73	44	18	72
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	88
20	148	107	140	19727	0.95	20.5	107.6	188	149	109	194
22	185	112	187	34848	1.01	28.1	130.3	241	186	136	246

Dead Density Statistics for all Periods

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	54	42.3	35	1250	0.66	10.2	33.6	74	53	35.3	74
CK	21	11.3	28	757	1.29	9.7	2.3	40	21	5.9	41
CR	20	13.8	15	235	0.77	5.1	10.0	30	20	10.9	31
HB	13	8.0	14	201	1.12	4.7	3.4	22	13	5.0	22
LC	17	8.6	21	421	1.21	1.6	13.7	20	17	13.9	21
LT	58	47.1	40	1570	0.68	10.2	38.2	78	59	39.8	77
NN	28	16.1	26	668	0.91	8.2	12.5	45	29	14.5	46

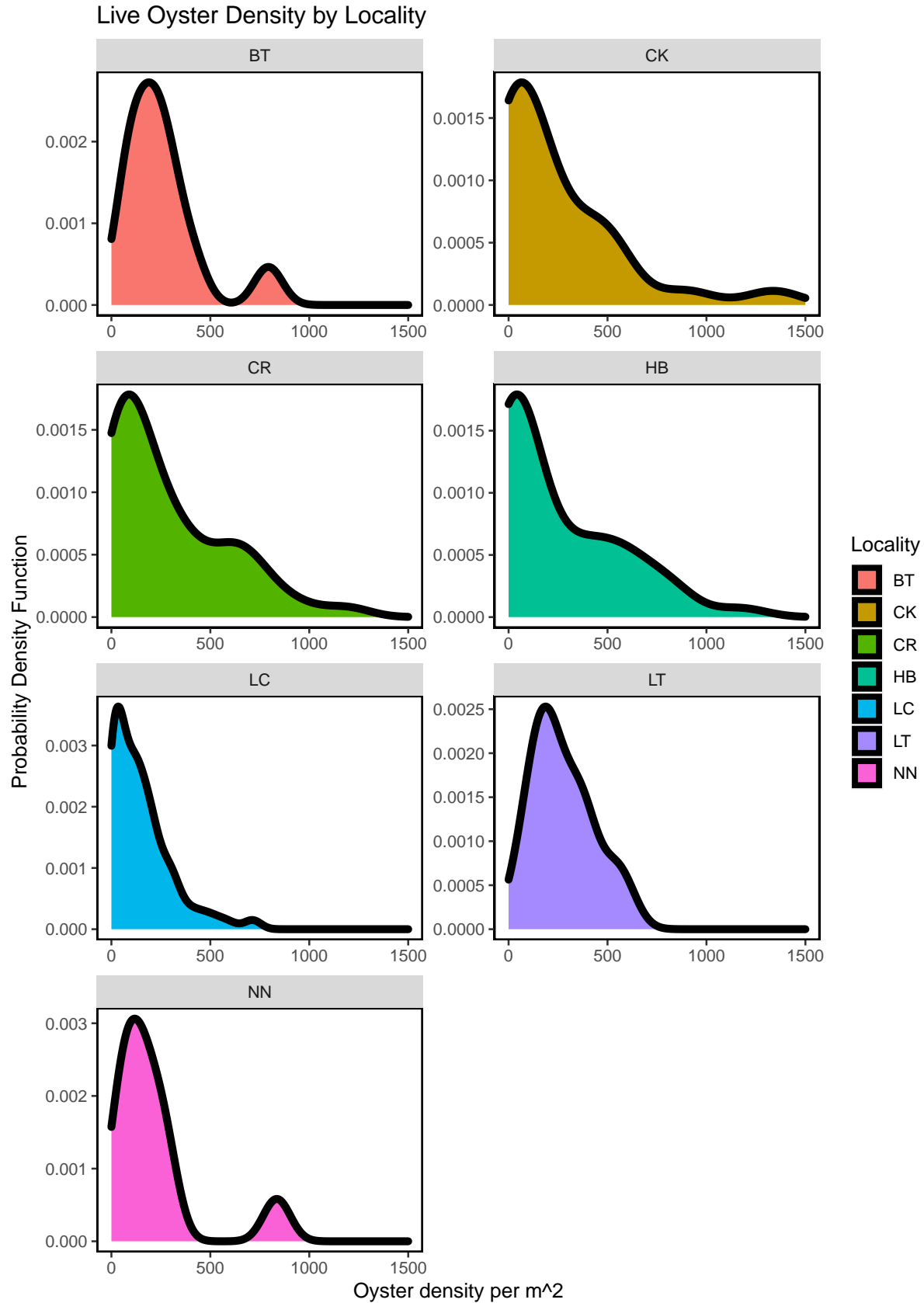
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	32.6	24.5	32.6	1060	1.00	3.71	25.4	39.9	32.6	25.7	40
N_PILOT	8.5	8.7	4.5	20	0.53	1.25	6.1	10.9	8.5	6.4	11
N_Y	5.3	3.8	4.6	21	0.88	0.93	3.5	7.1	5.3	3.7	7
Y_N	23.0	13.8	24.0	575	1.04	2.57	17.9	28.0	22.9	17.8	28
Y_Y	8.9	9.1	6.4	41	0.72	1.60	5.8	12.1	8.9	5.7	12

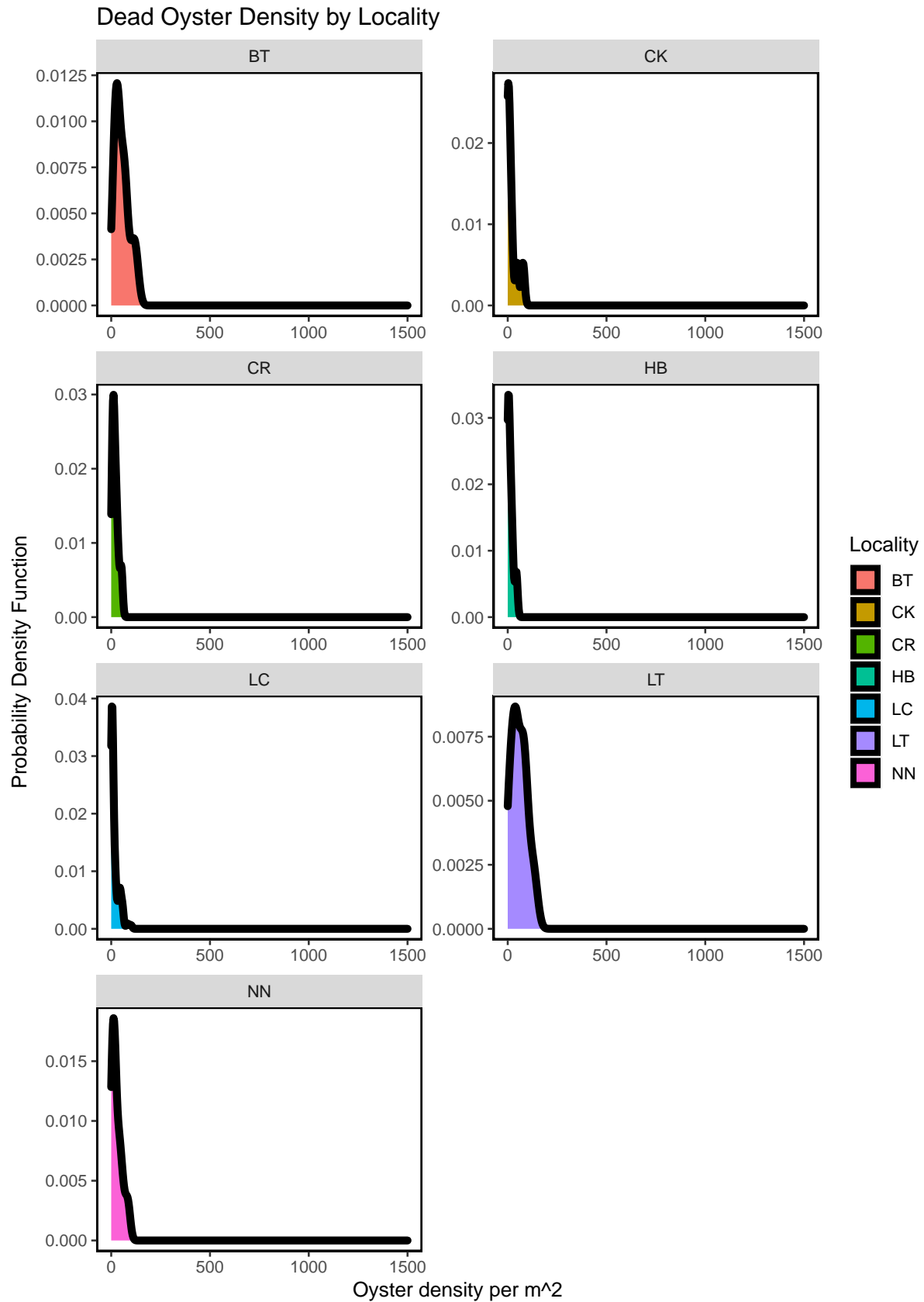
Dead Oyster Density by Period

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	0.98	4.8
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.3	4.17	12.9
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.69	6.8
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	1.99	7.2
18	26.4	15.7	31.3	980.1	1.19	4.01	18.54	34.3	26.4	19.39	33.9
19	18.1	13.1	19.3	370.6	1.07	3.30	11.59	24.5	18.3	12.27	24.7
20	27.9	18.4	26.4	697.6	0.95	3.85	20.38	35.5	27.8	20.61	35.7
22	27.1	12.8	28.5	810.1	1.05	4.29	18.67	35.5	27.1	19.05	34.9

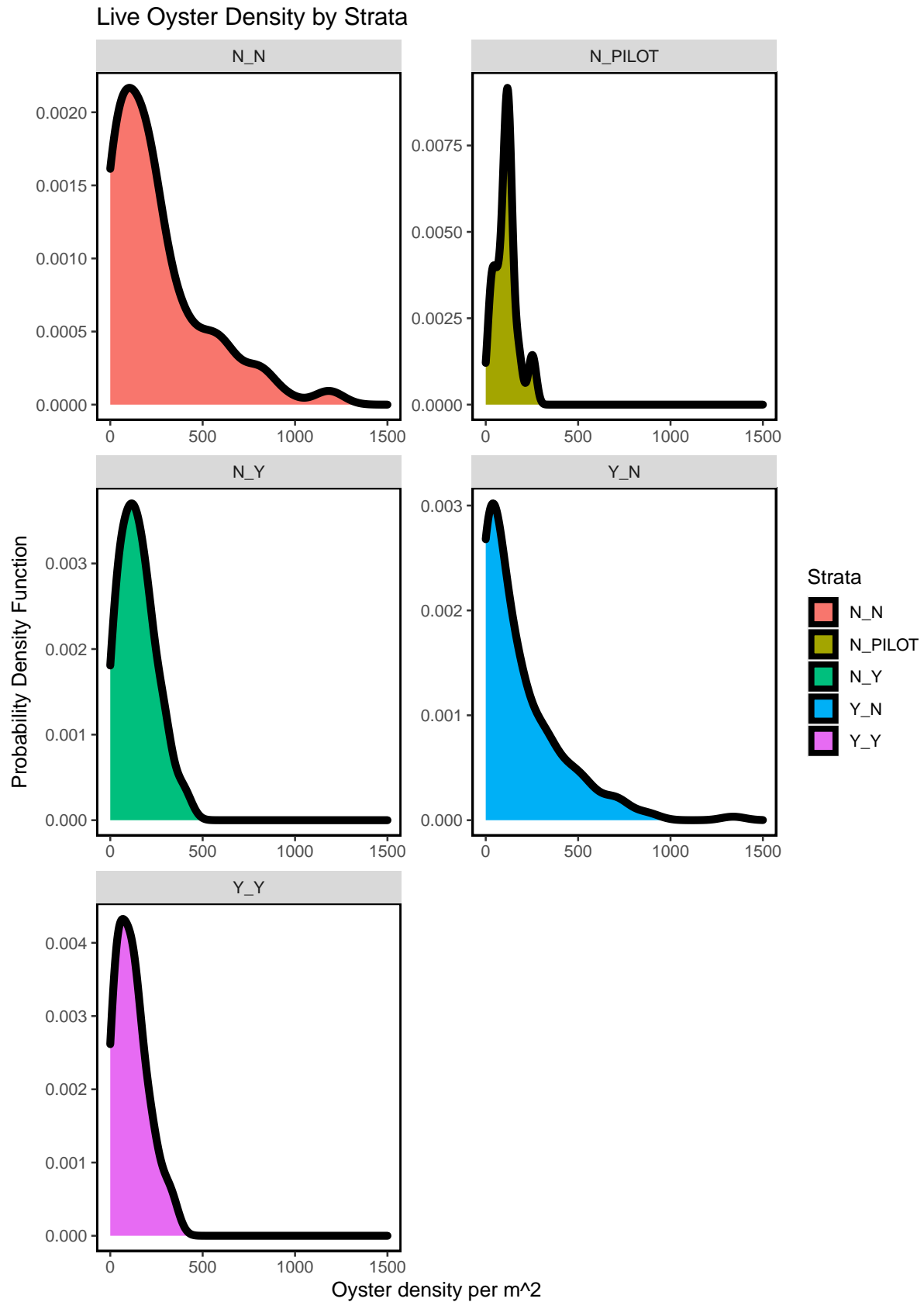
Summary Density Plots for all Periods



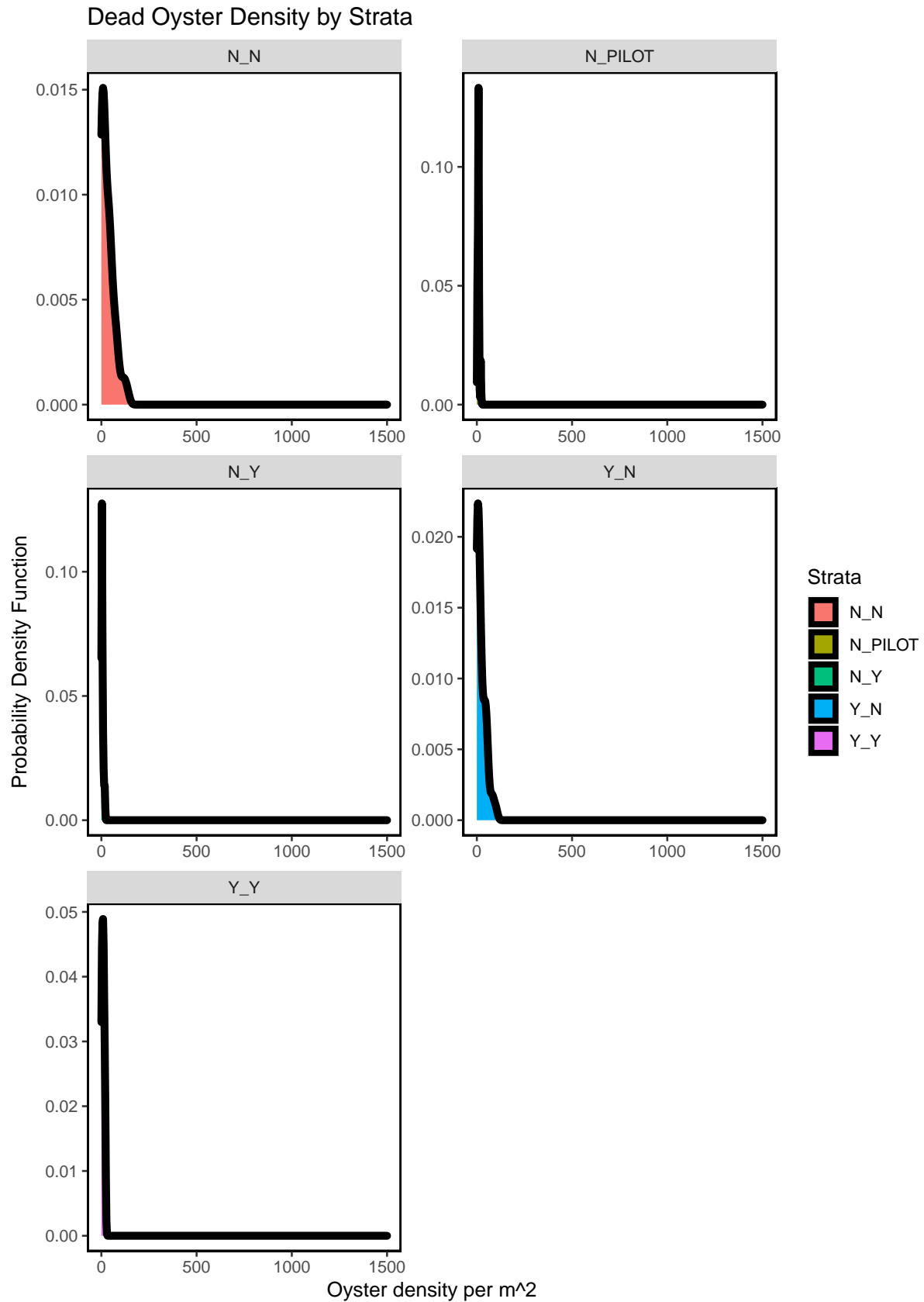
Figure– Calculated live oyster density by locality for all periods including period 22 (current period).



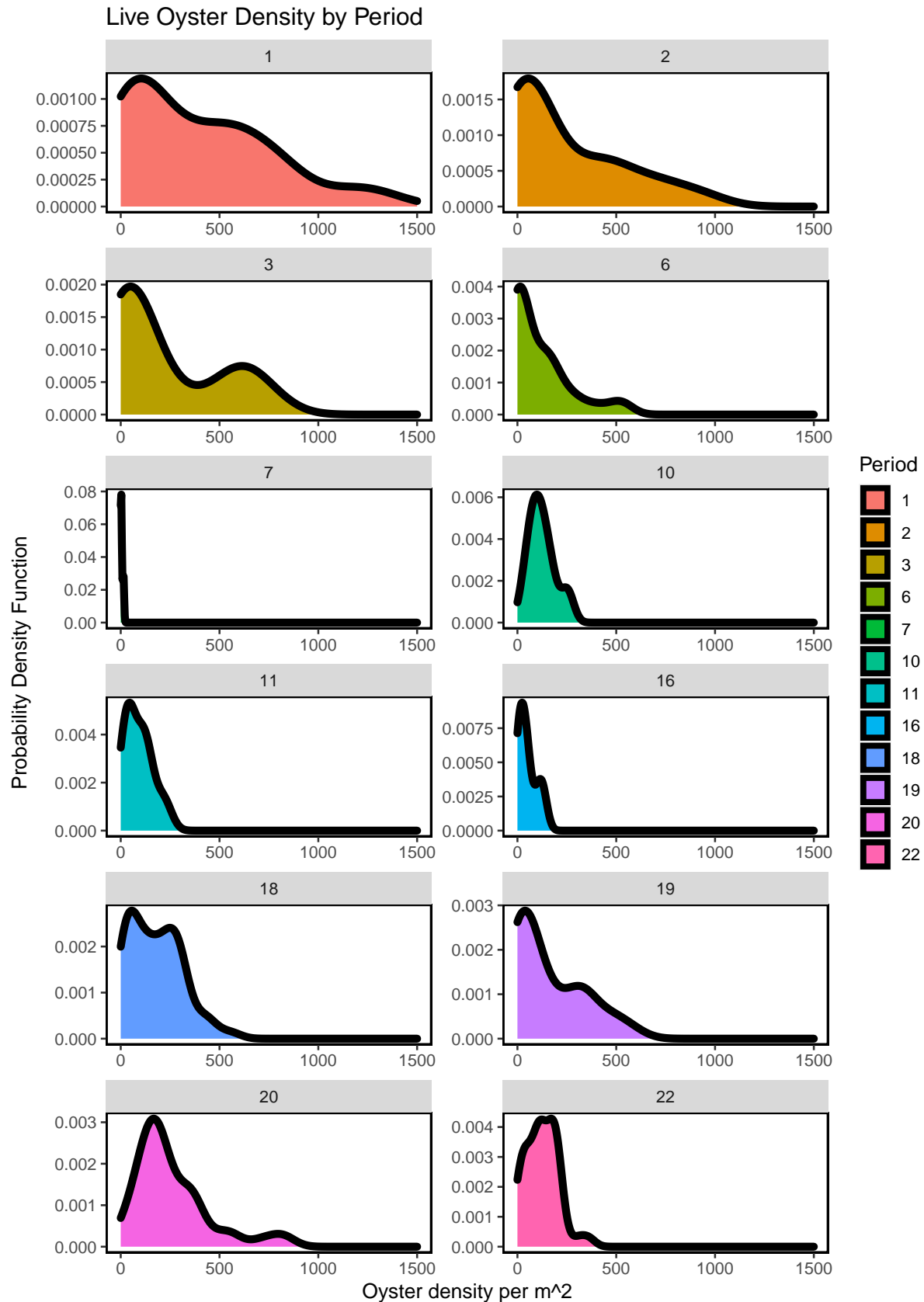
Figure– Calculated dead oyster density by locality for all periods including period 22 (current period).



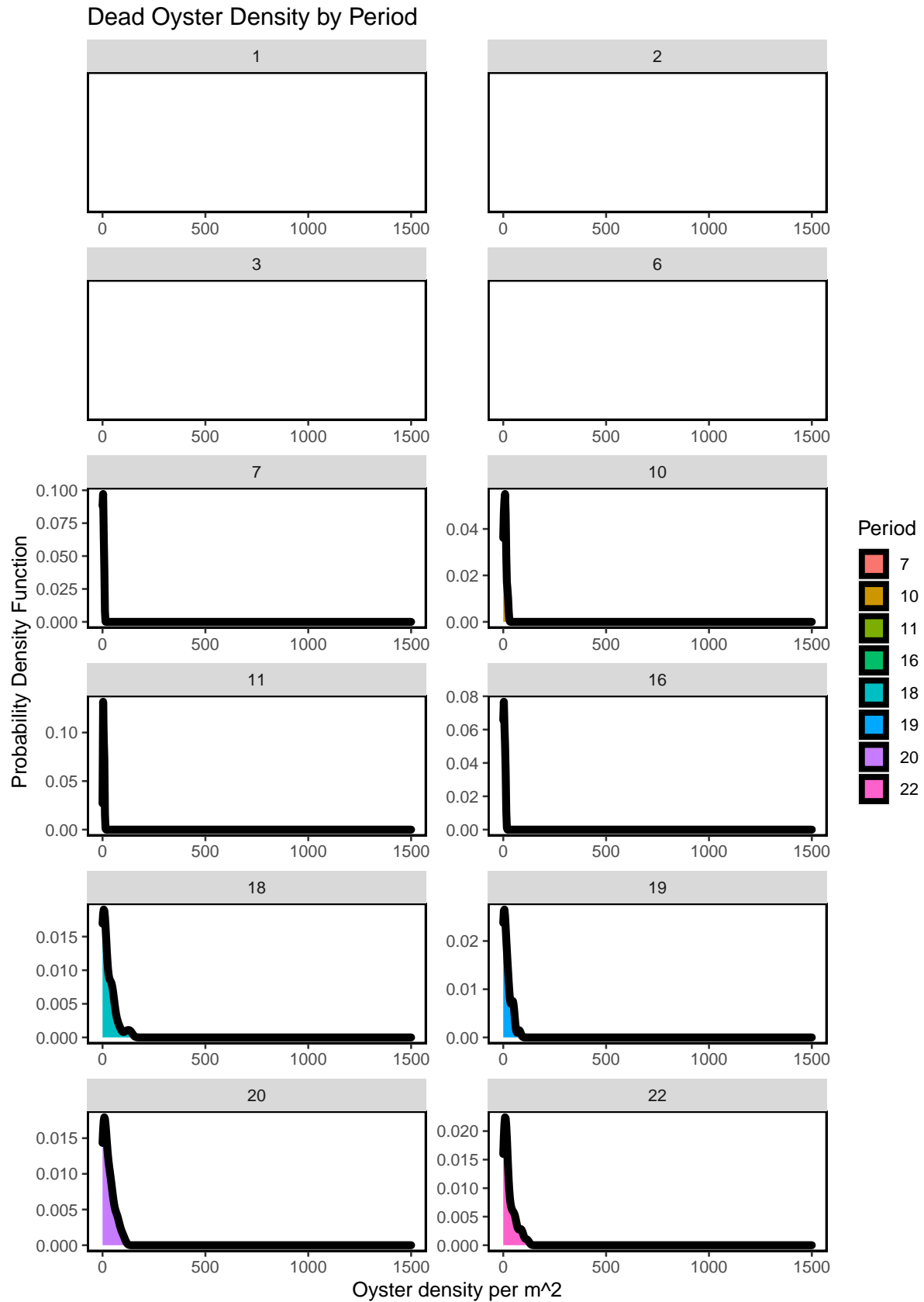
Figure– Calculated live oyster density by strata for all periods including period 22 (current period).



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

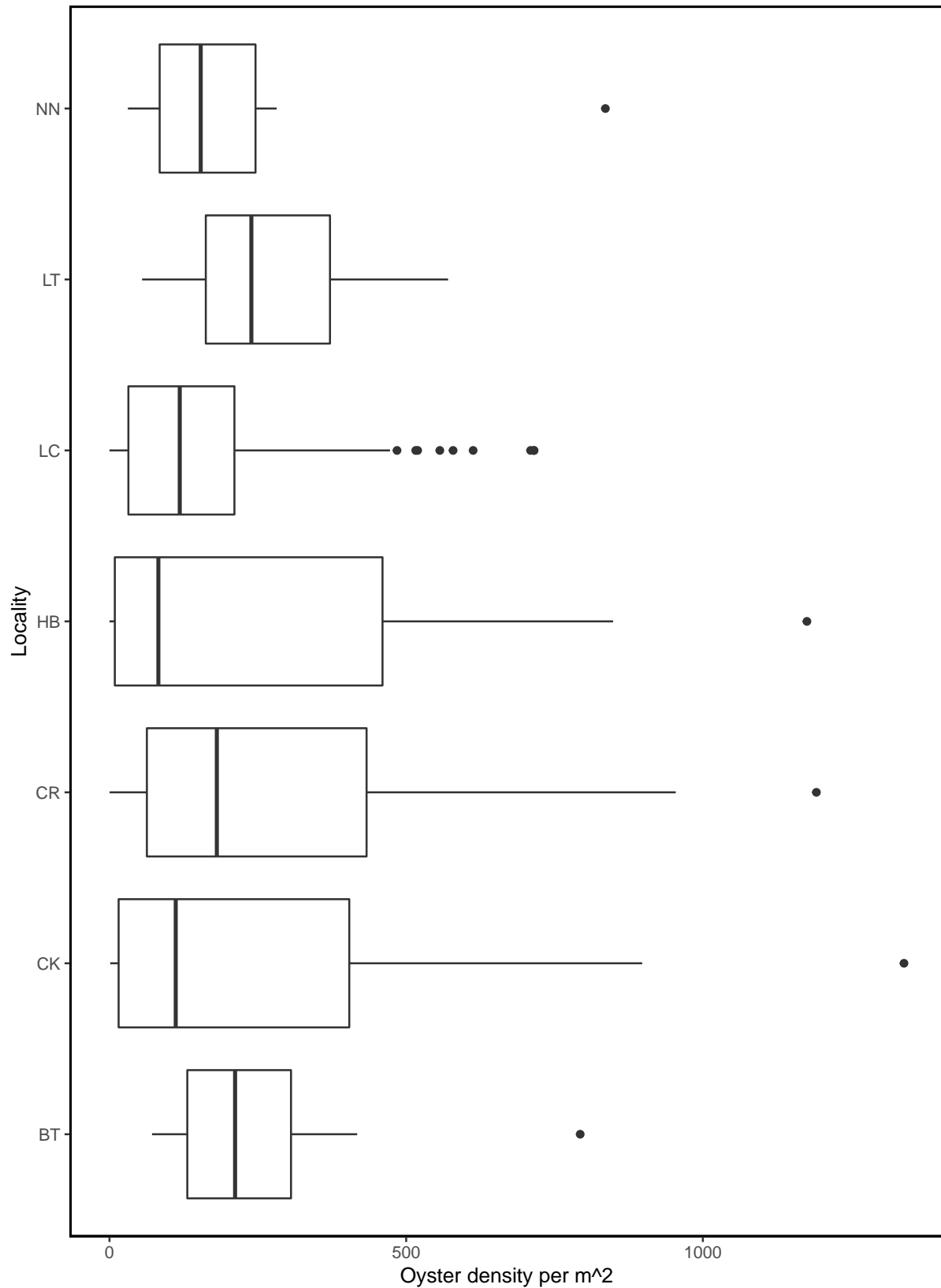


Figure– Calculated live oyster density for all periods including period 22 (current period) using a probability densi



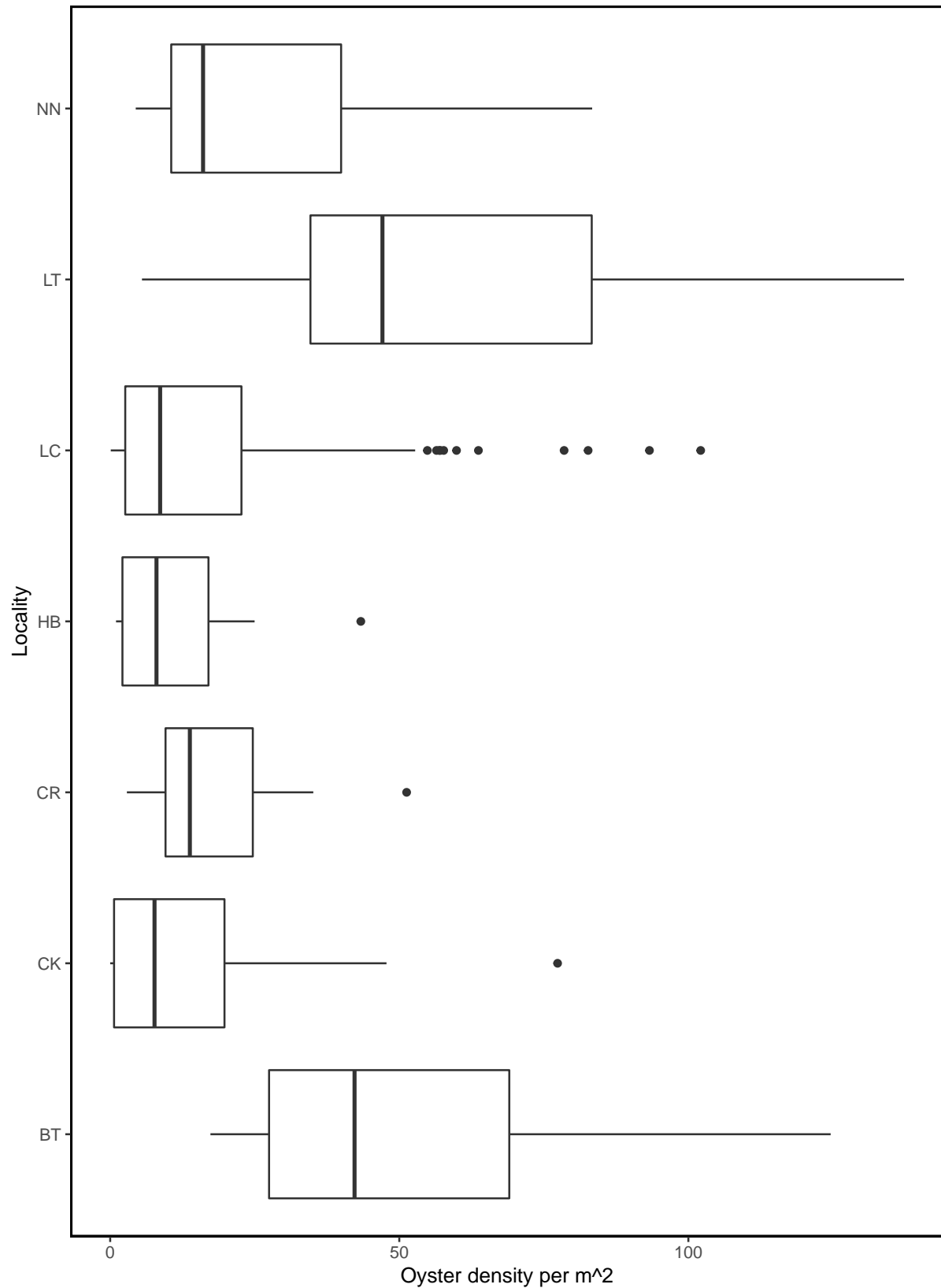
Figure– Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

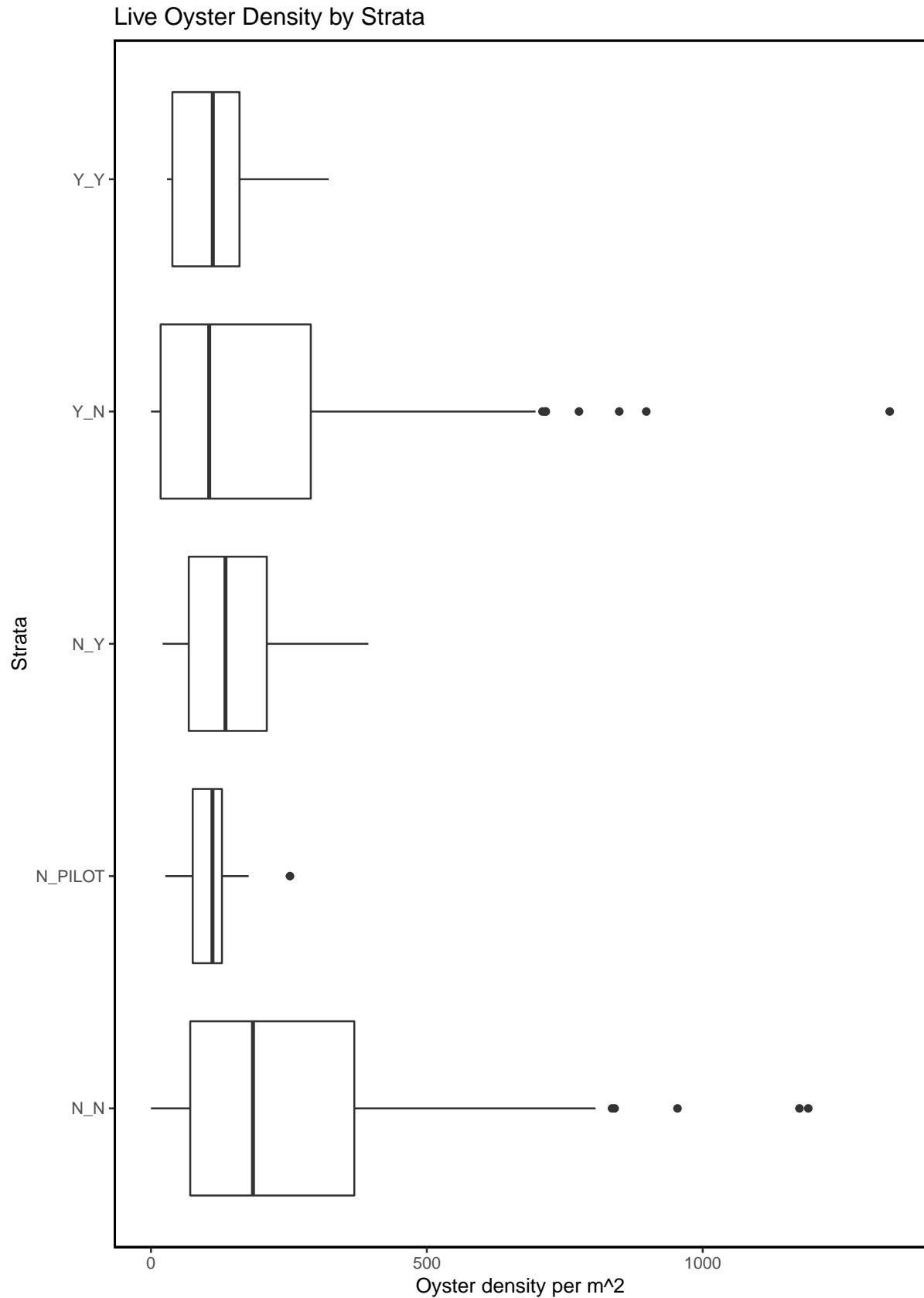


Figure– Box plot depicting live oyster density by locality for all periods including period 22 (current period).

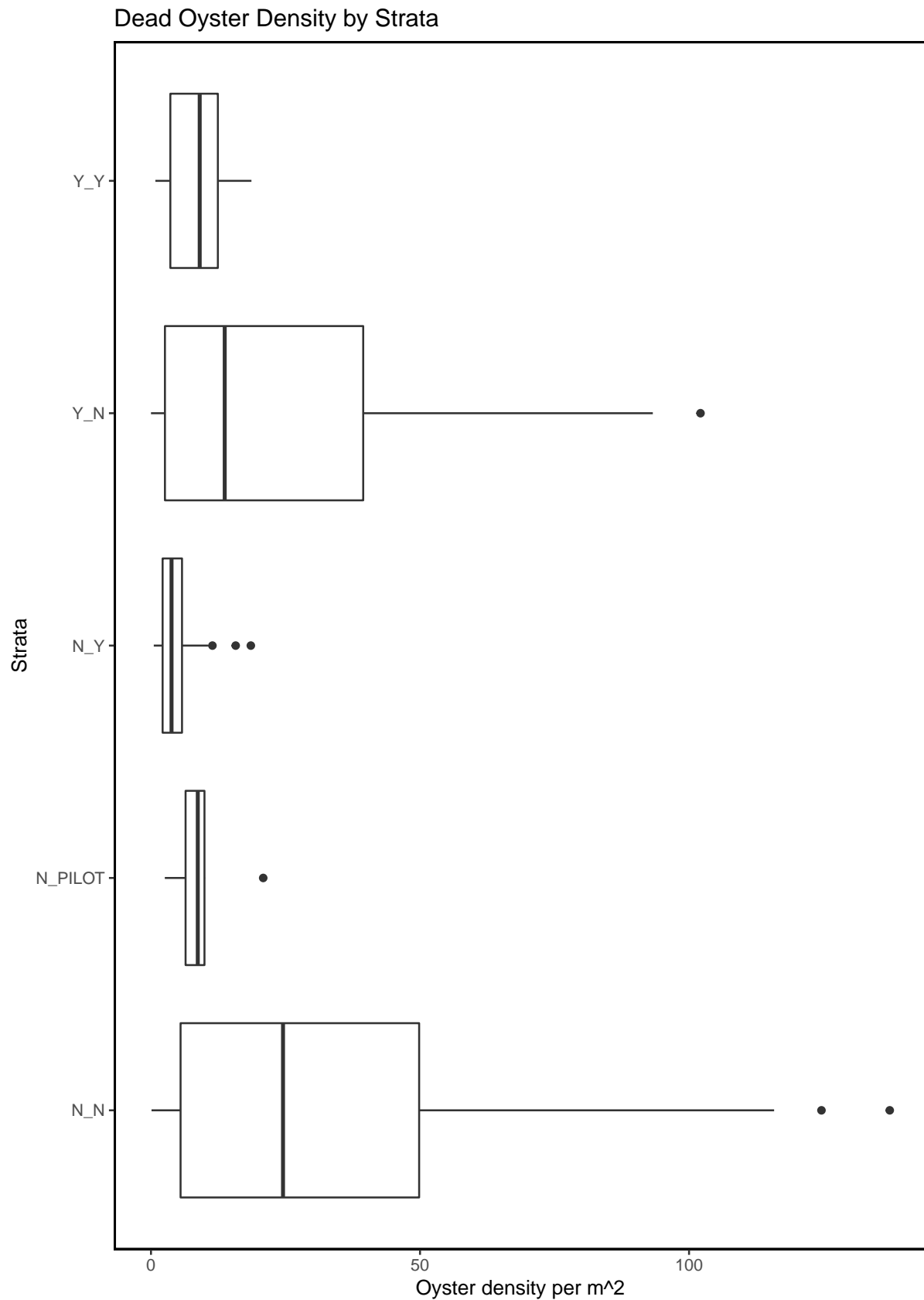
Dead Oyster Density by Locality



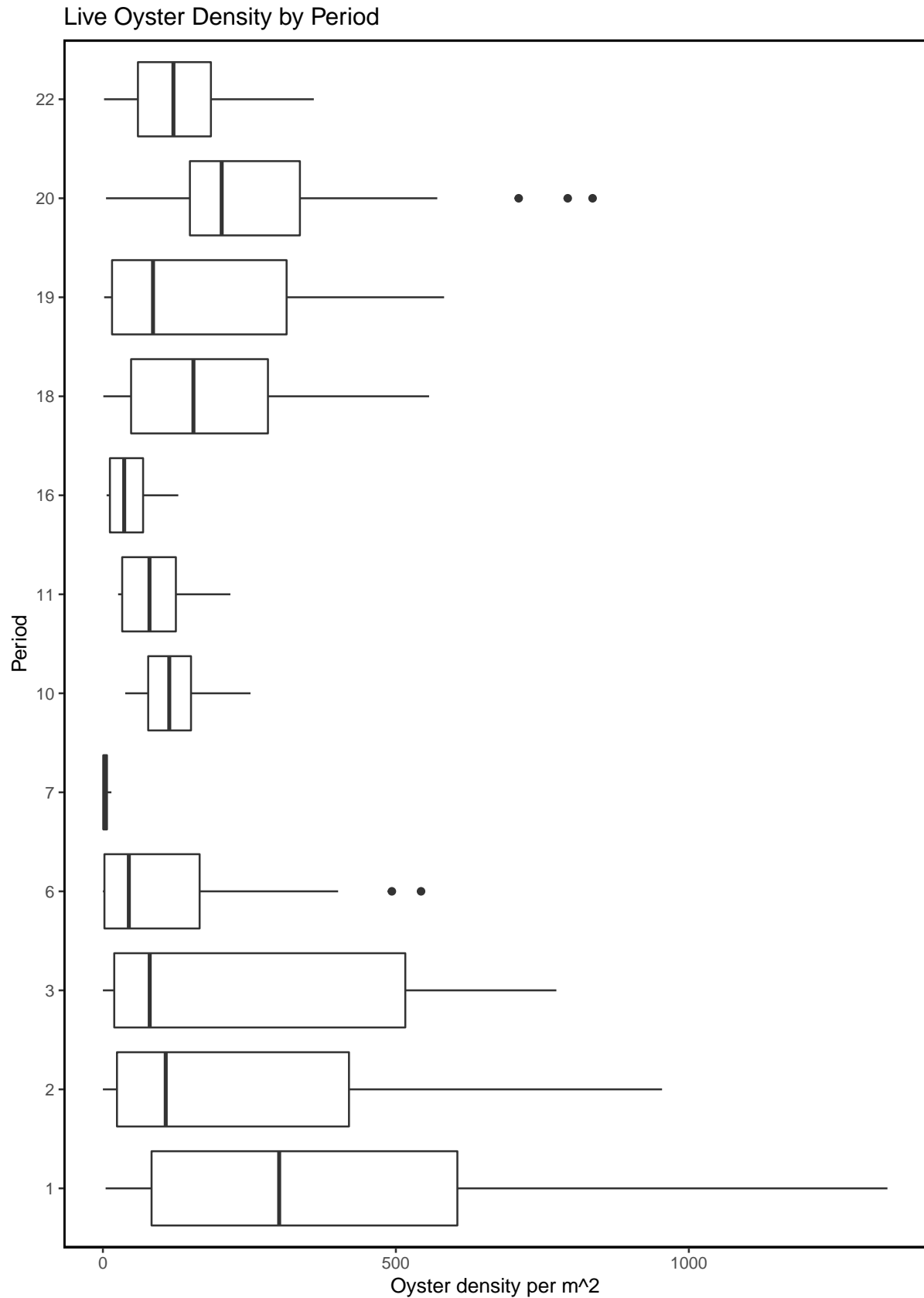
Figure– Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



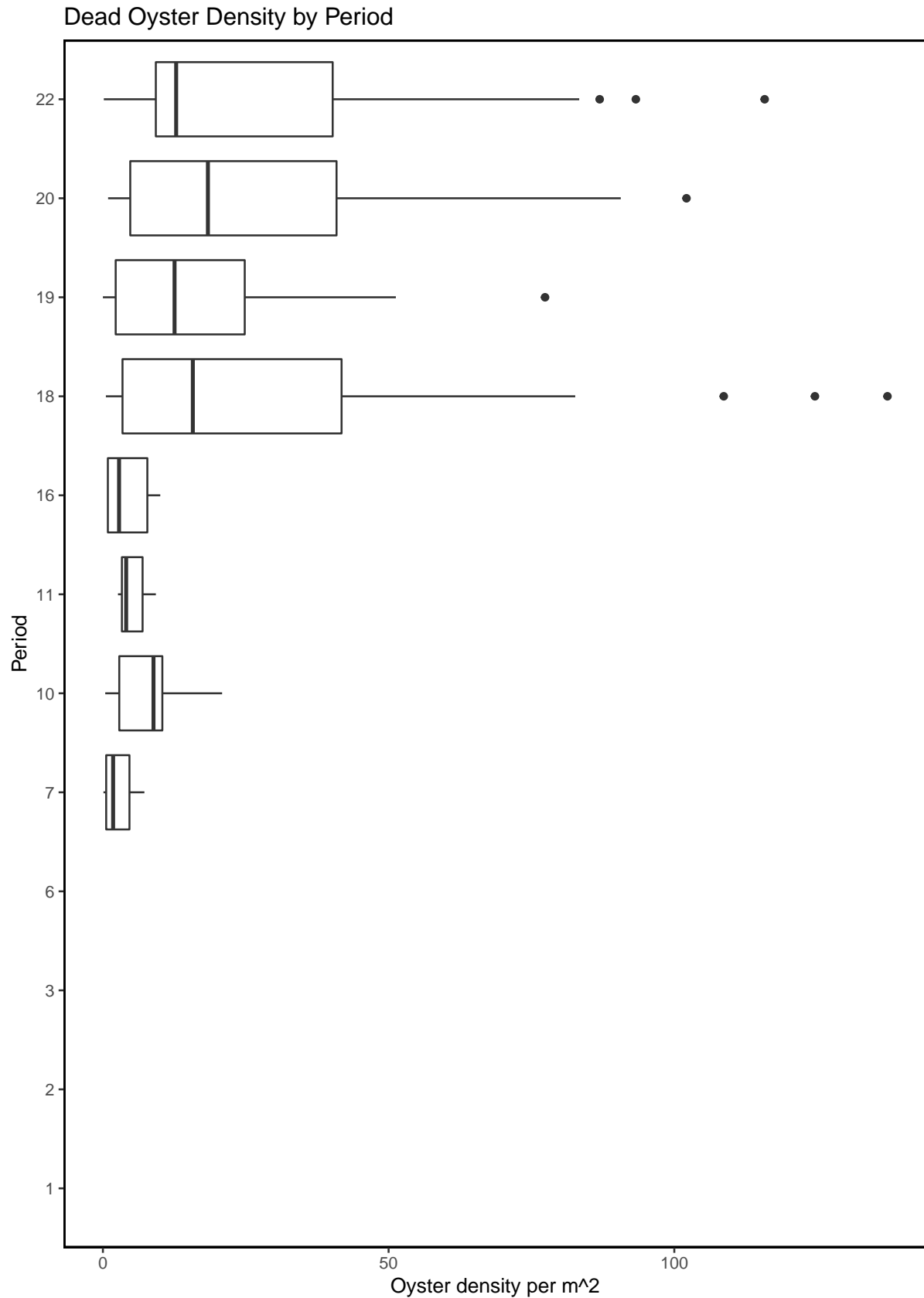
Figure– Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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



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



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

Live Oyster Density by Locality and Period

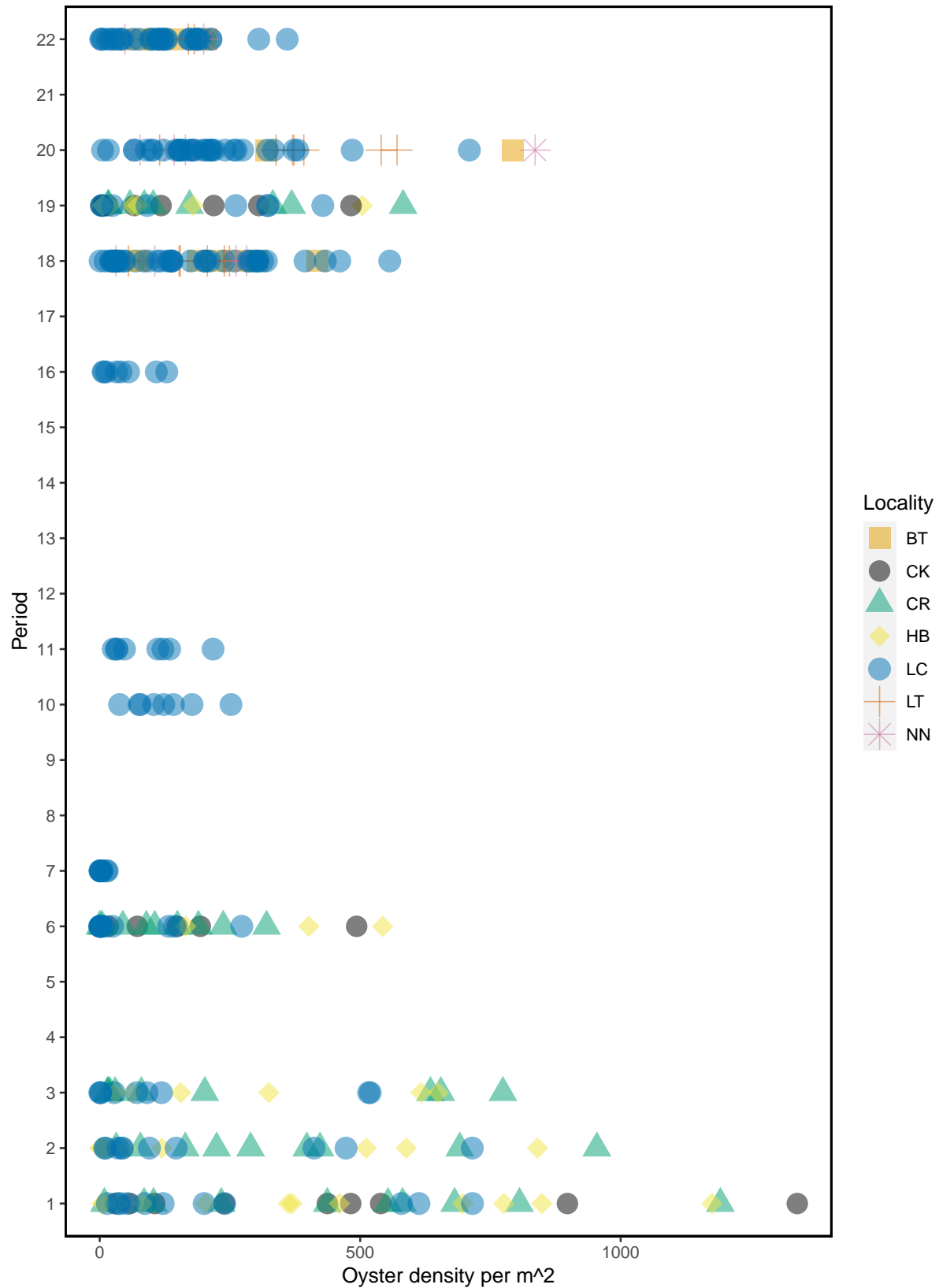


Figure – Live oyster density by locality and period for all periods including period 22 (current period).

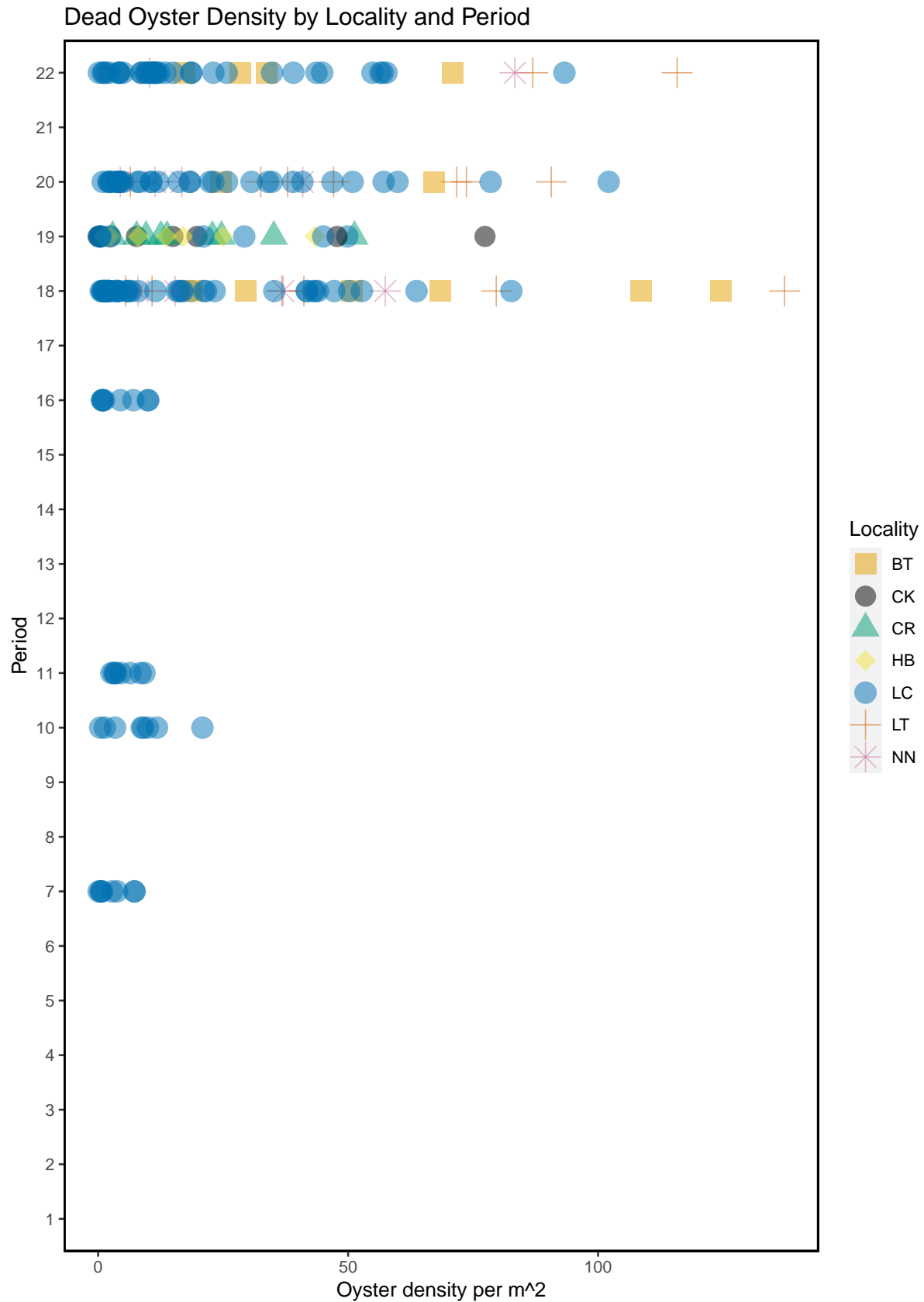


Figure – Dead oyster density by locality and period for all periods including period 22 (current period).

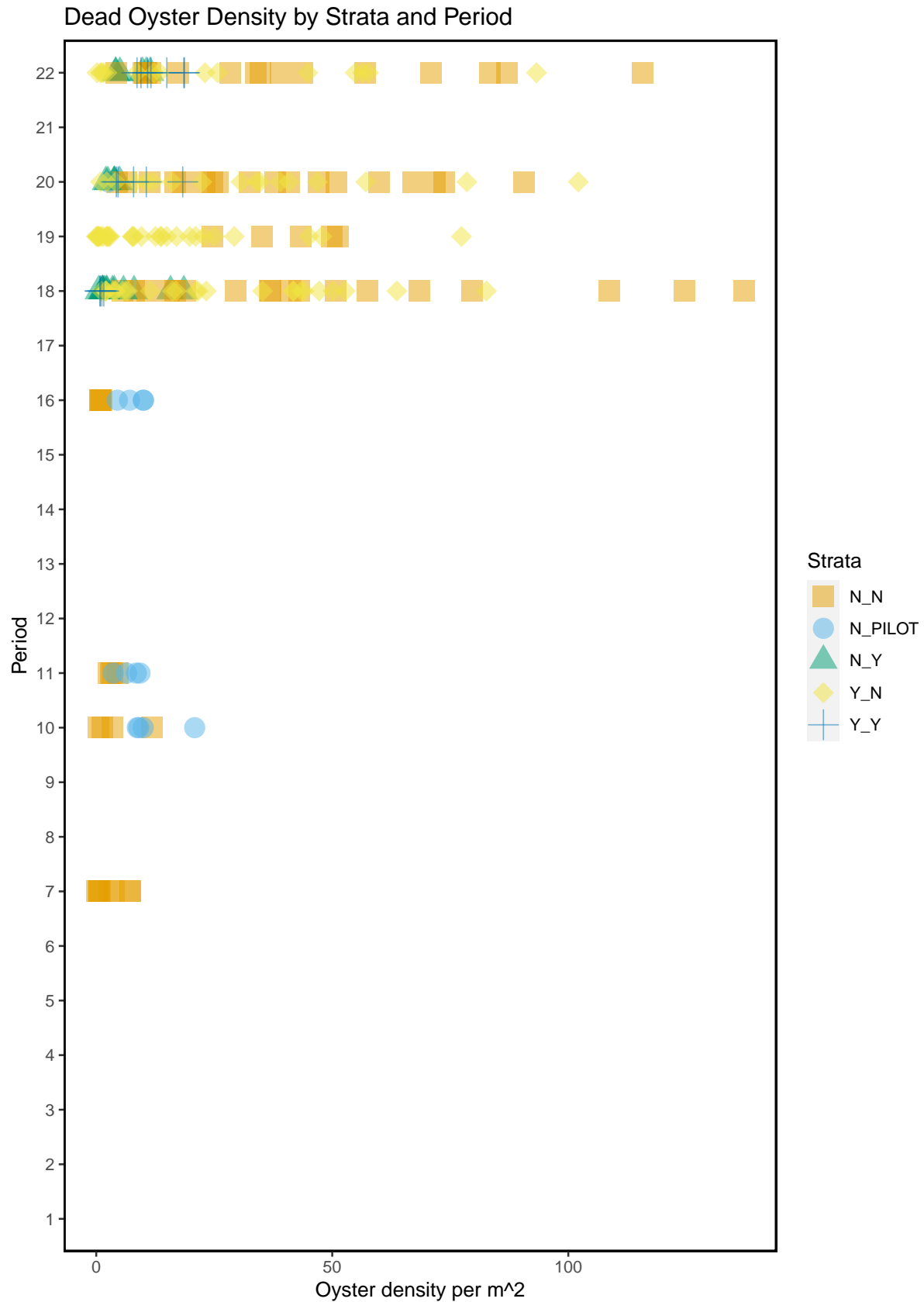


Figure – Dead oyster density by strata and period for all periods including period 22 (current period).

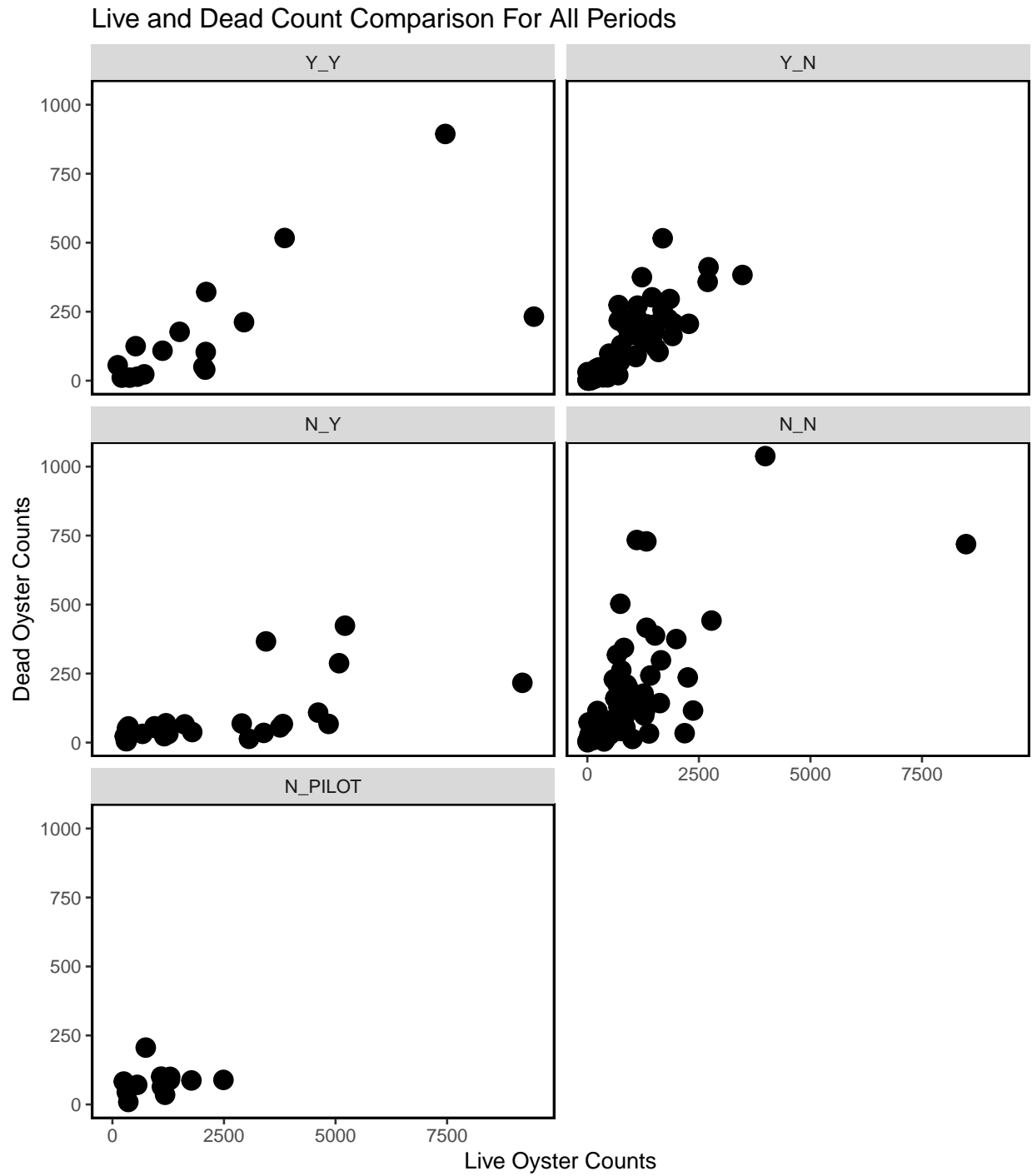


Figure- Live and dead oyster comparison for all periods, last sample date of period 22 is 2021-01-30.

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).

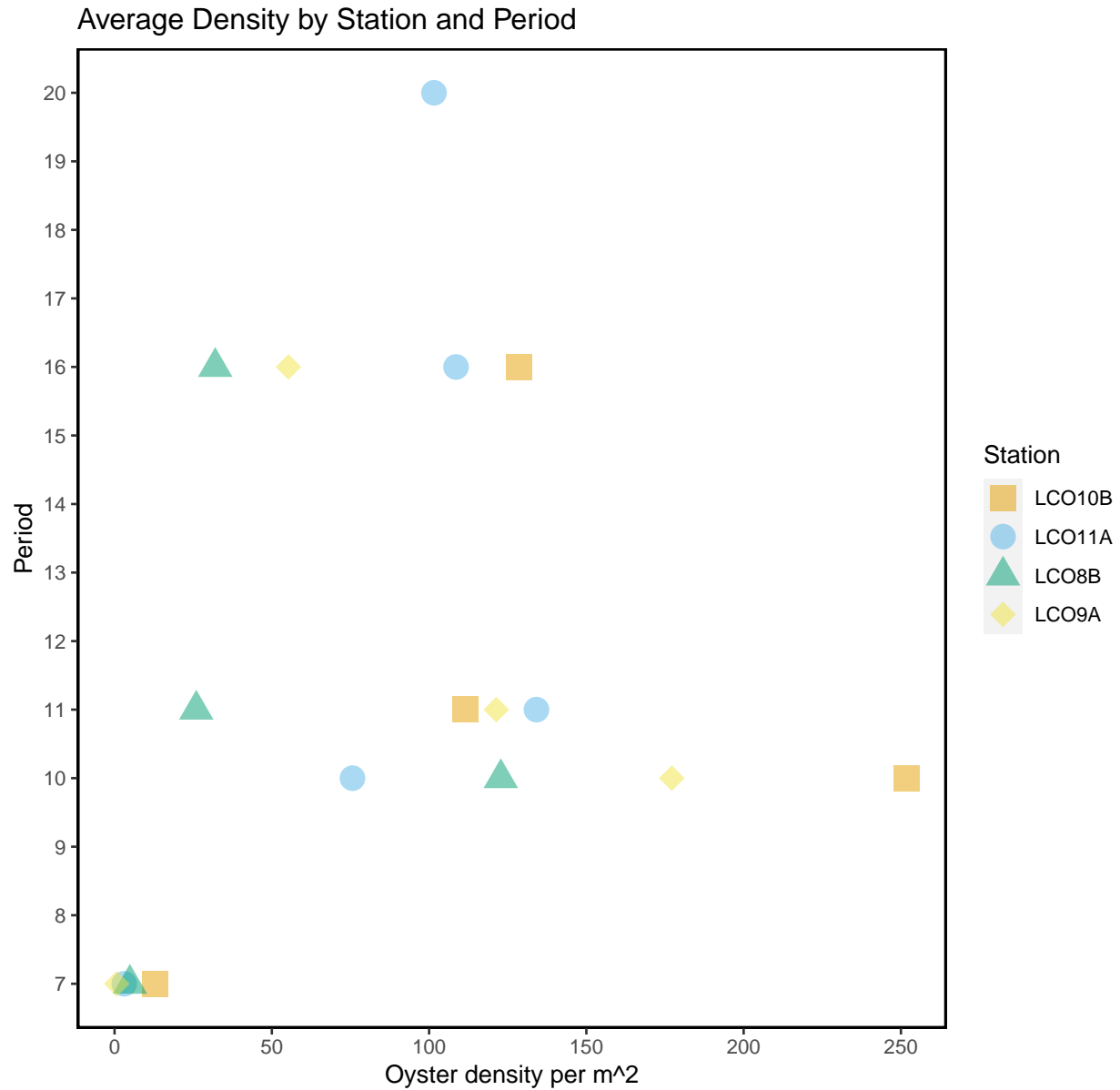


Figure – Average live oyster density comparison by station and period for all stations that were sampled during the pilc

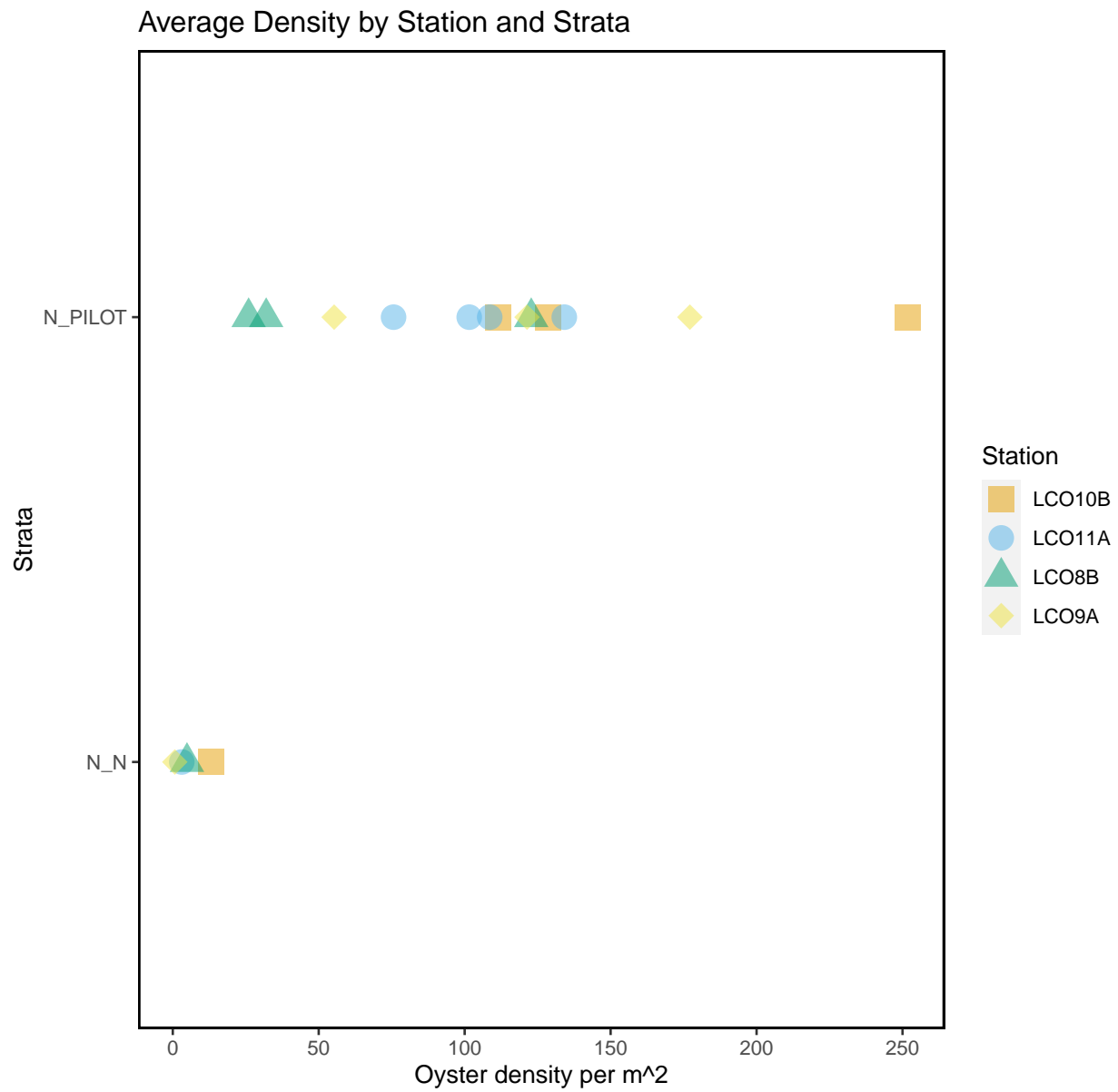


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

Latest Data Entered

Displayed are the entries for the last date of sampling (2021-01-30).

date	station	tran_length	count_live	count_dead	treatment	strata
2021-01-30	LC011B	2.5	43	8	rocks	N_Y
2021-01-30	LC011B	5.0	17	1	rocks	N_Y
2021-01-30	LC011B	7.5	13	5	rocks	N_Y
2021-01-30	LC011B	10.0	12	6	rocks	N_Y
2021-01-30	LC011B	12.5	22	7	rocks	N_Y
2021-01-30	LC011B	15.0	48	4	rocks	N_Y
2021-01-30	LC011B	17.5	27	2	rocks	N_Y
2021-01-30	LC011B	20.0	19	6	rocks	N_Y
2021-01-30	LC011B	22.5	68	5	rocks	N_Y
2021-01-30	LC011B	25.0	70	11	rocks	N_Y
2021-01-30	LC011B	26.5	18	4	rocks	N_Y
2021-01-30	LC011B	2.5	8	2	rocks	N_Y
2021-01-30	LC011B	5.0	21	6	rocks	N_Y
2021-01-30	LC011B	7.5	37	6	rocks	N_Y
2021-01-30	LC011B	10.0	30	7	rocks	N_Y
2021-01-30	LC011B	12.5	14	1	rocks	N_Y
2021-01-30	LC011B	15.0	41	4	rocks	N_Y
2021-01-30	LC011B	17.5	8	5	rocks	N_Y
2021-01-30	LC011B	20.0	12	2	rocks	N_Y
2021-01-30	LC011B	22.5	5	0	rocks	N_Y
2021-01-30	LC011B	25.0	29	6	rocks	N_Y
2021-01-30	LC011B	27.4	31	4	rocks	N_Y
2021-01-30	LC011B	2.5	25	5	rocks	N_Y
2021-01-30	LC011B	5.0	8	2	rocks	N_Y
2021-01-30	LC011B	7.5	14	7	rocks	N_Y
2021-01-30	LC011B	10.0	20	1	rocks	N_Y
2021-01-30	LC011B	12.5	6	3	rocks	N_Y
2021-01-30	LC011B	15.0	11	0	rocks	N_Y
2021-01-30	LC011B	17.5	30	8	rocks	N_Y
2021-01-30	LC011B	20.0	29	8	rocks	N_Y
2021-01-30	LC011B	22.5	17	2	rocks	N_Y
2021-01-30	LC011B	25.0	20	2	rocks	N_Y
2021-01-30	LC011B	27.2	7	0	rocks	N_Y
2021-01-30	LC011B	2.5	12	1	rocks	N_Y
2021-01-30	LC011B	5.0	32	2	rocks	N_Y
2021-01-30	LC011B	7.5	11	2	rocks	N_Y
2021-01-30	LC011B	10.0	43	17	rocks	N_Y
2021-01-30	LC011B	12.5	28	4	rocks	N_Y
2021-01-30	LC011B	15.0	78	3	rocks	N_Y
2021-01-30	LC011B	17.5	42	12	rocks	N_Y
2021-01-30	LC011B	20.0	18	1	rocks	N_Y
2021-01-30	LC011B	22.5	20	5	rocks	N_Y
2021-01-30	LC011B	25.0	28	2	rocks	N_Y
2021-01-30	LC011B	25.2	11	2	rocks	N_Y
2021-01-30	LC011B	2.5	10	0	rocks	N_Y
2021-01-30	LC011B	5.0	31	3	rocks	N_Y
2021-01-30	LC011B	7.5	14	2	rocks	N_Y
2021-01-30	LC011B	10.0	49	13	rocks	N_Y
2021-01-30	LC011B	12.5	34	3	rocks	N_Y

2021-01-30	LC011B	15.0	89	5	rocks	N_Y
2021-01-30	LC011B	17.5	43	12	rocks	N_Y
2021-01-30	LC011B	20.0	18	1	rocks	N_Y
2021-01-30	LC011B	22.5	23	4	rocks	N_Y
2021-01-30	LC011B	25.0	32	3	rocks	N_Y
2021-01-30	LC011B	25.2	13	2	rocks	N_Y
2021-01-30	LC011B	2.5	45	4	rocks	N_Y
2021-01-30	LC011B	5.0	27	2	rocks	N_Y
2021-01-30	LC011B	7.5	38	6	rocks	N_Y
2021-01-30	LC011B	10.0	60	2	rocks	N_Y
2021-01-30	LC011B	12.5	9	2	rocks	N_Y
2021-01-30	LC011B	15.0	15	1	rocks	N_Y
2021-01-30	LC011B	17.5	30	2	rocks	N_Y
2021-01-30	LC011B	20.0	32	3	rocks	N_Y
2021-01-30	LC011B	22.5	11	3	rocks	N_Y
2021-01-30	LC011B	25.0	16	6	rocks	N_Y
2021-01-30	LC011B	27.3	11	1	rocks	N_Y
2021-01-30	LC011B	2.5	25	6	rocks	N_Y
2021-01-30	LC011B	5.0	28	9	rocks	N_Y
2021-01-30	LC011B	7.5	48	10	rocks	N_Y
2021-01-30	LC011B	10.0	53	6	rocks	N_Y
2021-01-30	LC011B	12.5	25	7	rocks	N_Y
2021-01-30	LC011B	15.0	17	8	rocks	N_Y
2021-01-30	LC011B	17.5	19	1	rocks	N_Y
2021-01-30	LC011B	20.0	30	6	rocks	N_Y
2021-01-30	LC011B	22.5	20	2	rocks	N_Y
2021-01-30	LC011B	25.0	14	2	rocks	N_Y
2021-01-30	LC011B	27.5	34	1	rocks	N_Y