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 2022-2023) and how the collected data compare to last year's sampling (Winter 2021-2022). So far 7 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, 151 days have been sampled over this entire project.

Definition of Localities

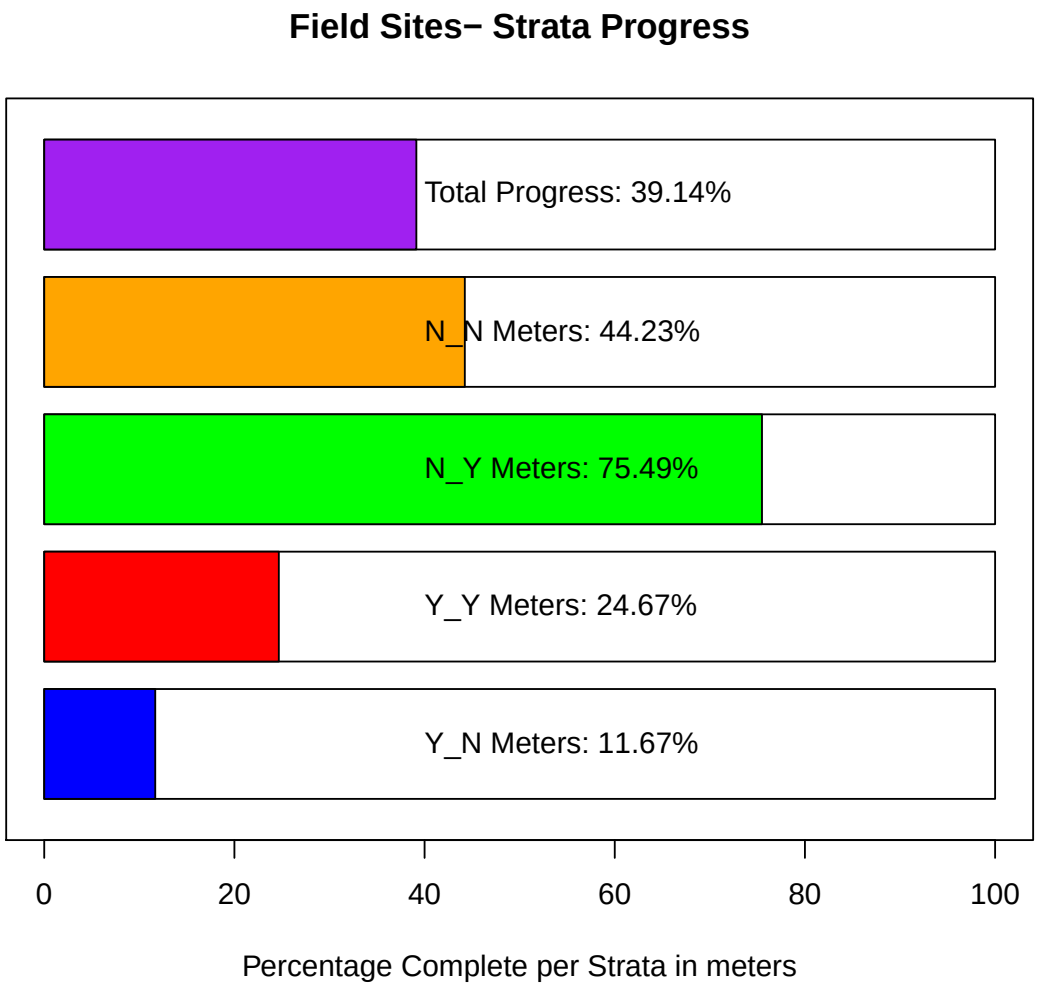
LOCALITY	LOCATION
BT	Big Trout
CK	Cedar Key
CR	Corrigan's Reef
HB	Horseshoe Beach
LC	Lone Cabbage
LT	Little Trout
NN	No Name

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 26, and last year's sampling period is period 24.**



Summary Tables for Periods 20, 22, 24, and 26

These summary tables provide summary statistics on live counts and oyster densities for just periods **20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023).**

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 20, 22, 24, and 26

Live Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	1331	766	2188	4789476	1.64	607	141	2521	1344	572	2623
LC	1920	1200	2083	4338305	1.08	194	1539	2301	1925	1546	2326
LT	1097	877	582	338863	0.53	150	802	1392	1096	844	1402
NN	842	714	639	408613	0.76	202	446	1238	847	524	1277

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1083	767	1185	1403189	1.09	154	781	1385	1084	824	1417
N_PILOT	2180	3009	1582	2501624	0.73	913	390	3970	2182	356	3174
N_Y	3650	3674	2182	4759072	0.60	412	2842	4458	3652	2928	4474
Y_N	740	626	662	437764	0.89	95	555	926	740	563	926
Y_Y	3861	3230	2836	8044464	0.73	758	2375	5347	3852	2479	5455

Live Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	1844	1253	2125	4517189	1.2	310	1236	2451	1835	1294	2473
22	1334	702	1693	2867783	1.3	242	860	1808	1325	902	1817
24	1729	942	1845	3403035	1.1	266	1207	2251	1740	1266	2289
26	3107	3690	2496	6230888	0.8	832	1476	4738	3096	1541	4658

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	235	205	192	37004	0.82	53	131	340	238	151	350
LC	168	161	110	12103	0.65	10	148	188	168	149	188
LT	320	321	129	16749	0.40	33	255	386	321	257	386
NN	233	174	230	52911	0.99	73	91	376	234	125	386

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	239	192	163	26724	0.69	21	197	280	239	200	283
N_PILOT	143	147	39	1557	0.28	23	98	188	143	102	180

N_Y	179	180	83	6878	0.46	16	148	209	179	149	210
Y_N	162	153	134	18016	0.83	19	125	200	162	127	202
Y_Y	147	145	75	5563	0.51	20	108	186	148	110	188

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	256	203	187	35057	0.73	27	203	310	256	202	312
22	137	121	93	8638	0.68	13	111	163	138	113	165
24	185	181	92	8385	0.49	13	159	211	185	160	212
26	207	198	124	15322	0.60	41	126	288	210	129	286

Summary of Dead Counts for Periods 20, 22, 24, and 26

Dead Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	163	98	175	30535	1.07	48	68	258	160	96	263
LC	182	130	185	34048	1.02	17	148	216	182	149	215
LT	206	137	151	22760	0.73	39	130	282	206	138	282
NN	102	72	94	8760	0.92	30	44	160	102	57	163

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	171	115	167	27877	0.97	22	129	214	171	132	218
N_PILOT	136	127	131	17150	0.97	76	-13	284	135	48	270
N_Y	196	166	143	20537	0.73	27	143	249	197	145	250
Y_N	128	81	130	16802	1.01	19	92	164	128	95	165
Y_Y	348	246	299	89594	0.86	80	191	504	345	208	507

Dead Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	148	107	140	19727	0.95	20	108	188	147	110	188
22	191	128	193	37399	1.01	28	137	245	190	140	247
24	192	130	194	37816	1.01	28	137	247	192	139	253
26	178	171	149	22311	0.84	50	81	276	177	95	280

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	36	28	23	534	0.64	6.4	23	48	36	25	49
LC	22	13	22	467	1.00	2.0	18	26	22	18	26
LT	56	50	30	881	0.53	7.7	41	71	56	42	71
NN	27	21	22	500	0.83	7.1	13	41	27	14	41

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	37.9	32.5	26.5	700	0.70	3.4	31.2	45	38.0	31.6	45
N_PILOT	7.6	7.6	5.0	25	0.66	2.9	1.9	13	7.6	2.6	13
N_Y	9.9	9.6	6.4	42	0.65	1.2	7.5	12	10.0	7.9	12
Y_N	27.4	19.4	25.6	658	0.94	3.7	20.2	35	27.3	20.3	34
Y_Y	12.3	13.1	5.2	27	0.42	1.4	9.5	15	12.2	9.5	15

Dead Oyster Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	28	18	26.1	682	0.94	3.8	20.2	35	28	20.2	35
22	28	14	28.4	807	1.00	4.1	20.5	36	28	21.3	36
24	26	19	20.9	438	0.81	3.0	19.8	32	26	20.1	32
26	13	10	7.6	58	0.58	2.5	8.1	18	13	8.9	18

Summary Plots for Periods 20, 22, 24, and 26

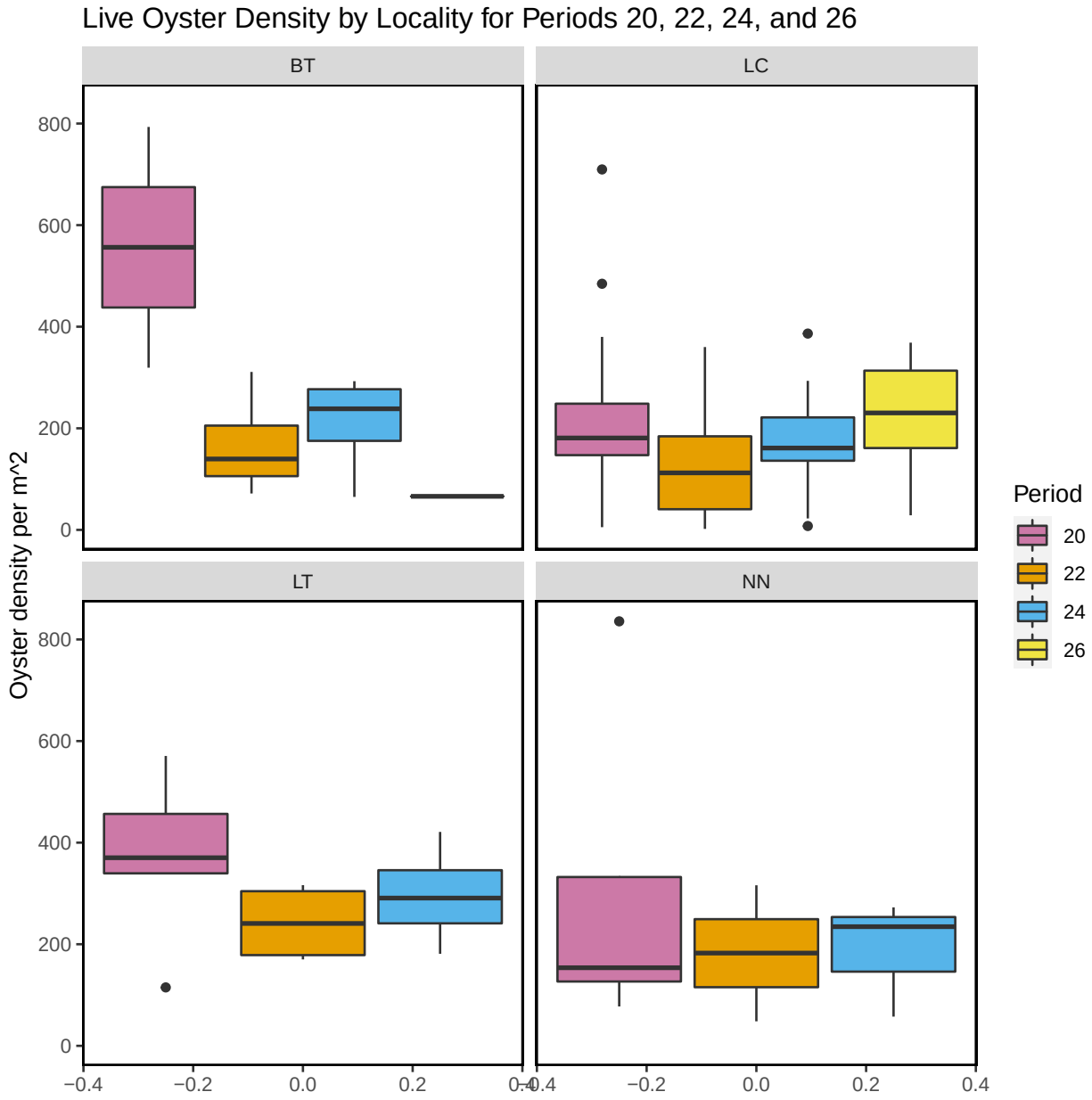


Figure- Calculated live oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-12-11.

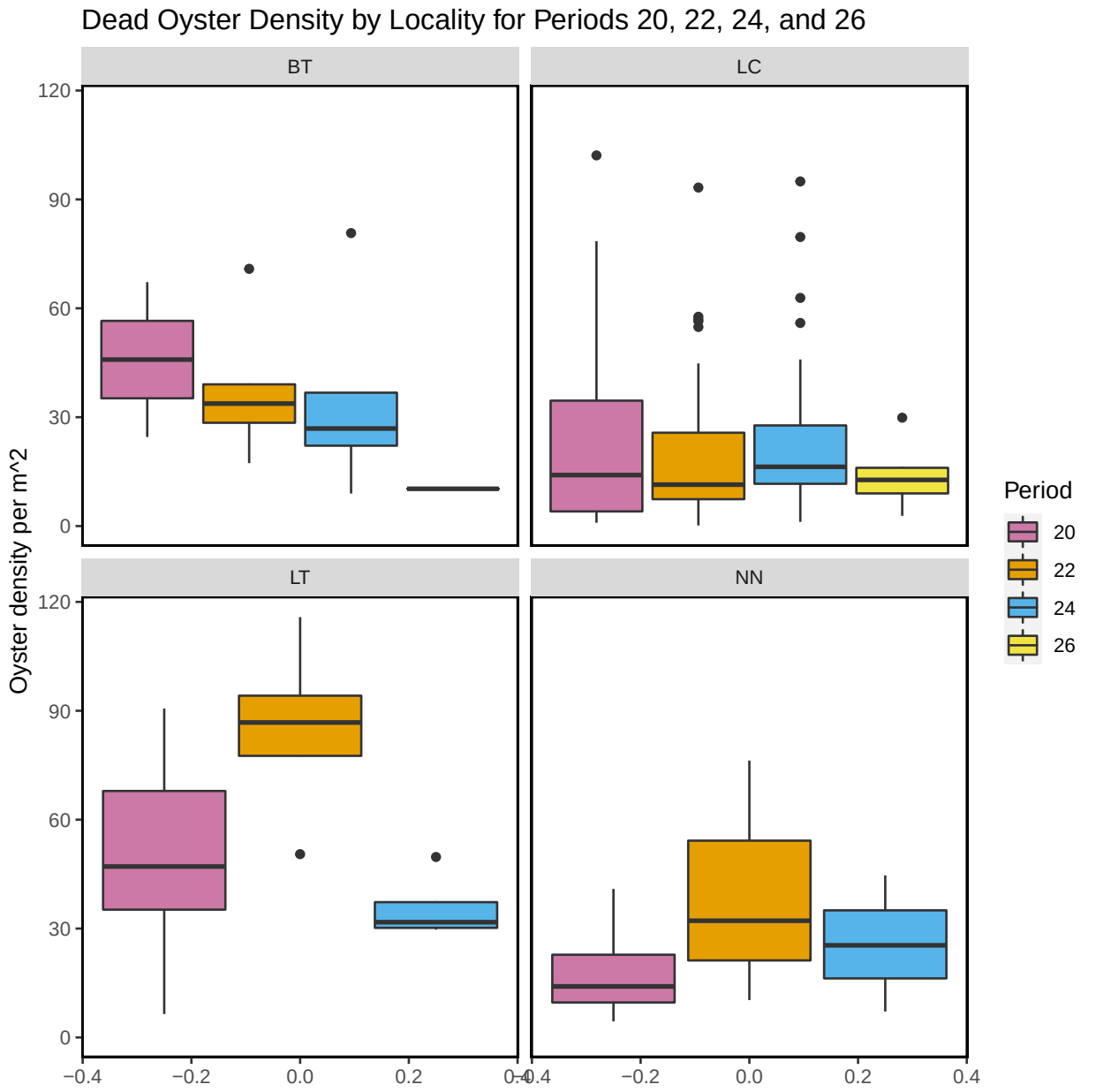


Figure- Calculated dead oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-12-11.

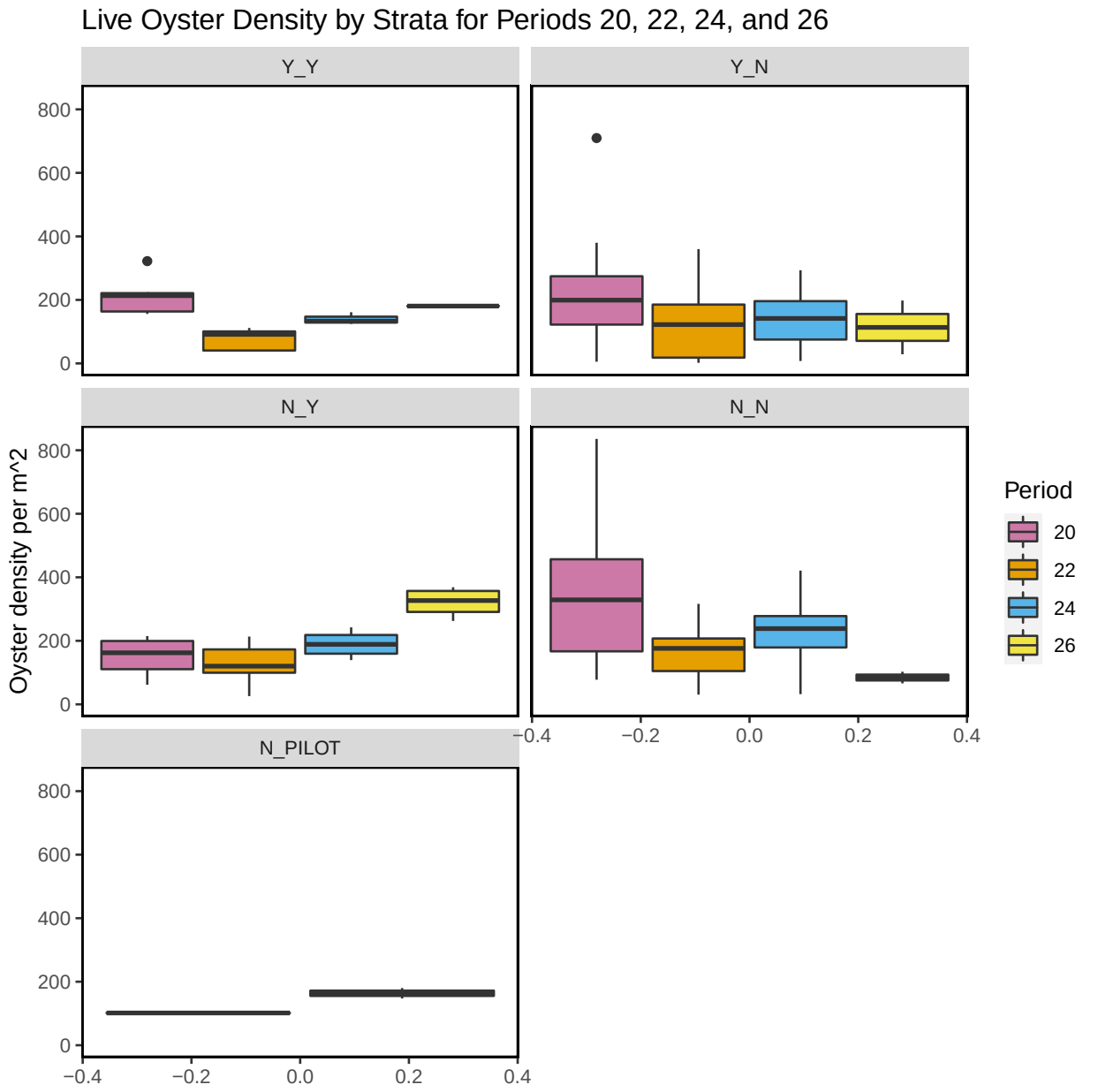


Figure- Calculated live oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-12-11.

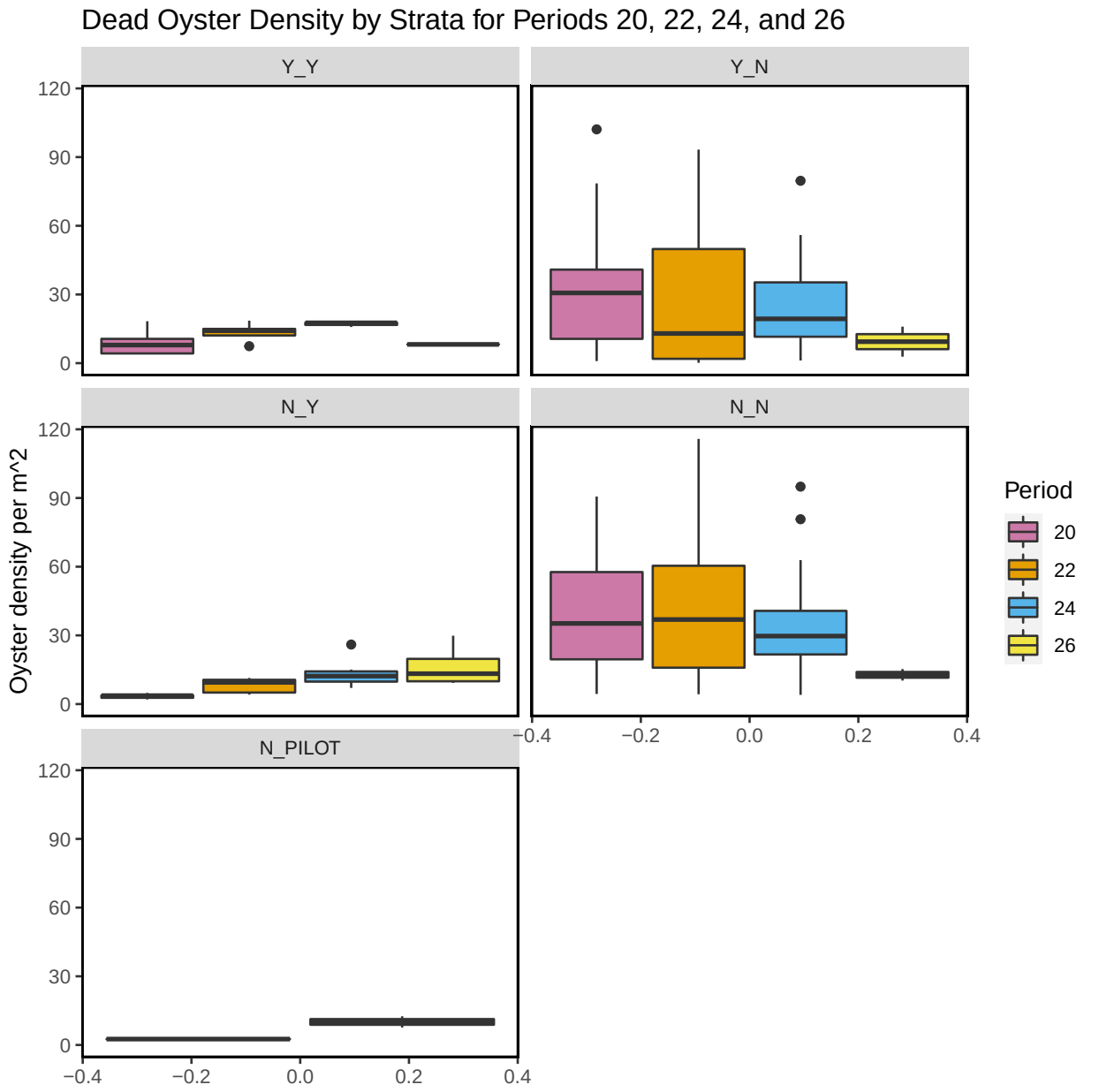


Figure- Calculated dead oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-12-11.

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.

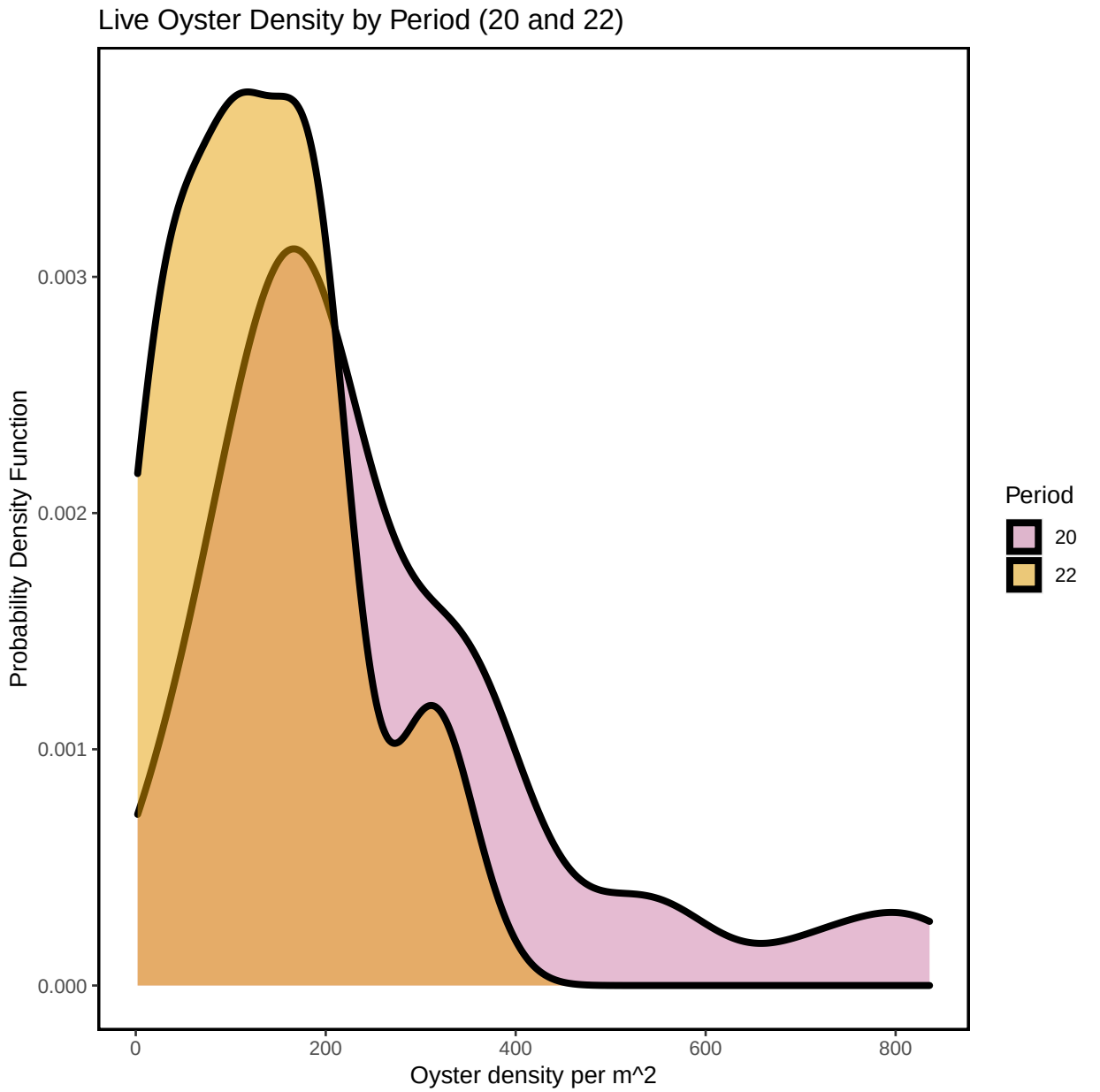


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2022-12-11.

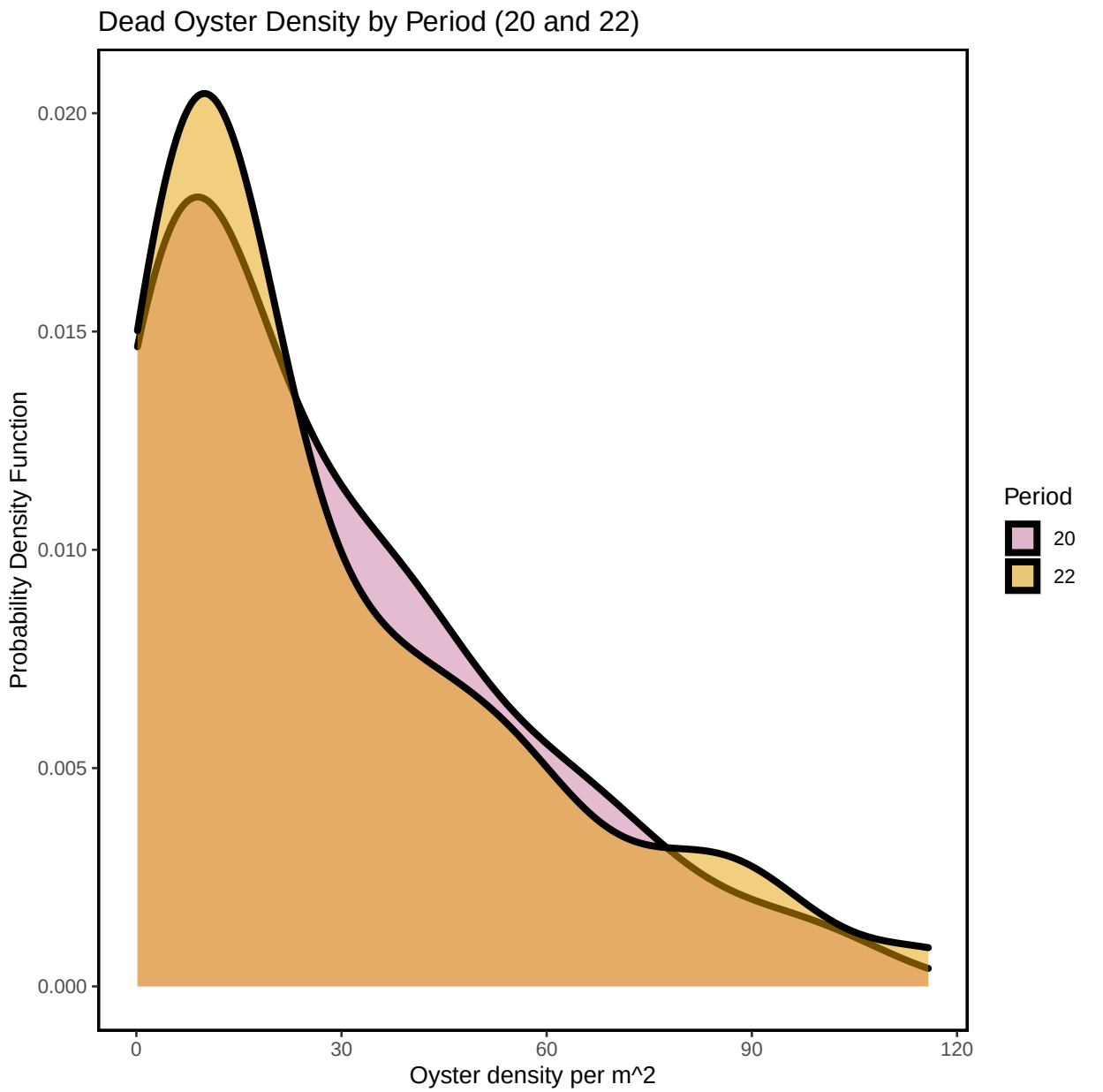


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2022-12-11.

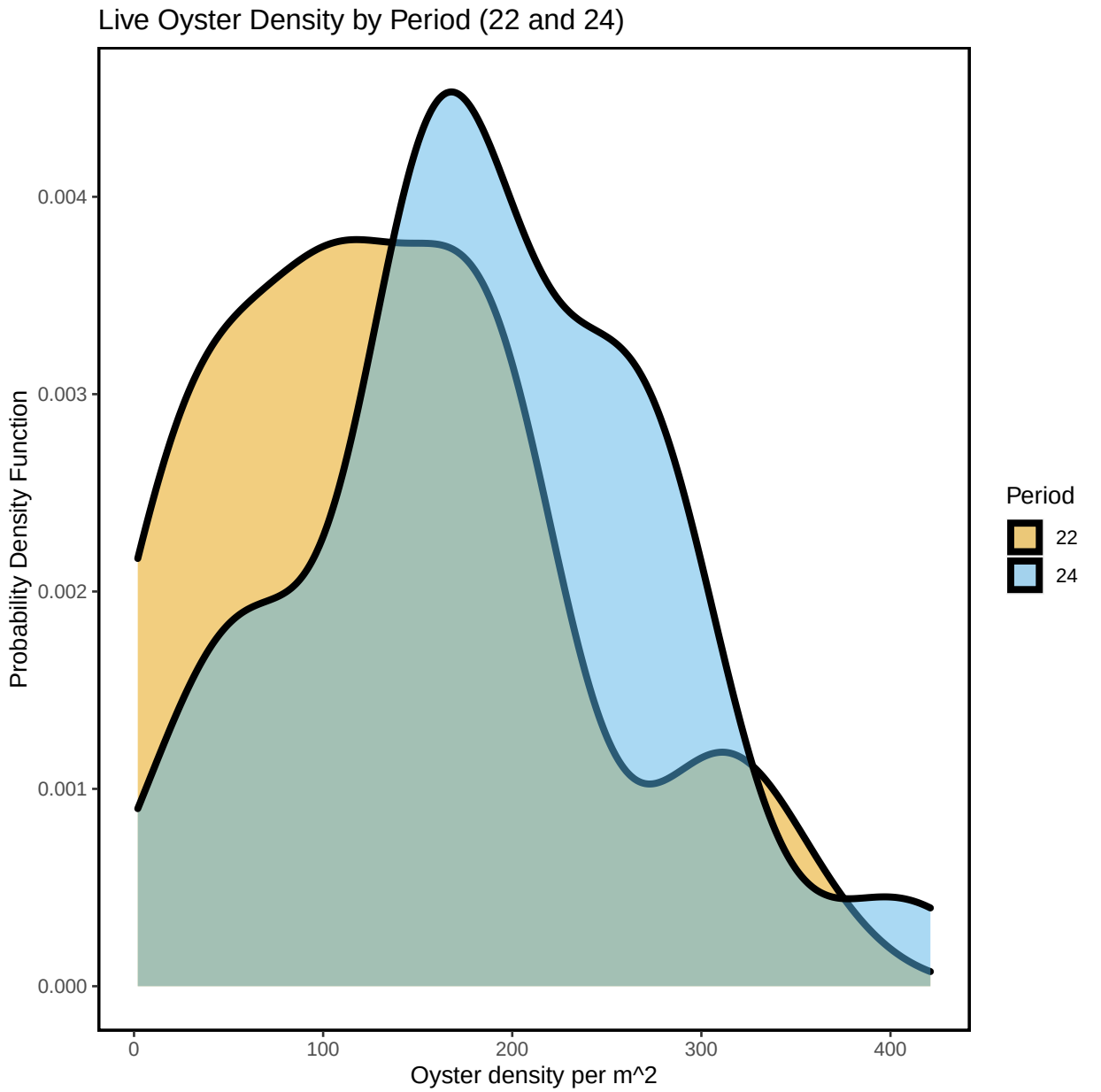


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2022-12-11.

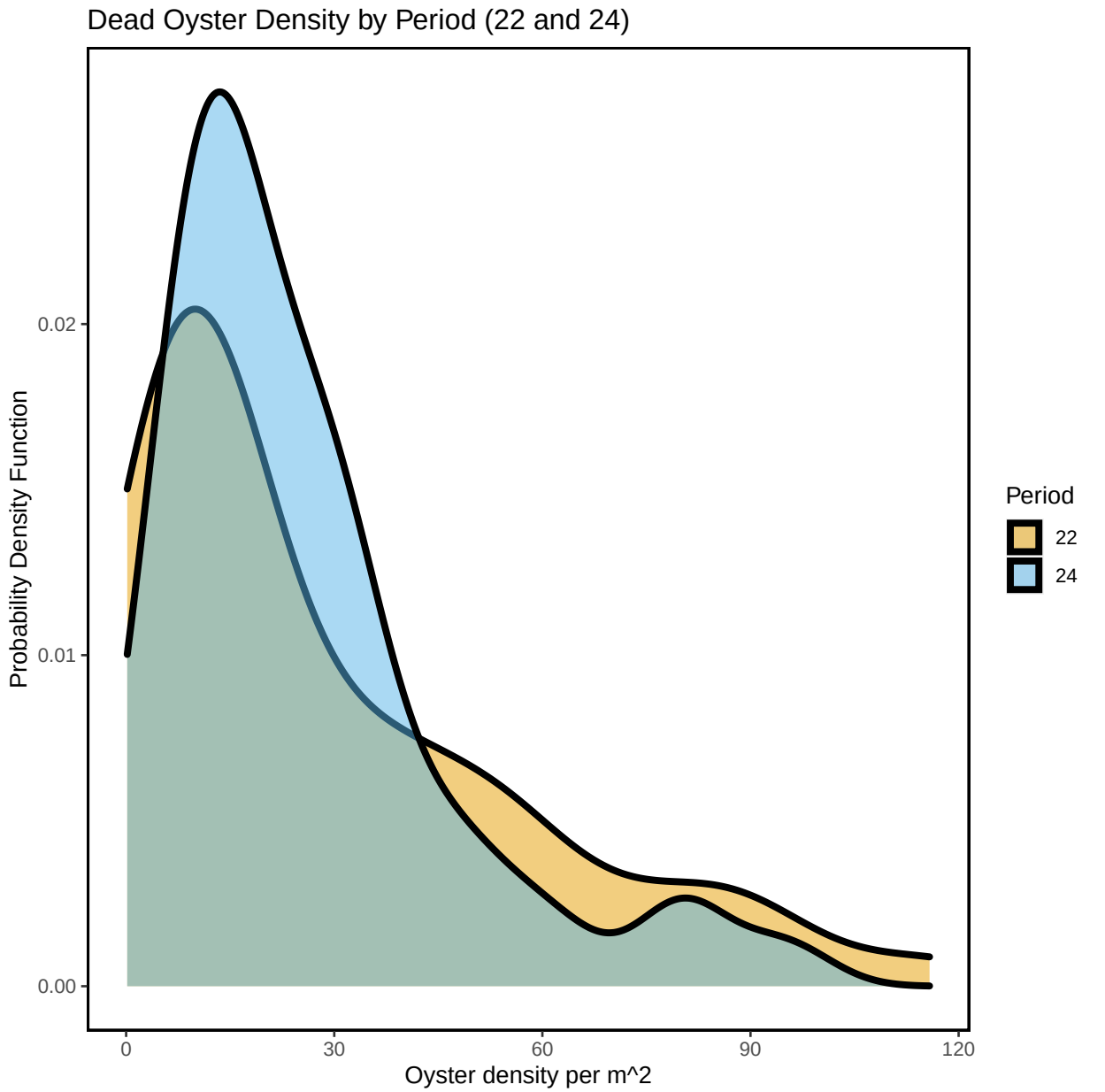


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2022-12-11.

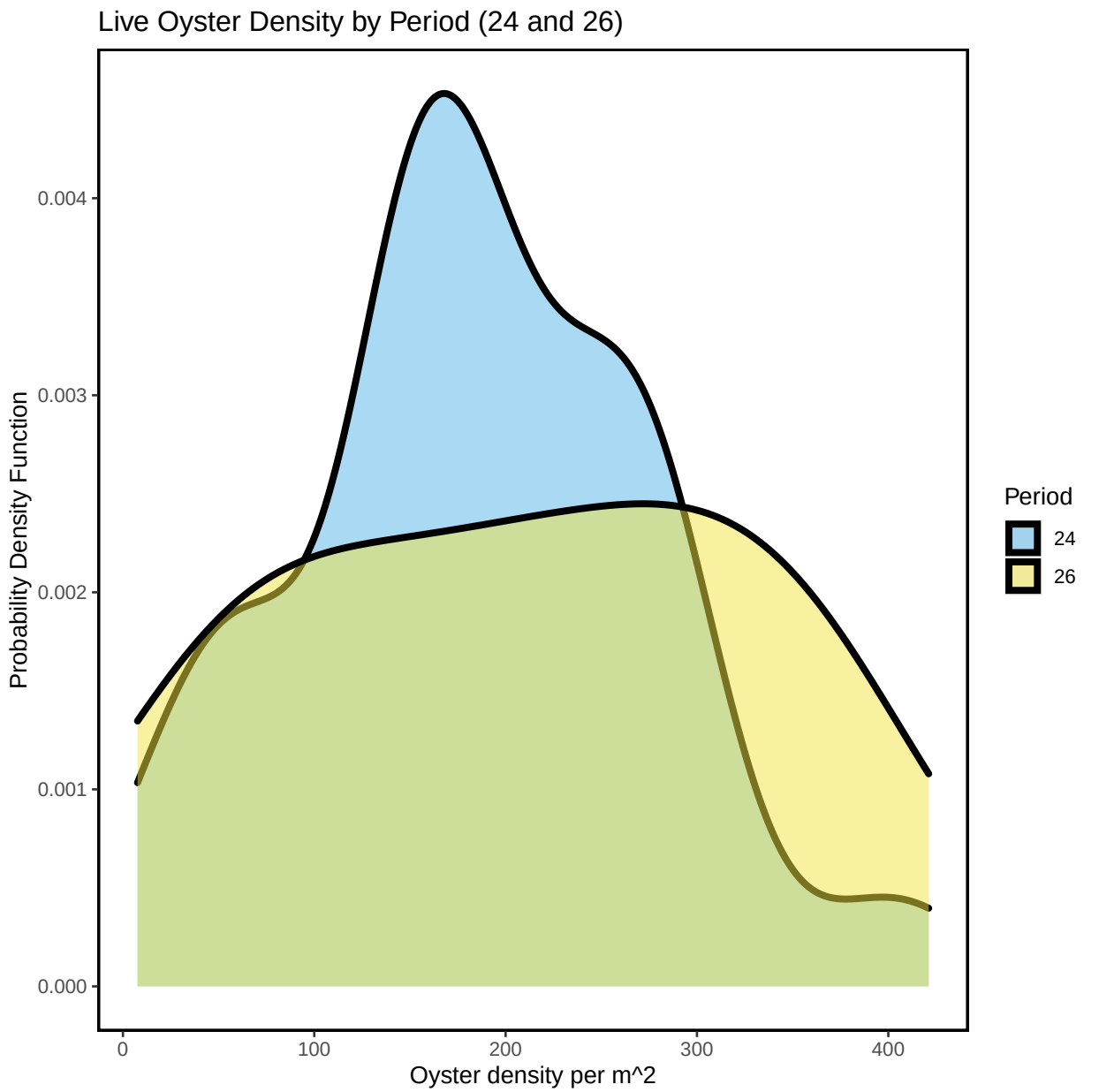


Figure- Calculated live oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2022-12-11.

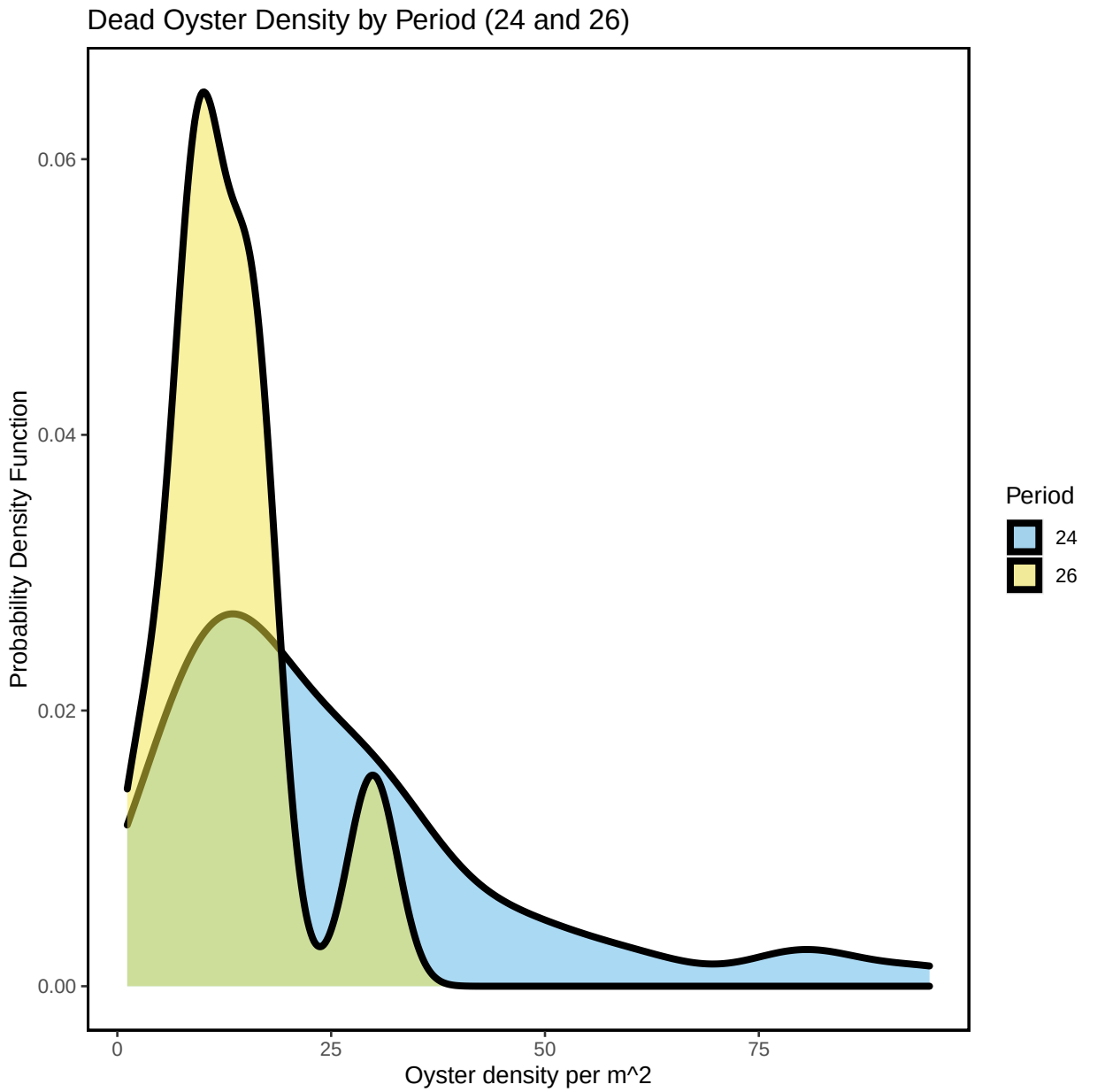


Figure- Calculated dead oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2022-12-11.

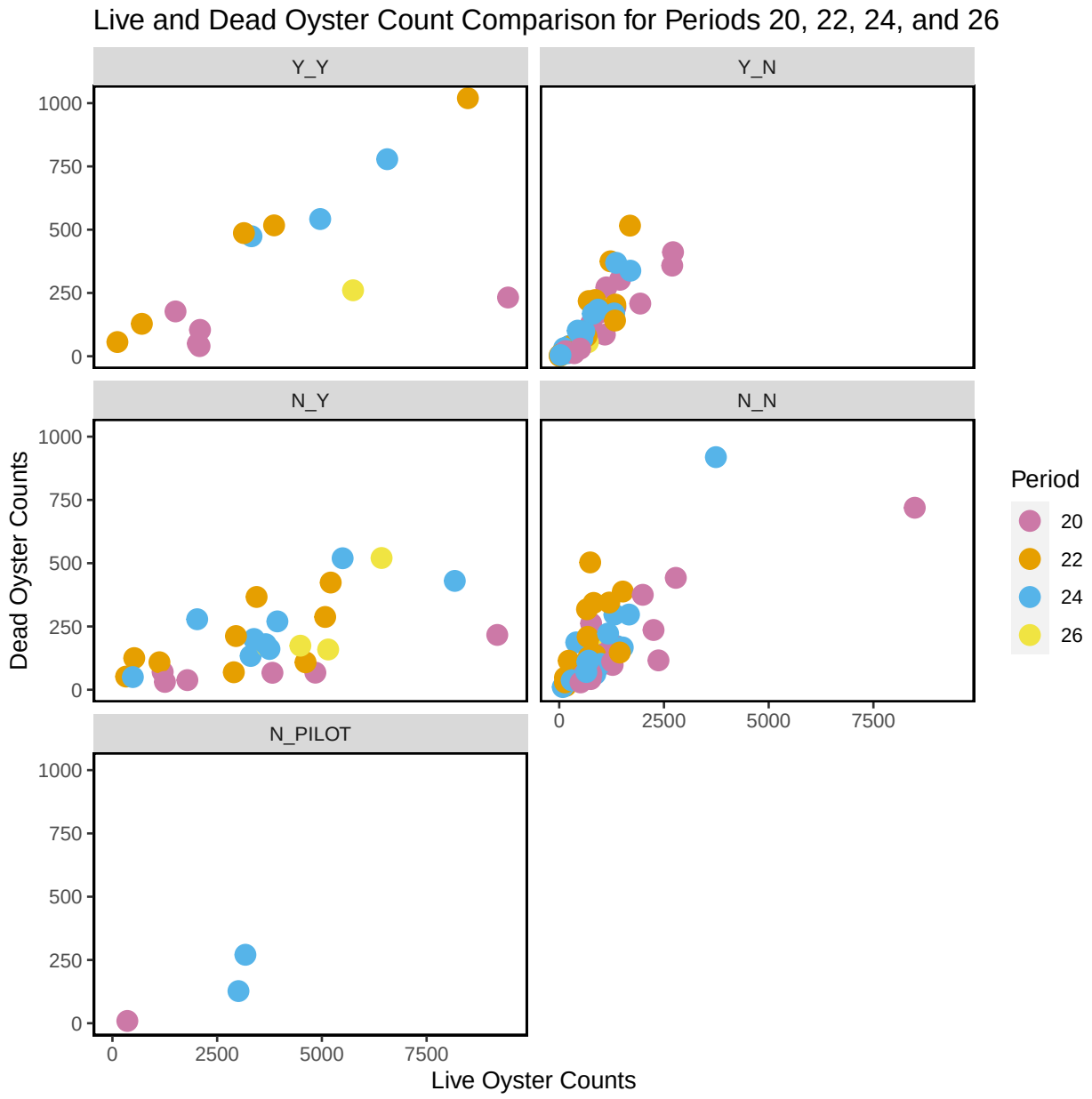


Figure- Live and dead oyster count comparison by periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) last sample date of period 26 as 2022-12-11.

Live Counts Double Pass Results

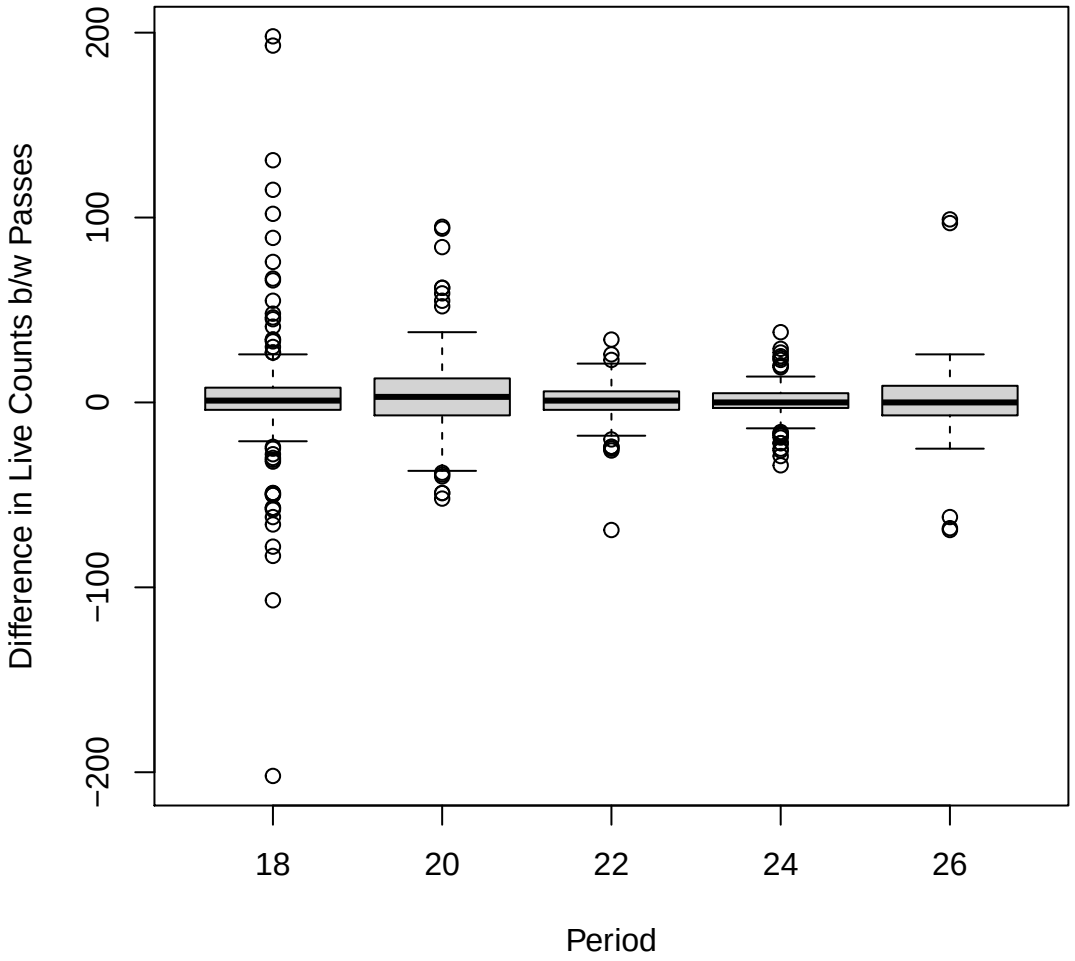


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, 24, and 26

locality	period	mean_difference	sd_difference	CV
BT	18	-5.43	60.0	-11.1
LC	18	3.58	30.0	8.4
NN	18	13.17	15.5	1.2
LC	20	4.33	22.4	5.2
LT	20	2.64	39.2	14.9
BT	22	-1.00	18.9	-18.9
LC	22	0.14	9.0	63.6
LT	22	3.38	10.9	3.2
BT	24	9.23	14.0	1.5
LC	24	-0.44	8.7	-19.5
LC	26	1.07	26.3	24.5

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

Dead Counts Double Pass Results

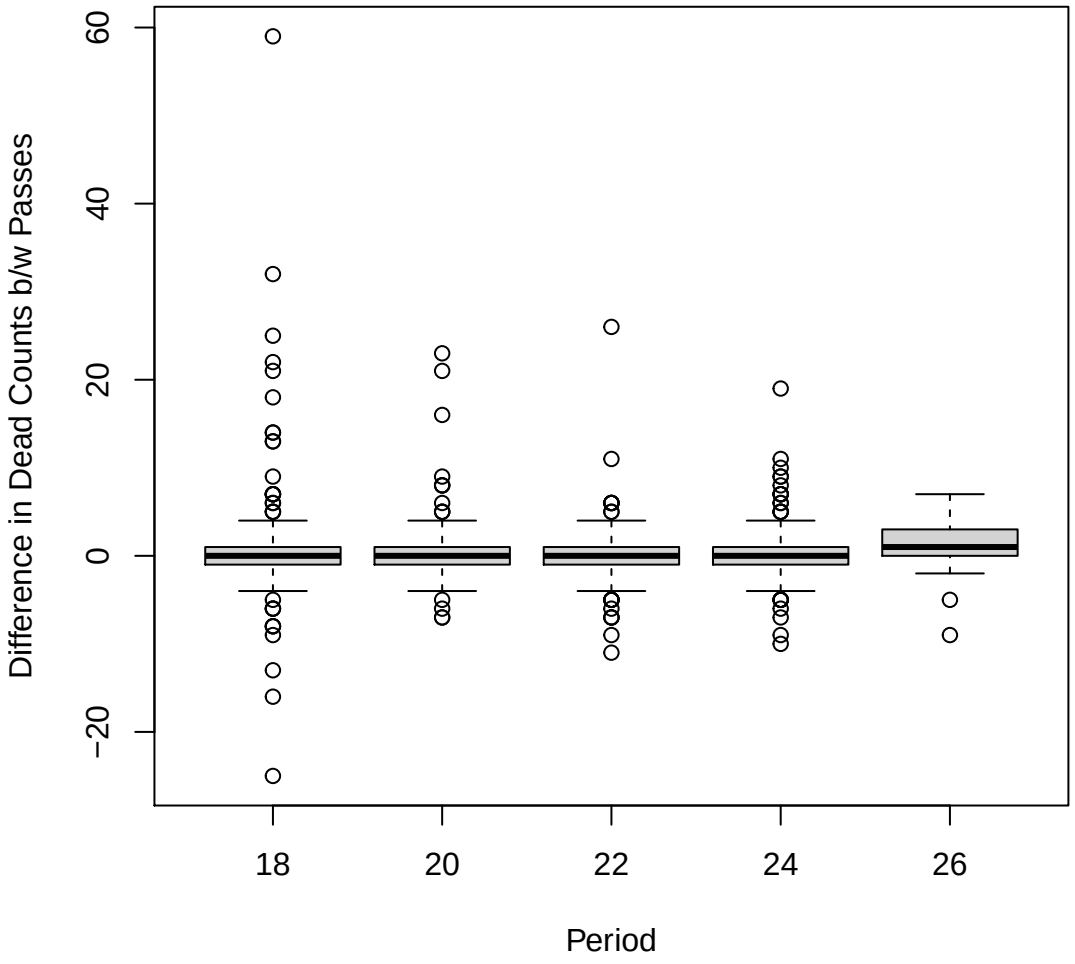


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, 24, and 26

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	1.13	1.11
LC	26	0.87	1.30

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 2022-12-11. 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
25	Summer	2022
26	Winter	2022-2023

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	19	640
CK	26	734
CR	46	1375
HB	45	1129
LC	240	14245
LT	21	542
NN	14	357

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	134	4379
N_PILOT	15	1050
N_Y	41	4785
Y_N	203	5912
Y_Y	18	2895

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	48	3059
26	9	782

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	5	122
24	LC	36	2780
24	LT	4	87
24	NN	3	69
26	BT	1	52
26	LC	8	731
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	19	521
24	N_PILOT	2	251
24	N_Y	9	1174
24	Y_N	15	412
24	Y_Y	3	700
26	N_N	2	128
26	N_Y	4	408
26	Y_N	2	38
26	Y_Y	1	209
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

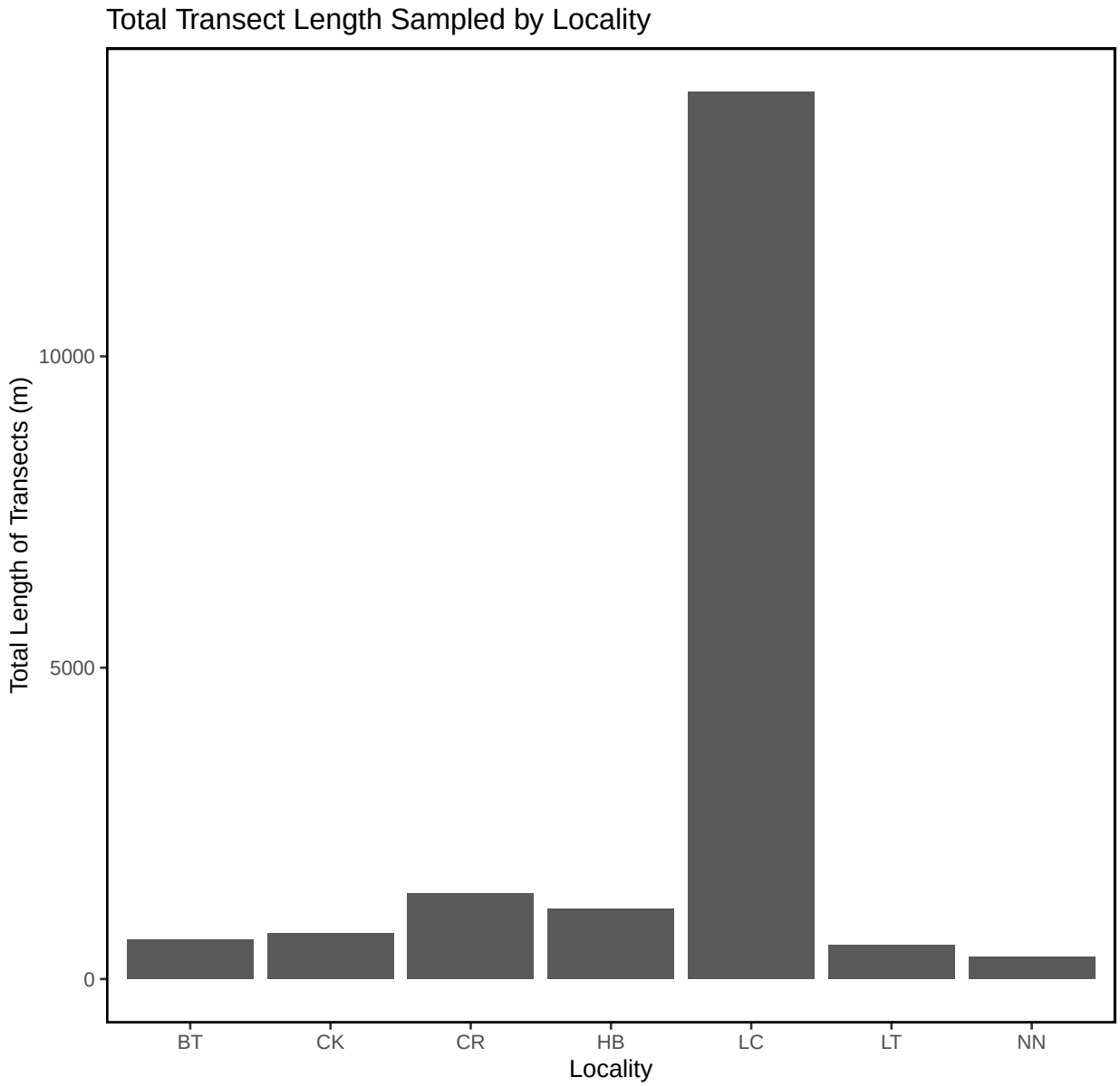


Figure − Bar plot of total transect length in meters sampled by locality for all periods.

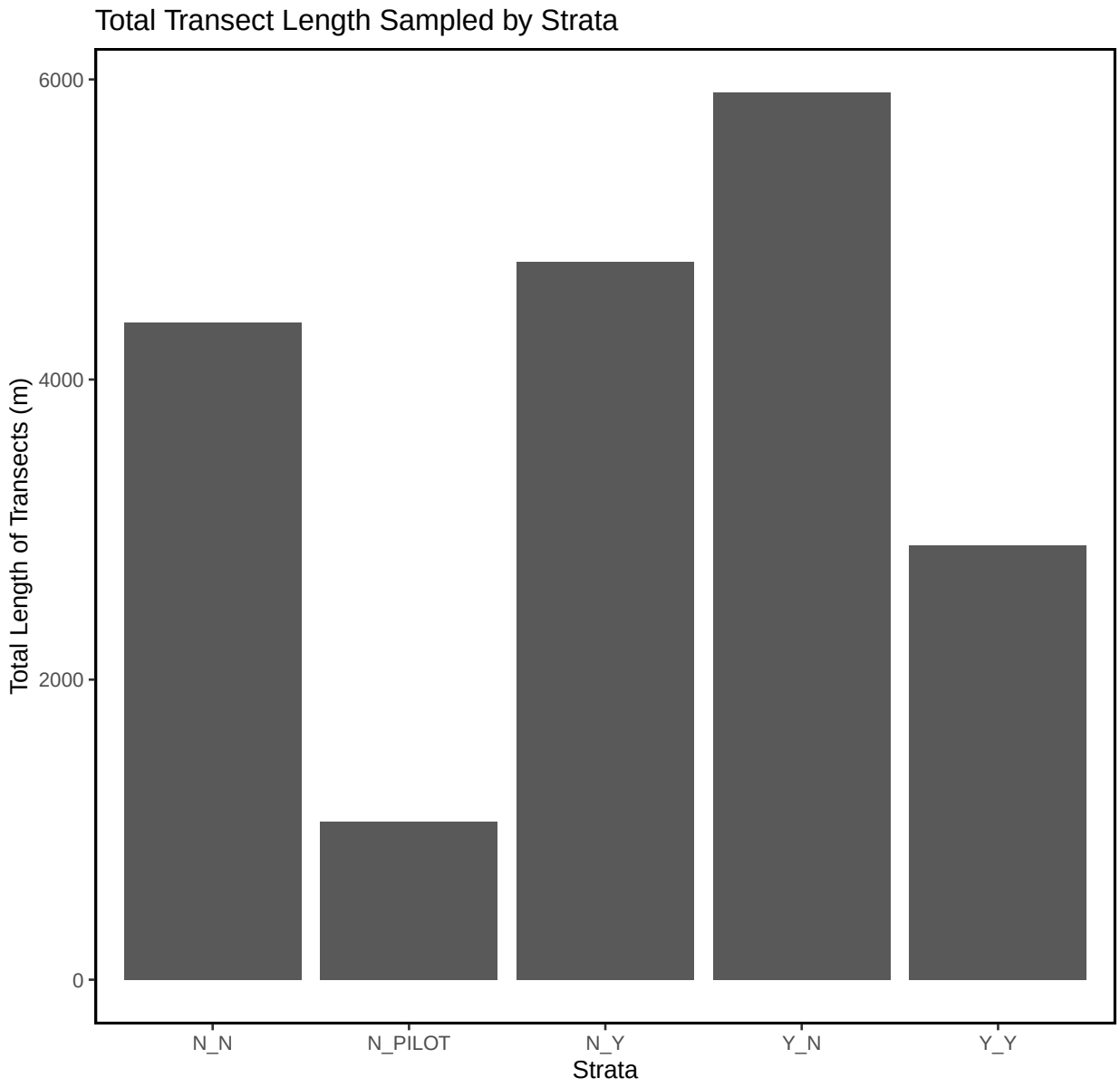
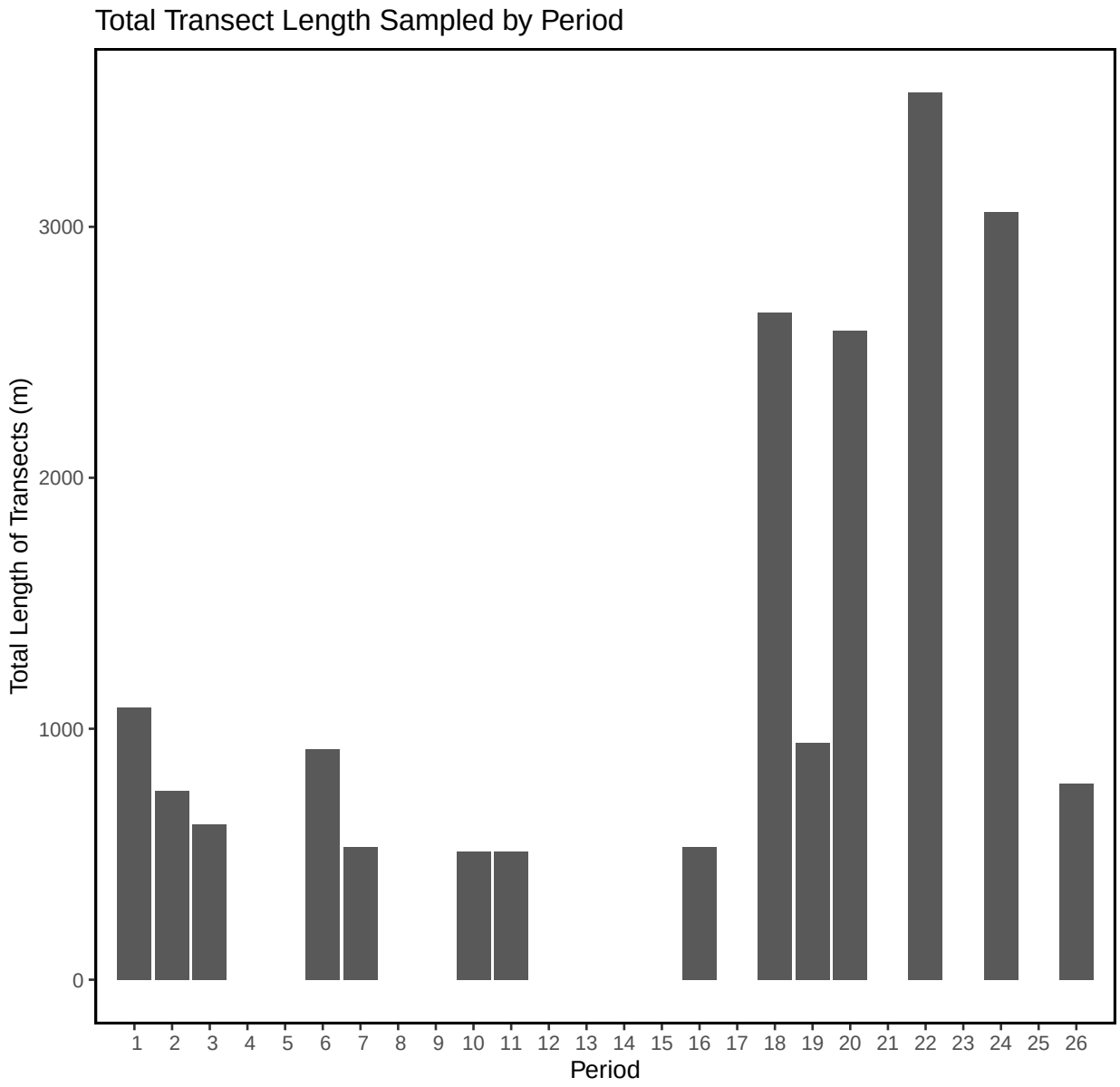


Figure − Bar plot of total transect length in meters sampled by strata for all periods.



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	1372	872	1908	3638919	1.39	438	514	2230	1386	751	2353
CK	857	444	1091	1190933	1.27	214	438	1277	863	516	1289
CR	1026	716	1035	1072162	1.01	153	727	1325	1027	737	1315
HB	902	364	1047	1095622	1.16	158	592	1211	902	608	1209
LC	1318	704	1665	2770934	1.26	108	1106	1529	1312	1099	1530
LT	1026	877	551	303721	0.54	120	790	1262	1021	819	1277
NN	735	674	584	341295	0.79	156	429	1041	742	487	1071

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	989	766	1012	1025017	1.02	88	817	1161	991	836	1179
N_PILOT	1318	1136	925	856059	0.70	239	850	1787	1321	909	1804
N_Y	2912	3060	2212	4892643	0.76	345	2235	3589	2929	2276	3601
Y_N	763	438	890	791857	1.17	63	640	887	765	645	888
Y_Y	3106	2086	2876	8268636	0.93	678	1778	4435	3067	1926	4365

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	1063	1806
2	890	476	945	893727	1.06	176	546	1234	886	559	1253
3	738	296	817	668064	1.11	167	411	1065	748	442	1060
6	433	176	534	284791	1.23	96	245	621	436	262	628
7	50	29	56	3186	1.12	20	11	90	52	18	91
10	1207	1074	671	449607	0.56	237	743	1672	1207	815	1643
11	886	776	678	459708	0.77	240	416	1356	883	501	1347
16	494	366	467	217855	0.95	165	170	817	499	231	829
18	982	695	935	874733	0.95	120	748	1217	980	761	1238
19	555	329	573	328431	1.03	97	365	745	554	371	760
20	1844	1253	2125	4517189	1.15	310	1236	2451	1848	1322	2486
22	1334	702	1693	2867783	1.27	242	860	1808	1334	867	1818
24	1729	942	1845	3403035	1.07	266	1207	2251	1740	1290	2297
26	3107	3690	2496	6230888	0.80	832	1476	4738	3098	1579	4604

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	238	218	168	28363	0.71	38.6	162	313	236	174	321
CK	241	112	321	102927	1.33	62.9	118	364	238	134	370
CR	283	178	294	86605	1.04	43.4	198	368	281	203	363
HB	257	101	303	92052	1.18	45.7	168	347	257	176	349
LC	157	132	141	19748	0.90	9.1	139	174	156	139	176
LT	279	261	132	17460	0.47	28.8	222	335	279	227	334
NN	215	174	202	40919	0.94	54.1	109	321	216	131	336

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	253	190	239	56963	0.94	21	212	294	254	212	298
N_PILOT	118	121	59	3467	0.50	15	88	148	119	91	148
N_Y	169	159	97	9362	0.57	15	139	198	168	141	199
Y_N	183	117	211	44489	1.15	15	154	212	183	154	213
Y_Y	121	118	82	6711	0.68	19	84	159	121	86	156

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	395	296.1	502.3
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	252	155.6	362.4
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	230	133.8	338.6
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	121	71.1	173.1
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.5	8.7
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	123	84.2	169.7
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	90	51.5	136.2
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	50	21.4	80.4
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	177	147.1	209.5
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	156	104.9	209.9
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	257	206.8	309.5
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	138	113.4	164.9
24	185	180.6	91.6	8385	0.49	13	159.3	211.1	186	159.5	211.5
26	207	198.0	123.8	15322	0.60	41	125.9	287.6	207	134.3	279.4

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	249	160	278	77231	1.12	64	123.6	374	248	141	375
CK	78	32	106	11170	1.36	37	4.3	151	76	18	152
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	44	17	73
LC	134	76	159	25236	1.19	11	112.0	156	134	112	158
LT	218	141	180	32543	0.83	39	140.5	295	219	151	296
NN	98	72	87	7493	0.88	23	52.5	143	99	61	147

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	157	96	189	35865	1.21	19	120	193	158	123	195
N_PILOT	98	89	65	4243	0.67	17	65	131	98	68	133
N_Y	145	70	141	19786	0.97	22	102	188	146	103	188
Y_N	103	60	113	12803	1.10	11	81	125	103	82	124
Y_Y	274	152	298	88766	1.09	70	136	411	274	146	404

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	80	42	125
11	50	40	25	620	0.49	8.8	33.2	68	51	35	66
16	44	28	41	1708	0.93	14.6	15.6	73	44	17	71
18	133	55	192	36903	1.44	24.6	85.1	182	132	92	183
19	63	44	67	4548	1.08	11.6	40.0	85	63	42	87
20	148	107	140	19727	0.95	20.5	107.6	188	147	111	190
22	191	128	193	37399	1.01	27.6	137.2	245	192	141	247
24	192	130	194	37816	1.01	28.1	136.8	247	191	142	248
26	178	171	149	22311	0.84	49.8	80.8	276	180	100	279

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	46	34	33	1076	0.72	7.5	30.9	60	46	32.9	61
CK	21	11	28	757	1.29	9.7	2.3	40	22	6.7	40
CR	18	11	16	247	0.87	5.2	7.8	28	18	9.6	28
HB	13	8	14	201	1.12	4.7	3.4	22	13	4.9	23
LC	18	10	20	413	1.14	1.4	15.1	21	18	15.2	21
LT	54	47	35	1232	0.64	7.7	39.5	70	54	40.2	70
NN	28	21	22	463	0.78	5.7	16.4	39	28	17.5	40

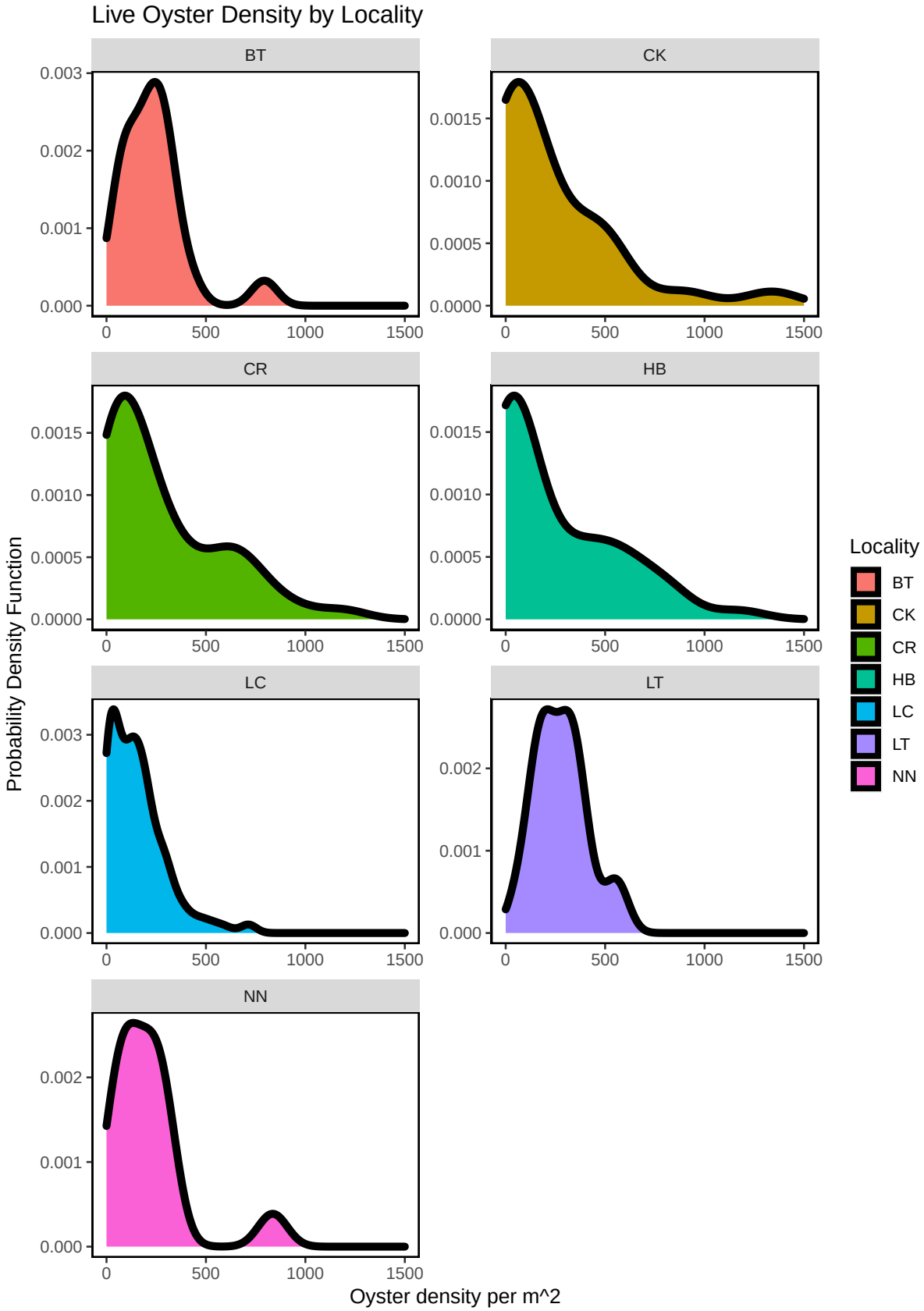
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	33.1	27.7	30.5	928	0.92	3.0	27.2	39	33.2	27.2	39
N_PILOT	8.7	8.7	4.3	18	0.49	1.1	6.5	11	8.7	6.7	11
N_Y	8.4	8.0	6.6	43	0.78	1.0	6.4	10	8.4	6.5	10
Y_N	23.0	15.5	23.5	550	1.02	2.3	18.5	28	23.1	19.0	28
Y_Y	9.8	9.4	6.6	44	0.68	1.6	6.7	13	9.8	6.8	13

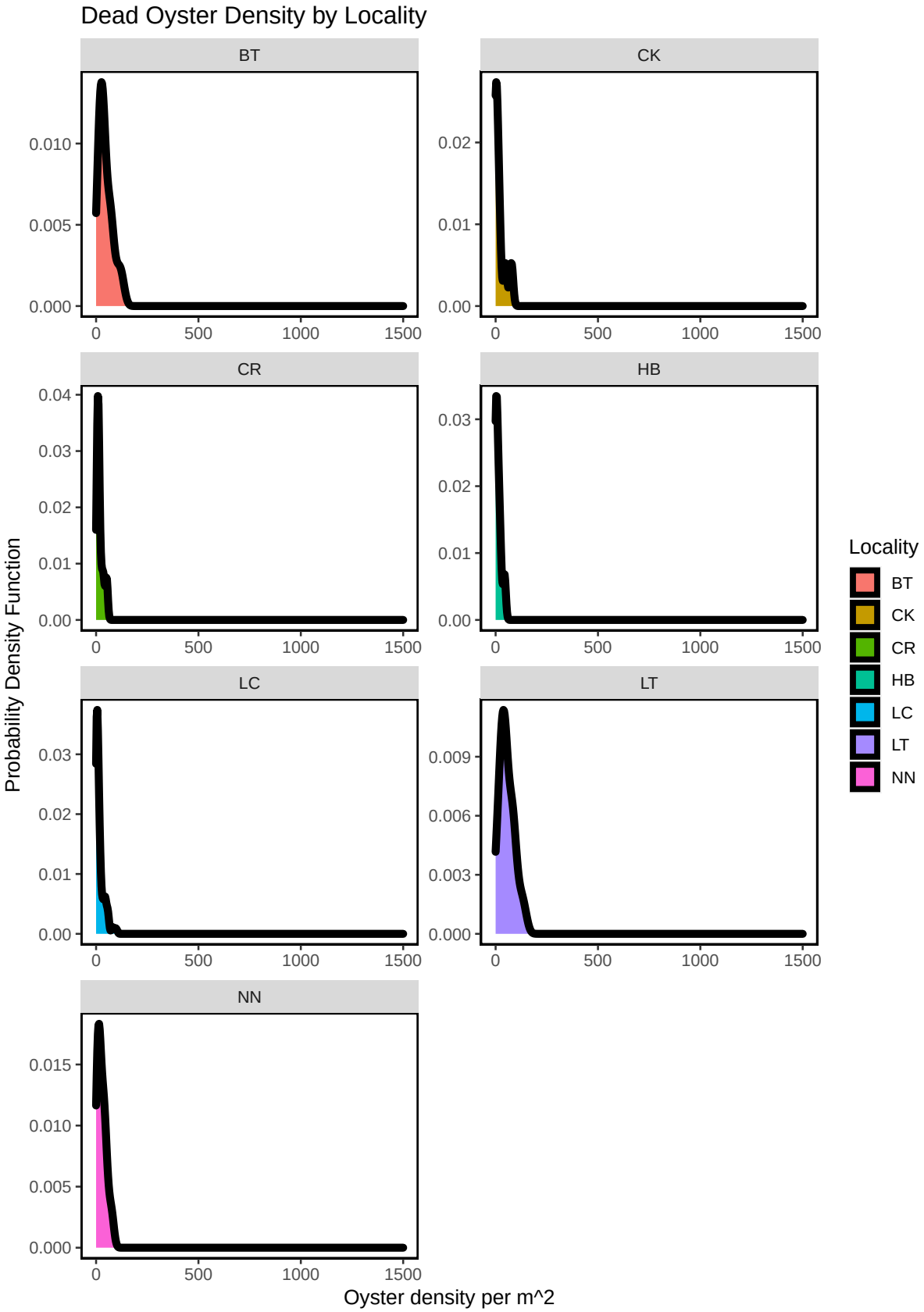
Dead Oyster Density by Period

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	1.3	4.9
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.1	4.0	12.8
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.6	6.8
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	2.0	7.0
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.5	19.2	34.7
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.5	11.4	24.1
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.7	20.5	35.5
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.6	20.9	36.6
24	25.7	19.1	20.9	438.3	0.81	3.02	19.83	31.7	25.8	20.2	32.3
26	13.1	10.3	7.6	58.1	0.58	2.54	8.15	18.1	13.0	8.8	18.2

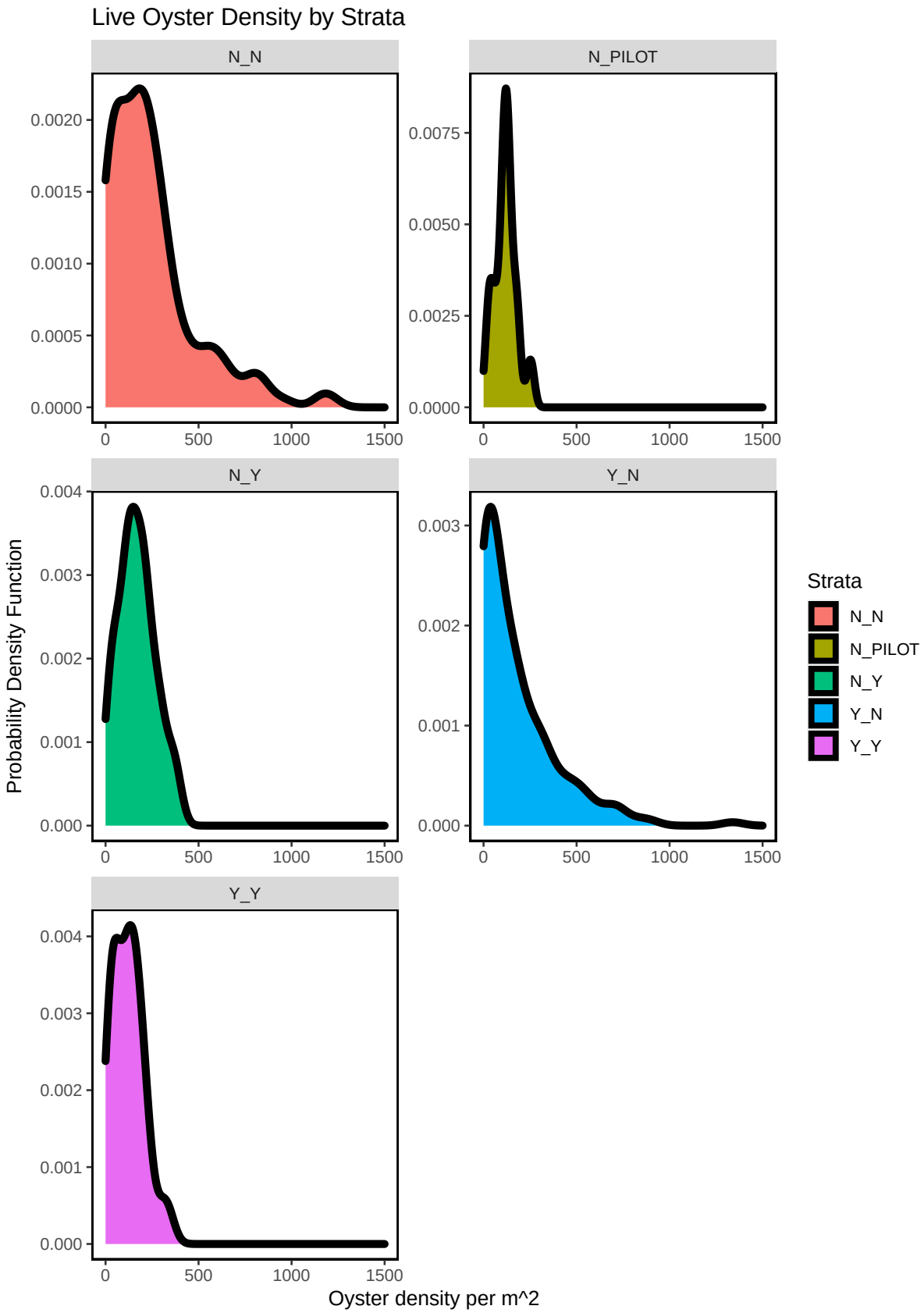
Summary Density Plots for all Periods



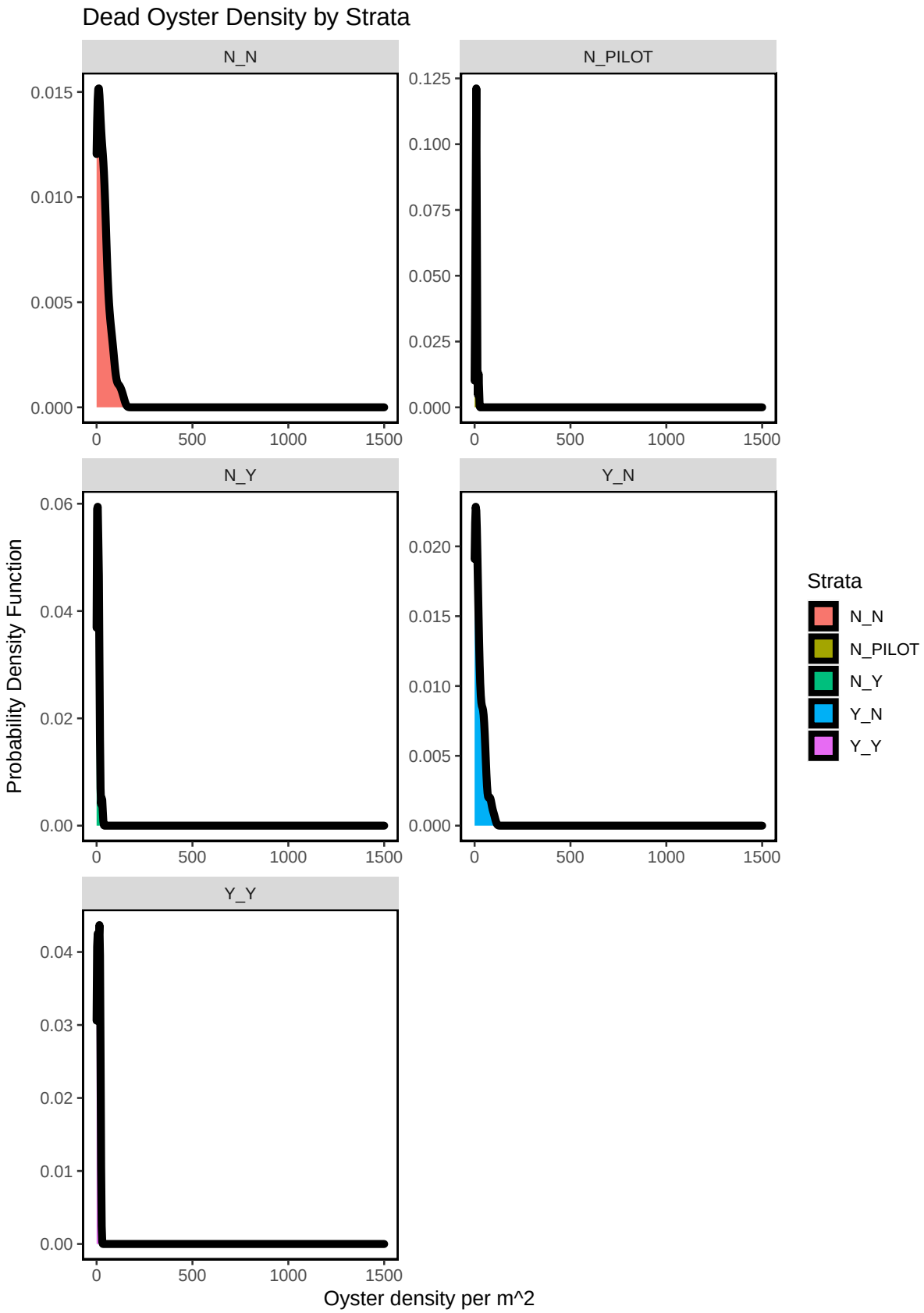
Figure− Calculated live oyster density by locality for all periods including period 22 (current period).



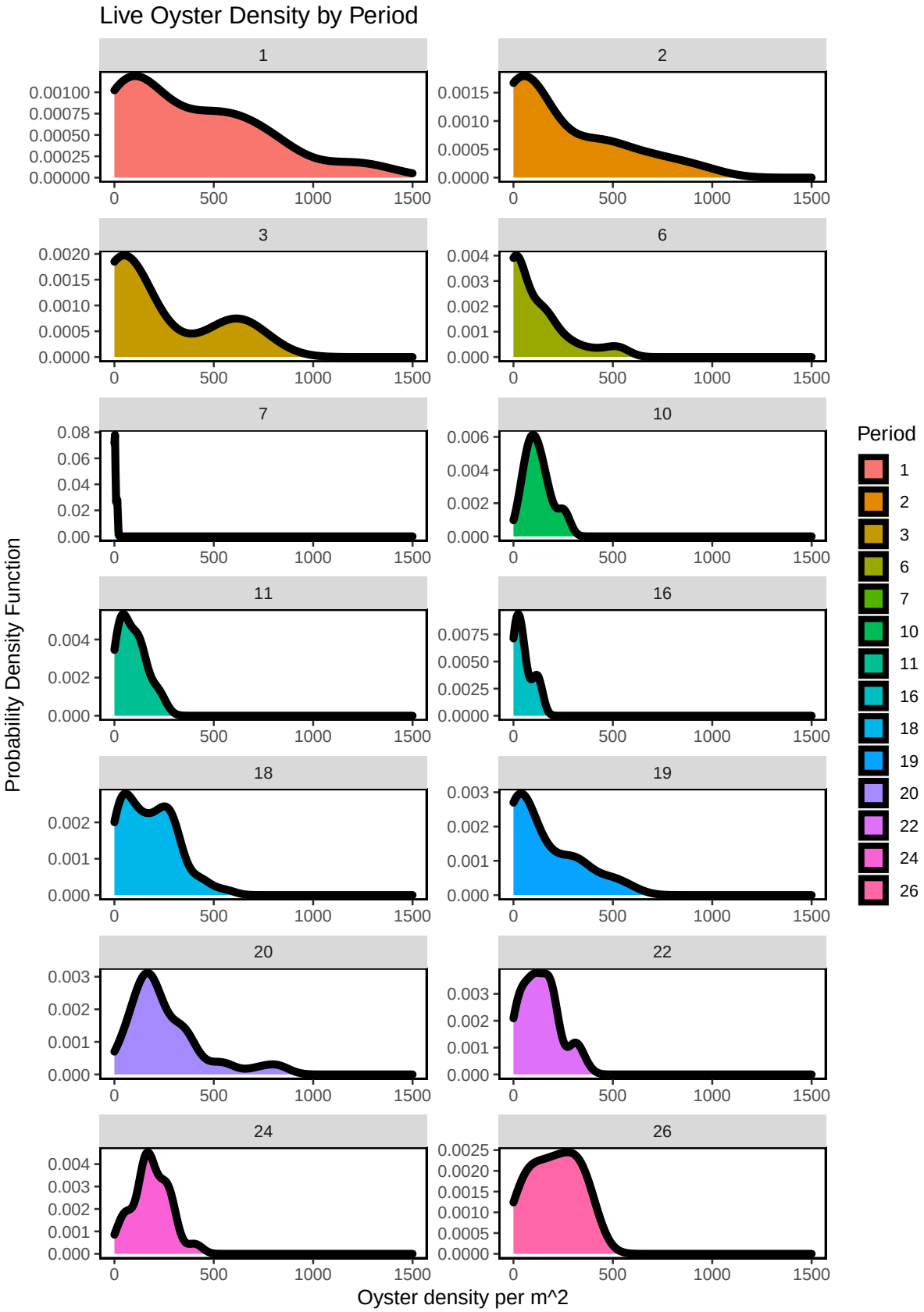
Figure− Calculated dead oyster density by locality for all periods including period 22 (current period).



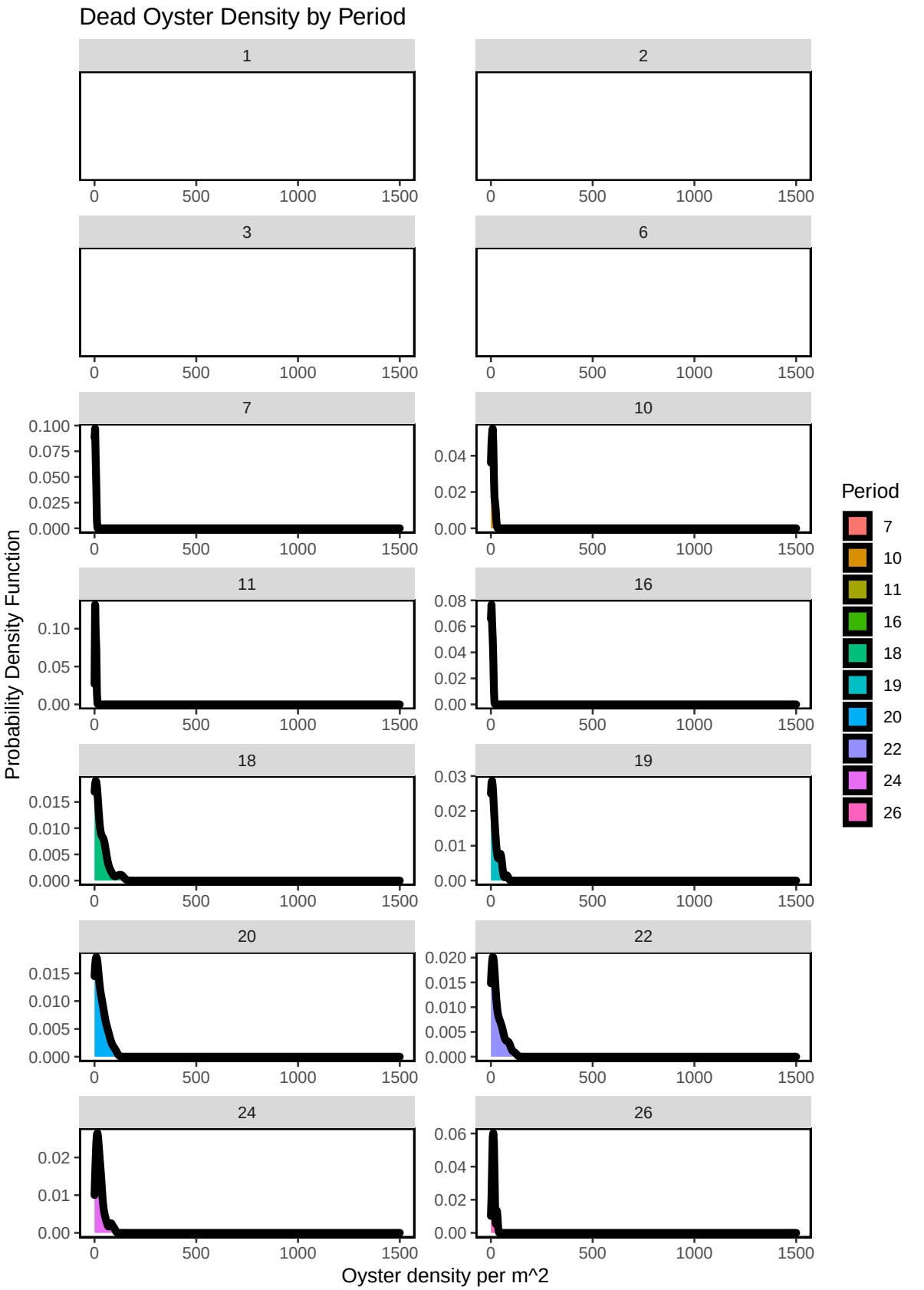
Figure− Calculated live oyster density by strata for all periods including period 22 (current period).



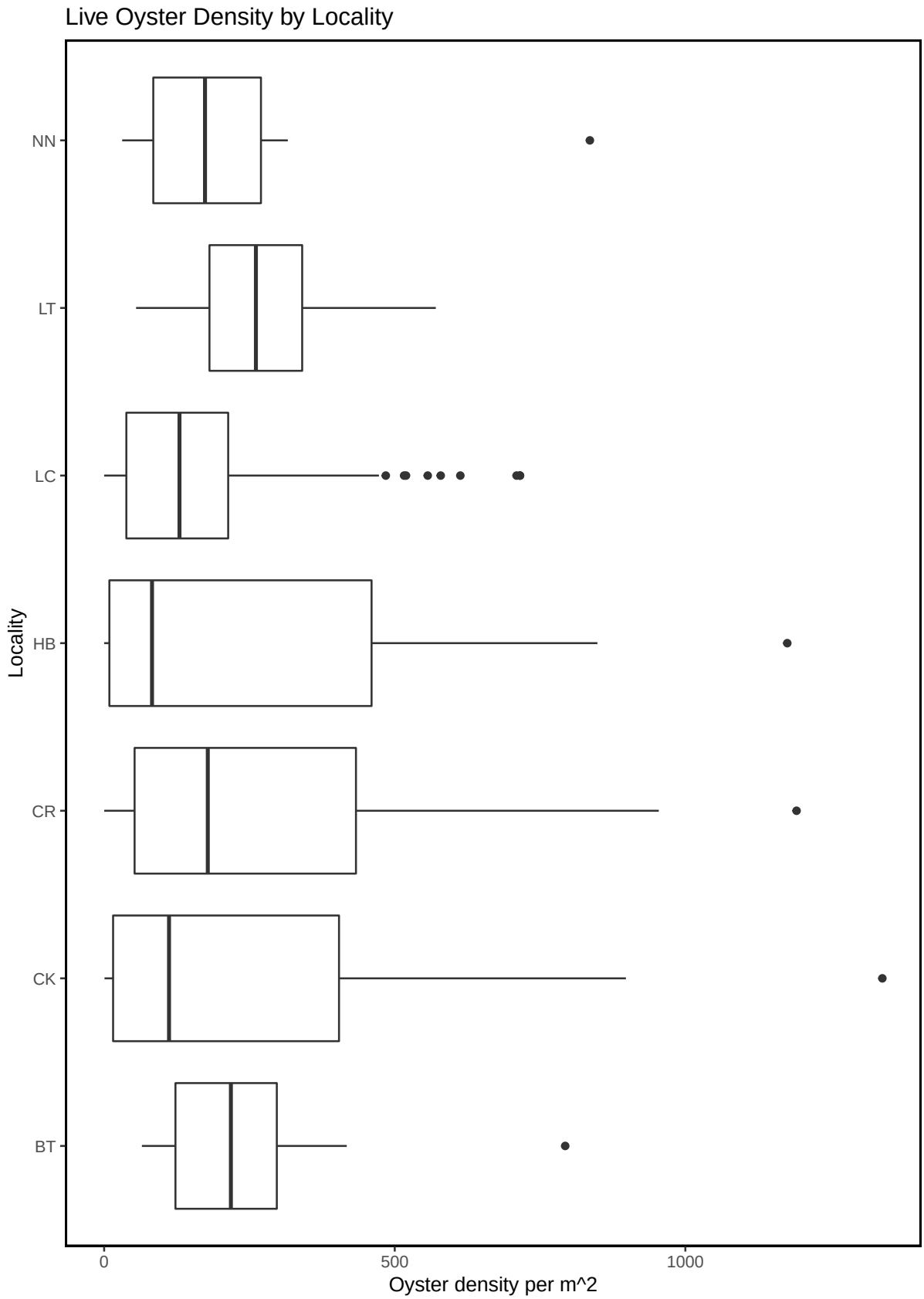
Figure− Calculated dead oyster density by strata for all periods including period 22 (current period).



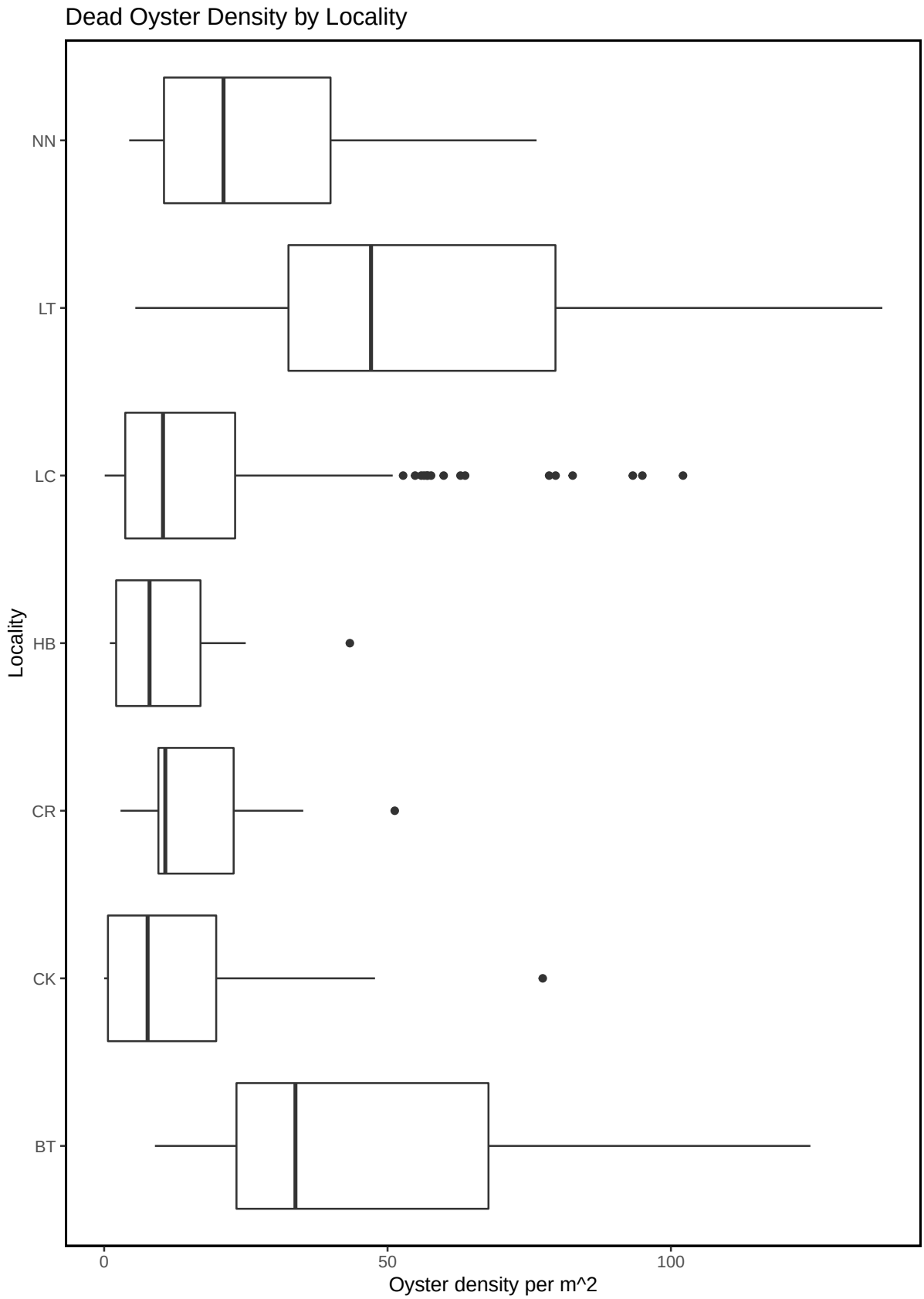
Figure− Calculated live oyster density for all periods including period 24 (current period) using a probability densit



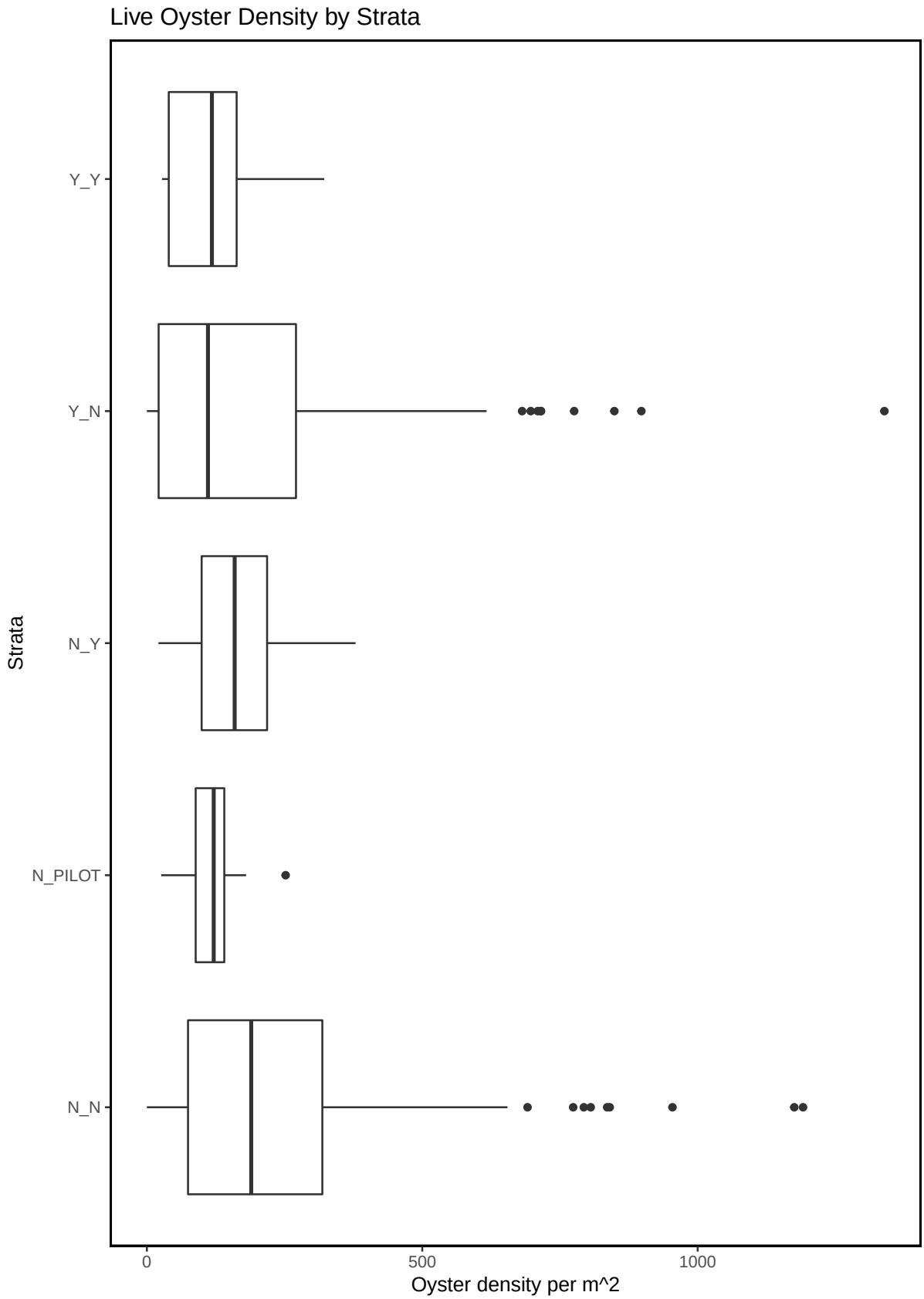
Figure− Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit



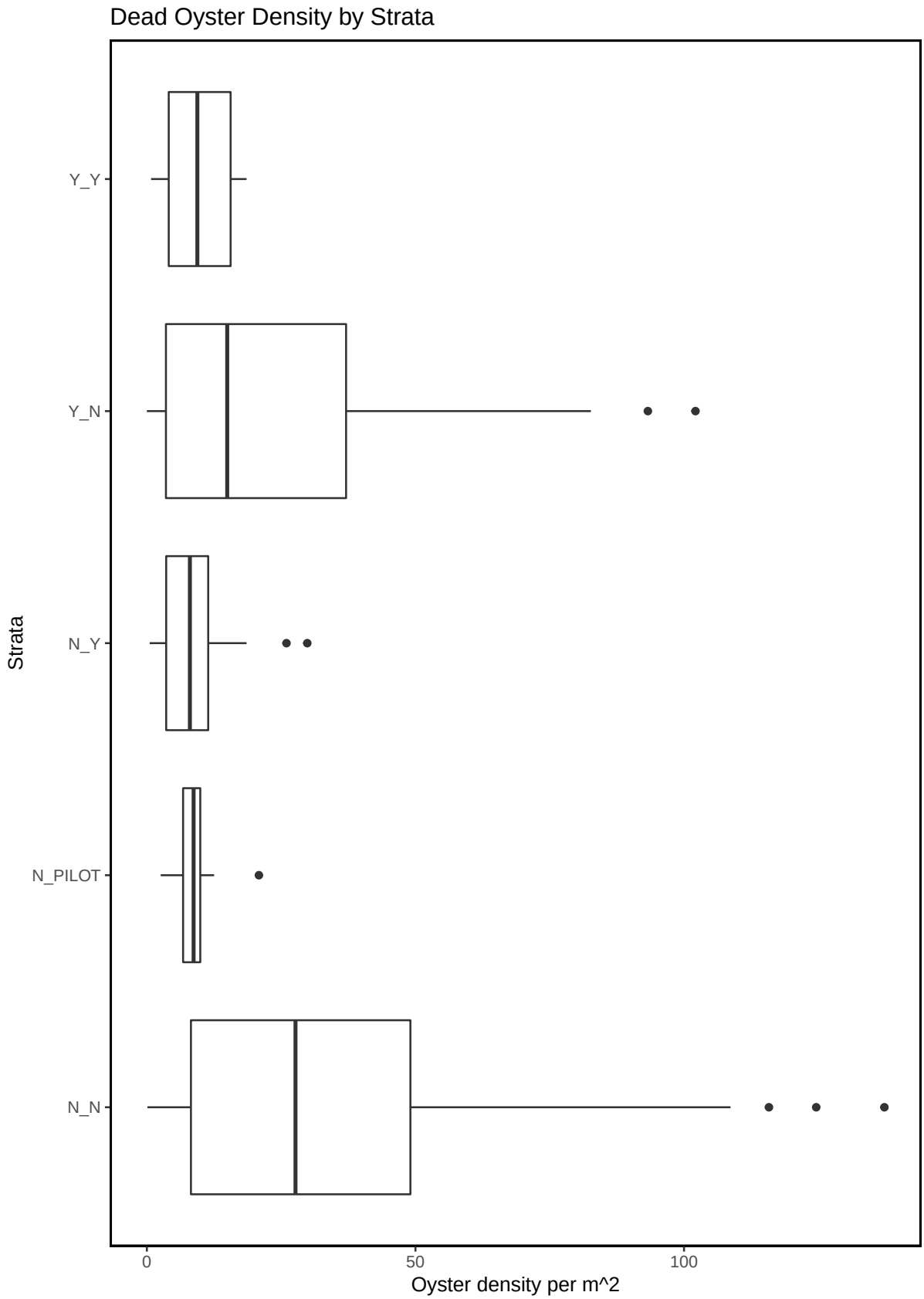
Figure− Box plot depicting live oyster density by locality for all periods including period 22 (current period).



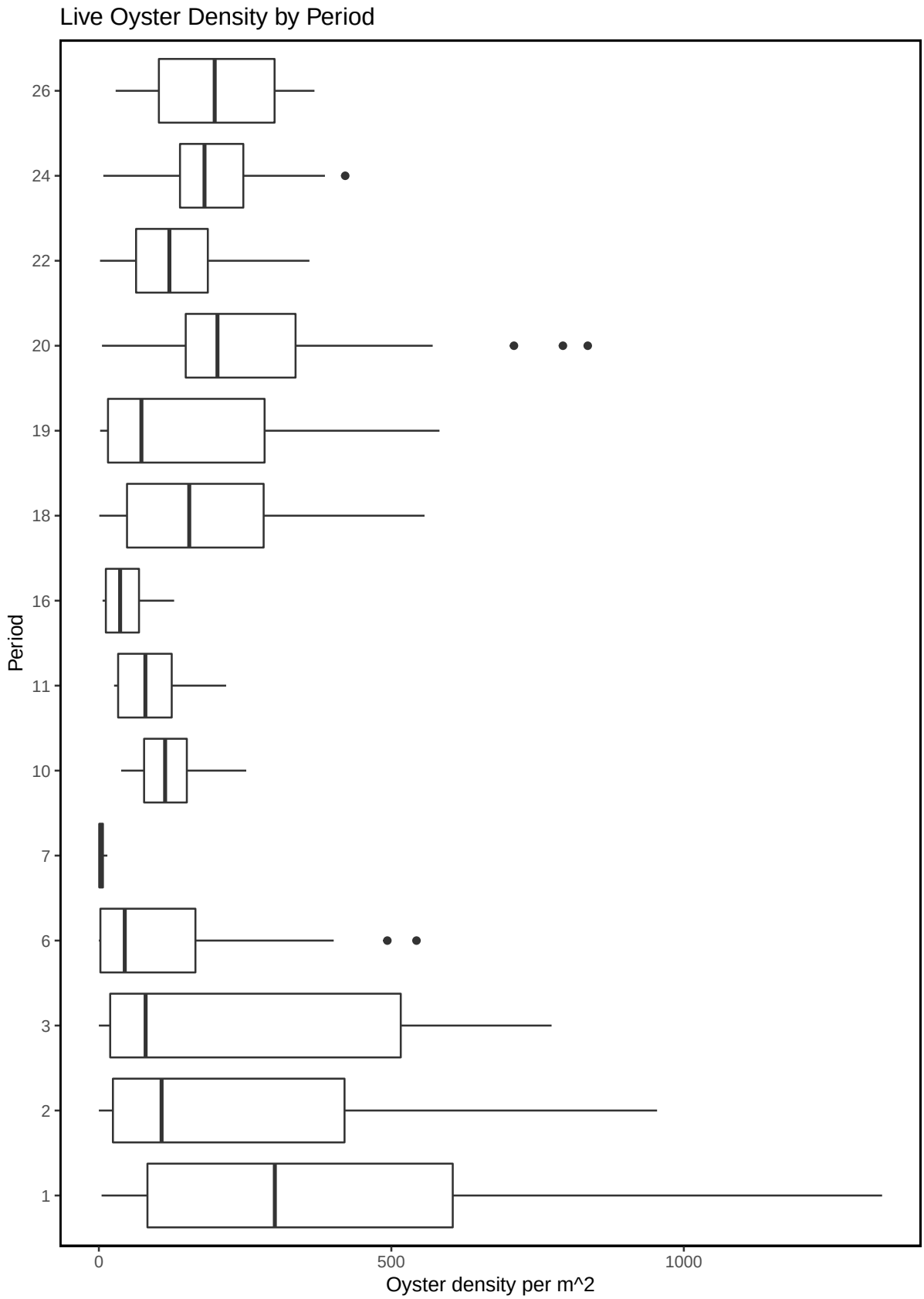
Figure− Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



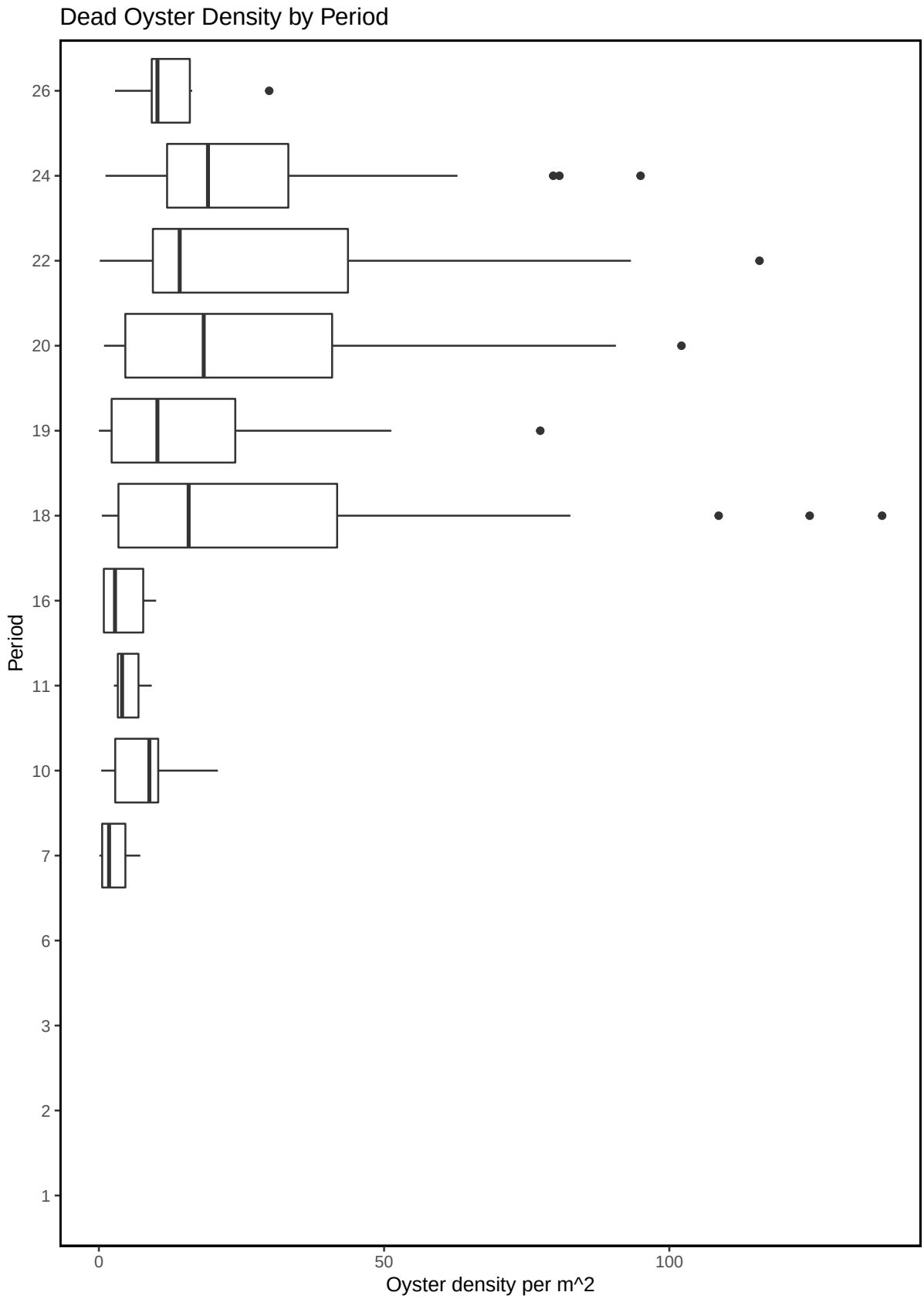
Figure− Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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).

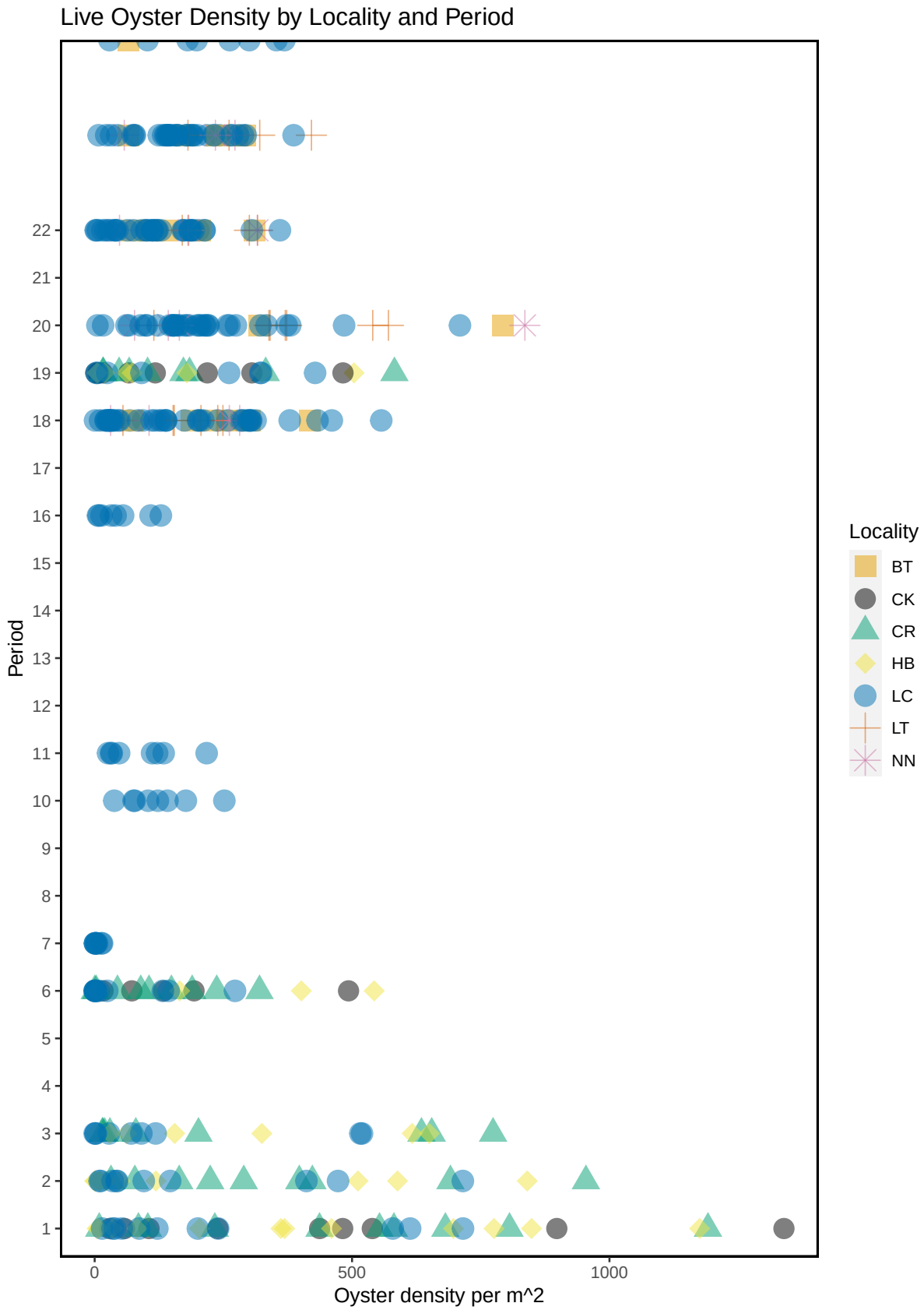


Figure − Live oyster density by locality and period for all periods including period 22 (current period).

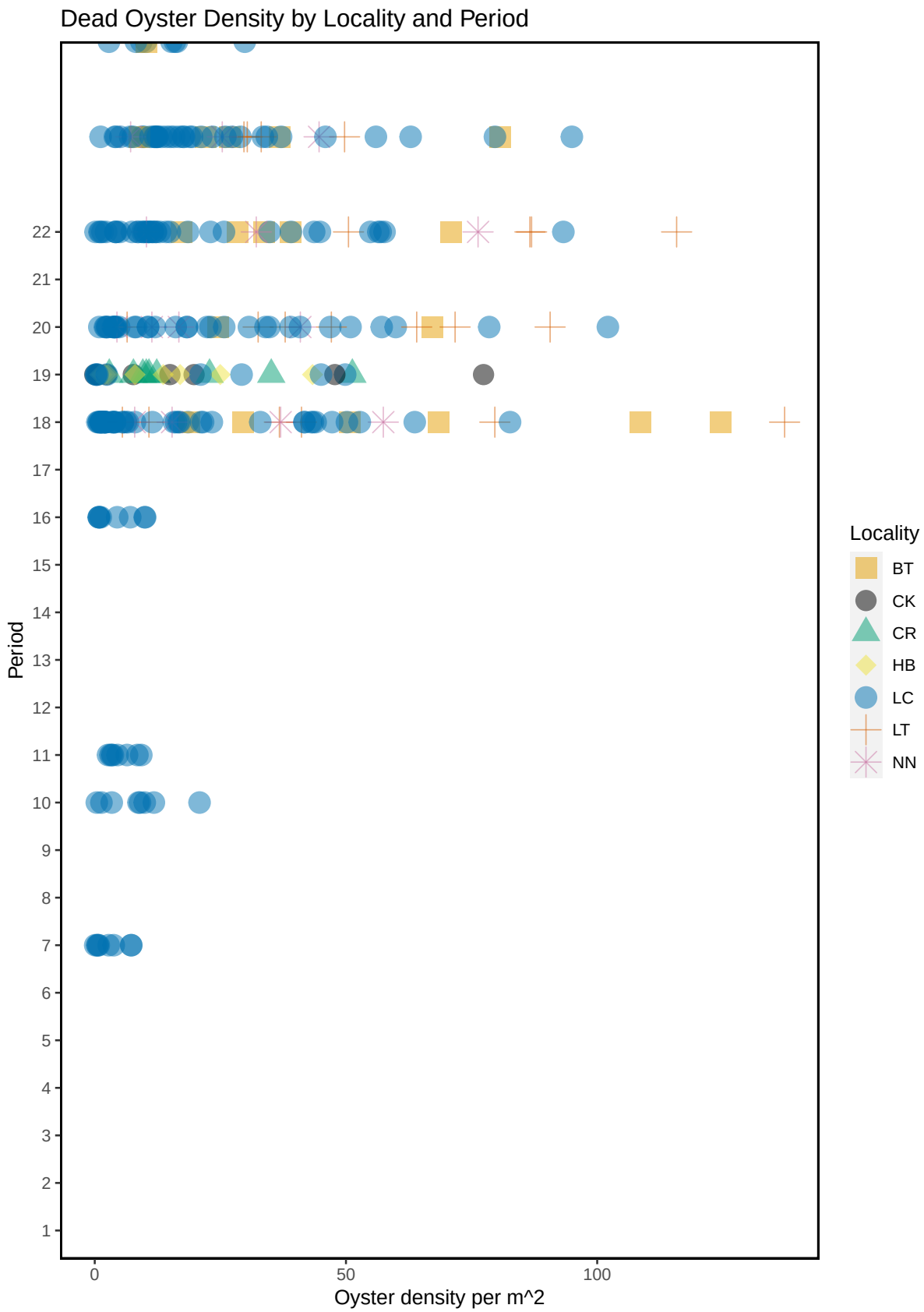


Figure − Dead oyster density by locality and period for all periods including period 22 (current period).

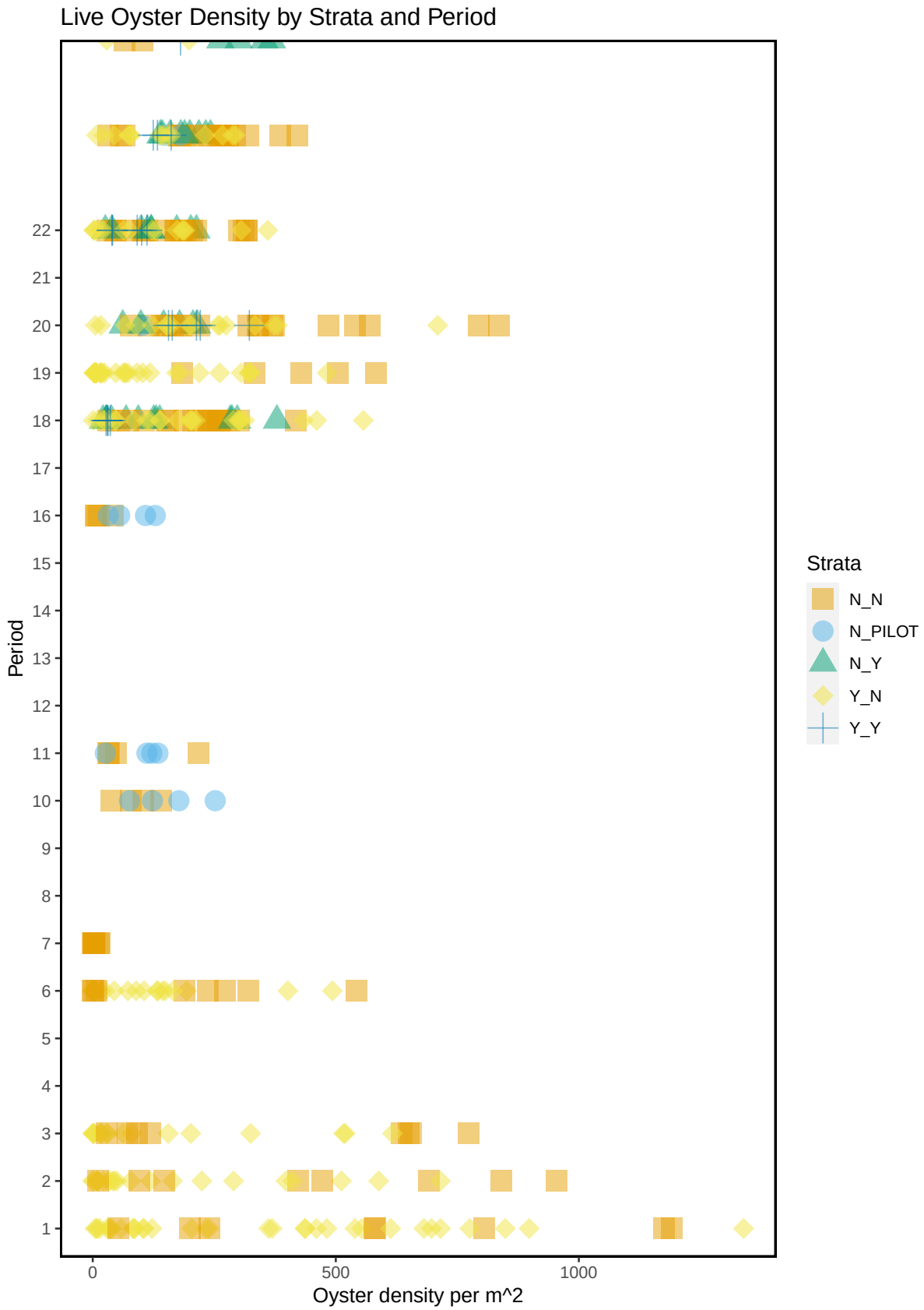


Figure − Live oyster density by strata and period for all periods including period 22 (current period).

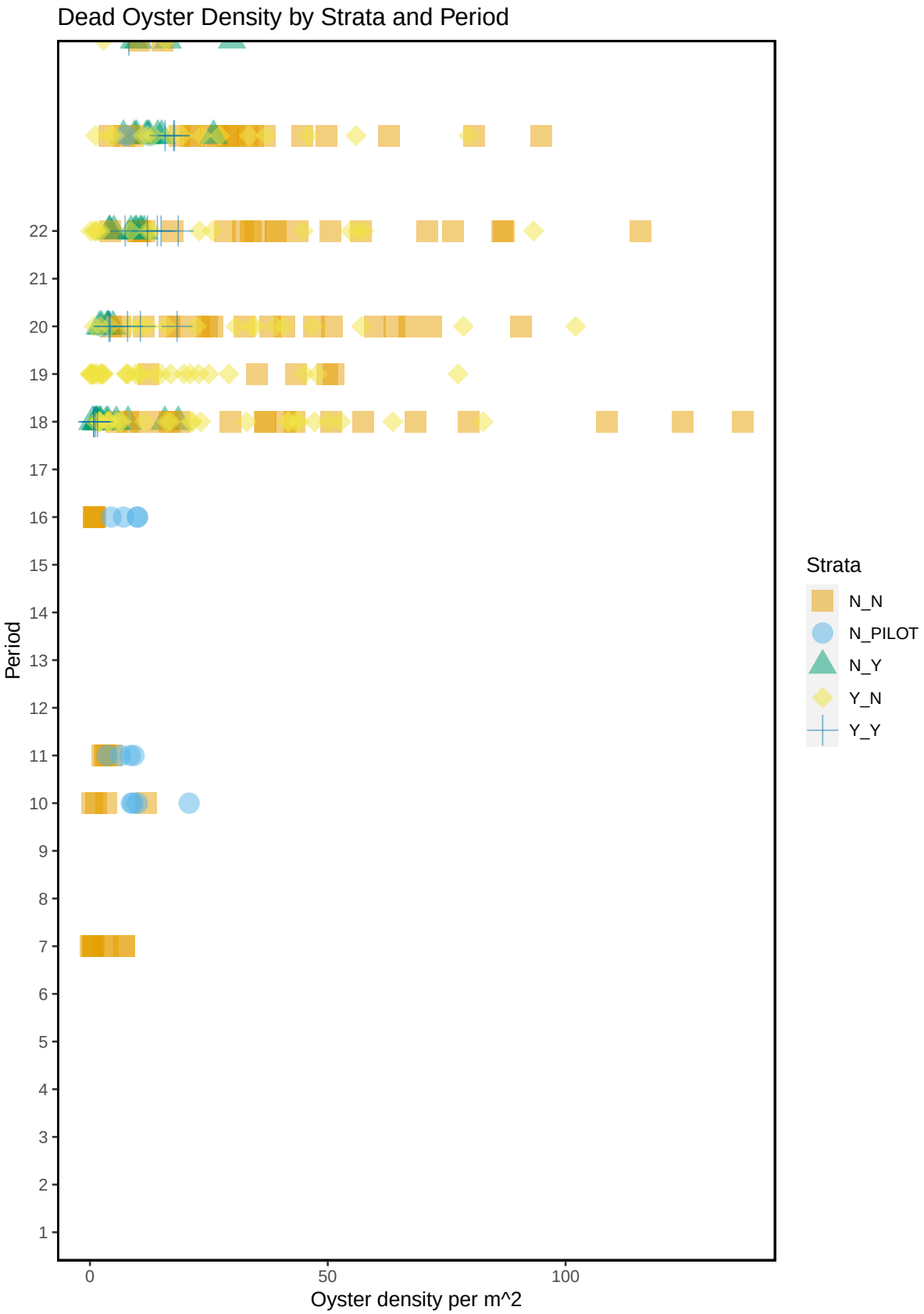


Figure − Dead oyster density by strata and period for all periods including period 22 (current period).

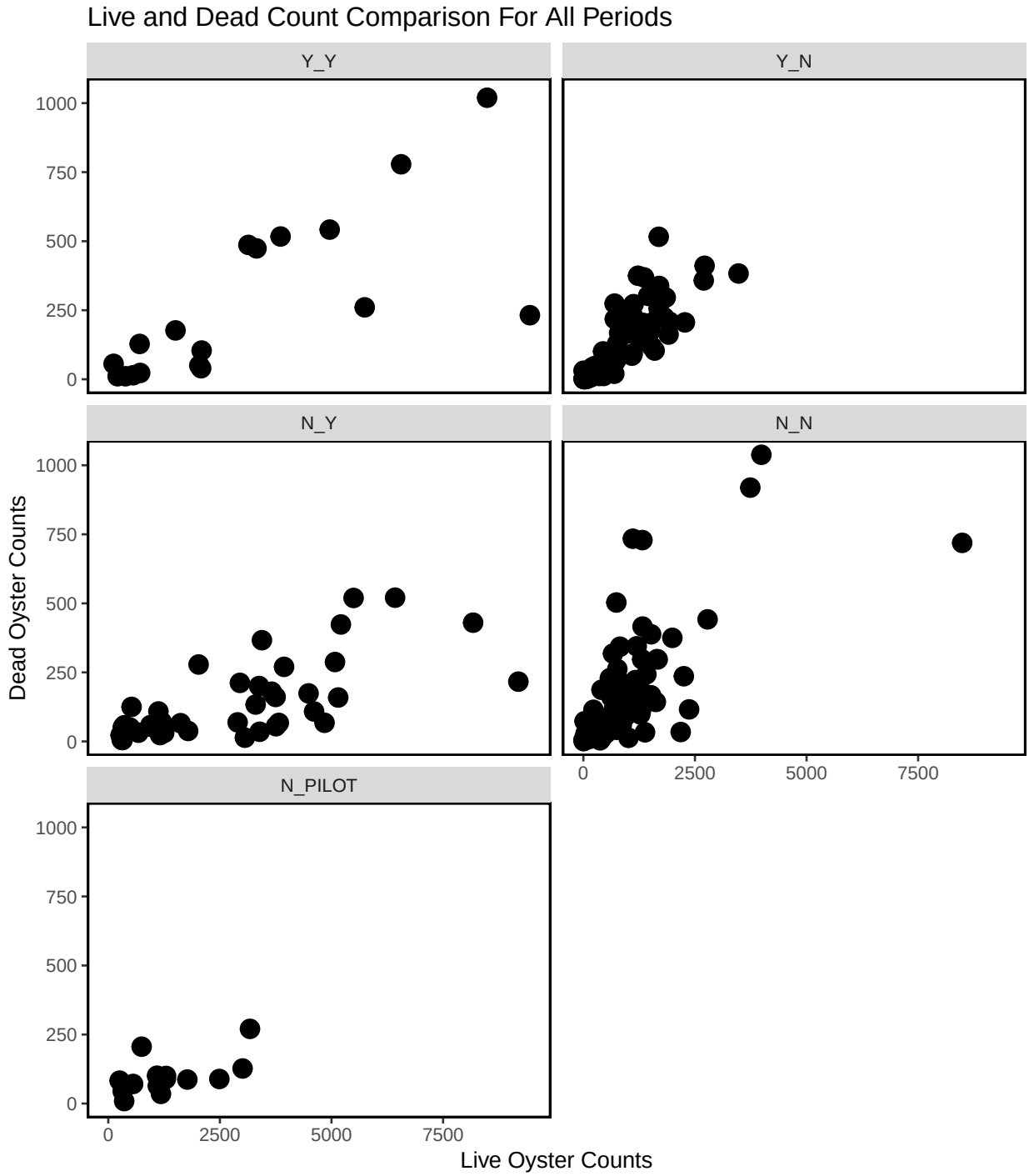


Figure- Live and dead oyster comparison for all periods, last sample date of period 26 is 2022-12-11.

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).

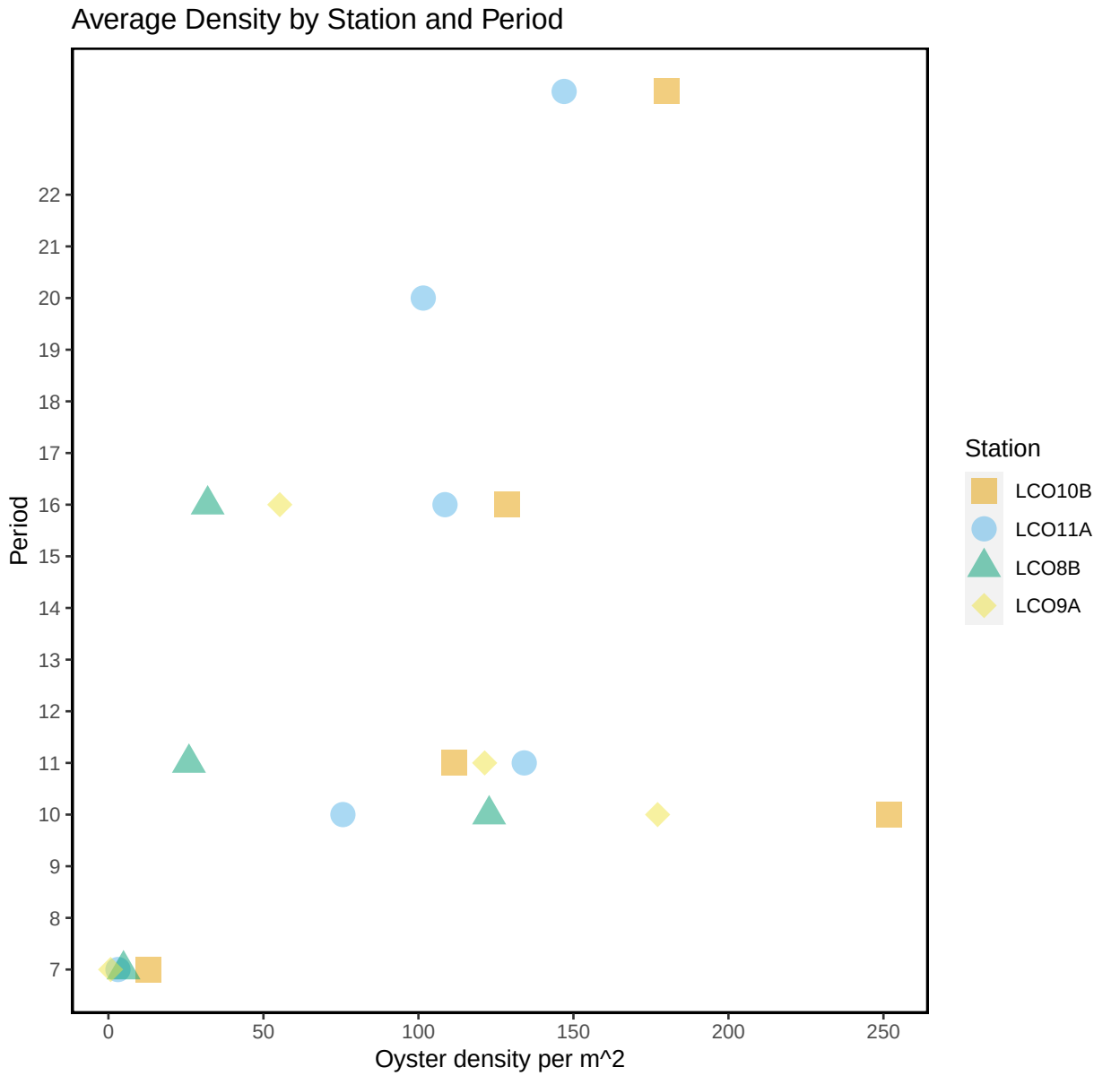


Figure − Average live oyster density comparison by station and period for all stations that were sampled during the pilc

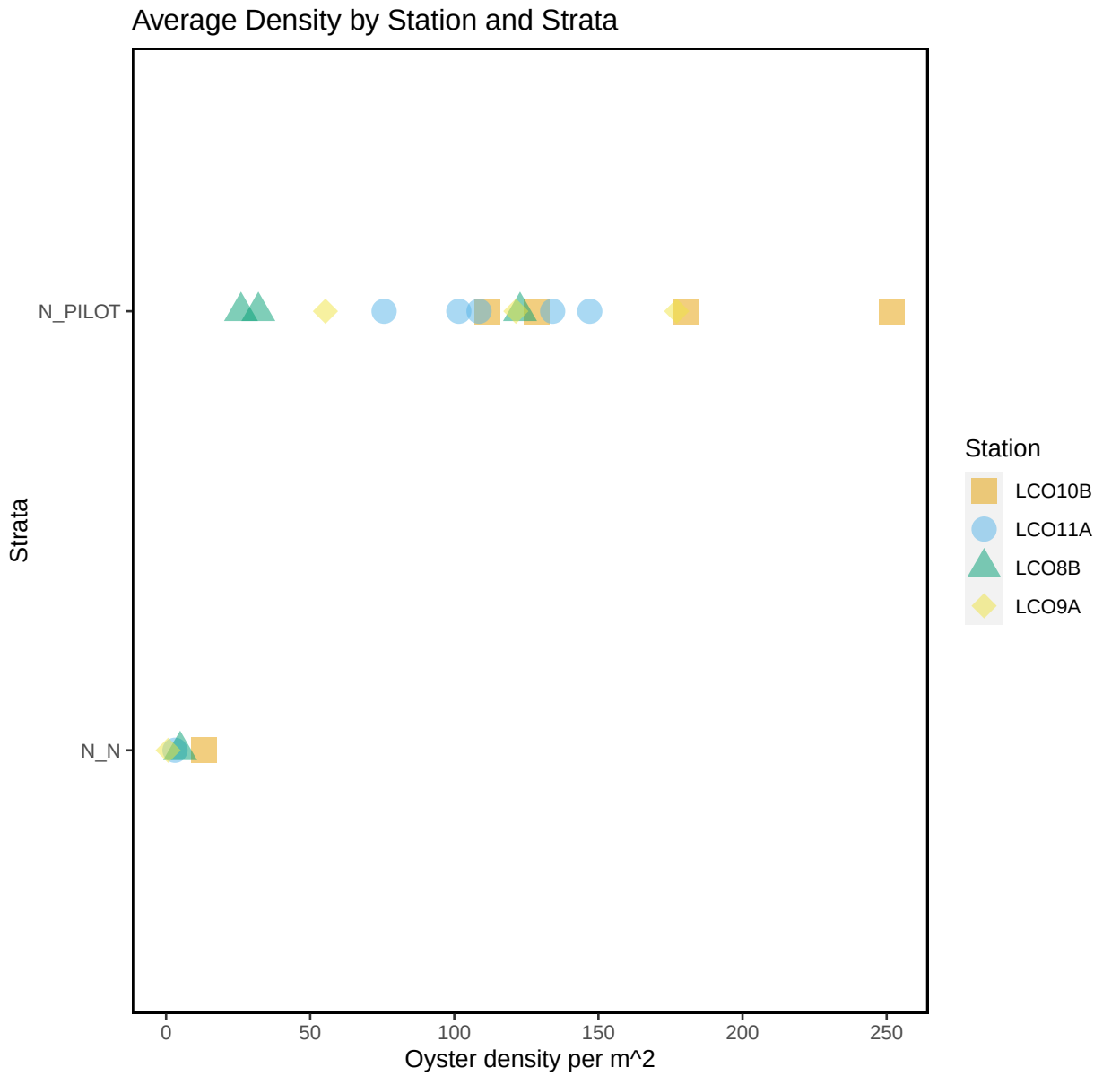


Figure − Average live oyster density comparison by station and strata for all stations that were sampled during th

Latest Data Entered

Displayed are the entries for the last date of sampling (2022-12-11).

date	station	tran_length	count_live	count_dead	treatment	strata
2022-12-11	LCO13	2.5	8	2	rocks	Y_Y
2022-12-11	LCO13	5.0	8	0	rocks	Y_Y
2022-12-11	LCO13	7.5	16	2	rocks	Y_Y
2022-12-11	LCO13	10.0	47	0	rocks	Y_Y
2022-12-11	LCO13	12.5	15	2	rocks	Y_Y
2022-12-11	LCO13	15.0	50	0	rocks	Y_Y
2022-12-11	LCO13	17.5	83	4	rocks	Y_Y
2022-12-11	LCO13	20.0	99	2	rocks	Y_Y
2022-12-11	LCO13	22.0	49	3	rocks	Y_Y
2022-12-11	LCO13	22.3	12	1	rocks	Y_Y
2022-12-11	LCO13	2.5	46	0	rocks	Y_Y
2022-12-11	LCO13	5.0	5	1	rocks	Y_Y
2022-12-11	LCO13	7.5	21	4	rocks	Y_Y
2022-12-11	LCO13	10.0	13	0	rocks	Y_Y
2022-12-11	LCO13	12.5	77	4	rocks	Y_Y
2022-12-11	LCO13	15.0	112	10	rocks	Y_Y
2022-12-11	LCO13	17.5	85	4	rocks	Y_Y
2022-12-11	LCO13	20.0	64	3	rocks	Y_Y
2022-12-11	LCO13	22.0	12	0	rocks	Y_Y
2022-12-11	LCO13	23.4	19	1	rocks	Y_Y
2022-12-11	LCO13	2.5	30	7	rocks	Y_Y
2022-12-11	LCO13	5.0	31	2	rocks	Y_Y
2022-12-11	LCO13	7.5	44	5	rocks	Y_Y
2022-12-11	LCO13	10.0	69	6	rocks	Y_Y
2022-12-11	LCO13	12.5	63	2	rocks	Y_Y
2022-12-11	LCO13	15.0	74	9	rocks	Y_Y
2022-12-11	LCO13	17.5	62	1	rocks	Y_Y
2022-12-11	LCO13	20.0	41	3	rocks	Y_Y
2022-12-11	LCO13	22.0	38	4	rocks	Y_Y
2022-12-11	LCO13	22.7	11	0	rocks	Y_Y
2022-12-11	LCO13	2.5	27	3	rocks	Y_Y
2022-12-11	LCO13	5.0	17	1	rocks	Y_Y
2022-12-11	LCO13	7.5	39	1	rocks	Y_Y
2022-12-11	LCO13	10.0	87	1	rocks	Y_Y
2022-12-11	LCO13	12.5	51	3	rocks	Y_Y
2022-12-11	LCO13	15.0	81	2	rocks	Y_Y
2022-12-11	LCO13	17.5	59	0	rocks	Y_Y
2022-12-11	LCO13	20.0	46	2	rocks	Y_Y
2022-12-11	LCO13	22.0	45	1	rocks	Y_Y
2022-12-11	LCO13	22.7	10	0	rocks	Y_Y
2022-12-11	LCO13	2.5	59	0	rocks	Y_Y
2022-12-11	LCO13	5.0	99	0	rocks	Y_Y
2022-12-11	LCO13	7.5	73	3	rocks	Y_Y
2022-12-11	LCO13	10.0	100	4	rocks	Y_Y
2022-12-11	LCO13	12.5	96	0	rocks	Y_Y
2022-12-11	LCO13	15.0	157	6	rocks	Y_Y
2022-12-11	LCO13	17.5	104	3	rocks	Y_Y
2022-12-11	LCO13	20.0	109	4	rocks	Y_Y
2022-12-11	LCO13	22.0	105	2	rocks	Y_Y

2022-12-11	LCO13	22.7	20	0	rocks	Y_Y
2022-12-11	LCO13	2.5	78	1	rocks	Y_Y
2022-12-11	LCO13	5.0	157	12	rocks	Y_Y
2022-12-11	LCO13	7.5	123	6	rocks	Y_Y
2022-12-11	LCO13	10.0	111	2	rocks	Y_Y
2022-12-11	LCO13	12.5	73	1	rocks	Y_Y
2022-12-11	LCO13	15.0	142	7	rocks	Y_Y
2022-12-11	LCO13	17.5	125	6	rocks	Y_Y
2022-12-11	LCO13	20.0	162	12	rocks	Y_Y
2022-12-11	LCO13	22.0	67	5	rocks	Y_Y
2022-12-11	LCO13	23.0	18	0	rocks	Y_Y
2022-12-11	LCO13	2.5	21	0	rocks	Y_Y
2022-12-11	LCO13	5.0	6	0	rocks	Y_Y
2022-12-11	LCO13	7.5	13	1	rocks	Y_Y
2022-12-11	LCO13	10.0	11	0	rocks	Y_Y
2022-12-11	LCO13	12.5	9	0	rocks	Y_Y
2022-12-11	LCO13	15.0	3	0	rocks	Y_Y
2022-12-11	LCO13	17.5	11	0	rocks	Y_Y
2022-12-11	LCO13	20.0	0	0	rocks	Y_Y
2022-12-11	LCO13	22.0	5	0	rocks	Y_Y
2022-12-11	LCO13	22.8	25	2	rocks	Y_Y
2022-12-11	LCO13	2.5	104	5	rocks	Y_Y
2022-12-11	LCO13	5.0	82	6	rocks	Y_Y
2022-12-11	LCO13	7.5	77	0	rocks	Y_Y
2022-12-11	LCO13	10.0	118	4	rocks	Y_Y
2022-12-11	LCO13	12.5	121	2	rocks	Y_Y
2022-12-11	LCO13	15.0	111	7	rocks	Y_Y
2022-12-11	LCO13	17.5	72	3	rocks	Y_Y
2022-12-11	LCO13	20.0	55	2	rocks	Y_Y
2022-12-11	LCO13	22.0	73	3	rocks	Y_Y
2022-12-11	LCO13	24.2	58	5	rocks	Y_Y
2022-12-11	LCO13	2.5	30	0	rocks	Y_Y
2022-12-11	LCO13	5.0	78	3	rocks	Y_Y
2022-12-11	LCO13	7.5	207	5	rocks	Y_Y
2022-12-11	LCO13	10.0	142	3	rocks	Y_Y
2022-12-11	LCO13	12.5	28	0	rocks	Y_Y
2022-12-11	LCO13	15.0	82	3	rocks	Y_Y
2022-12-11	LCO13	17.5	82	2	rocks	Y_Y
2022-12-11	LCO13	20.0	50	2	rocks	Y_Y
2022-12-11	LCO13	22.0	30	1	rocks	Y_Y
2022-12-11	LCO13	24.1	43	2	rocks	Y_Y
2022-12-11	LCO13	2.5	62	7	rocks	Y_Y
2022-12-11	LCO13	5.0	72	9	rocks	Y_Y
2022-12-11	LCO13	7.5	104	10	rocks	Y_Y
2022-12-11	LCO13	10.0	80	3	rocks	Y_Y
2022-12-11	LCO13	12.5	116	7	rocks	Y_Y
2022-12-11	LCO13	15.0	82	5	rocks	Y_Y
2022-12-11	LCO13	17.5	63	5	rocks	Y_Y
2022-12-11	LCO13	20.0	30	5	rocks	Y_Y
2022-12-11	LCO13	22.0	56	4	rocks	Y_Y
2022-12-11	LCO13	23.6	51	1	rocks	Y_Y