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

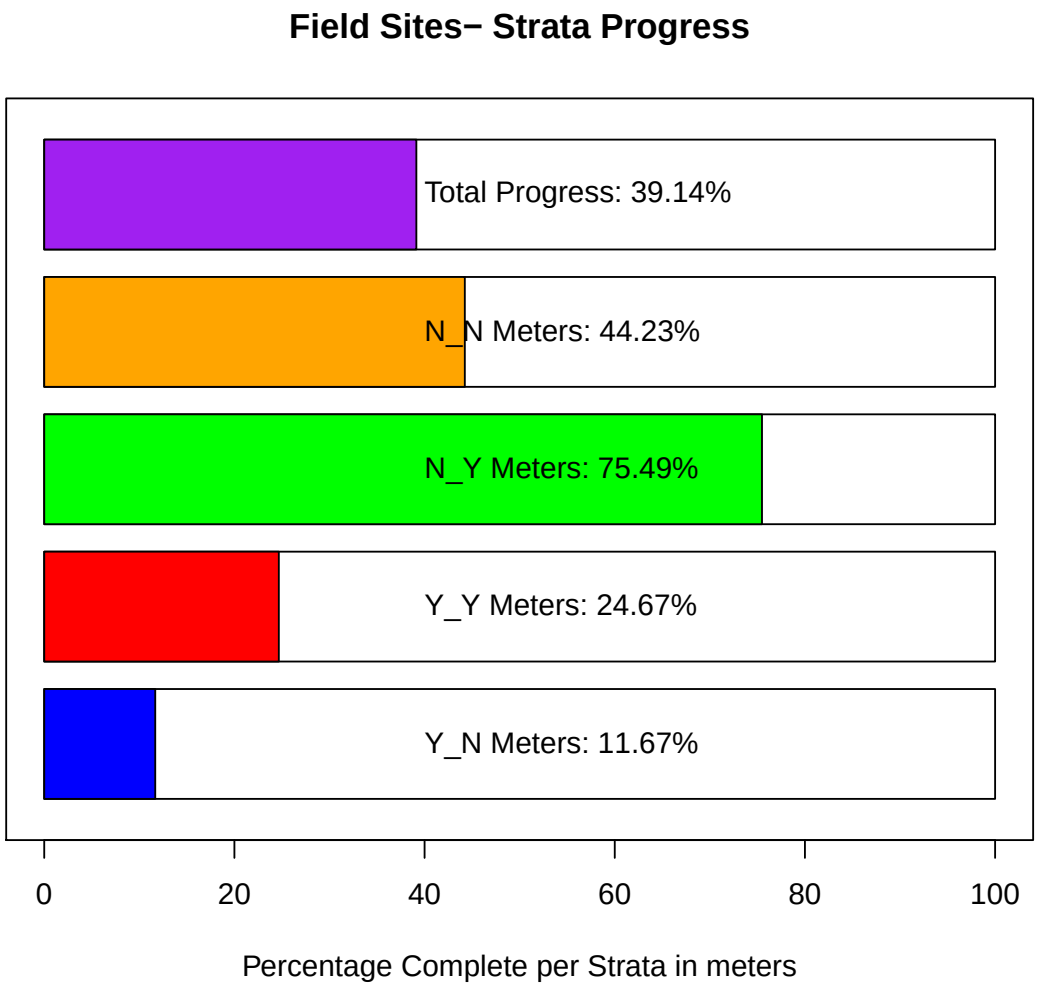
LOCALITY	LOCATION
BT	Big Trout
CK	Cedar Key
CR	Corrigan's Reef
HB	Horseshoe Beach
LC	Lone Cabbage
LT	Little Trout
NN	No Name

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)

Data are aggregated by station and period and then summarized in the tables below. Live counts are the number of live oysters summarized by locality, strata, and period, and density is the number of live oysters per square meter summarized by locality, strata, and period.

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	1325	579	2571
LC	1920	1200	2083	4338305	1.08	194	1539	2301	1922	1539	2351
LT	1097	877	582	338863	0.53	150	802	1392	1095	854	1401
NN	842	714	639	408613	0.76	202	446	1238	842	521	1251

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	1088	840	1414
N_PILOT	2180	3009	1582	2501624	0.73	913	390	3970	2190	356	3174
N_Y	3650	3674	2182	4759072	0.60	412	2842	4458	3654	2864	4504
Y_N	740	626	662	437764	0.89	95	555	926	741	563	934
Y_Y	3861	3230	2836	8044464	0.73	758	2375	5347	3913	2526	5411

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	1849	1310	2508
22	1334	702	1693	2867783	1.3	242	860	1808	1329	885	1838
24	1729	942	1845	3403035	1.1	266	1207	2251	1742	1256	2246
26	3107	3690	2496	6230888	0.8	832	1476	4738	3124	1682	4591

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	237	152	348
LC	168	161	110	12103	0.65	10	148	188	168	149	188
LT	320	321	129	16749	0.40	33	255	386	320	256	386
NN	233	174	230	52911	0.99	73	91	376	230	123	377

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	201	281
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	178	150	206
Y_N	162	153	134	18016	0.83	19	125	200	163	131	204
Y_Y	147	145	75	5563	0.51	20	108	186	146	108	182

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	255	207	306
22	137	121	93	8638	0.68	13	111	163	137	111	163
24	185	181	92	8385	0.49	13	159	211	185	159	210
26	207	198	124	15322	0.60	41	126	288	206	128	278

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	164	95	268
LC	182	130	185	34048	1.02	17	148	216	181	149	215
LT	206	137	151	22760	0.73	39	130	282	204	132	277
NN	102	72	94	8760	0.92	30	44	160	103	60	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	172	132	215
N_PILOT	136	127	131	17150	0.97	76	-13	284	135	9	270
N_Y	196	166	143	20537	0.73	27	143	249	197	147	248
Y_N	128	81	130	16802	1.01	19	92	164	128	93	164
Y_Y	348	246	299	89594	0.86	80	191	504	347	206	485

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	148	112	193
22	191	128	193	37399	1.01	28	137	245	191	145	242
24	192	130	194	37816	1.01	28	137	247	192	140	248
26	178	171	149	22311	0.84	50	81	276	178	102	270

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	24	47
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	55	42	70
NN	27	21	22	500	0.83	7.1	13	41	27	15	40

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	37.9	31.9	44
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	7.7	13
Y_N	27.4	19.4	25.6	658	0.94	3.7	20.2	35	27.3	20.5	34
Y_Y	12.3	13.1	5.2	27	0.42	1.4	9.5	15	12.3	9.7	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	20.3	35
22	28	14	28.4	807	1.00	4.1	20.5	36	28	21.0	37
24	26	19	20.9	438	0.81	3.0	19.8	32	26	20.4	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

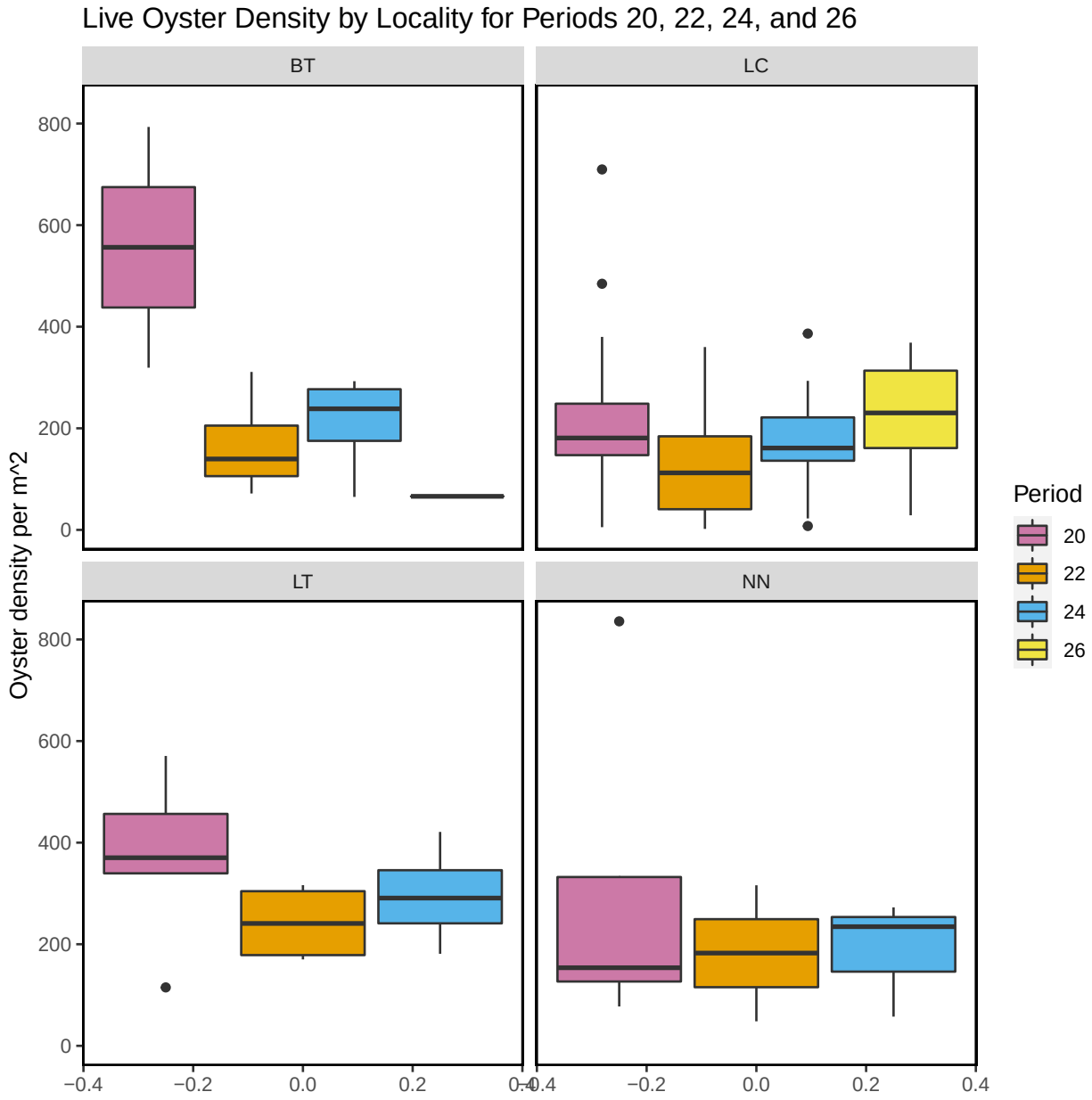


Figure- Calculated live oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-12-11.

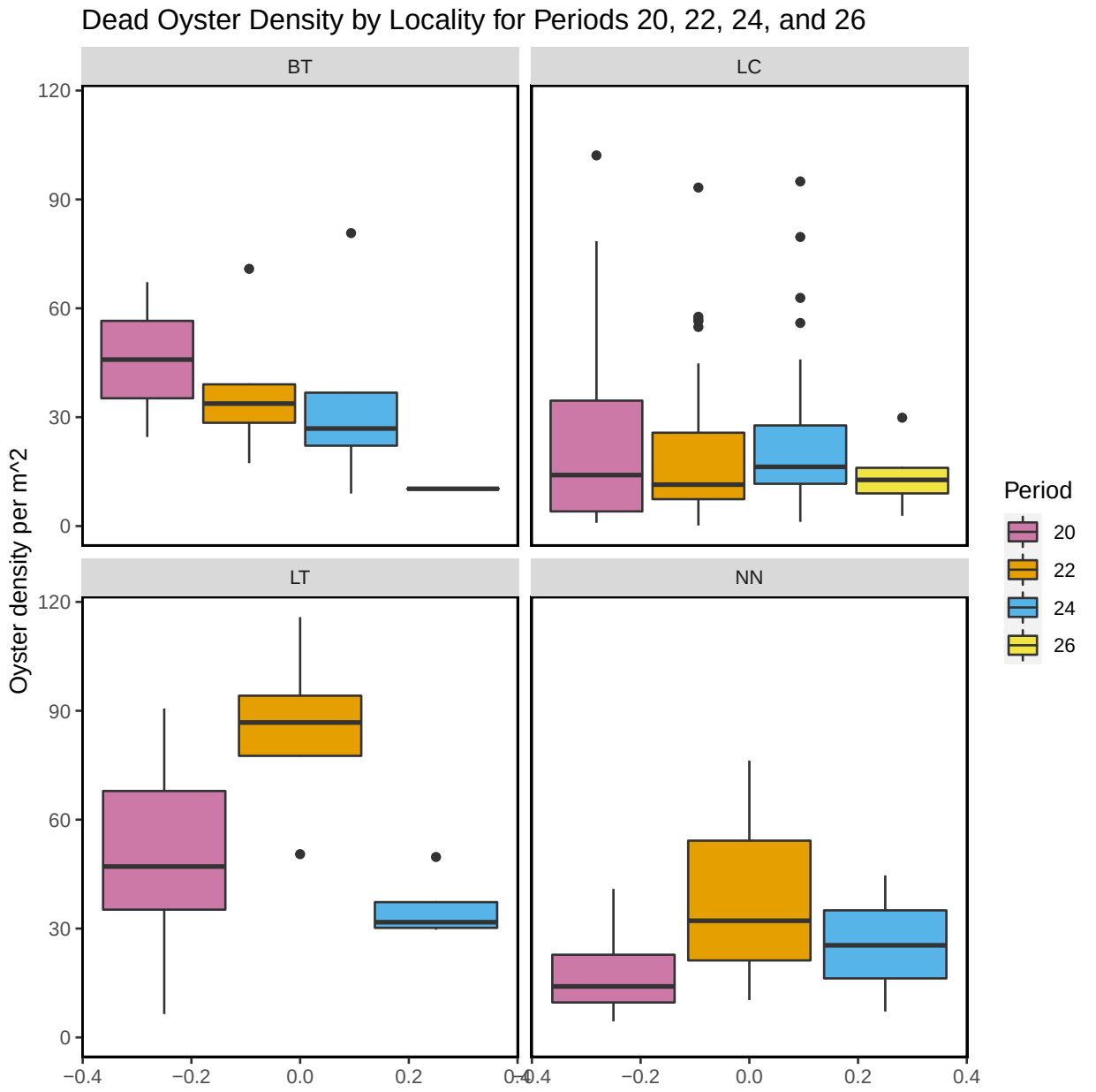


Figure- Calculated dead oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-12-11.

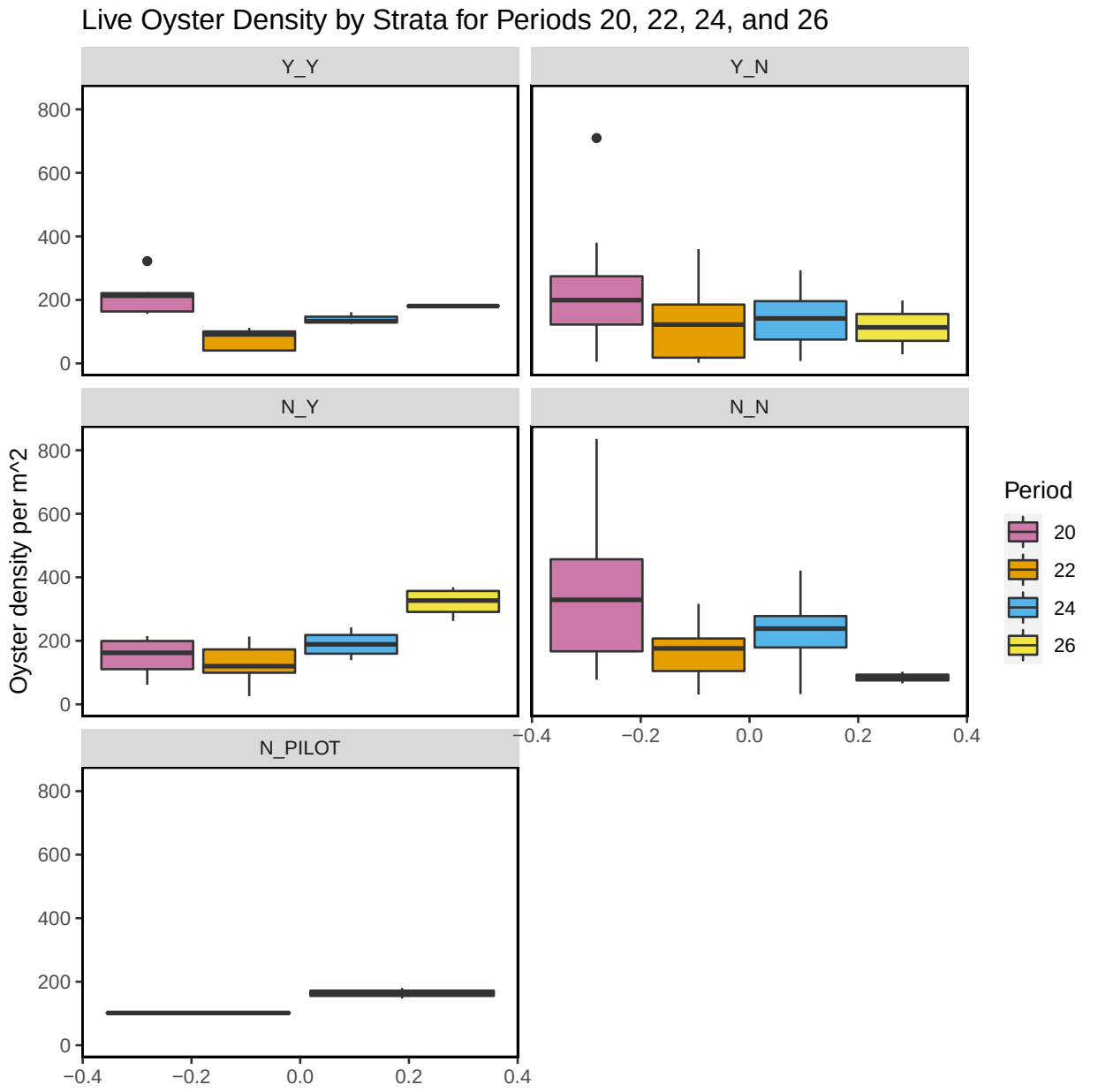


Figure- Calculated live oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-12-11.

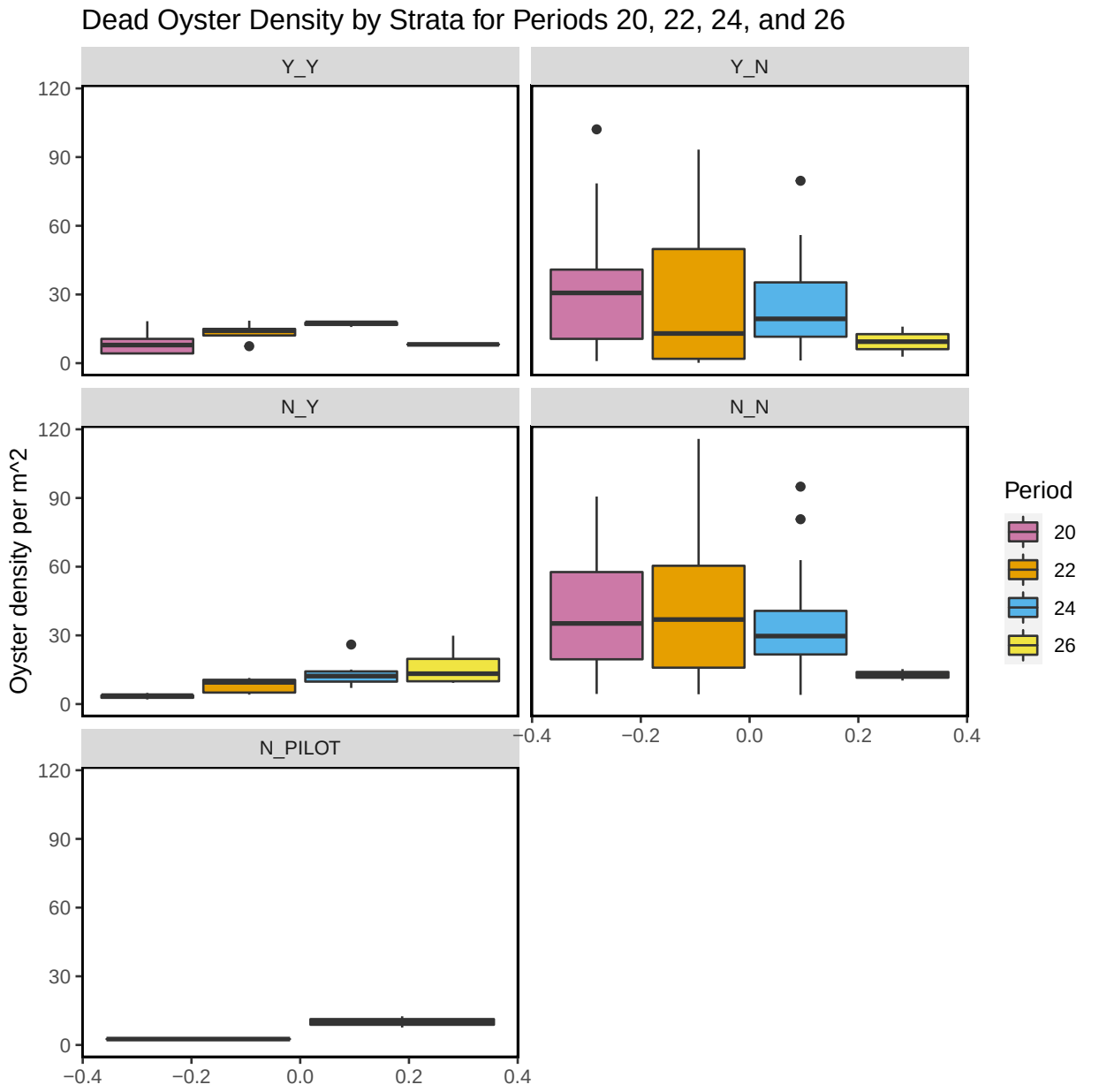


Figure- Calculated dead oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-12-11.

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.

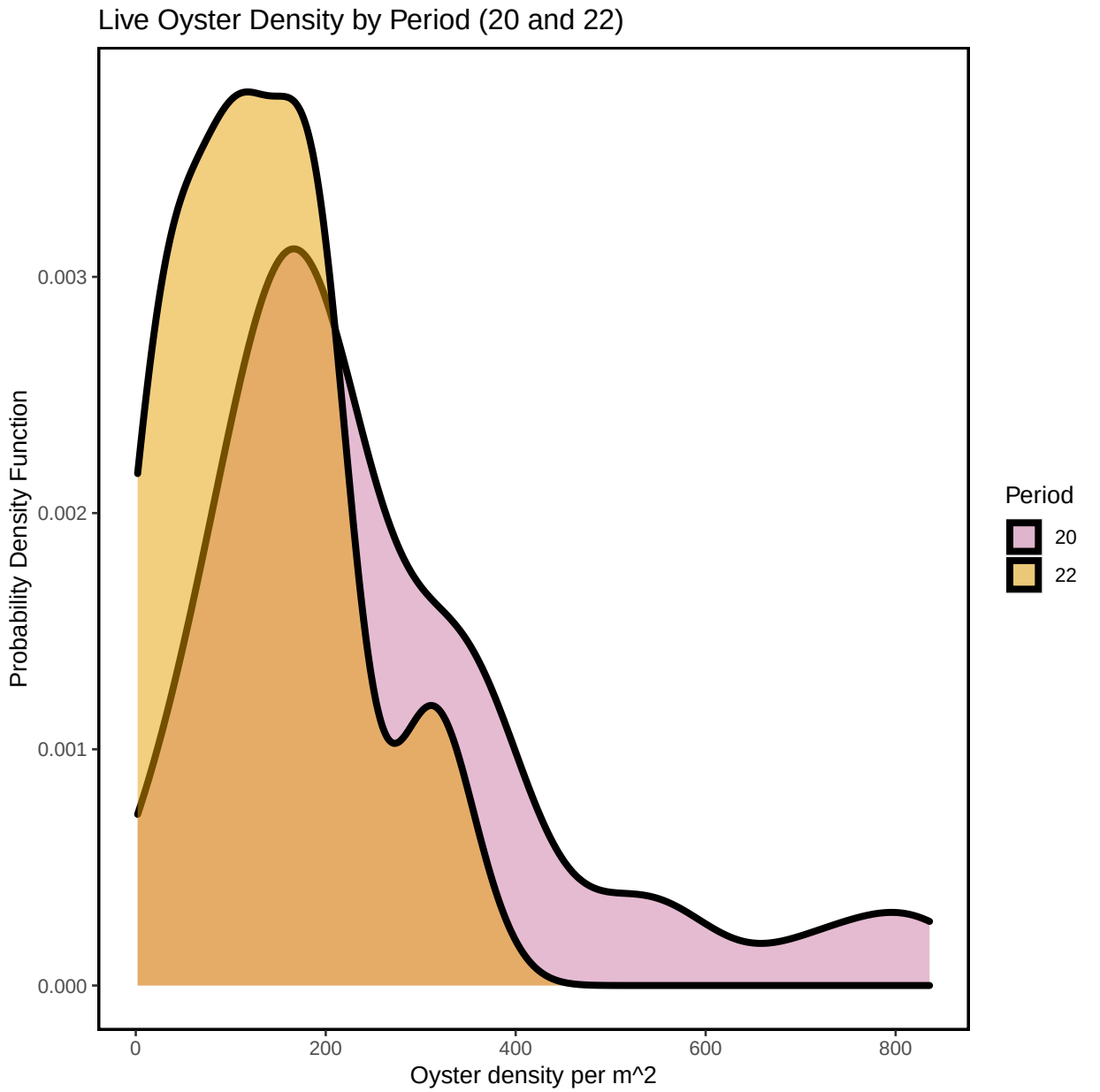


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2022-12-11.

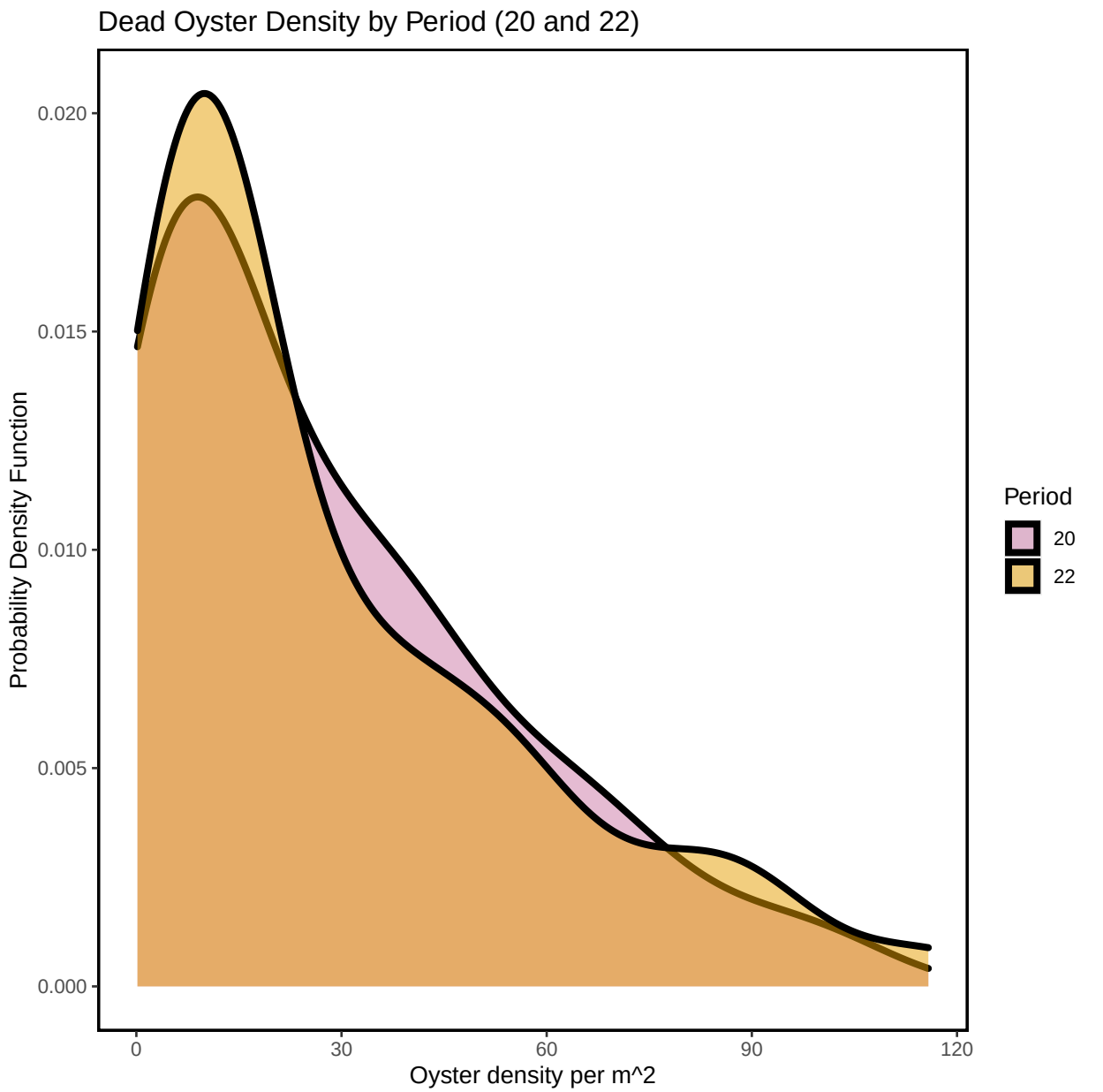


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2022-12-11.

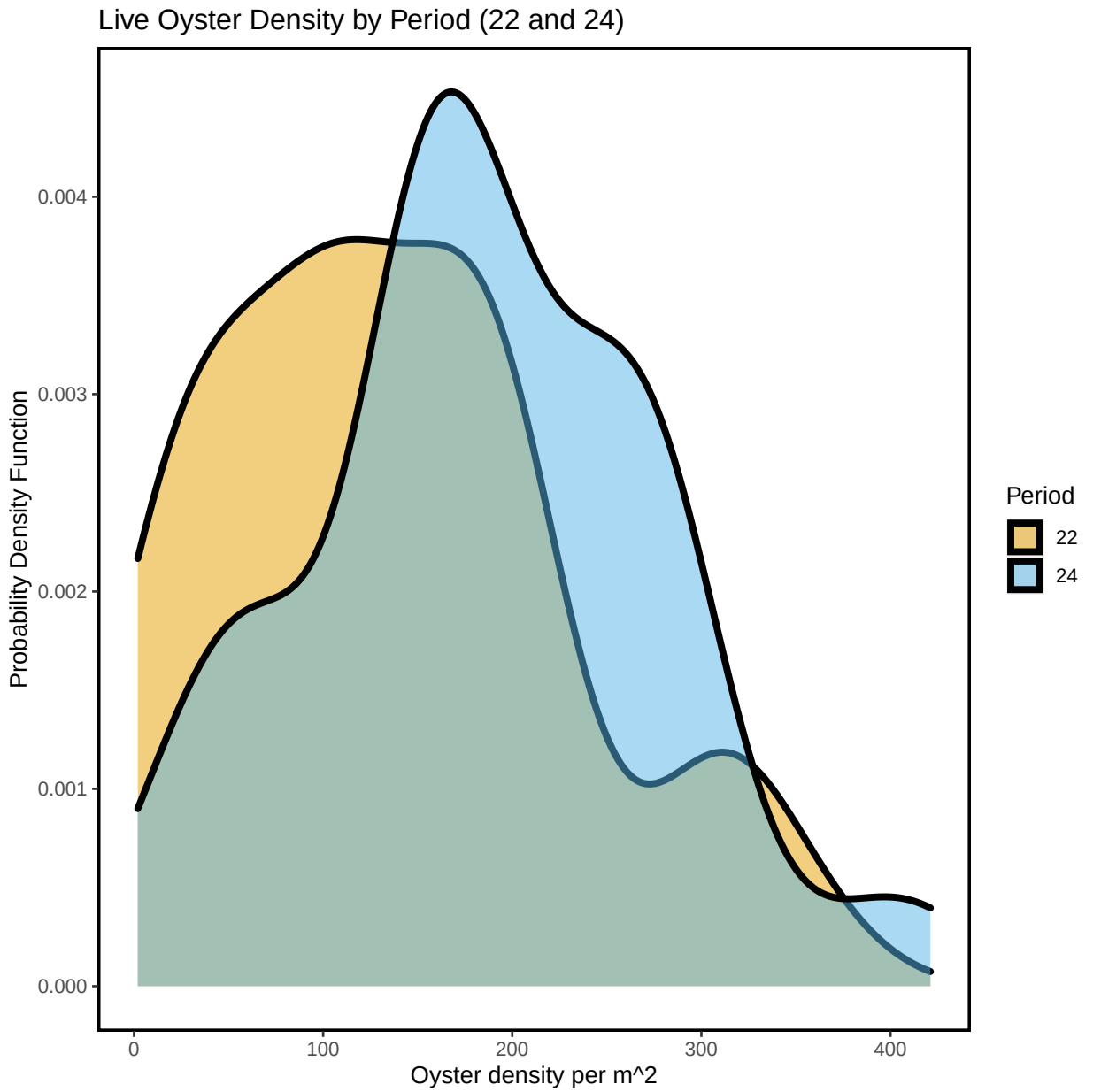


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2022-12-11.

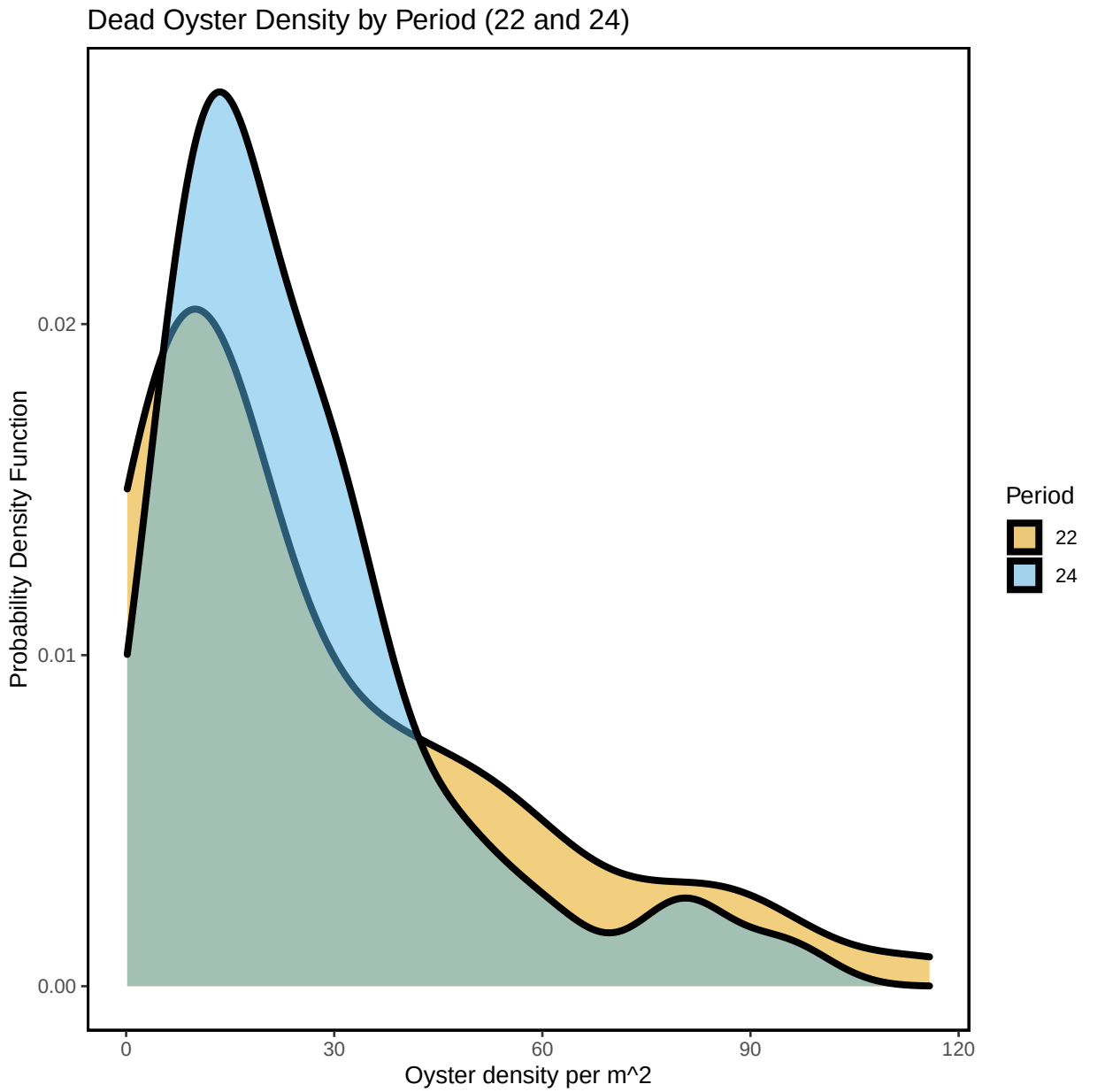


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2022-12-11.

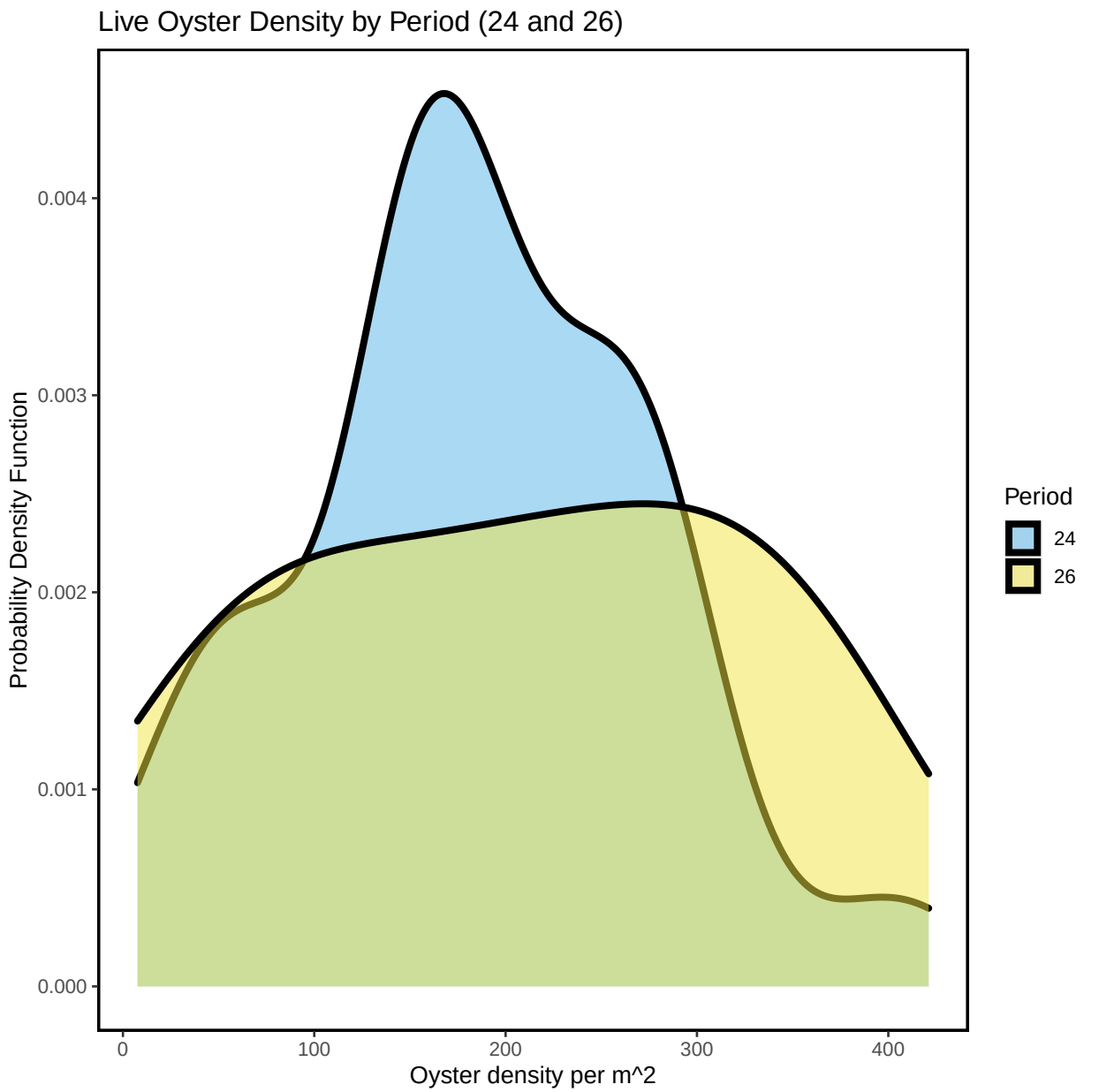


Figure- Calculated live oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2022-12-11.

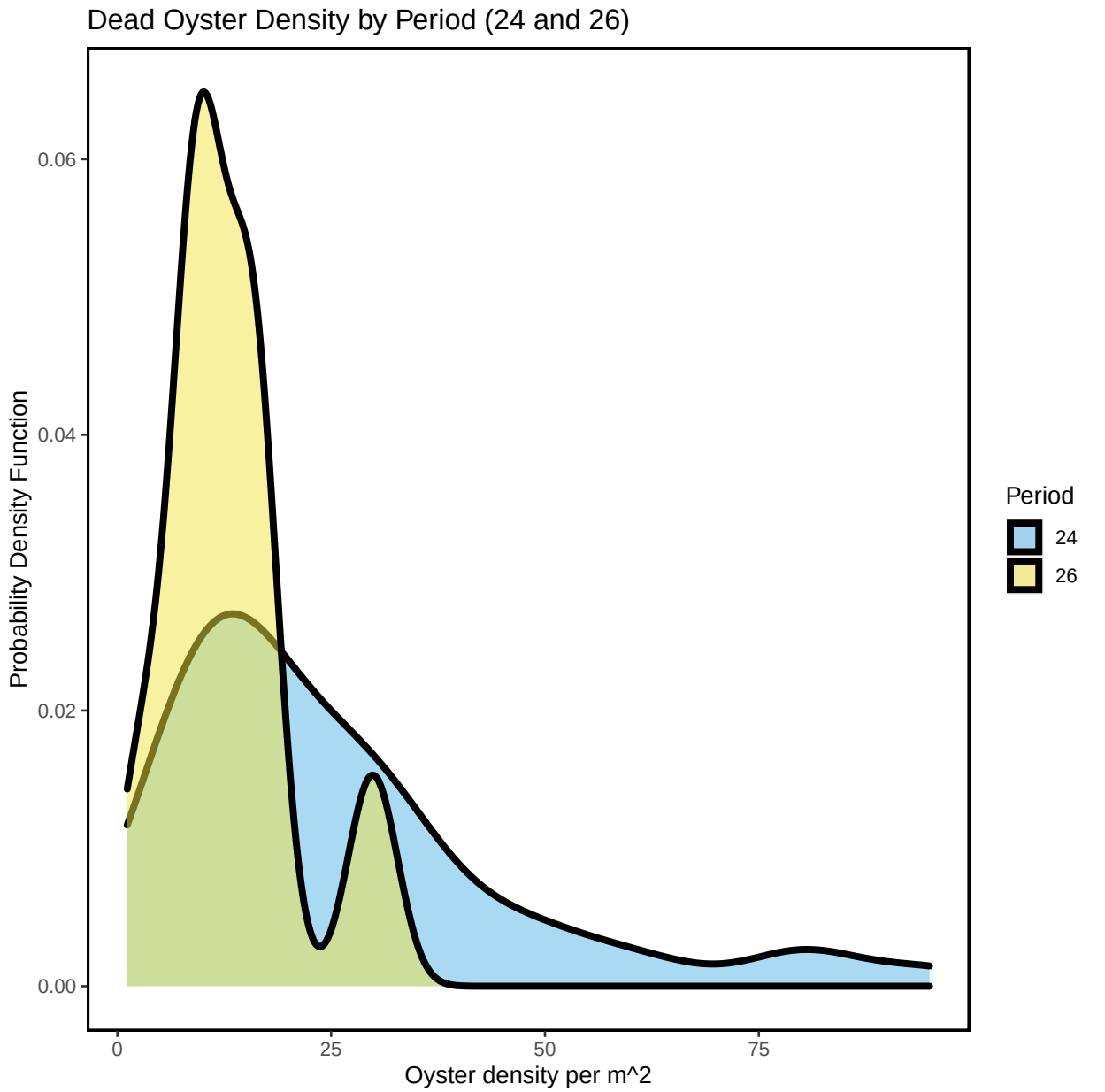


Figure- Calculated dead oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2022-12-11.

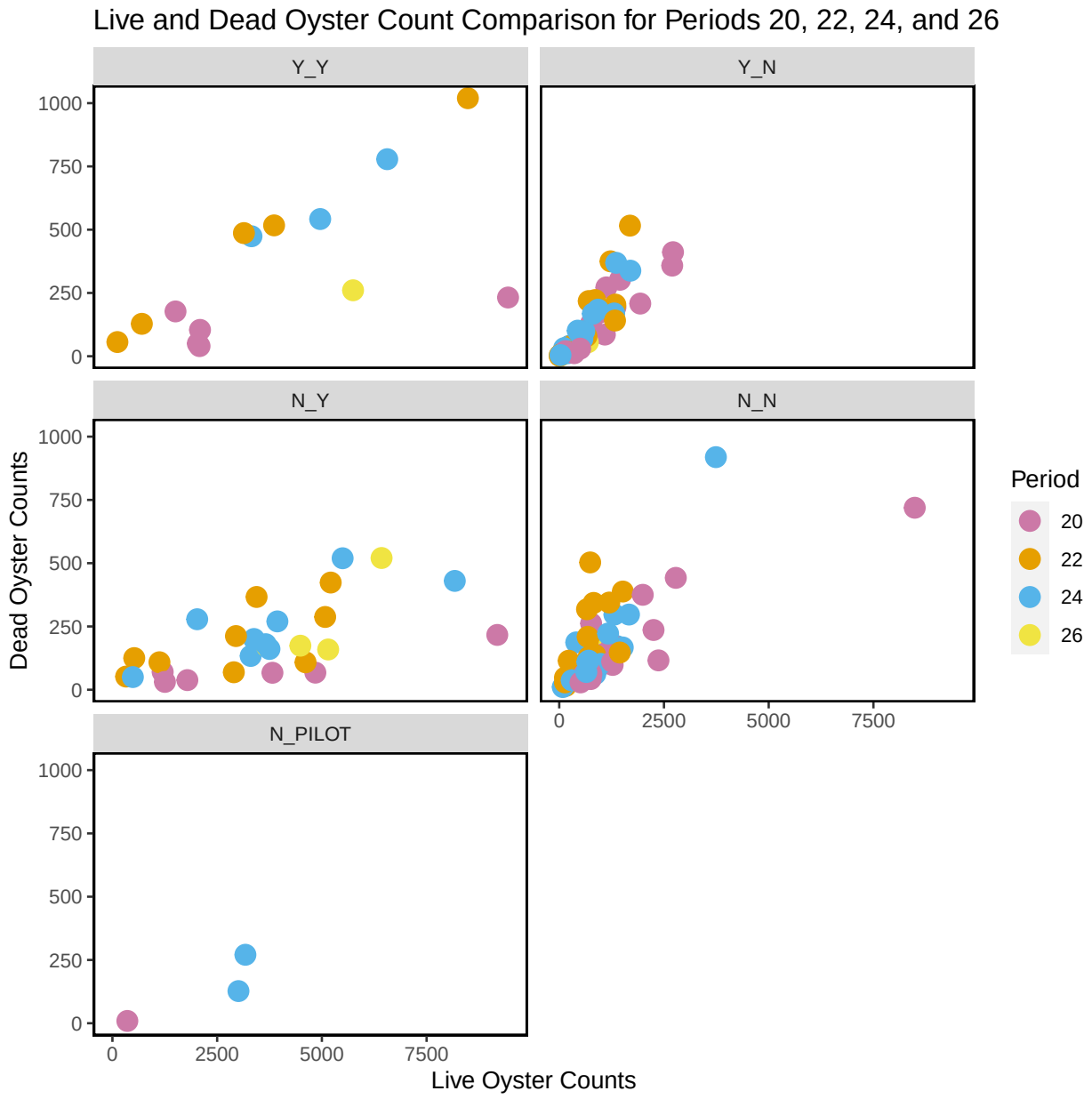


Figure- Live and dead oyster count comparison by periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) last sample date of period 26 as 2022-12-11.

Live Counts Double Pass Results

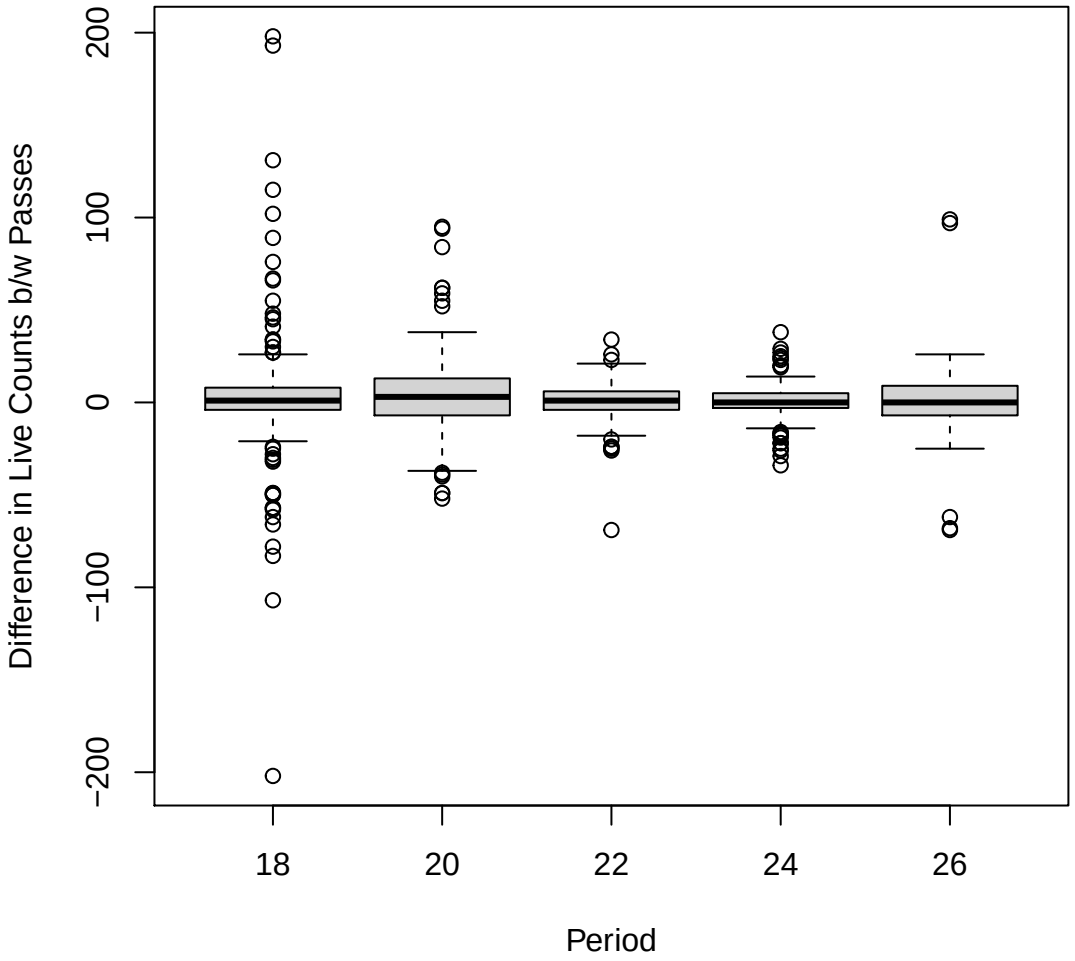


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, 24, and 26

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

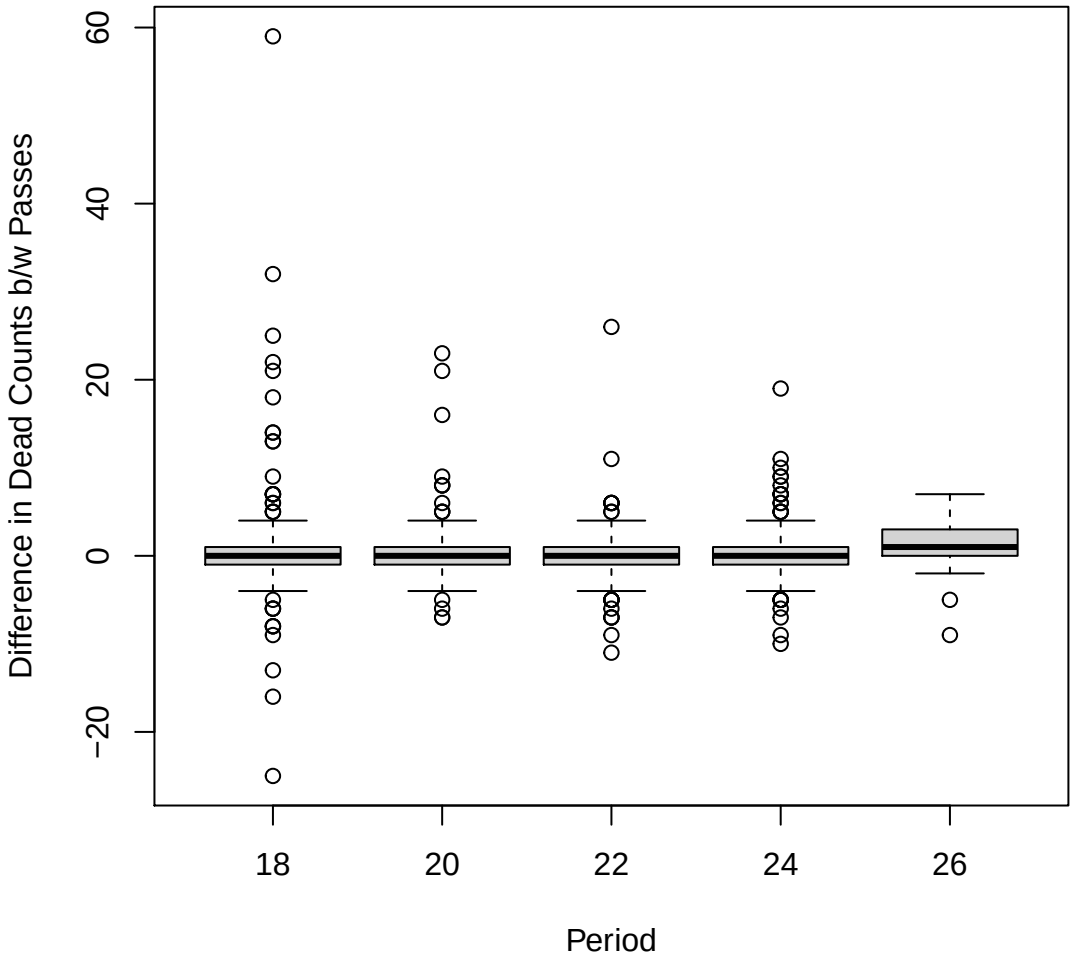


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, 24, and 26

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

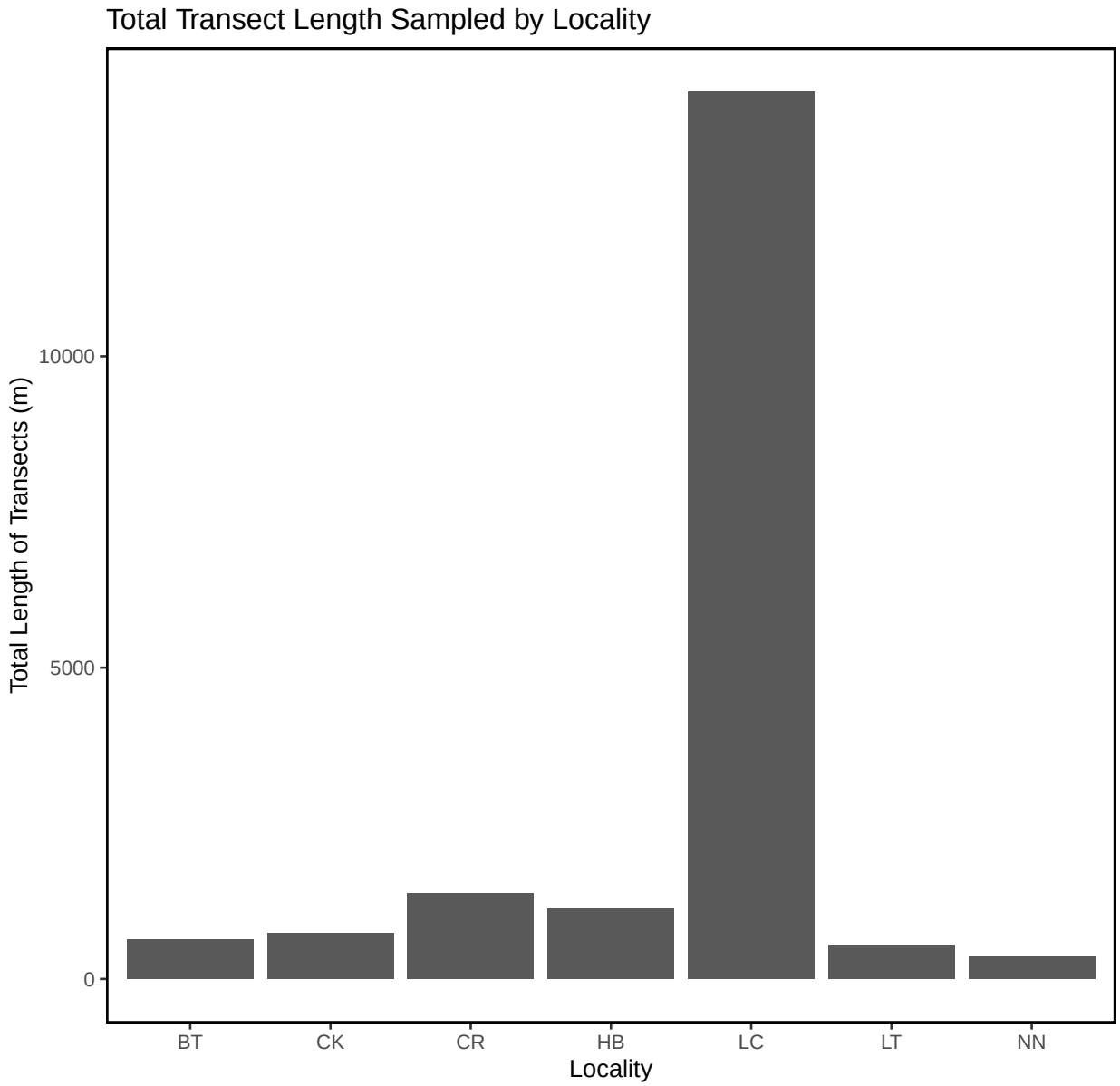


Figure − Bar plot of total transect length in meters sampled by locality for all periods.

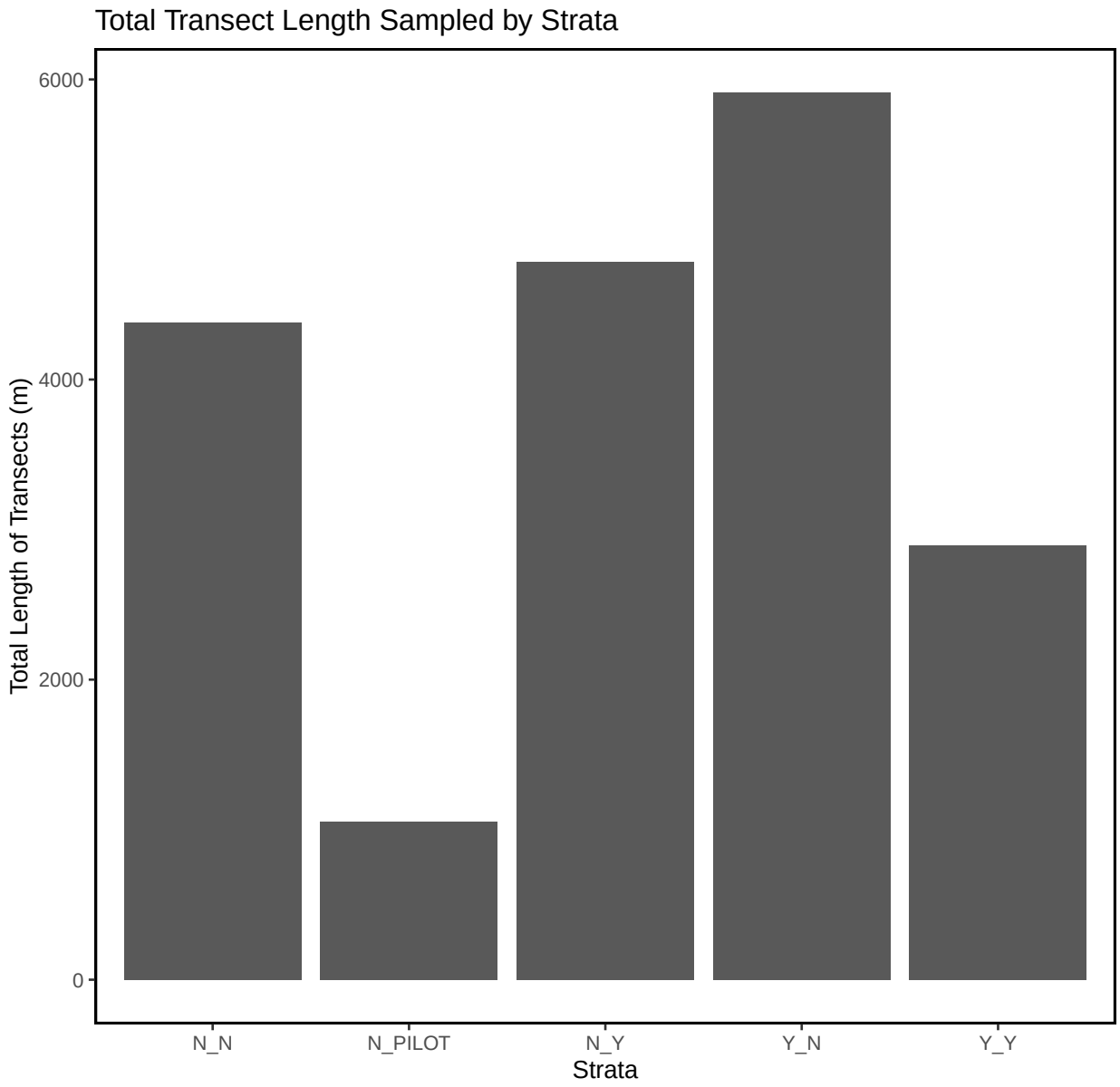
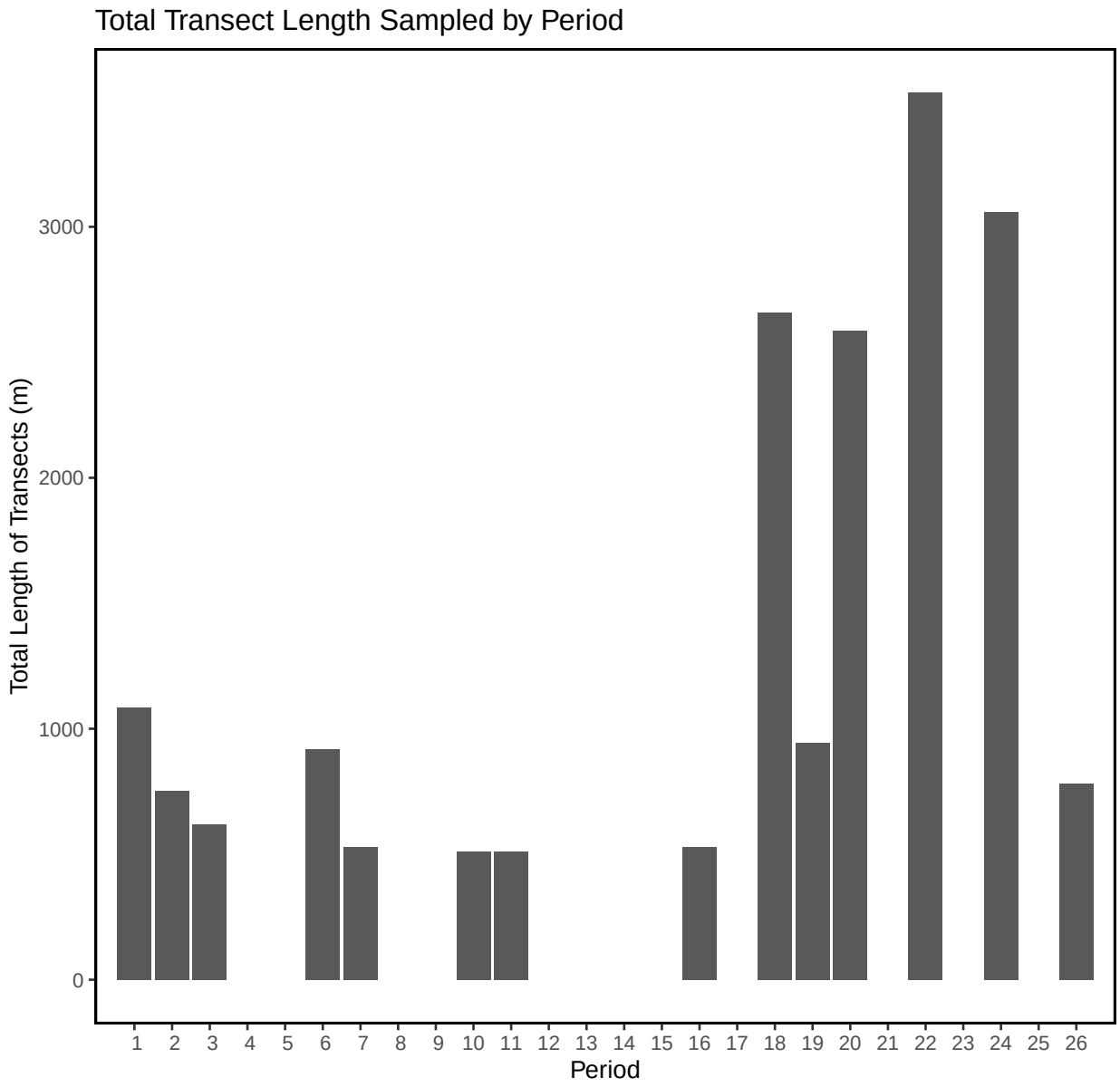


Figure − Bar plot of total transect length in meters sampled by strata for all periods.



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	1371	731	2310
CK	857	444	1091	1190933	1.27	214	438	1277	861	492	1286
CR	1026	716	1035	1072162	1.01	153	727	1325	1034	756	1343
HB	902	364	1047	1095622	1.16	158	592	1211	900	601	1220
LC	1318	704	1665	2770934	1.26	108	1106	1529	1319	1110	1526
LT	1026	877	551	303721	0.54	120	790	1262	1031	813	1298
NN	735	674	584	341295	0.79	156	429	1041	744	471	1072

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	828	1189
N_PILOT	1318	1136	925	856059	0.70	239	850	1787	1326	905	1827
N_Y	2912	3060	2212	4892643	0.76	345	2235	3589	2914	2271	3592
Y_N	763	438	890	791857	1.17	63	640	887	762	647	890
Y_Y	3106	2086	2876	8268636	0.93	678	1778	4435	3127	1913	4547

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	1409	1028	1771
2	890	476	945	893727	1.06	176	546	1234	886	563	1246
3	738	296	817	668064	1.11	167	411	1065	731	437	1055
6	433	176	534	284791	1.23	96	245	621	427	255	622
7	50	29	56	3186	1.12	20	11	90	50	16	90
10	1207	1074	671	449607	0.56	237	743	1672	1212	815	1689
11	886	776	678	459708	0.77	240	416	1356	874	456	1331
16	494	366	467	217855	0.95	165	170	817	495	223	818
18	982	695	935	874733	0.95	120	748	1217	987	777	1227
19	555	329	573	328431	1.03	97	365	745	556	371	748
20	1844	1253	2125	4517189	1.15	310	1236	2451	1846	1286	2488
22	1334	702	1693	2867783	1.27	242	860	1808	1321	907	1850
24	1729	942	1845	3403035	1.07	266	1207	2251	1725	1244	2274
26	3107	3690	2496	6230888	0.80	832	1476	4738	3125	1646	4518

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	238	170	317
CK	241	112	321	102927	1.33	62.9	118	364	241	134	369
CR	283	178	294	86605	1.04	43.4	198	368	282	200	371
HB	257	101	303	92052	1.18	45.7	168	347	255	165	347
LC	157	132	141	19748	0.90	9.1	139	174	156	138	174
LT	279	261	132	17460	0.47	28.8	222	335	279	225	337
NN	215	174	202	40919	0.94	54.1	109	321	214	132	334

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	253	215	292
N_PILOT	118	121	59	3467	0.50	15	88	148	118	91	148
N_Y	169	159	97	9362	0.57	15	139	198	169	139	201
Y_N	183	117	211	44489	1.15	15	154	212	183	156	215
Y_Y	121	118	82	6711	0.68	19	84	159	123	89	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	393	287.7	507.9
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	255	161.0	358.8
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	235	139.2	345.9
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	122	73.8	179.0
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.8	8.6
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	124	82.4	166.8
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	91	53.1	135.7
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	50	22.2	81.3
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	176	143.3	208.2
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	154	99.4	212.9
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	257	207.2	310.8
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	137	111.5	164.1
24	185	180.6	91.6	8385	0.49	13	159.3	211.1	185	159.3	210.1
26	207	198.0	123.8	15322	0.60	41	125.9	287.6	205	126.8	281.2

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	245	136	372
CK	78	32	106	11170	1.36	37	4.3	151	78	20	153
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	19	72
LC	134	76	159	25236	1.19	11	112.0	156	134	115	156
LT	218	141	180	32543	0.83	39	140.5	295	218	147	290
NN	98	72	87	7493	0.88	23	52.5	143	99	59	148

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	157	123	195
N_PILOT	98	89	65	4243	0.67	17	65	131	97	70	134
N_Y	145	70	141	19786	0.97	22	102	188	145	105	187
Y_N	103	60	113	12803	1.10	11	81	125	104	82	127
Y_Y	274	152	298	88766	1.09	70	136	411	278	154	417

Dead Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
7	29	18	30	898	1.03	10.6	8.2	50	29	12	48
10	80	88	65	4245	0.82	23.0	34.5	125	79	40	121
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	134	88	190
19	63	44	67	4548	1.08	11.6	40.0	85	62	41	86
20	148	107	140	19727	0.95	20.5	107.6	188	147	110	189
22	191	128	193	37399	1.01	27.6	137.2	245	190	143	247
24	192	130	194	37816	1.01	28.1	136.8	247	192	142	249
26	178	171	149	22311	0.84	49.8	80.8	276	179	95	287

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	32.4	61
CK	21	11	28	757	1.29	9.7	2.3	40	21	6.1	40
CR	18	11	16	247	0.87	5.2	7.8	28	18	9.4	29
HB	13	8	14	201	1.12	4.7	3.4	22	13	5.0	22
LC	18	10	20	413	1.14	1.4	15.1	21	18	15.0	21
LT	54	47	35	1232	0.64	7.7	39.5	70	55	40.8	69
NN	28	21	22	463	0.78	5.7	16.4	39	27	17.9	38

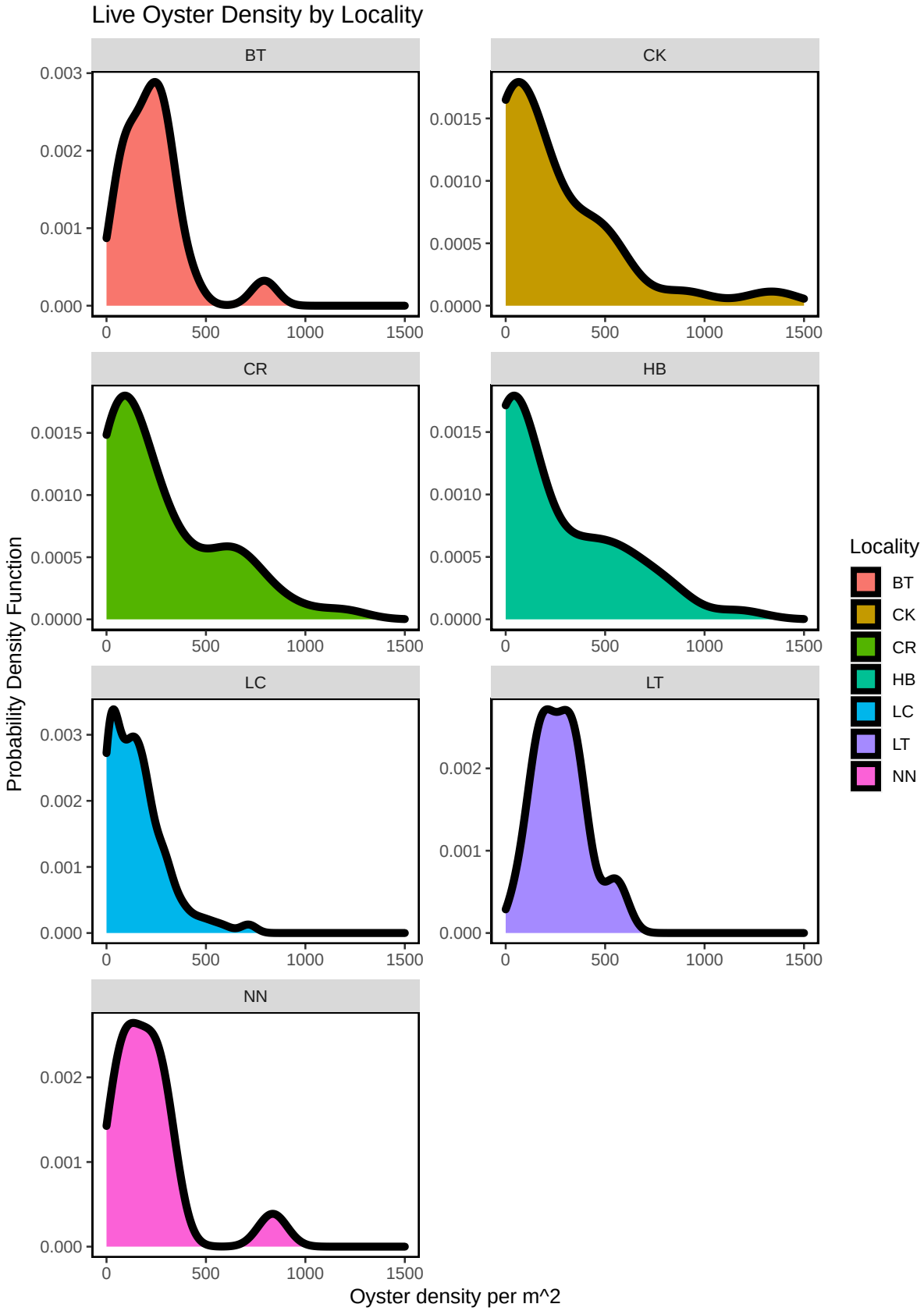
Dead Oyster Density by Strata

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	33.0	27.5	39
N_PILOT	8.7	8.7	4.3	18	0.49	1.1	6.5	11	8.8	6.7	11
N_Y	8.4	8.0	6.6	43	0.78	1.0	6.4	10	8.4	6.4	10
Y_N	23.0	15.5	23.5	550	1.02	2.3	18.5	28	23.0	18.7	28
Y_Y	9.8	9.4	6.6	44	0.68	1.6	6.7	13	9.8	6.8	13

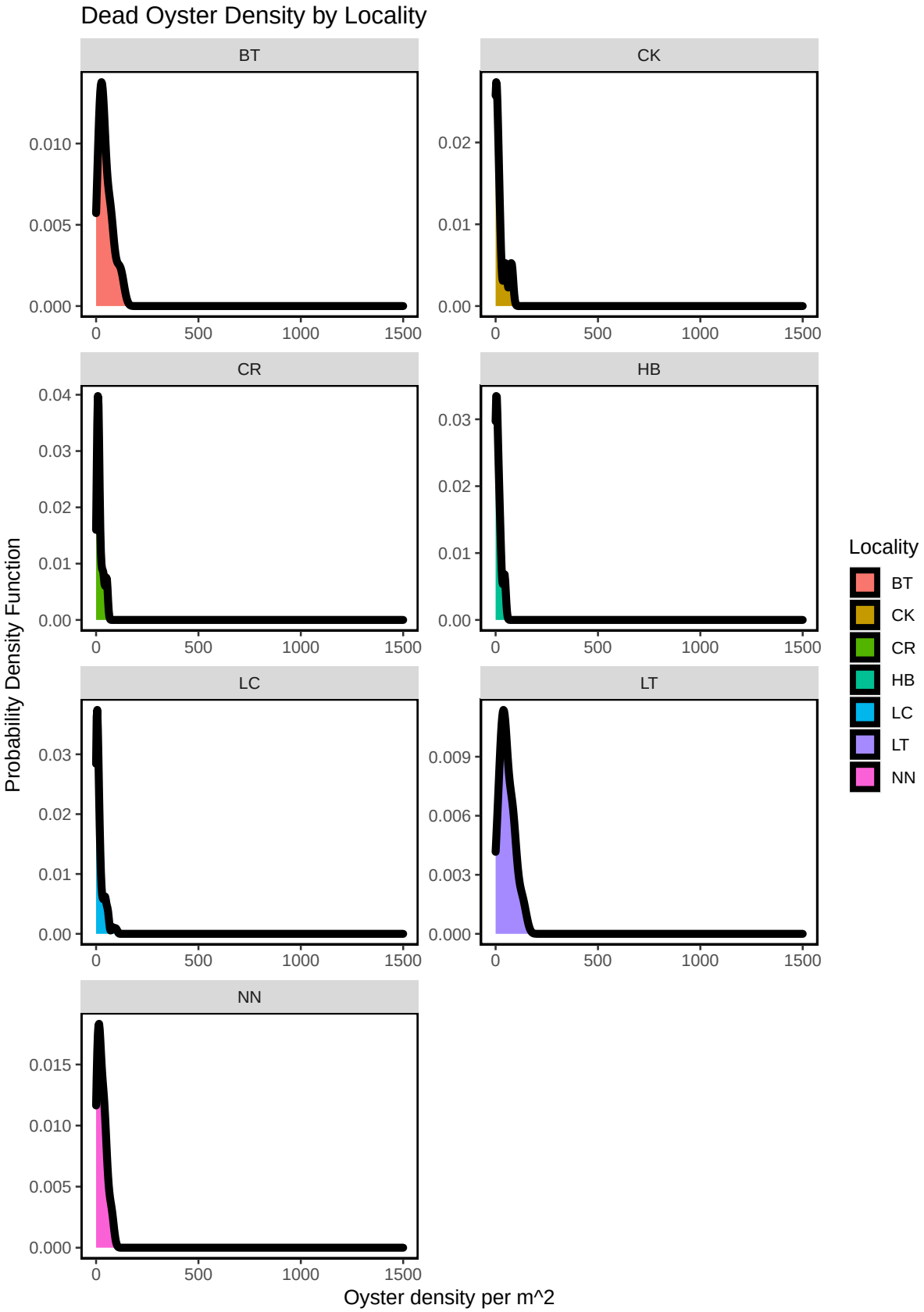
Dead Oyster Density by Period

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	2.8	1.0	4.8
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.2	4.1	12.4
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.6	7.0
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	1.8	7.1
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.2	19.2	34.1
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.5	11.7	24.4
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.6	20.1	35.1
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.5	20.9	36.3
24	25.7	19.1	20.9	438.3	0.81	3.02	19.83	31.7	25.8	20.4	32.0
26	13.1	10.3	7.6	58.1	0.58	2.54	8.15	18.1	13.0	8.9	18.1

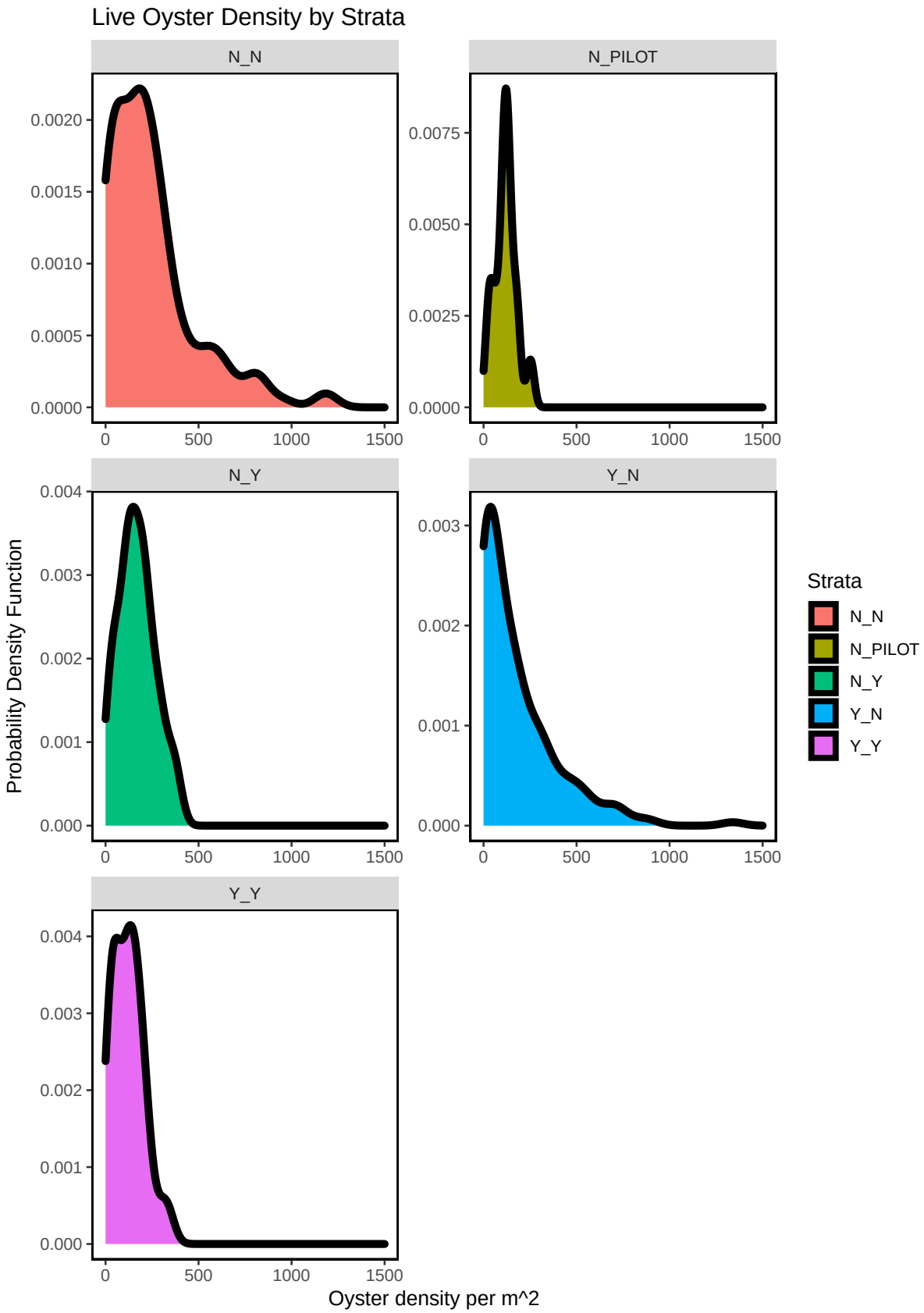
Summary Density Plots for all Periods



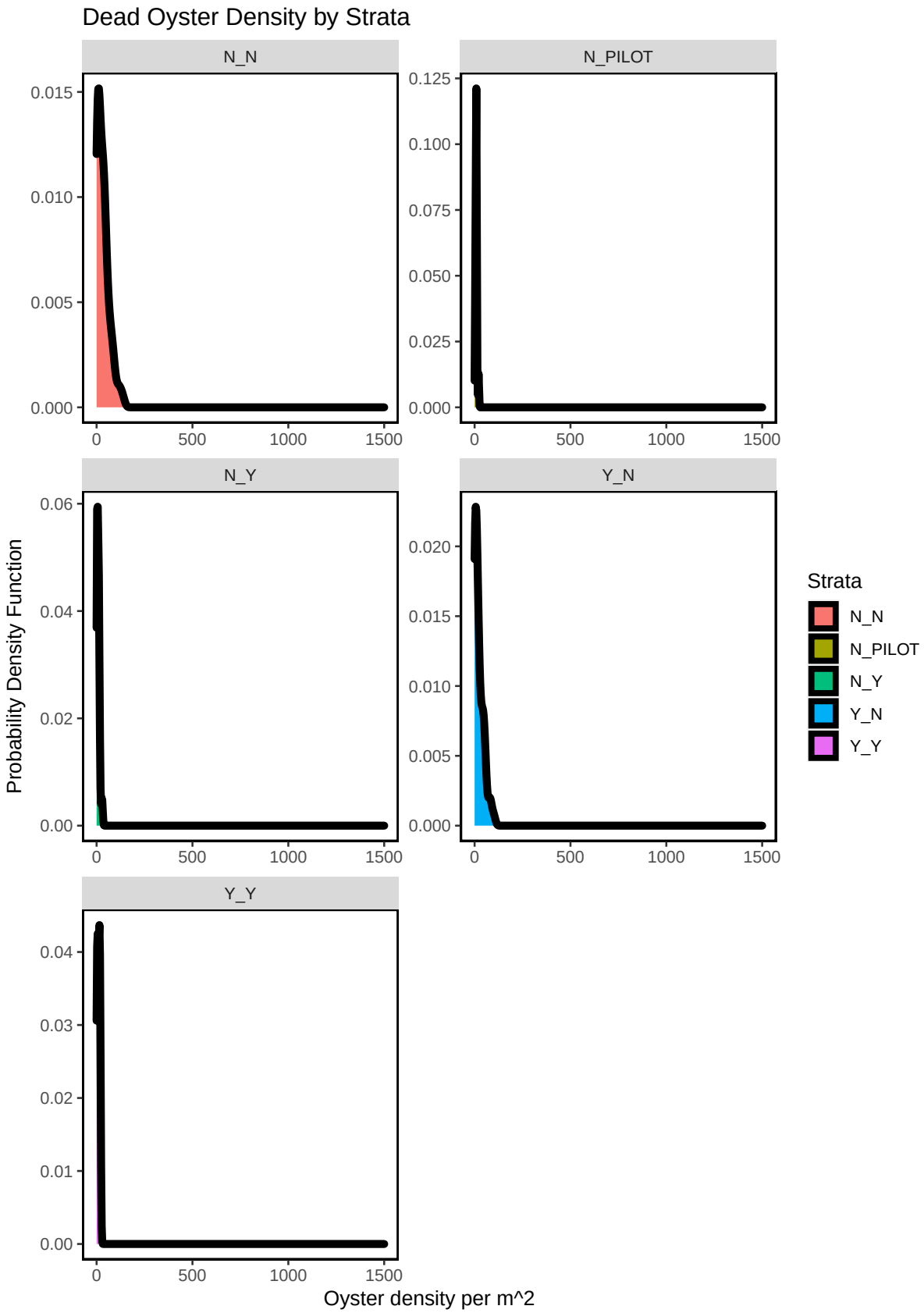
Figure− Calculated live oyster density by locality for all periods including period 22 (current period).



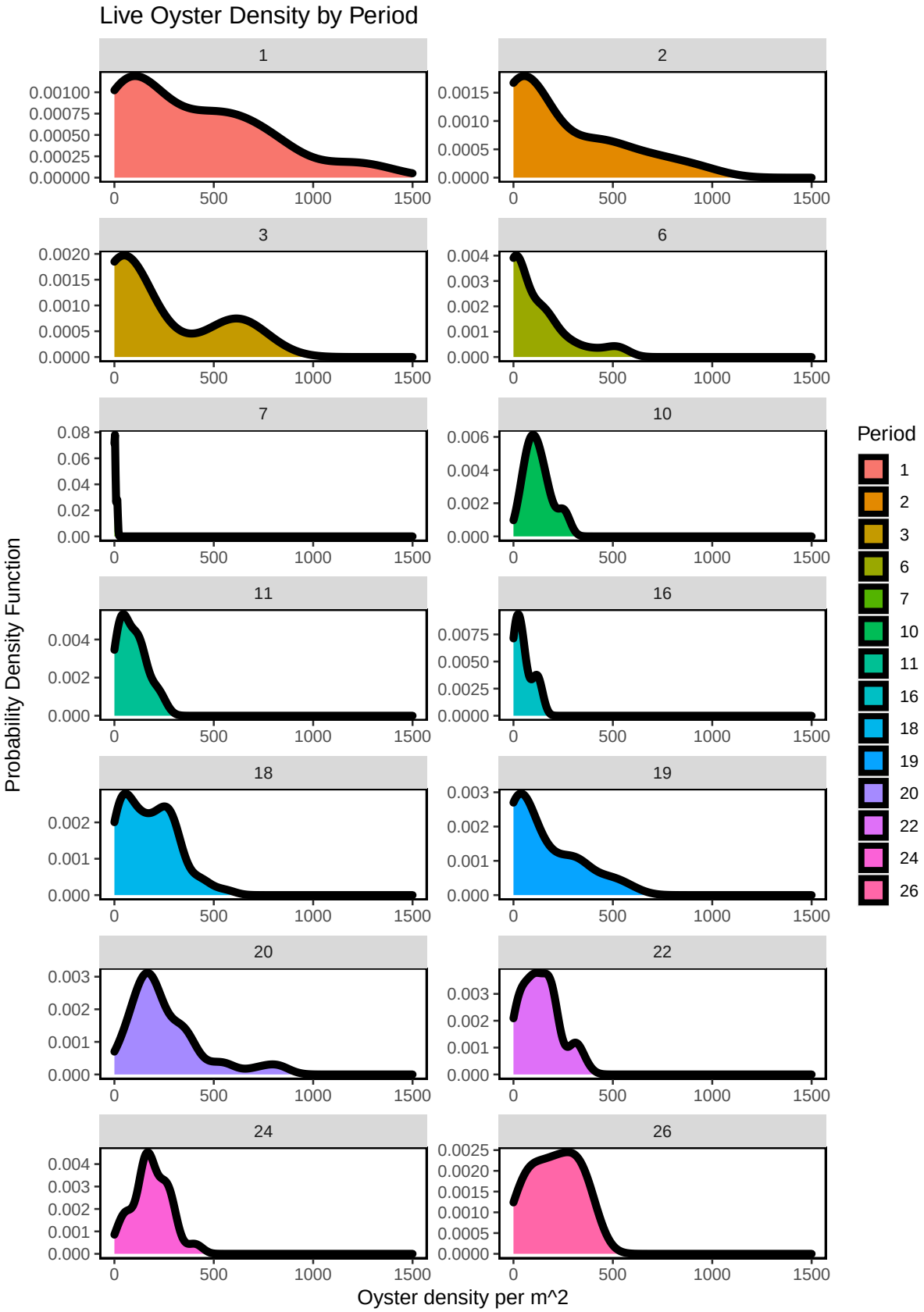
Figure− Calculated dead oyster density by locality for all periods including period 22 (current period).



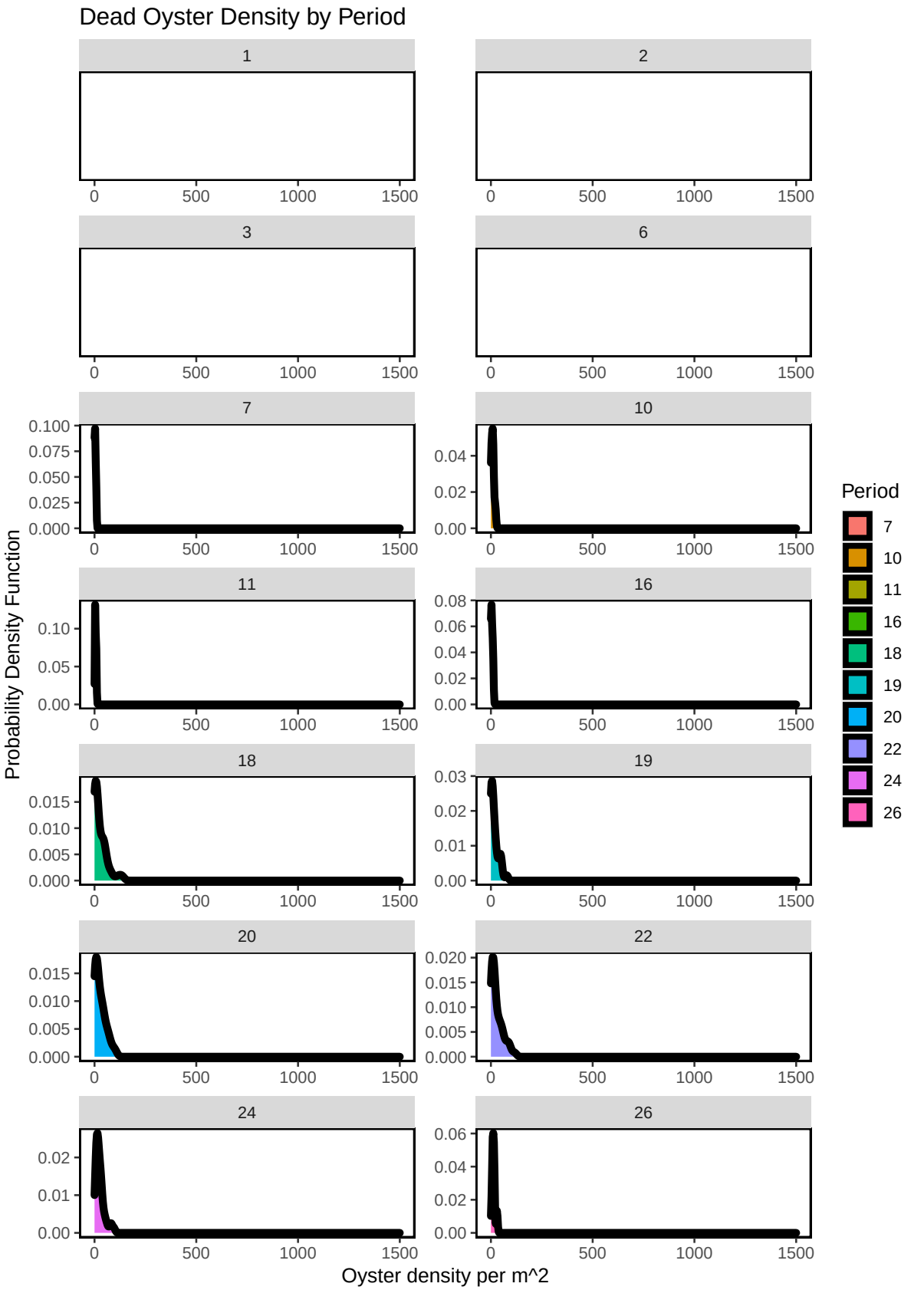
Figure− Calculated live oyster density by strata for all periods including period 22 (current period).



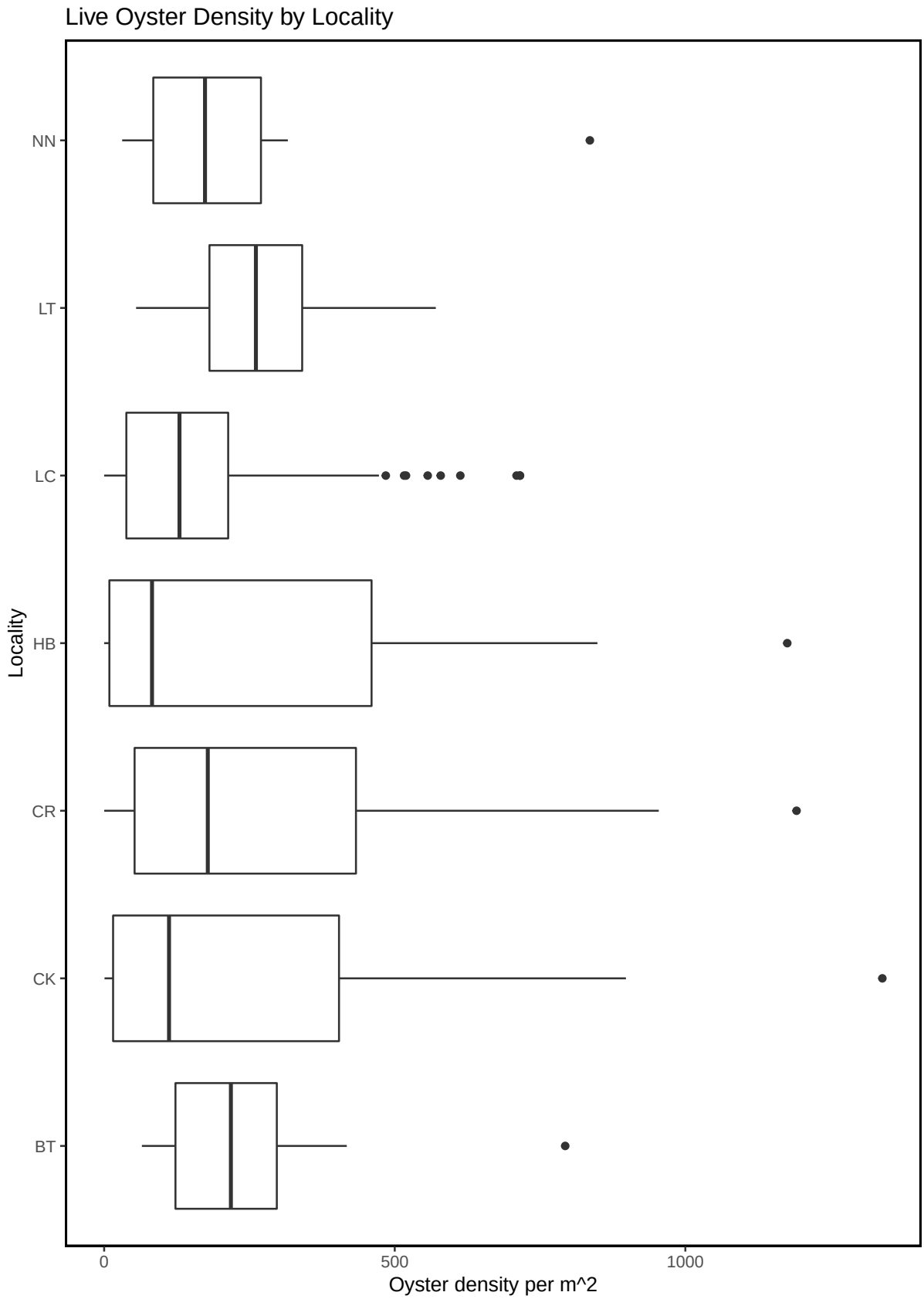
Figure− Calculated dead oyster density by strata for all periods including period 22 (current period).



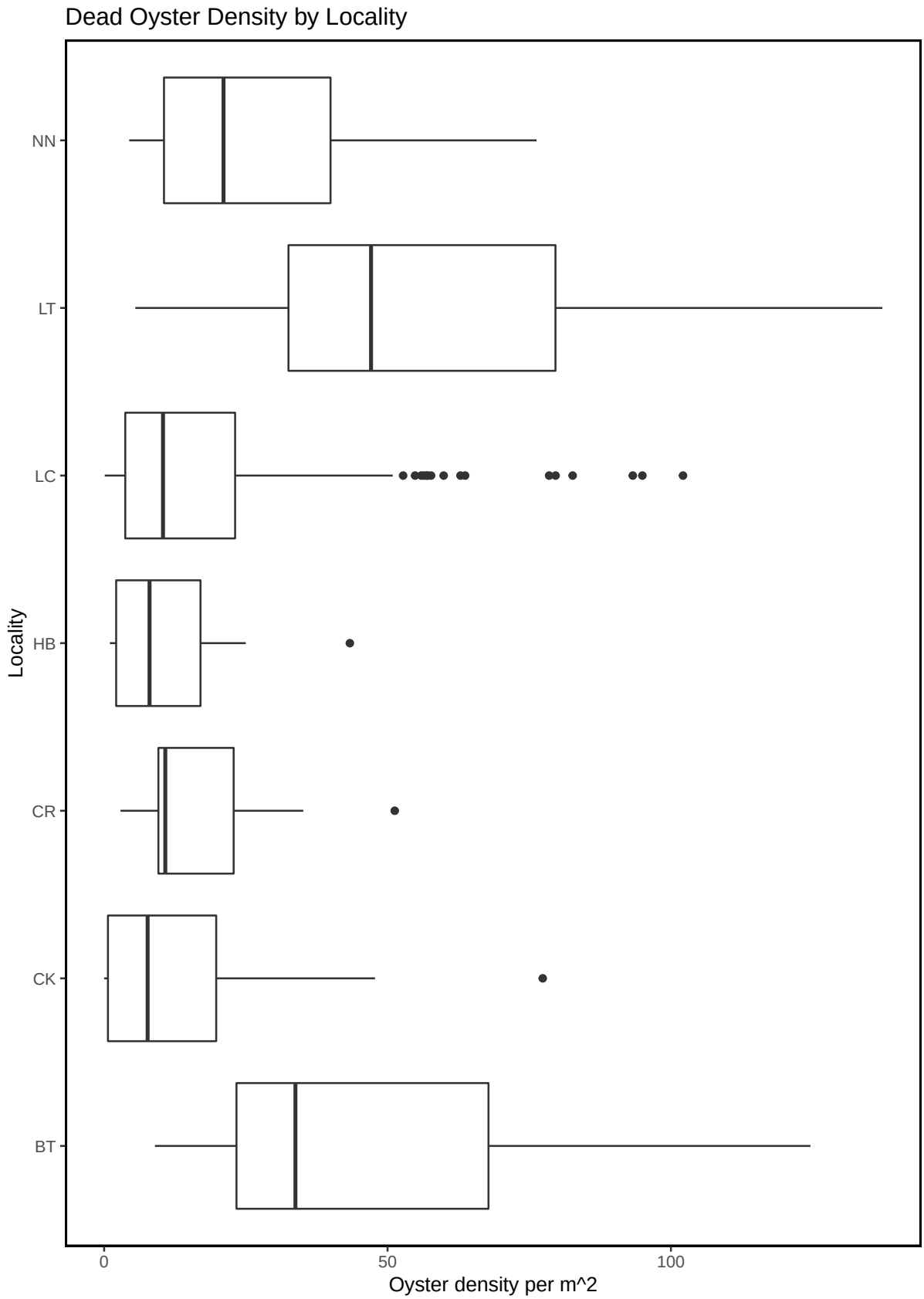
Figure− Calculated live oyster density for all periods including period 24 (current period) using a probability densit



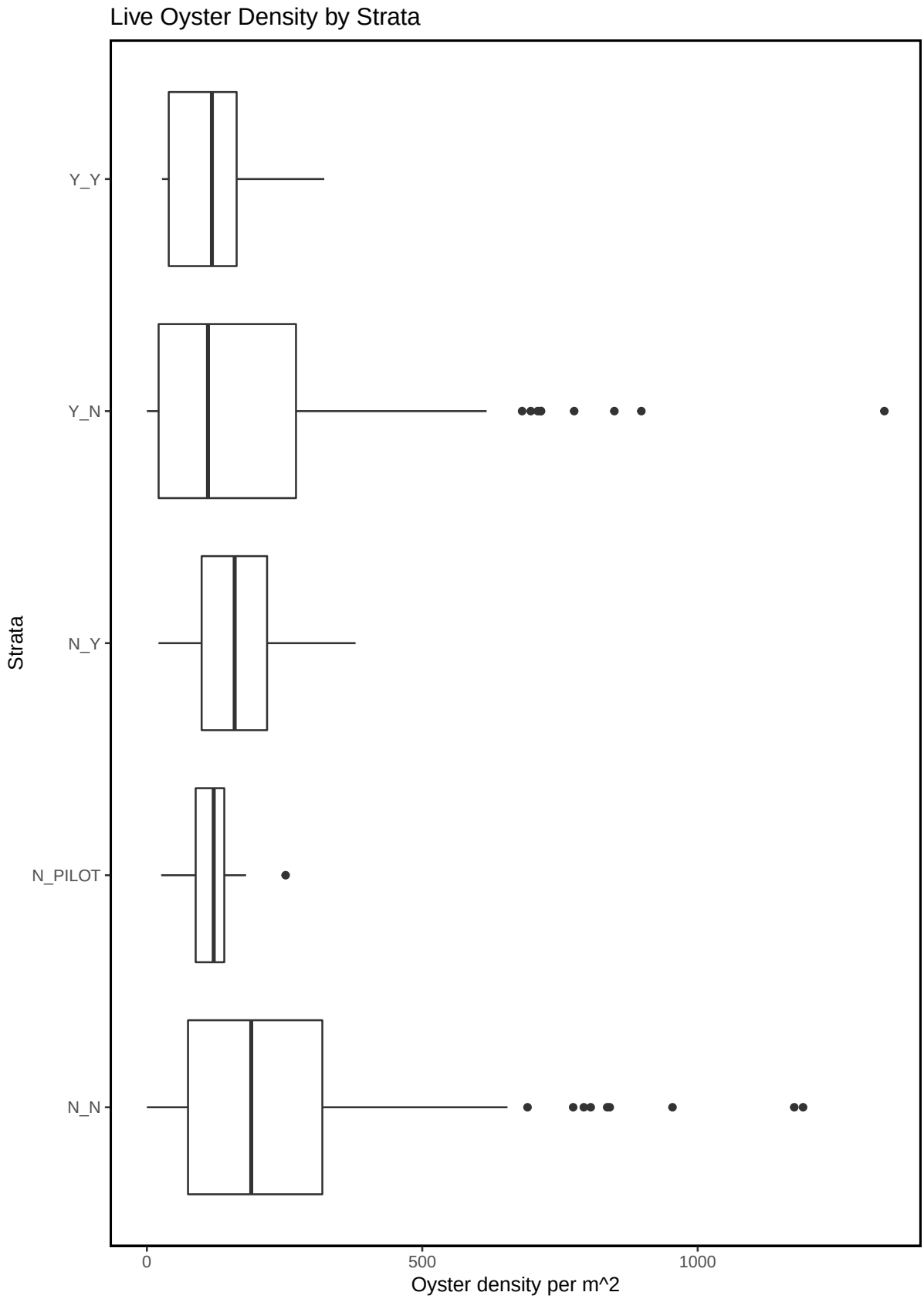
Figure− Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit



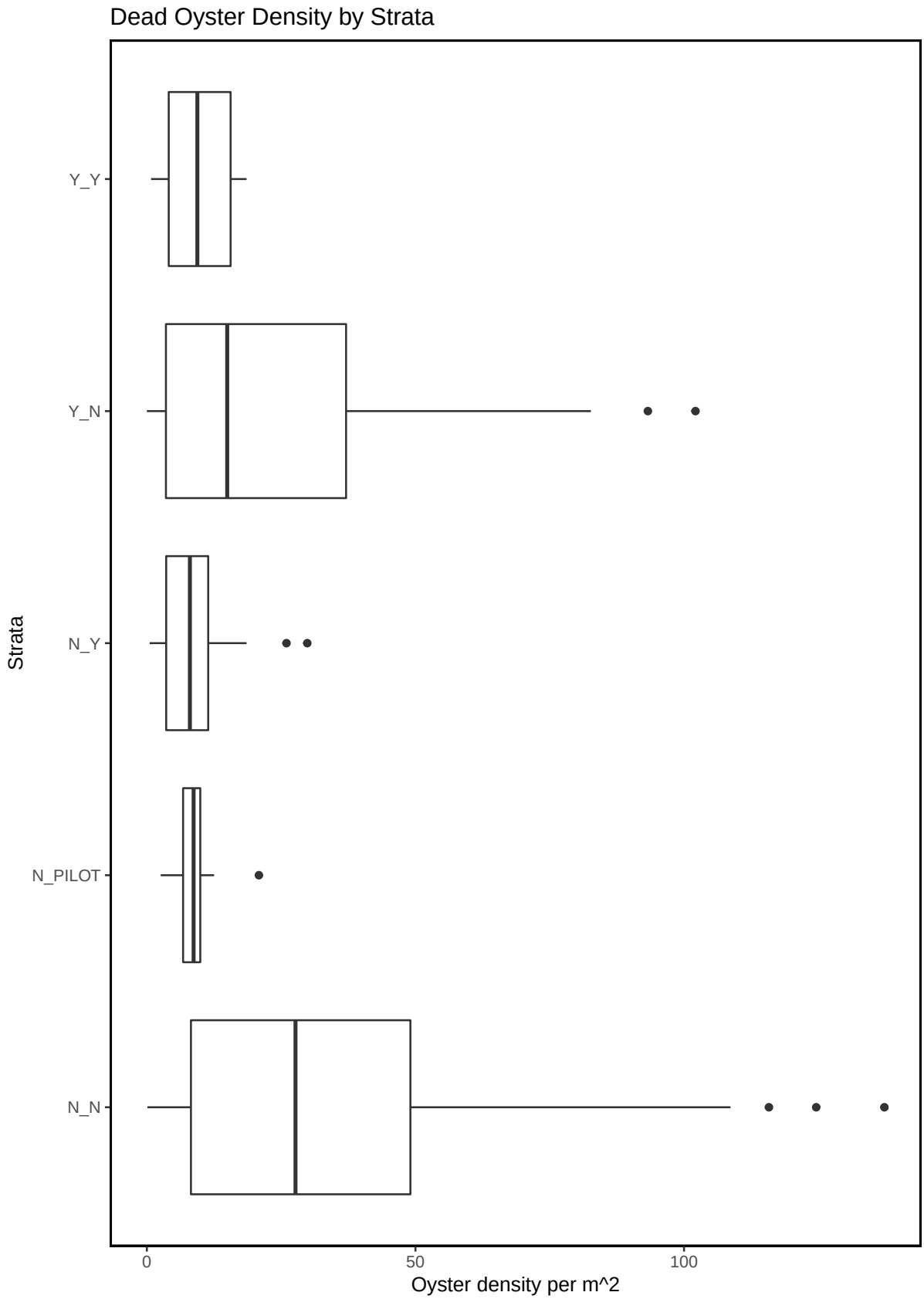
Figure− Box plot depicting live oyster density by locality for all periods including period 22 (current period).



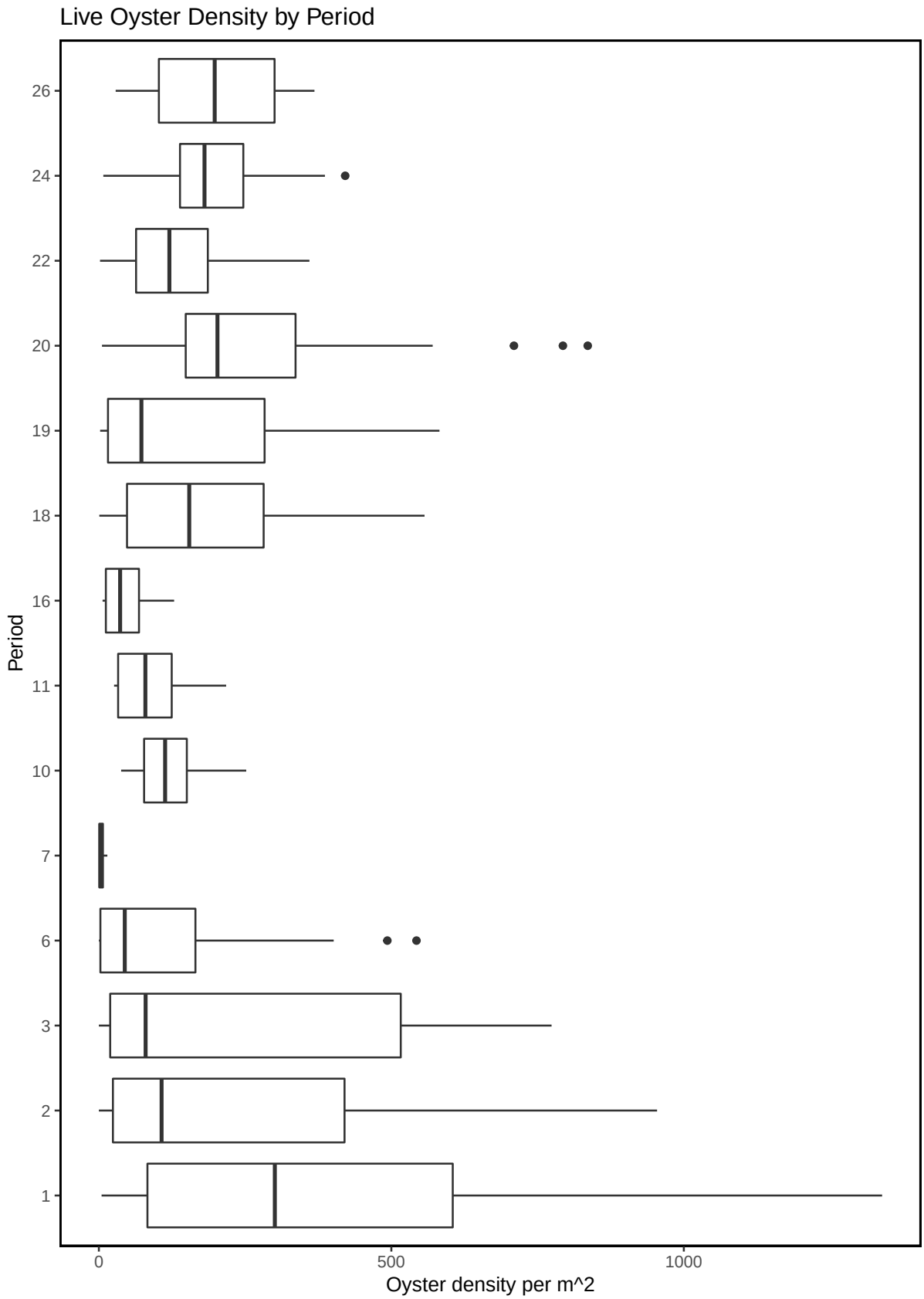
Figure− Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



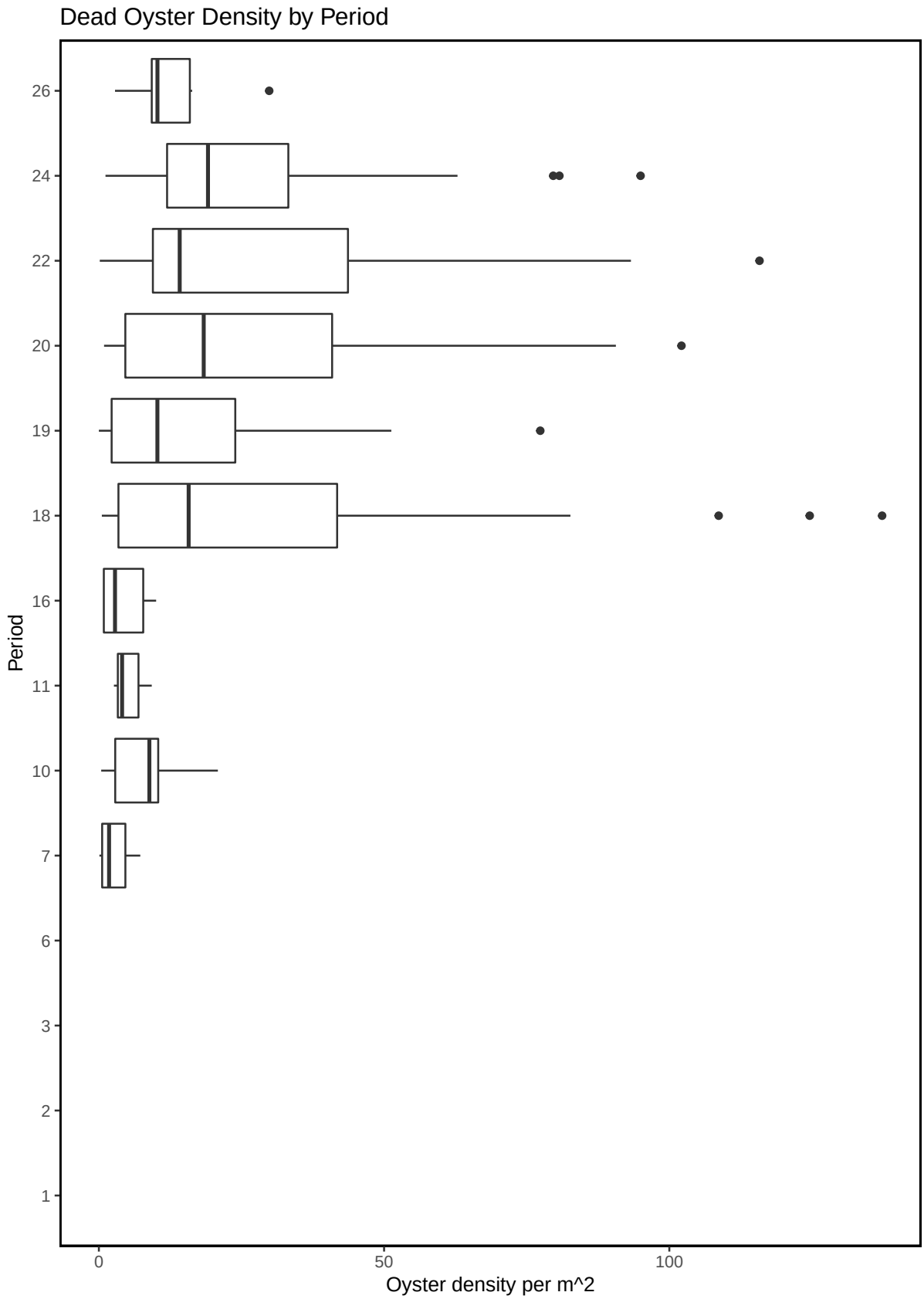
Figure− Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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).

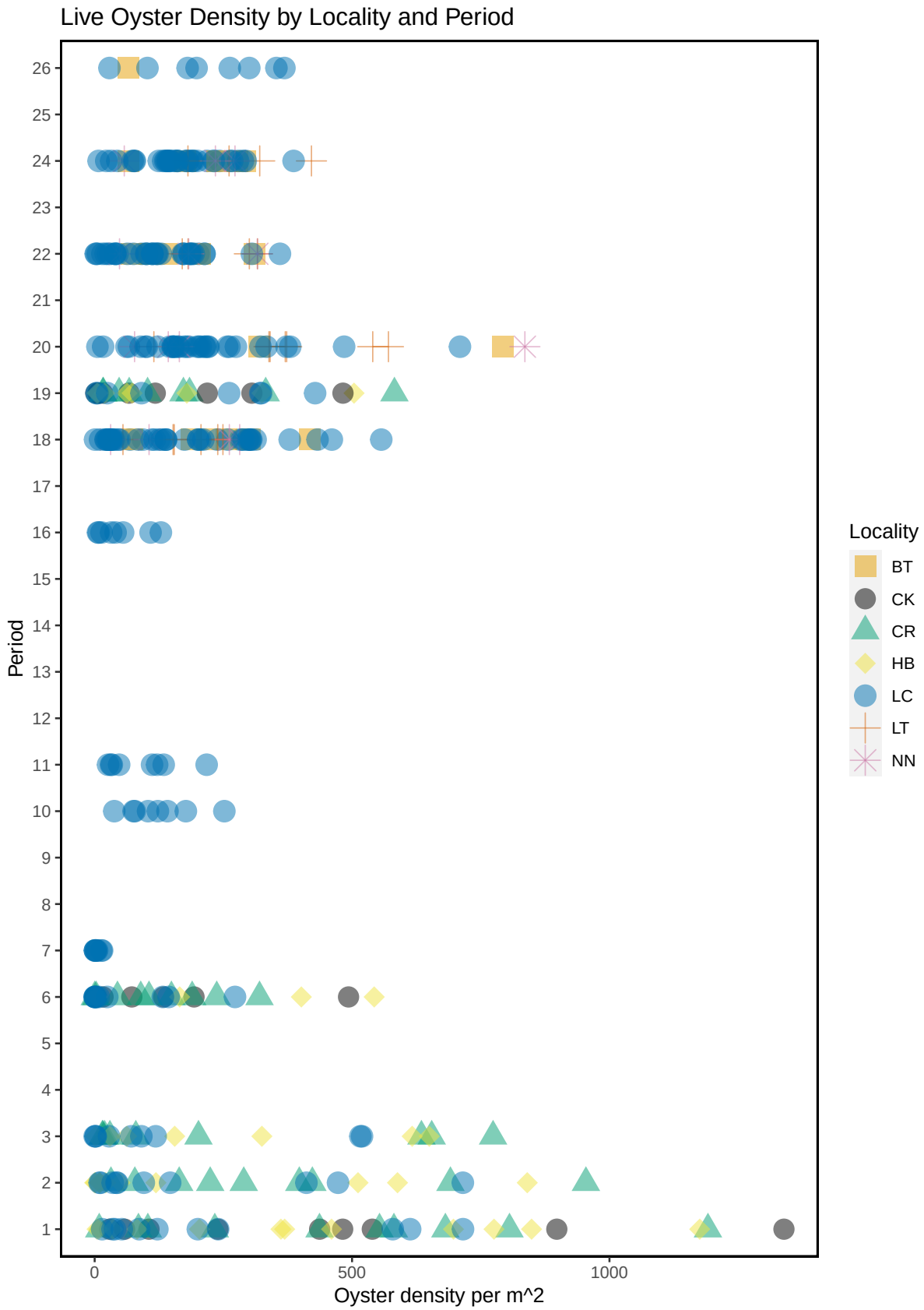


Figure − Live oyster density by locality and period for all periods including period 22 (current period).

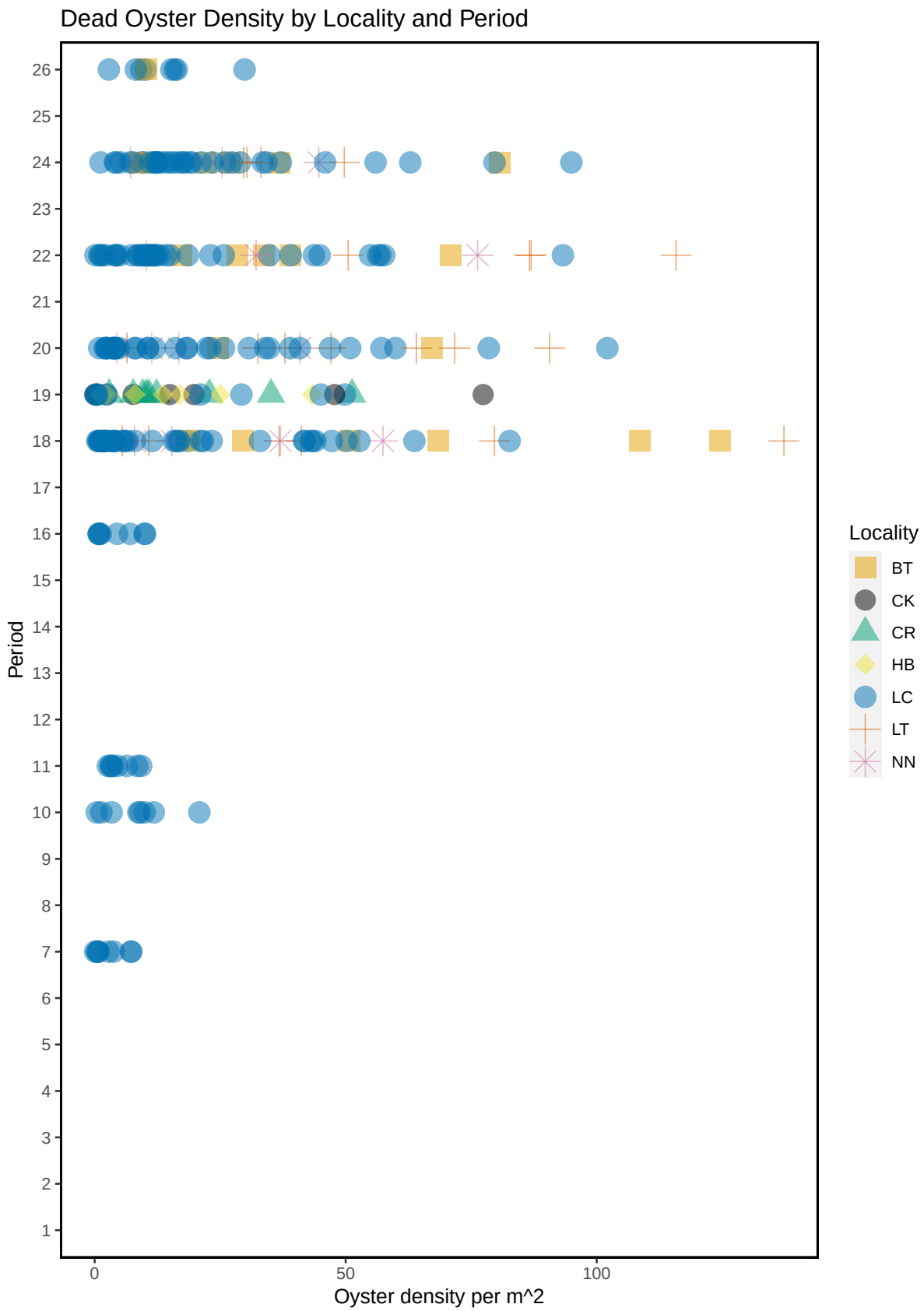


Figure − Dead oyster density by locality and period for all periods including period 22 (current period).

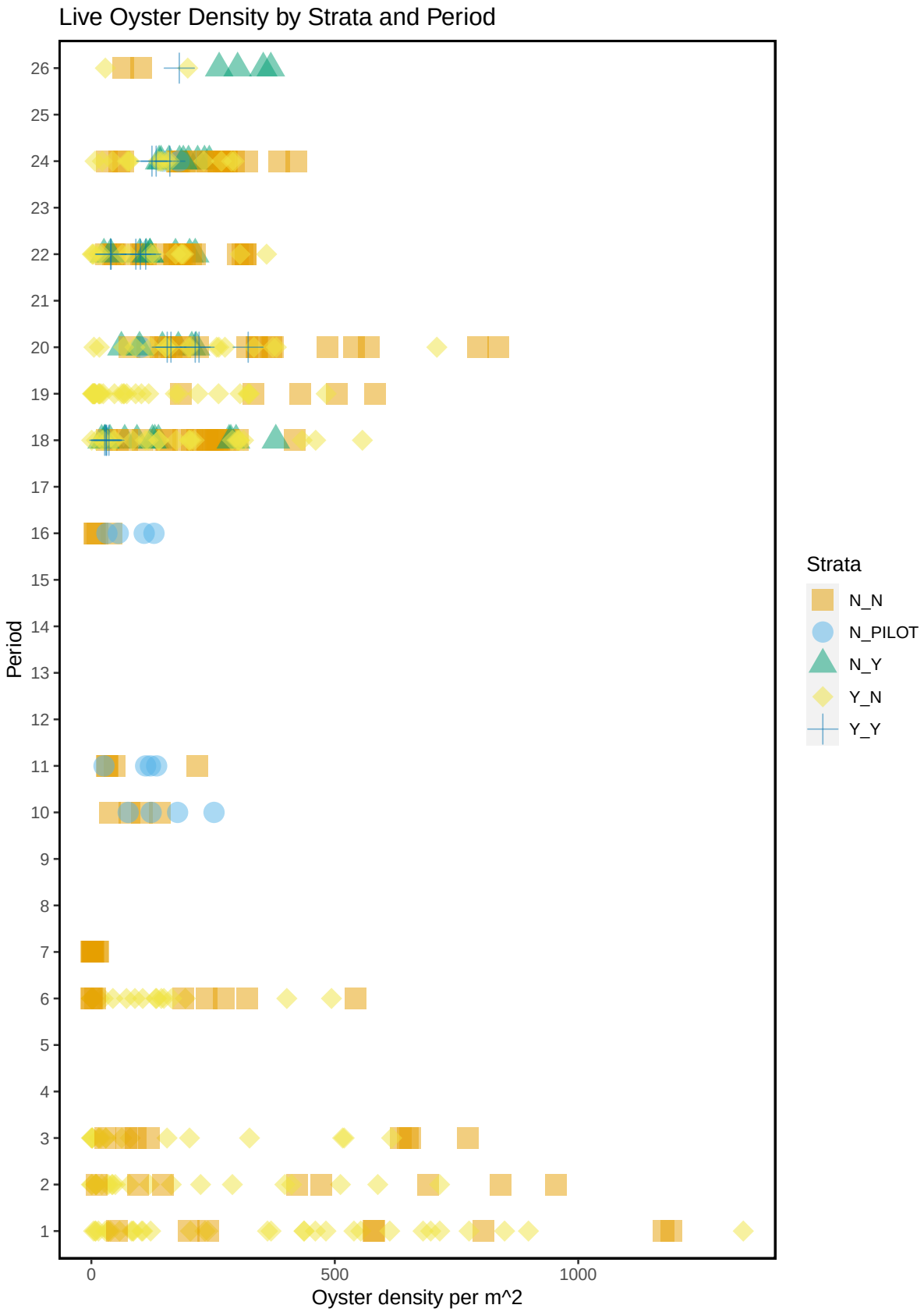


Figure − Live oyster density by strata and period for all periods including period 22 (current period).

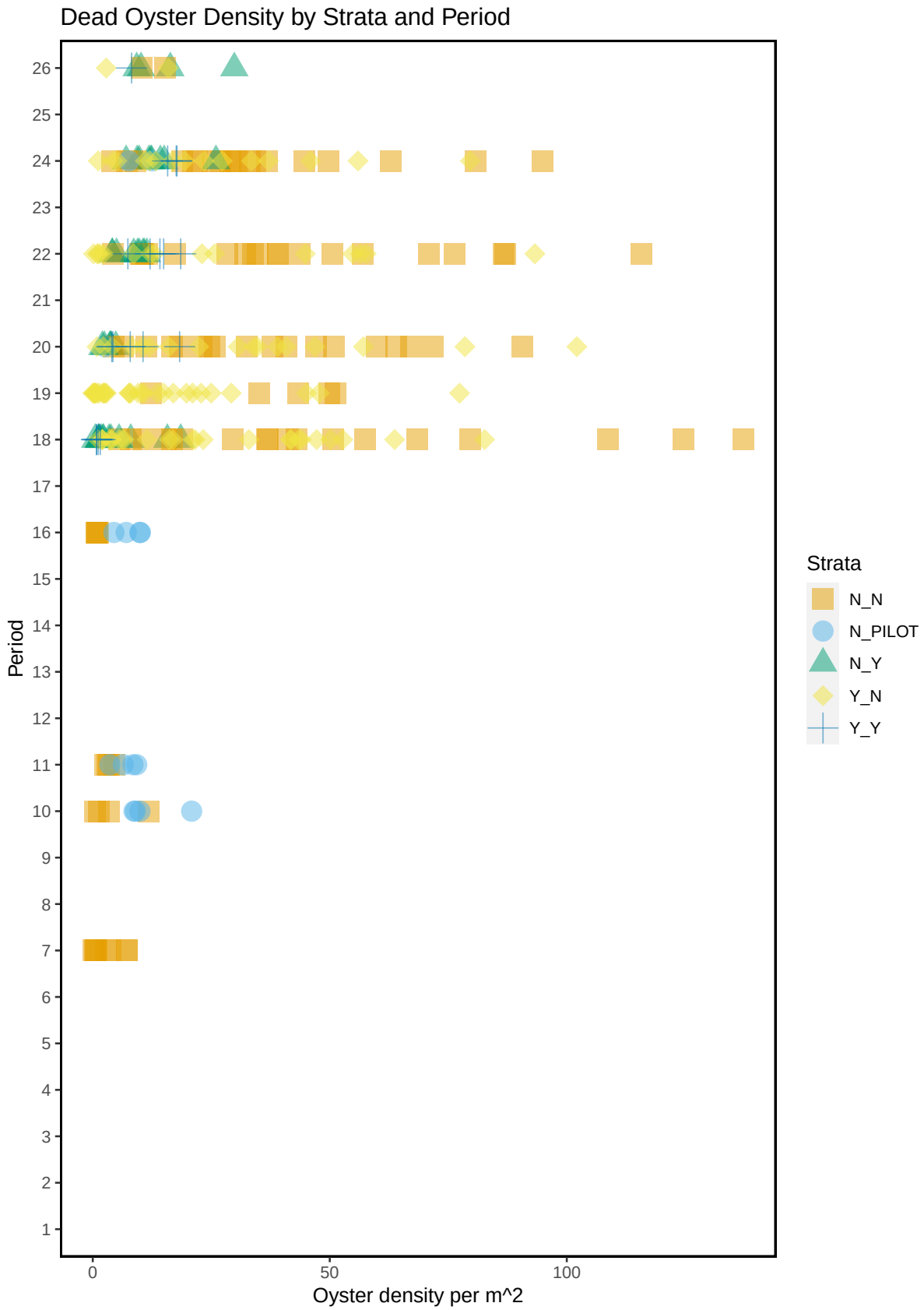


Figure − Dead oyster density by strata and period for all periods including period 22 (current period).

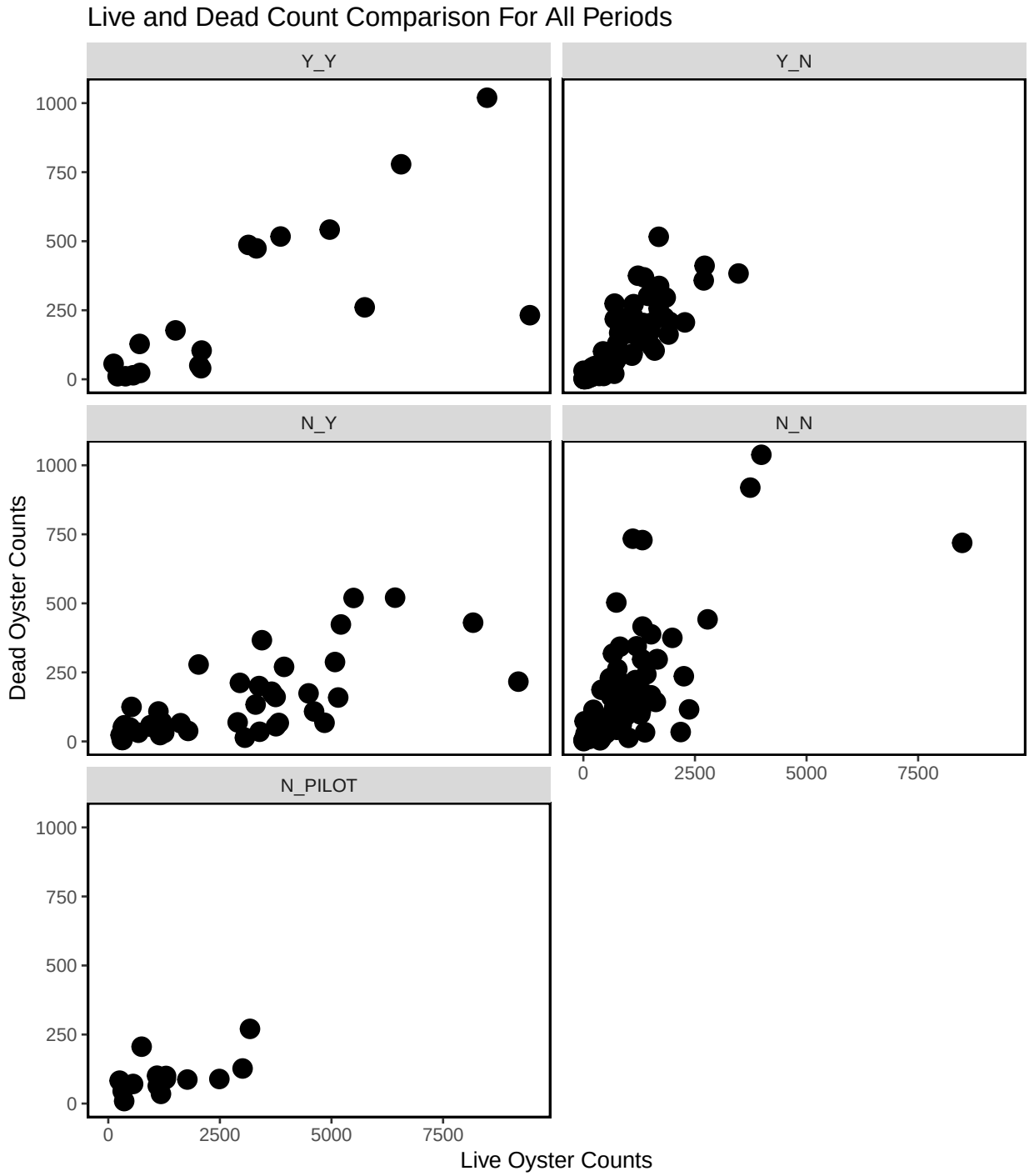


Figure- Live and dead oyster comparison for all periods, last sample date of period 26 is 2022-12-11.

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).

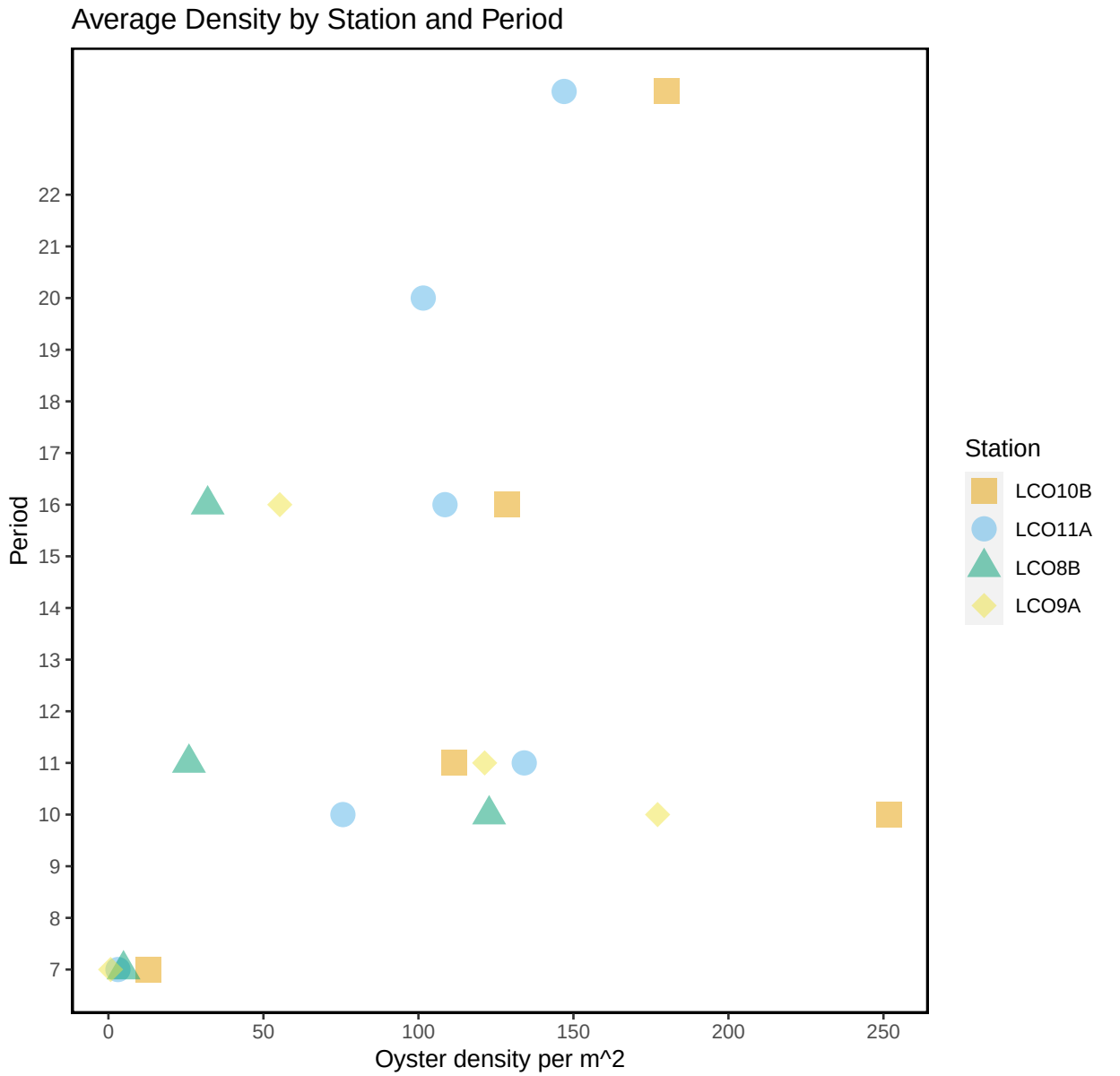


Figure − Average live oyster density comparison by station and period for all stations that were sampled during the pilc

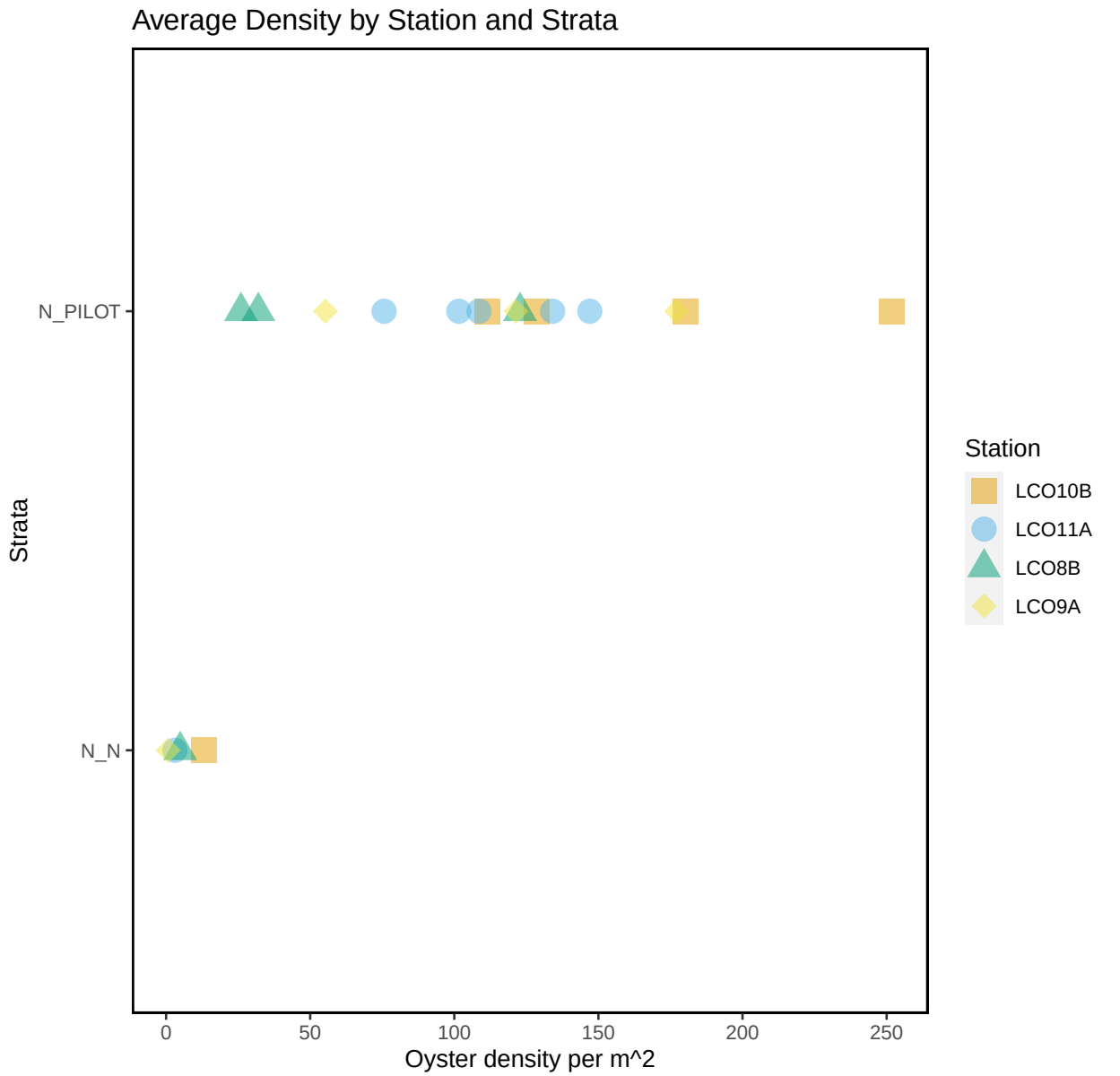


Figure − Average live oyster density comparison by station and strata for all stations that were sampled during th

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