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 3 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, 147 days have been sampled over this entire project.

Definition of Localities

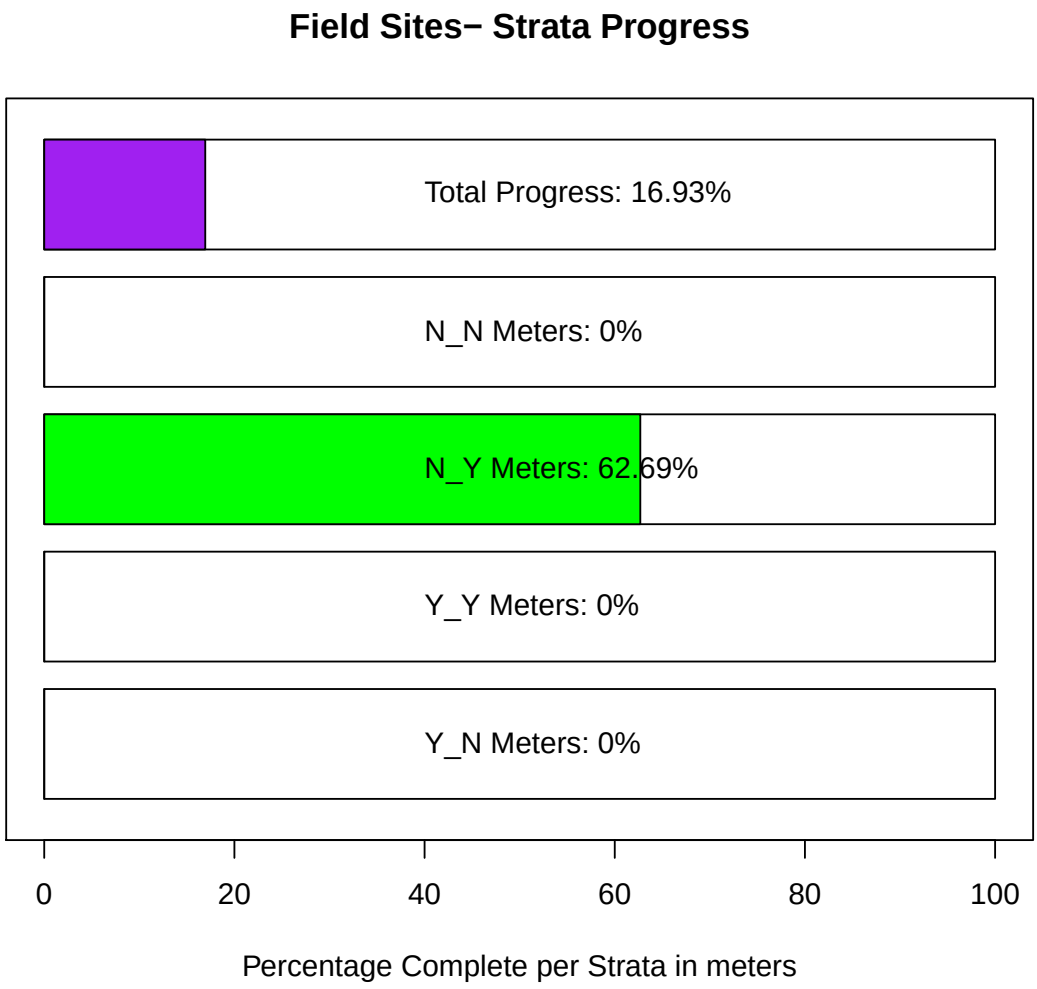
LOCALITY	LOCATION
BT	Big Trout
CK	Cedar Key
CR	Corrigan's Reef
HB	Horseshoe Beach
LC	Lone Cabbage
LT	Little Trout
NN	No Name

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	1398	819	2272	5160285	1.62	656	113	2684	1407	589	2835
LC	1874	1212	2037	4149521	1.09	194	1493	2255	1880	1530	2278
LT	1097	877	582	338863	0.53	150	802	1392	1100	863	1411
NN	842	714	639	408613	0.76	202	446	1238	828	518	1235

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1091	767	1203	1447370	1.10	159	779	1403	1090	828	1411
N_PILOT	2180	3009	1582	2501624	0.73	913	390	3970	2165	356	3174
N_Y	3528	3442	2154	4639983	0.61	415	2715	4340	3513	2750	4332
Y_N	756	626	668	446589	0.88	97	565	947	752	566	947
Y_Y	3716	3139	2898	8396392	0.78	804	2141	5291	3766	2424	5428

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	1.15	310	1236	2451	1848	1289	2500
22	1334	702	1693	2867783	1.27	242	860	1808	1340	911	1839
24	1729	942	1845	3403035	1.07	266	1207	2251	1720	1234	2234
26	4262	4486	1020	1039857	0.24	589	3108	5416	4252	3148	5150

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	250	222	194	37543	0.78	56	140	359	250	160	362
LC	166	161	108	11746	0.65	10	146	186	166	147	187
LT	320	321	129	16749	0.40	33	255	386	318	260	380
NN	233	174	230	52911	0.99	73	91	376	232	124	385

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	244	192	164	26786	0.67	22	202	287	245	206	286
N_PILOT	143	147	39	1557	0.28	23	98	188	142	102	180

N_Y	165	179	66	4398	0.40	13	140	190	165	142	188
Y_N	164	153	136	18379	0.83	20	125	203	164	130	200
Y_Y	145	133	77	5926	0.53	21	103	186	144	107	189

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	308
22	137	121	93	8638	0.68	13	111	163	137	112	164
24	185	181	92	8385	0.49	13	159	211	186	160	212
26	248	262	61	3691	0.24	35	179	317	248	181	300

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	170	106	181	32653	1.07	52	67	272	169	98	278
LC	181	129	185	34078	1.02	18	147	216	181	149	217
LT	206	137	151	22760	0.73	39	130	282	205	134	280
NN	102	72	94	8760	0.92	30	44	160	102	58	165

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	173	115	169	28724	0.98	22	129	217	173	134	219
N_PILOT	136	127	131	17150	0.97	76	-13	284	136	9	270
N_Y	186	161	131	17152	0.71	25	136	235	184	139	232
Y_N	132	86	131	17080	0.99	19	95	169	132	96	172
Y_Y	354	232	310	96380	0.88	86	185	523	357	201	526

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	108	190
22	191	128	193	37399	1.01	28	137	245	193	140	250
24	192	130	194	37816	1.01	28	137	247	191	141	250
26	182	174	28	777	0.15	16	150	214	182	159	213

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	38	31	23	518	0.60	6.6	25	51	38	27	51
LC	22	12	22	483	1.00	2.1	18	26	22	18	27
LT	56	50	30	881	0.53	7.7	41	71	56	41	70
NN	27	21	22	500	0.83	7.1	13	41	27	15	41

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	38.8	33.1	26.5	701	0.68	3.51	32.0	46	39.0	32.5	45
N_PILOT	7.6	7.6	5.0	25	0.66	2.88	1.9	13	7.5	2.6	13
N_Y	9.0	9.5	5.1	26	0.56	0.98	7.1	11	9.0	7.4	11
Y_N	28.1	22.4	25.9	670	0.92	3.78	20.7	36	27.9	21.2	35
Y_Y	12.6	14.2	5.3	28	0.42	1.47	9.7	15	12.4	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	681.6	0.94	3.81	20.2	35	28	21.0	35
22	28	14	28.4	807.0	1.00	4.06	20.5	36	28	21.3	36
24	26	19	20.9	438.3	0.81	3.02	19.8	32	26	20.2	32
26	11	10	1.5	2.4	0.15	0.89	8.8	12	11	9.3	12

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

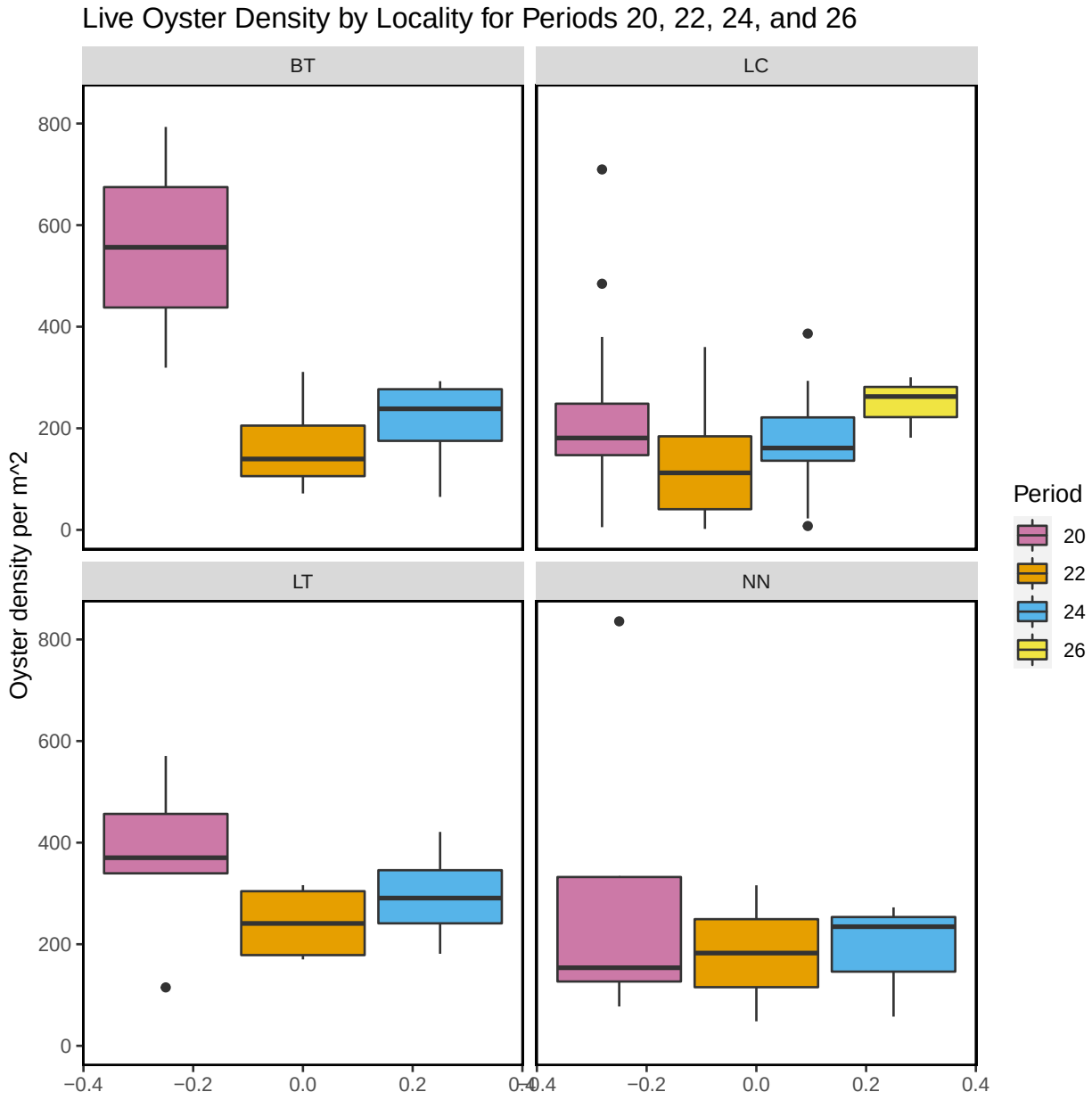


Figure- Calculated live oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-11-28.

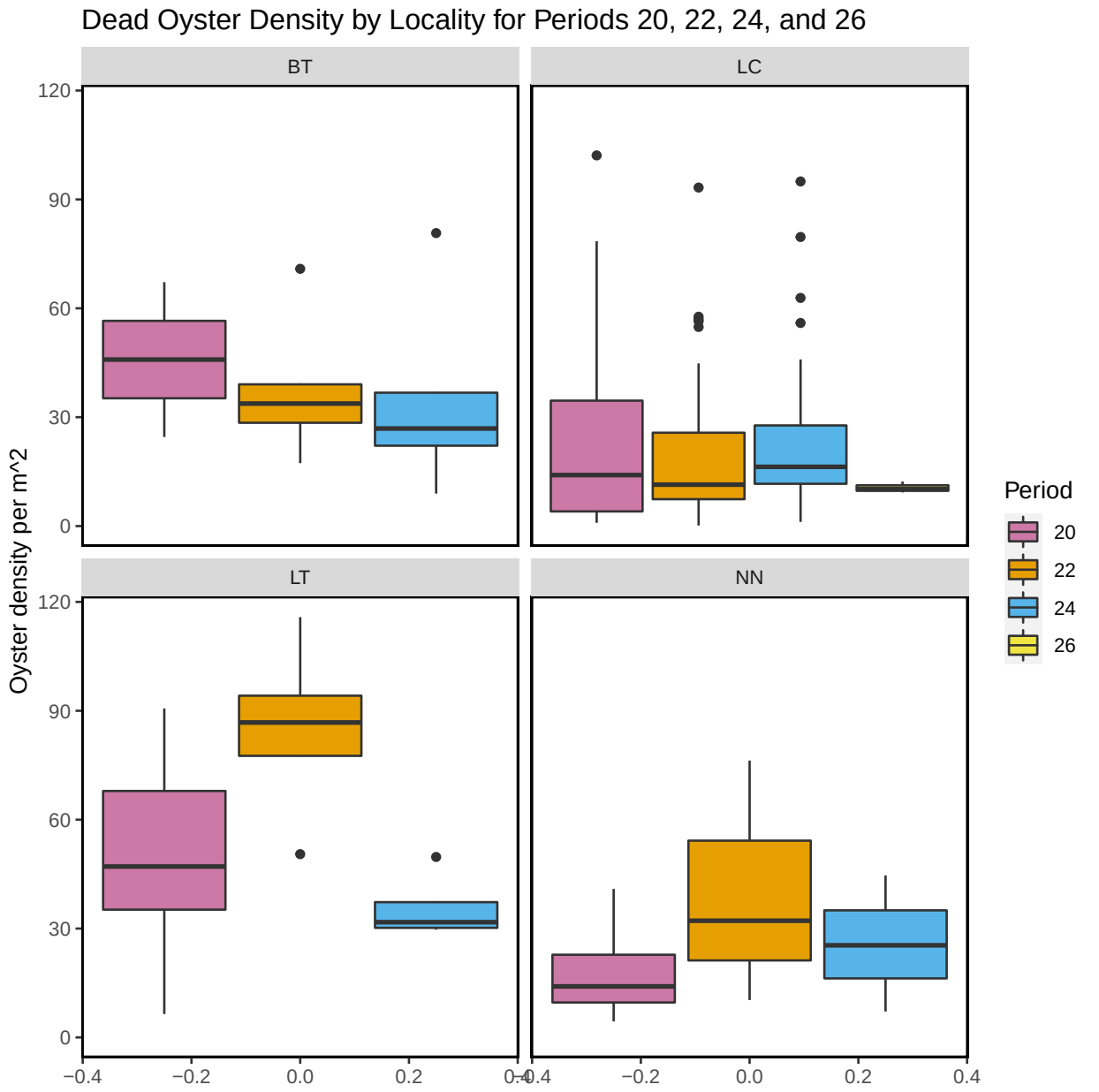


Figure- Calculated dead oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-11-28.

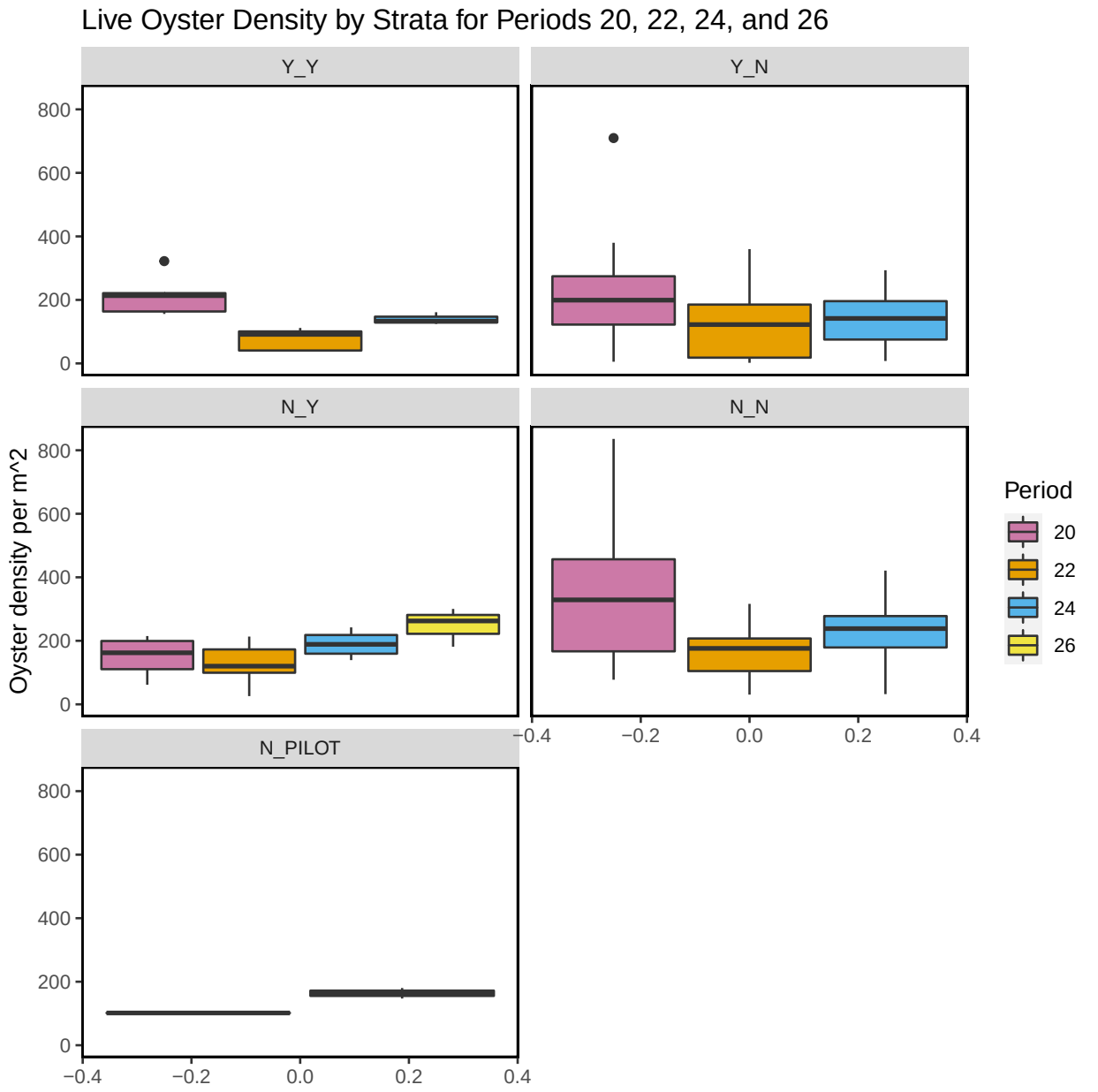


Figure- Calculated live oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-11-28.

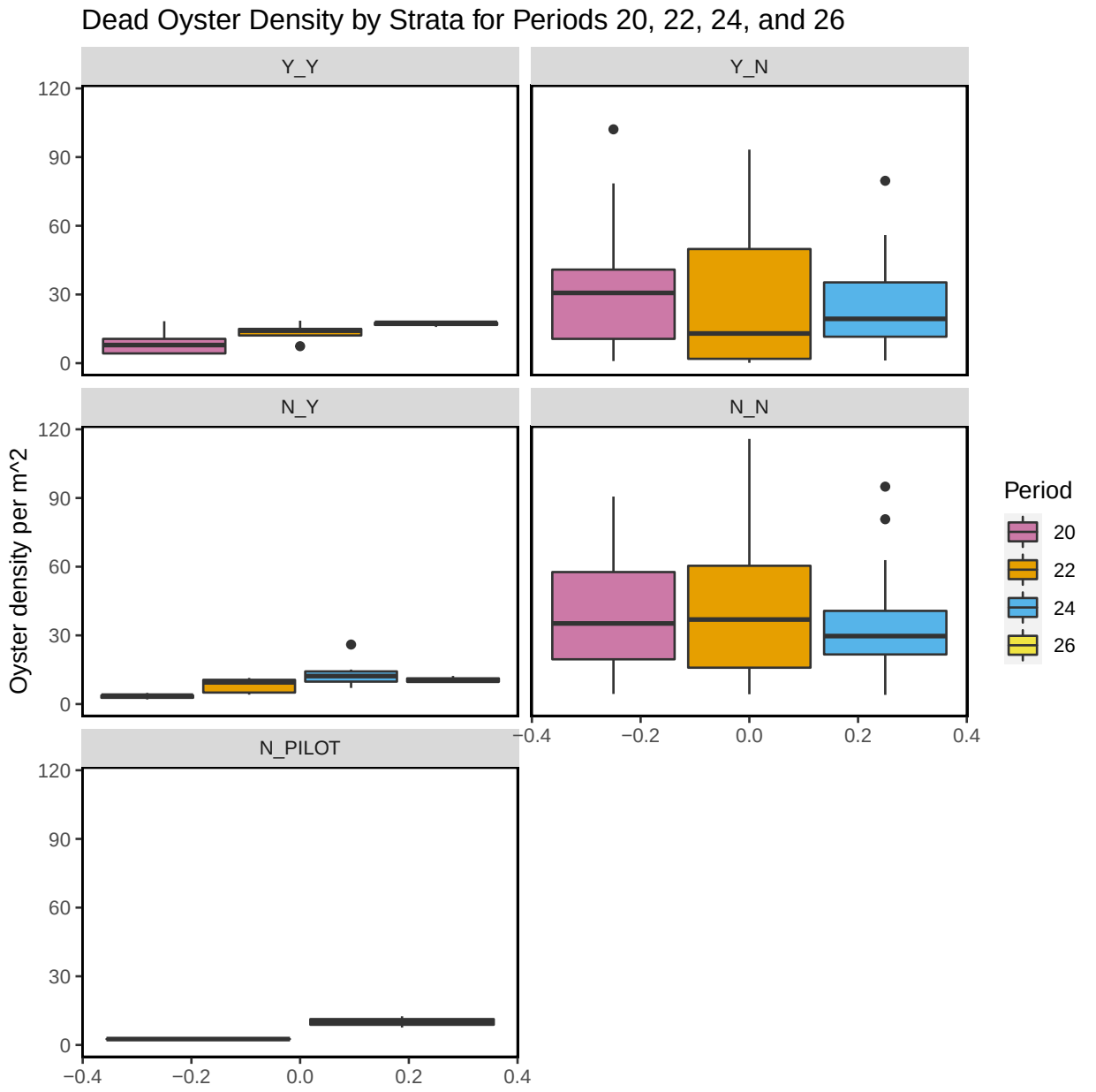


Figure- Calculated dead oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2022-11-28.

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.

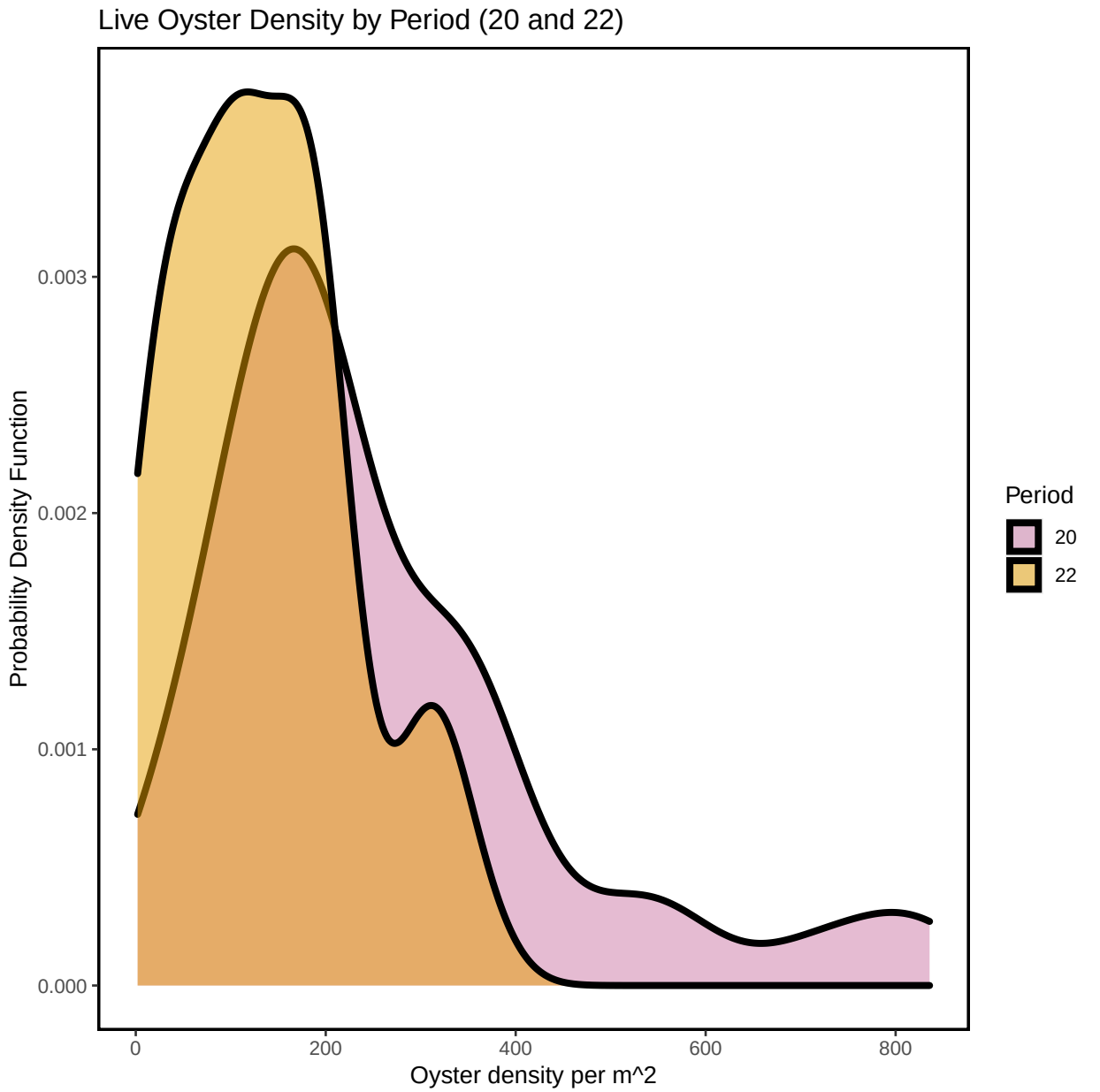


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2022-11-28.

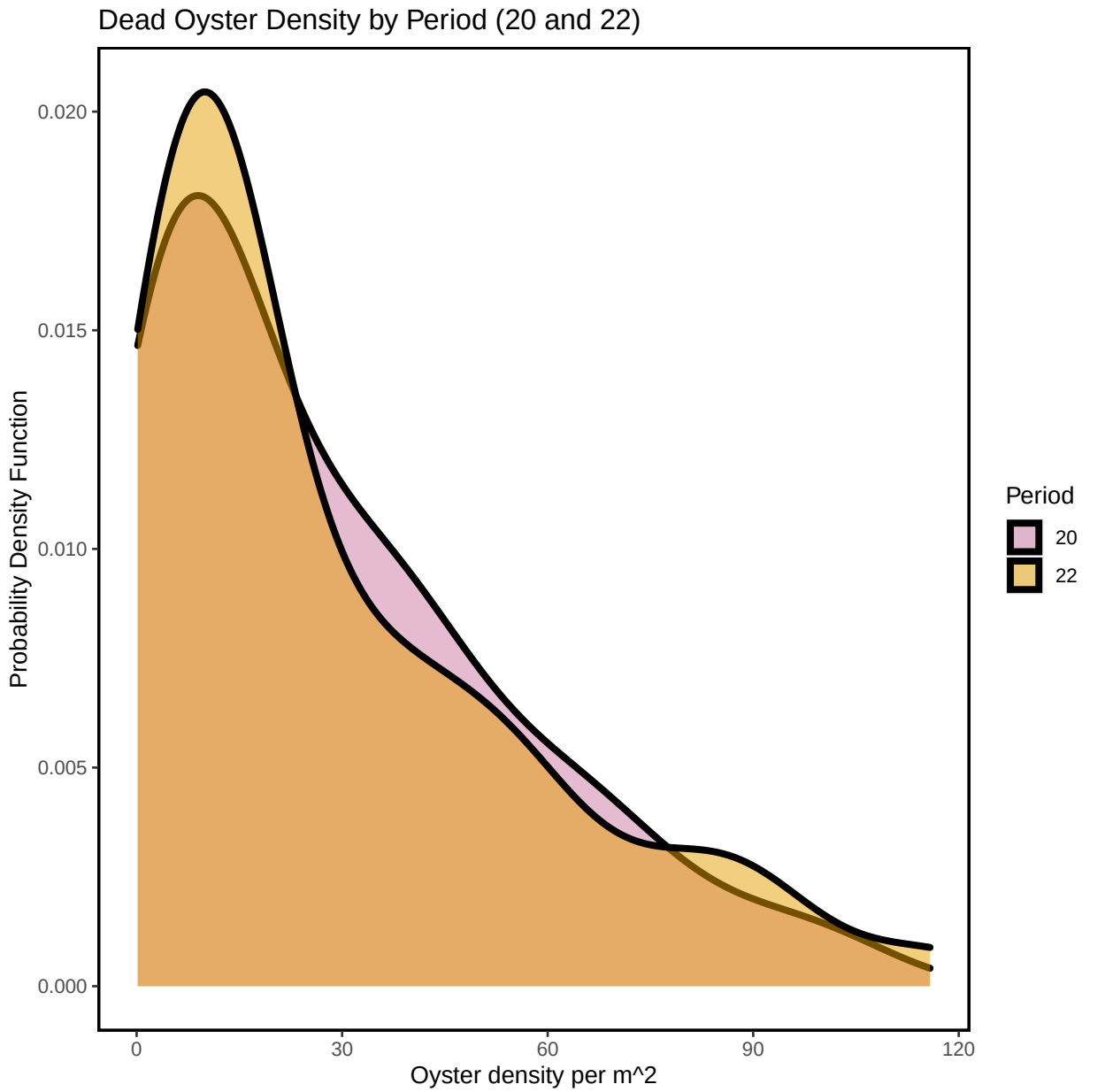


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2022-11-28.

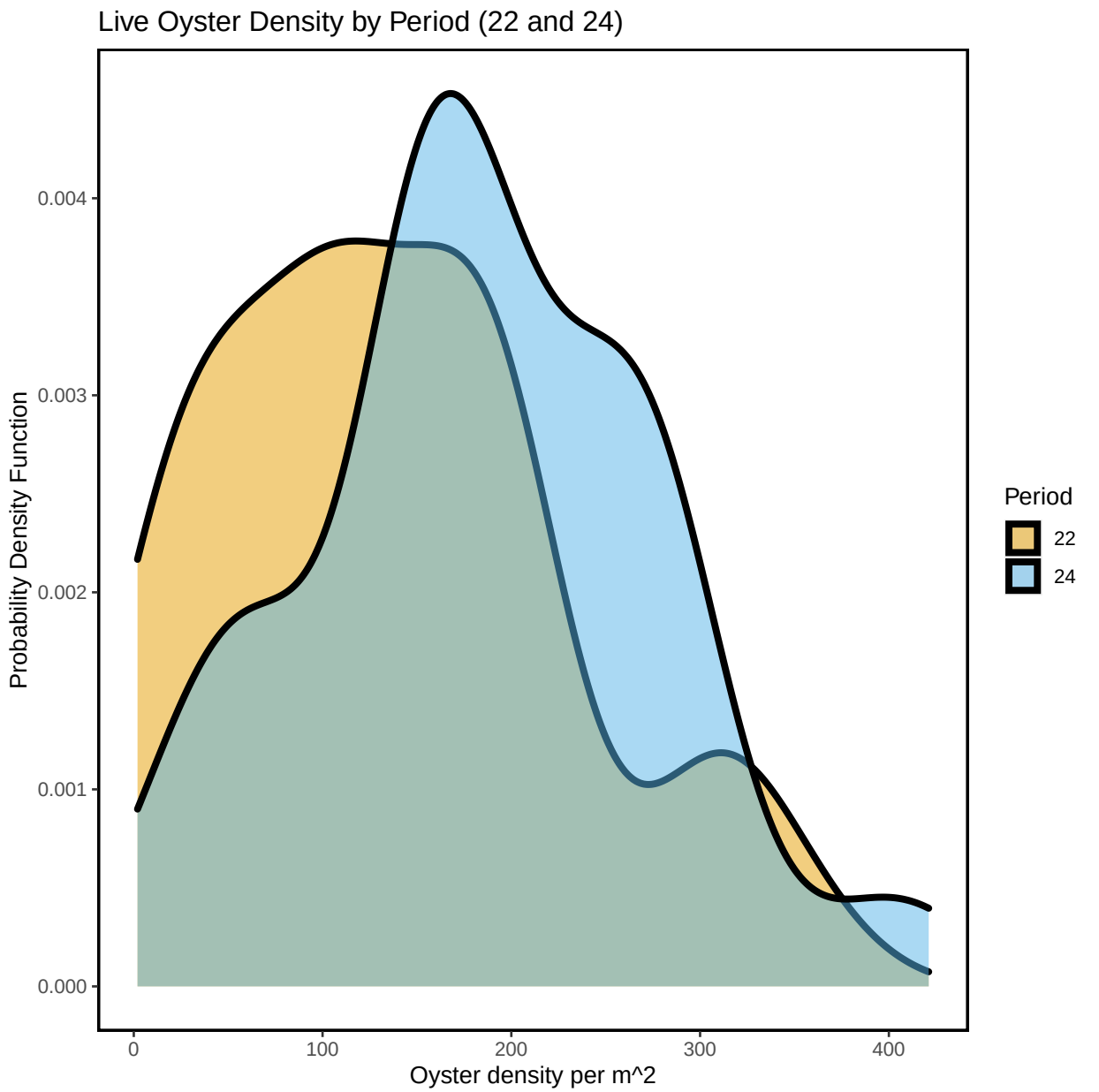


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2022-11-28.

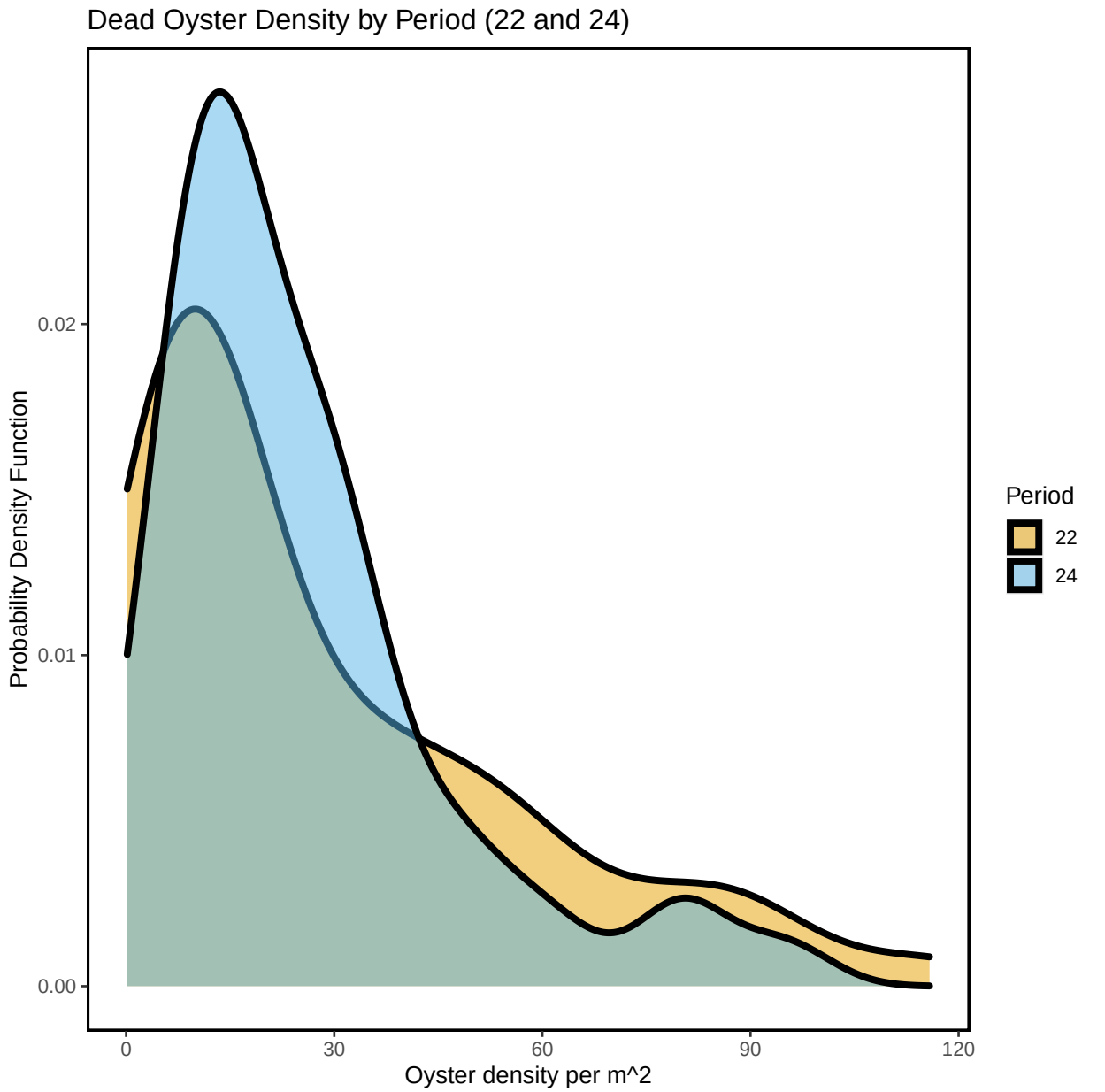


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2022-11-28.

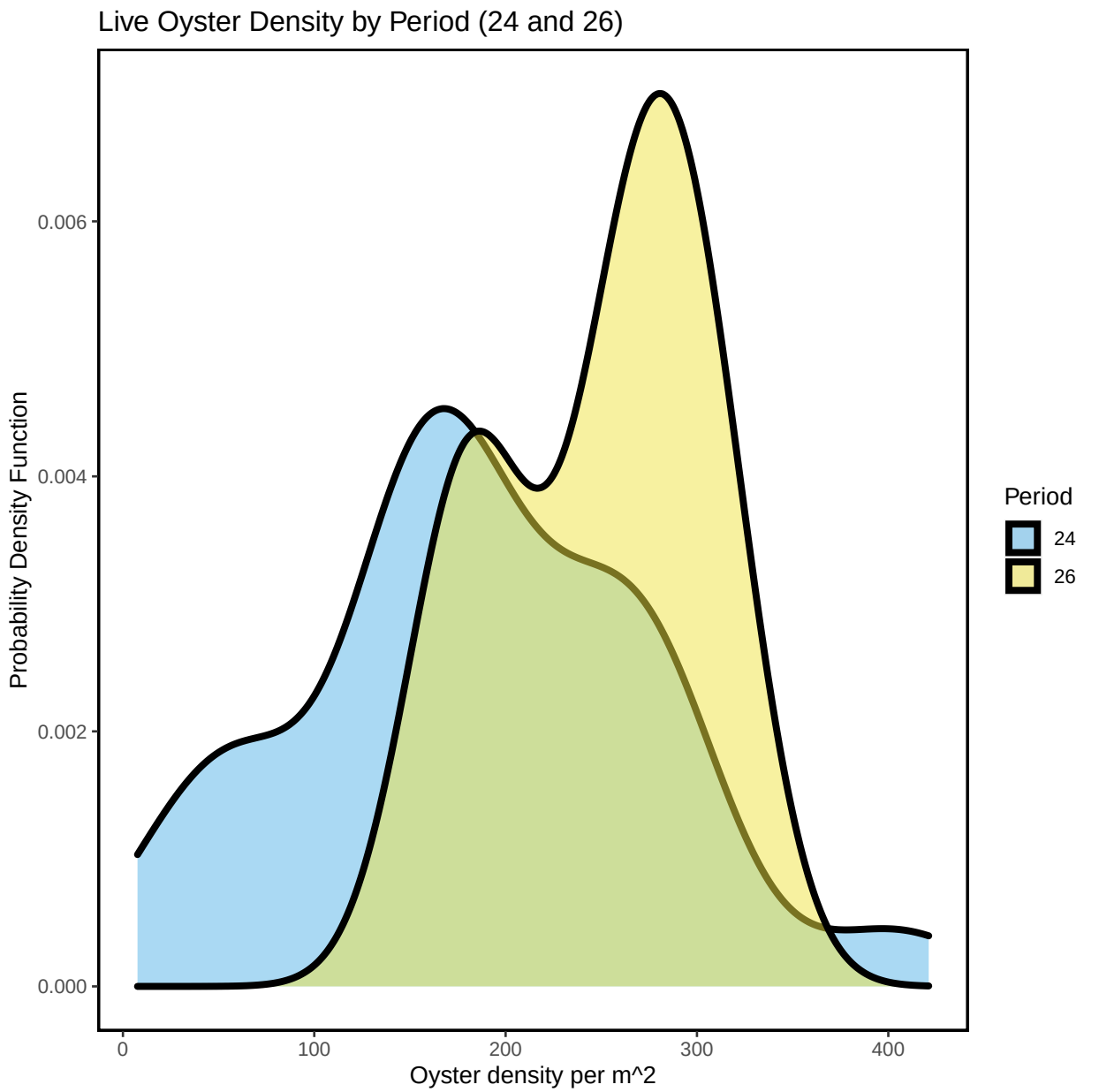


Figure- Calculated live oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2022-11-28.

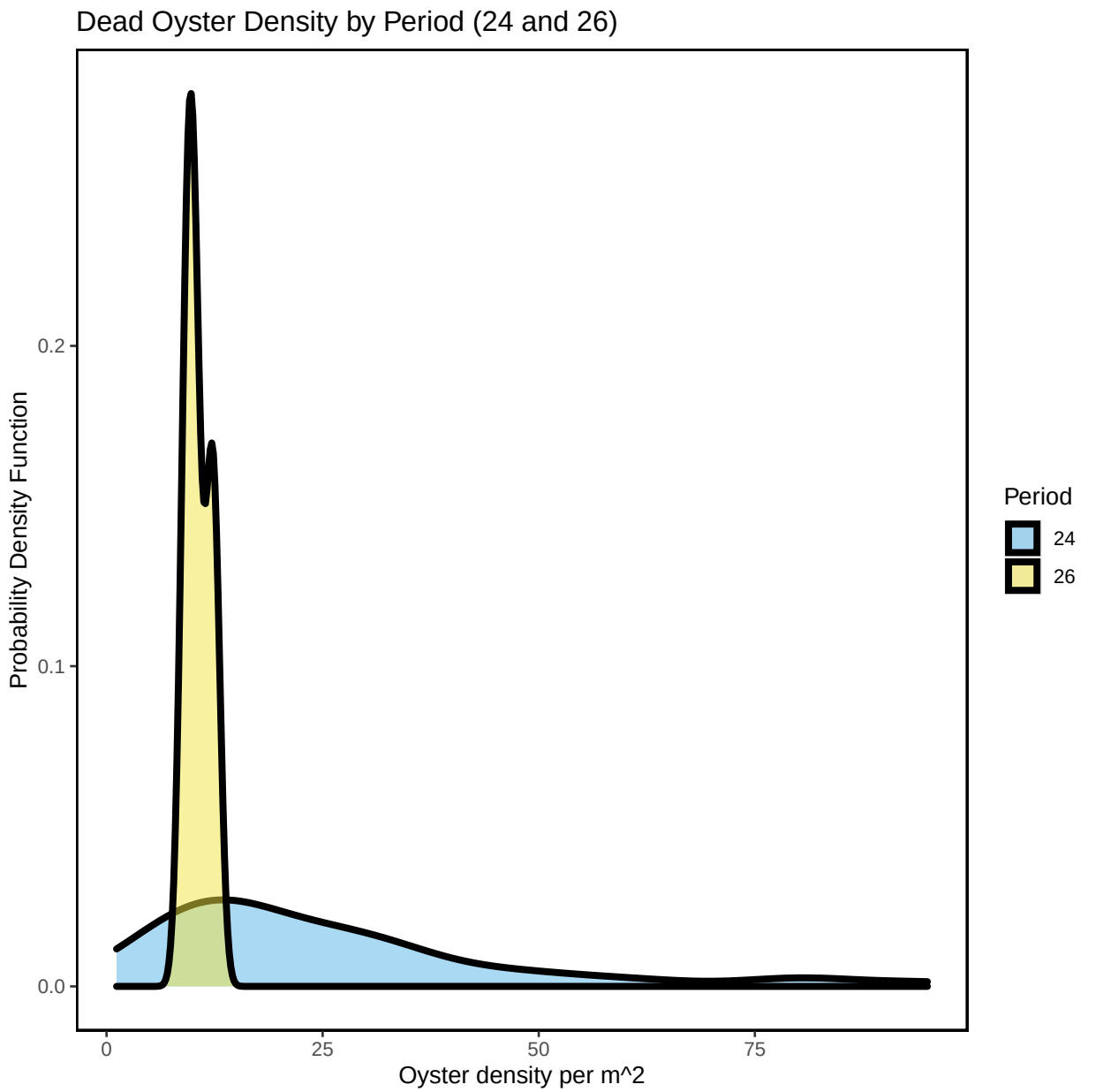


Figure- Calculated dead oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2022-11-28.

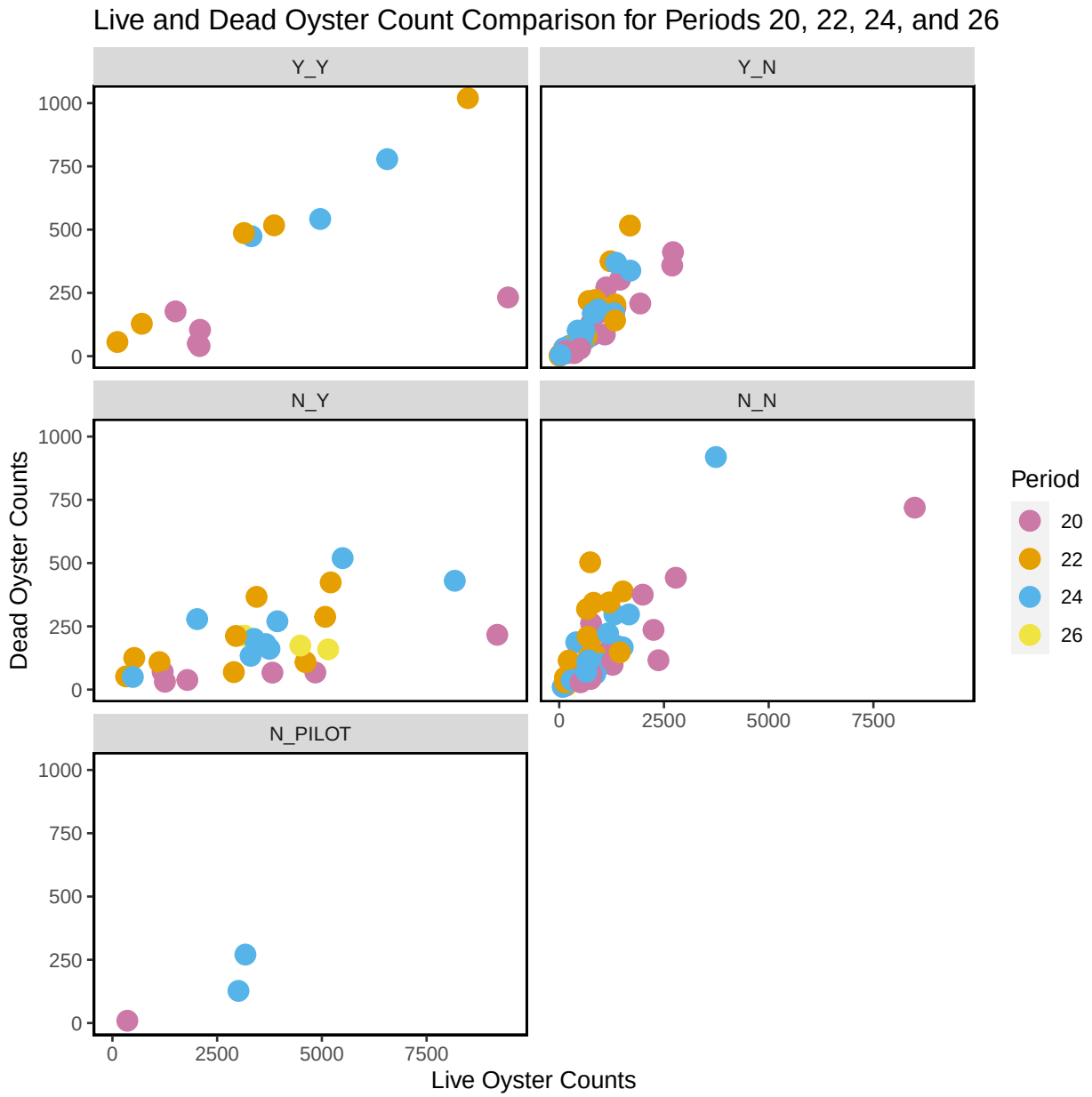


Figure- Live and dead oyster count comparison by periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) last sample date of period 26 as 2022-11-28.

Live Counts Double Pass Results

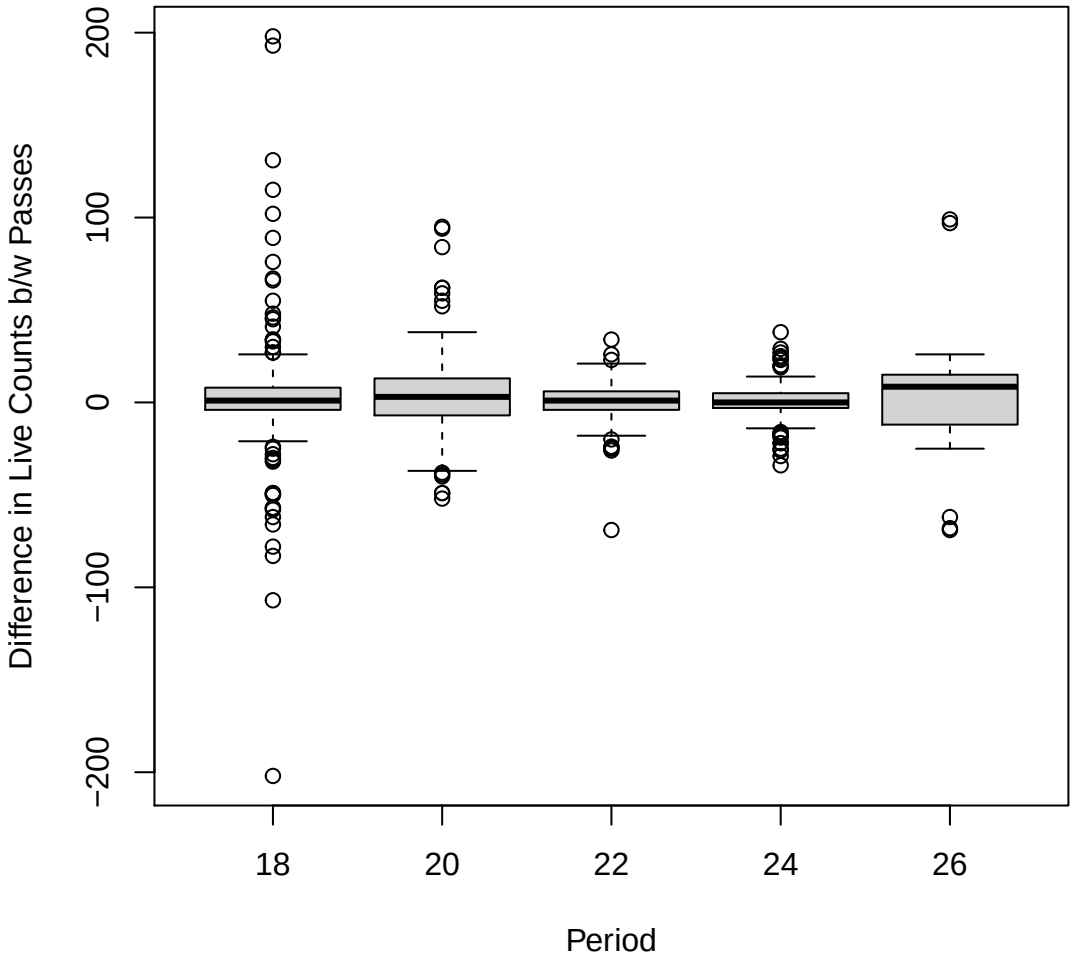


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, 24, and 26

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	3.23	35.9	11.1

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

Dead Counts Double Pass Results

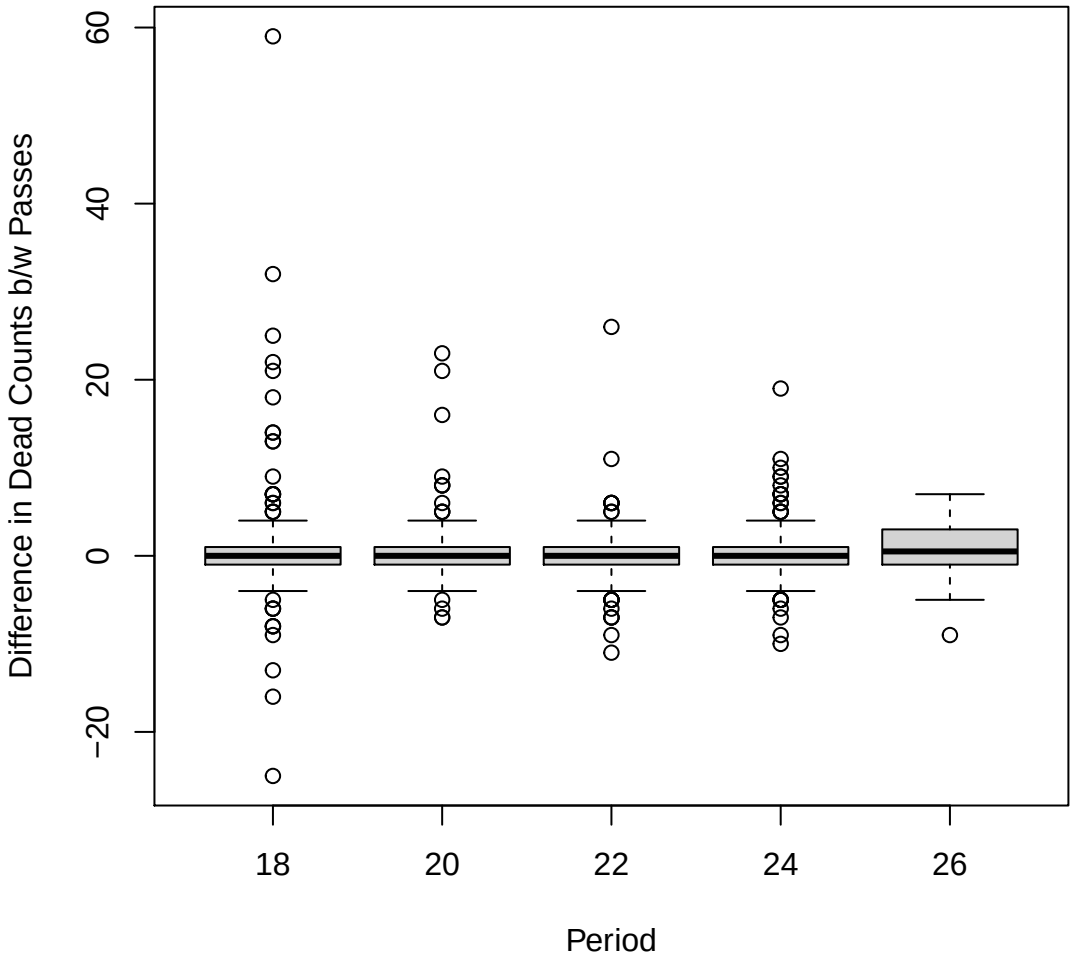


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, 24, and 26

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	0.79	1.15

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 2022-11-28. 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	18	588
CK	26	734
CR	46	1375
HB	45	1129
LC	235	13853
LT	21	542
NN	14	357

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	132	4251
N_PILOT	15	1050
N_Y	40	4716
Y_N	201	5874
Y_Y	17	2686

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	3	339

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	LC	3	339
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_Y	3	339
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

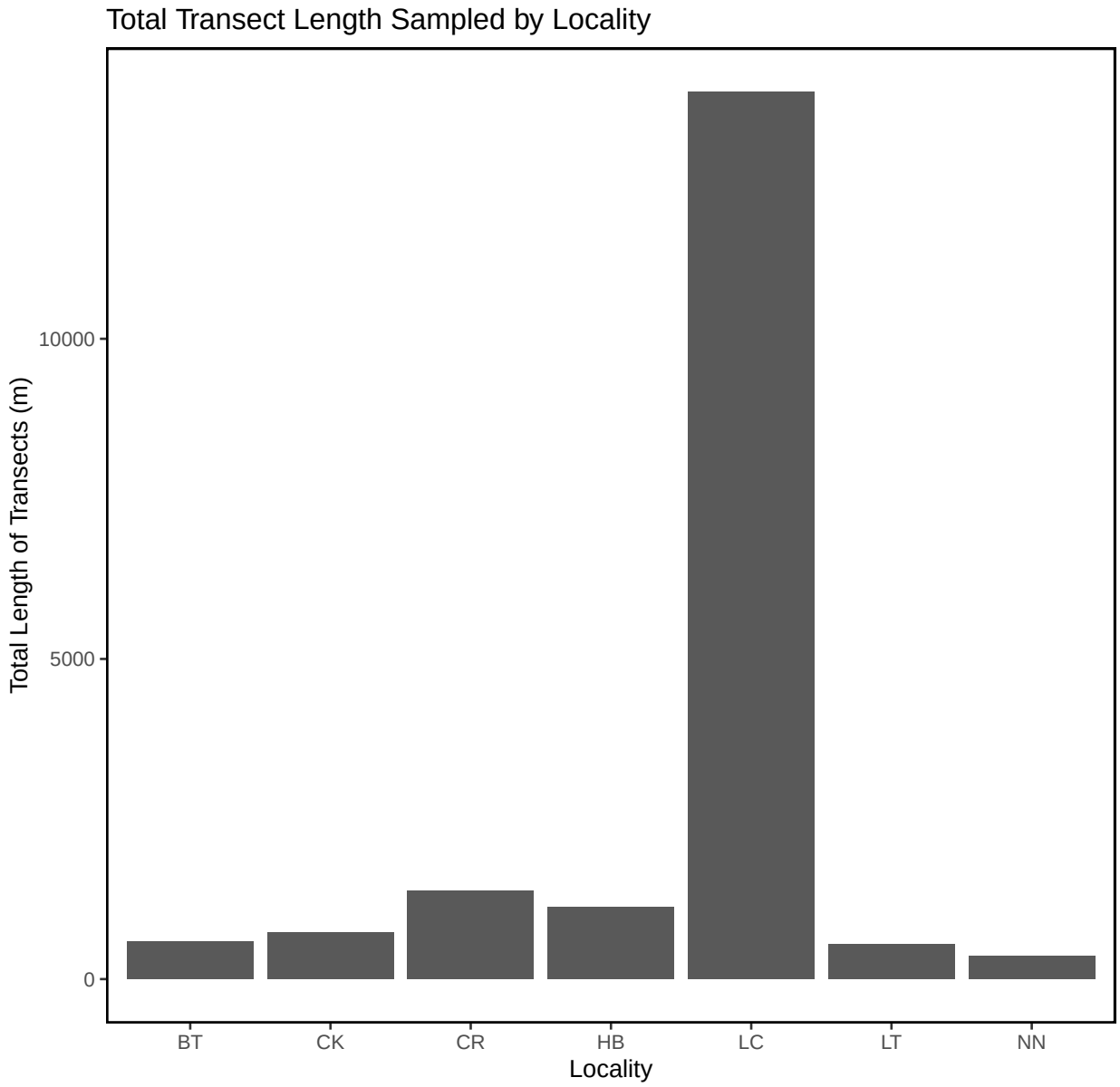


Figure − Bar plot of total transect length in meters sampled by locality for all periods.

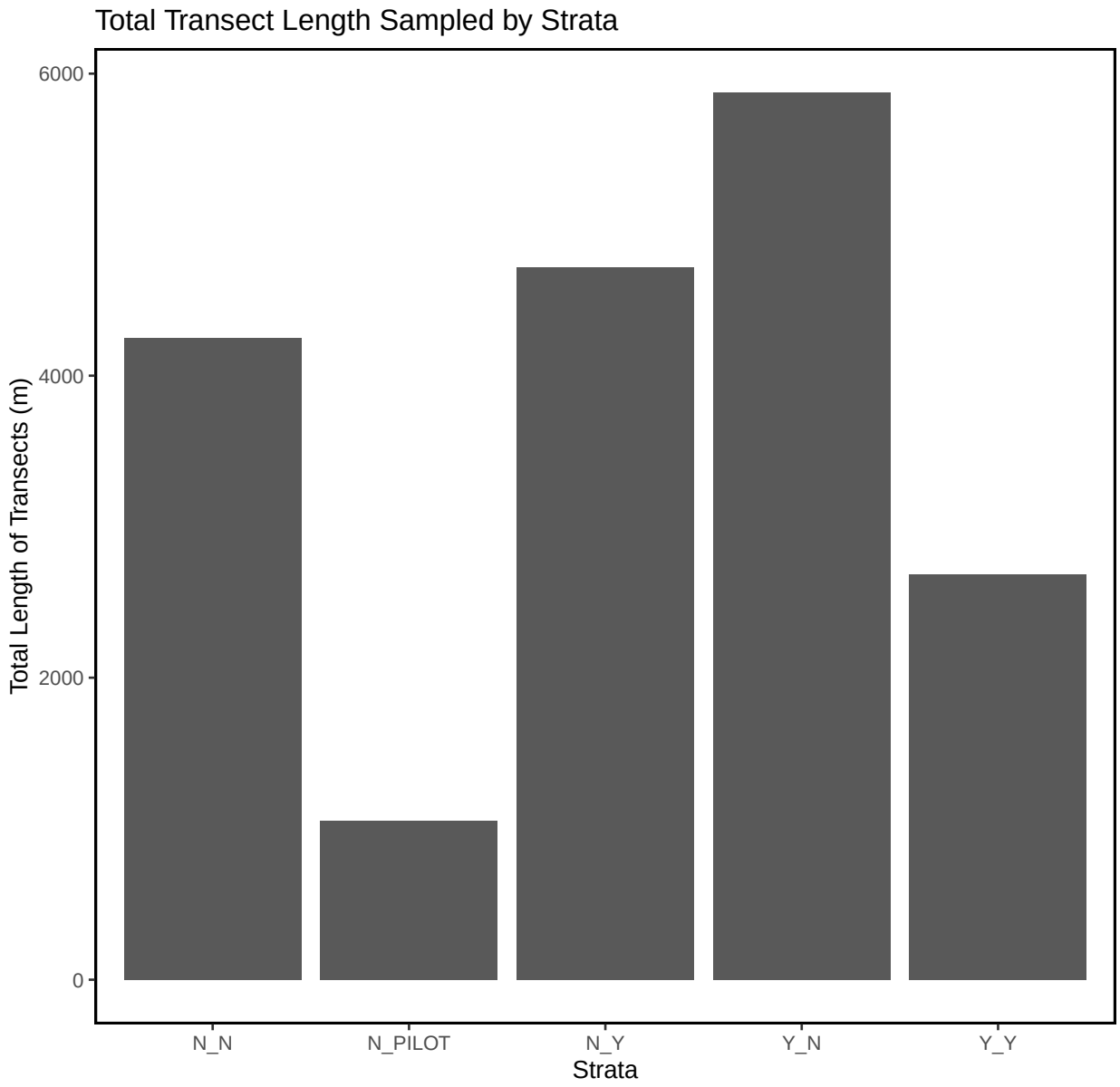
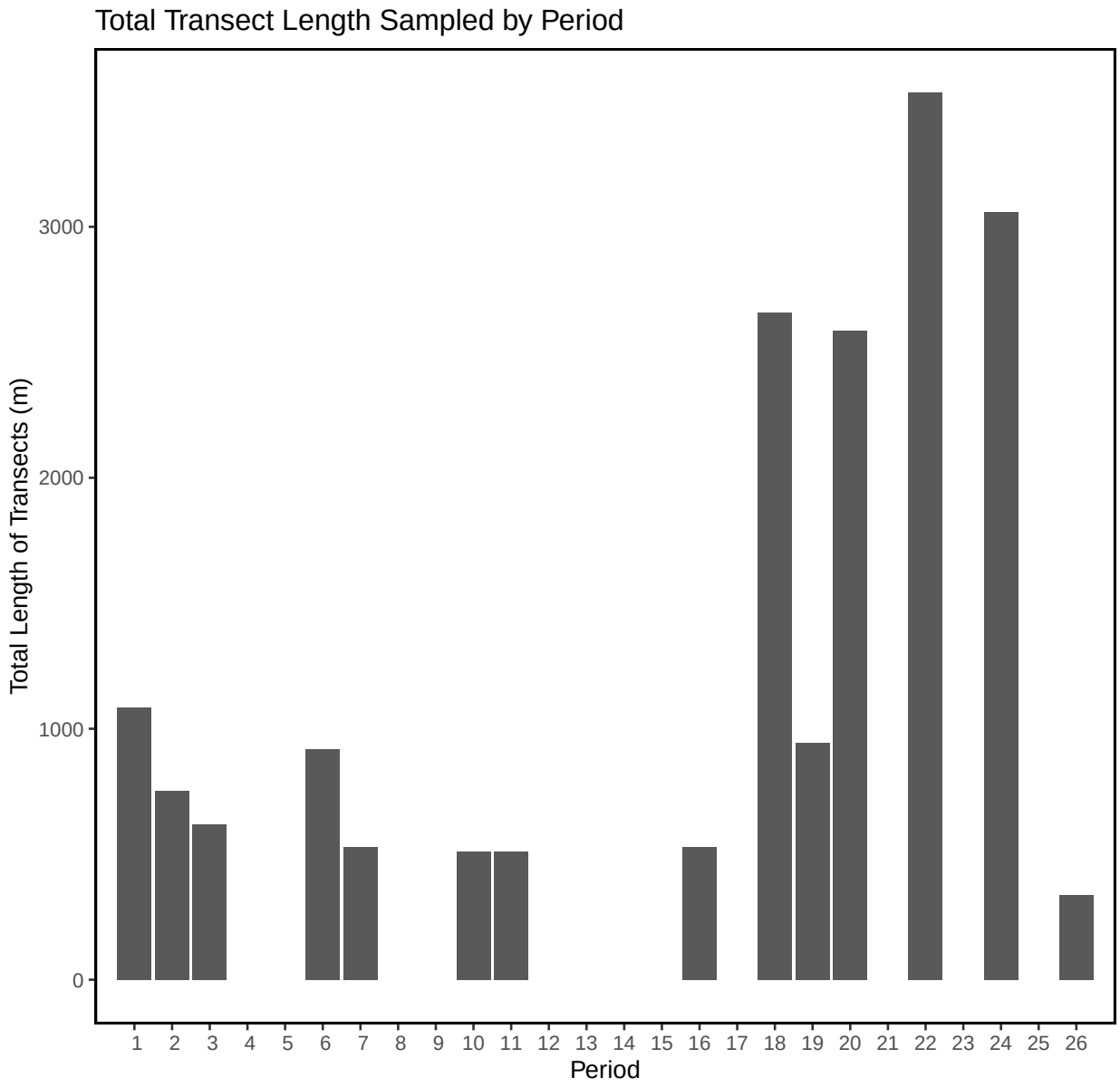


Figure − Bar plot of total transect length in meters sampled by strata for all periods.



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	1419	884	1951	3808032	1.38	460	518	2321	1452	743	2447
CK	857	444	1091	1190933	1.27	214	438	1277	860	498	1286
CR	1026	716	1035	1072162	1.01	153	727	1325	1037	740	1337
HB	902	364	1047	1095622	1.16	158	592	1211	905	606	1244
LC	1283	703	1617	2613487	1.26	106	1075	1491	1283	1093	1499
LT	1026	877	551	303721	0.54	120	790	1262	1025	825	1264
NN	735	674	584	341295	0.79	156	429	1041	727	465	1030

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	991	766	1019	1038768	1.03	89	816	1166	990	826	1172
N_PILOT	1318	1136	925	856059	0.70	239	850	1787	1319	878	1793
N_Y	2810	3005	2163	4676987	0.77	342	2140	3481	2811	2158	3469
Y_N	767	438	893	797378	1.16	63	643	892	767	643	893
Y_Y	2951	2080	2885	8324892	0.98	700	1580	4323	2921	1846	4317

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	1417	1034	1812
2	890	476	945	893727	1.06	176	546	1234	883	545	1235
3	738	296	817	668064	1.11	167	411	1065	740	430	1059
6	433	176	534	284791	1.23	96	245	621	433	257	619
7	50	29	56	3186	1.12	20	11	90	50	17	88
10	1207	1074	671	449607	0.56	237	743	1672	1214	801	1679
11	886	776	678	459708	0.77	240	416	1356	884	495	1347
16	494	366	467	217855	0.95	165	170	817	496	215	840
18	982	695	935	874733	0.95	120	748	1217	983	764	1233
19	555	329	573	328431	1.03	97	365	745	554	380	751
20	1844	1253	2125	4517189	1.15	310	1236	2451	1828	1297	2453
22	1334	702	1693	2867783	1.27	242	860	1808	1337	896	1833
24	1729	942	1845	3403035	1.07	266	1207	2251	1715	1245	2255
26	4262	4486	1020	1039857	0.24	589	3108	5416	4276	3148	5150

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	247	228	168	28203	0.68	39.6	170	325	244	181	332
CK	241	112	321	102927	1.33	62.9	118	364	241	134	381
CR	283	178	294	86605	1.04	43.4	198	368	282	197	372
HB	257	101	303	92052	1.18	45.7	168	347	256	169	345
LC	155	131	140	19721	0.90	9.2	137	173	155	137	176
LT	279	261	132	17460	0.47	28.8	222	335	278	224	335
NN	215	174	202	40919	0.94	54.1	109	321	214	125	333

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	256	192	240	57390	0.94	21	215	297	255	217	295
N_PILOT	118	121	59	3467	0.50	15	88	148	118	88	148
N_Y	159	153	87	7623	0.55	14	132	186	159	131	187
Y_N	184	117	212	44818	1.15	15	154	213	184	155	215
Y_Y	118	112	83	6898	0.70	20	78	157	118	83	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	395.8	291.2	496.4
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	255.5	157.5	360.5
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	234.1	138.2	341.1
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	121.1	73.8	171.9
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5.1	1.8	8.8
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	124.3	83.6	167.8
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	90.5	49.3	135.4
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49.1	21.7	81.9
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	177.0	146.2	209.1
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	154.2	100.6	210.5
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	255.4	206.8	309.8
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	137.2	112.0	163.5
24	185	180.6	91.6	8385	0.49	13	159.3	211.1	185.4	160.0	210.9
26	248	262.5	60.8	3691	0.24	35	179.4	316.9	248.7	181.5	300.4

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	258	165	283	80030	1.10	67	127.2	389	257	137	396
CK	78	32	106	11170	1.36	37	4.3	151	77	16	153
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	18	73
LC	132	73	158	24930	1.19	11	110.3	155	133	110	156
LT	218	141	180	32543	0.83	39	140.5	295	218	149	302
NN	98	72	87	7493	0.88	23	52.5	143	97	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	191	36527	1.22	19	120	195	157	121	196
N_PILOT	98	89	65	4243	0.67	17	65	131	97	68	132
N_Y	137	70	129	16706	0.95	20	96	177	137	102	178
Y_N	104	65	114	12940	1.09	11	82	127	104	84	127
Y_Y	274	128	307	94303	1.12	74	128	420	275	150	413

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	49
10	80	88	65	4245	0.82	23.0	34.5	125	80	40	125
11	50	40	25	620	0.49	8.8	33.2	68	50	36	66
16	44	28	41	1708	0.93	14.6	15.6	73	45	20	71
18	133	55	192	36903	1.44	24.6	85.1	182	133	89	186
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	111	187
22	191	128	193	37399	1.01	27.6	137.2	245	193	144	255
24	192	130	194	37816	1.01	28.1	136.8	247	191	140	250
26	182	174	28	777	0.15	16.1	150.5	214	182	159	213

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	48	35	33	1061	0.68	7.7	32.6	63	48	33.9	63
CK	21	11	28	757	1.29	9.7	2.3	40	22	6.6	42
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	5.0	22
LC	18	10	21	422	1.14	1.5	15.1	21	18	15.2	21
LT	54	47	35	1232	0.64	7.7	39.5	70	55	40.7	69
NN	28	21	22	463	0.78	5.7	16.4	39	27	17.0	39

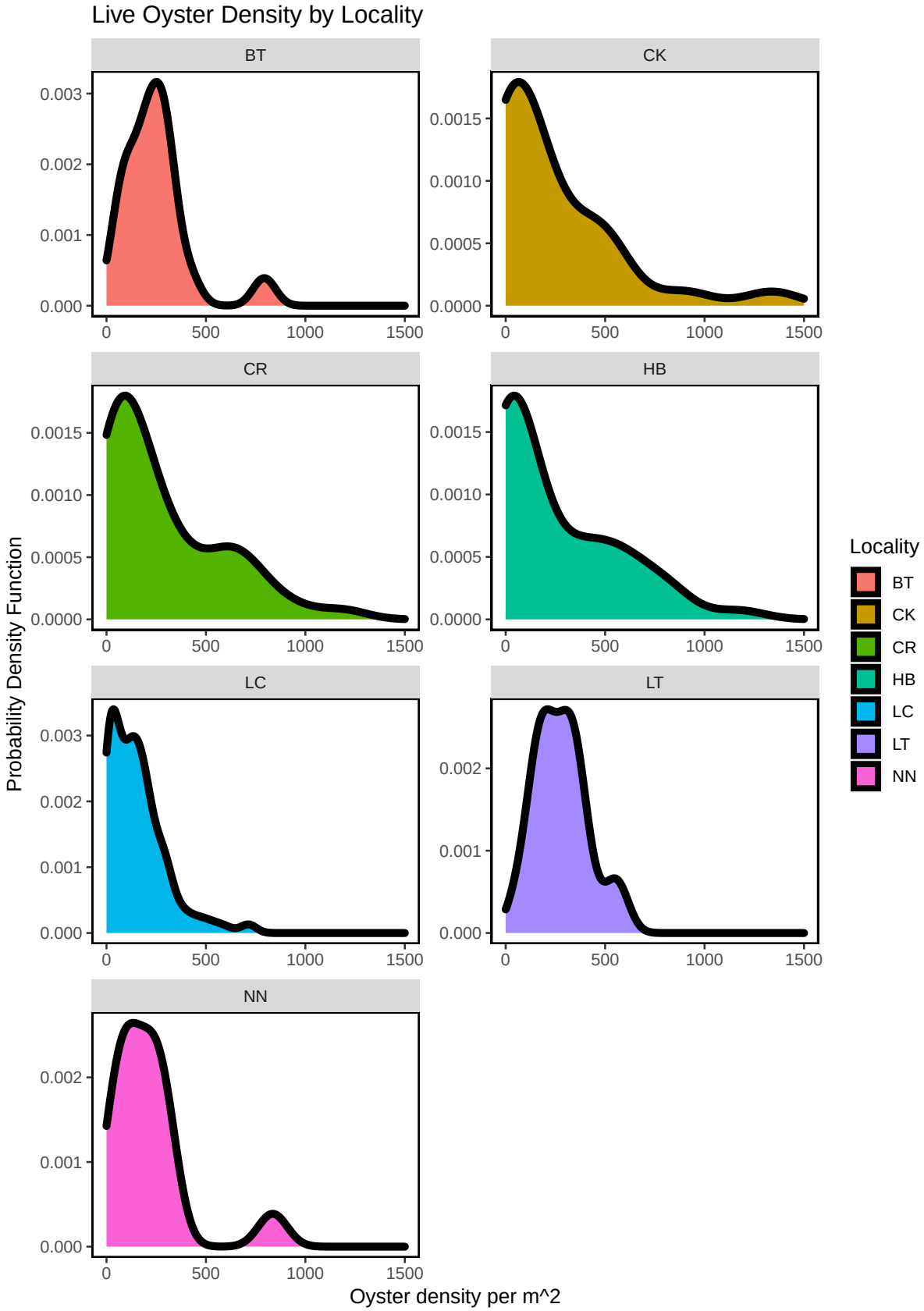
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	33.5	28.7	30.6	938	0.91	3.06	27.5	39.5	33.5	27.8	39.6
N_PILOT	8.7	8.7	4.3	18	0.49	1.11	6.5	10.9	8.7	6.8	11.1
N_Y	7.8	7.5	5.6	31	0.72	0.88	6.0	9.5	7.7	6.0	9.5
Y_N	23.3	15.5	23.6	556	1.01	2.34	18.7	27.9	23.3	18.8	28.0
Y_Y	9.9	10.6	6.8	46	0.69	1.65	6.6	13.1	9.9	6.6	13.0

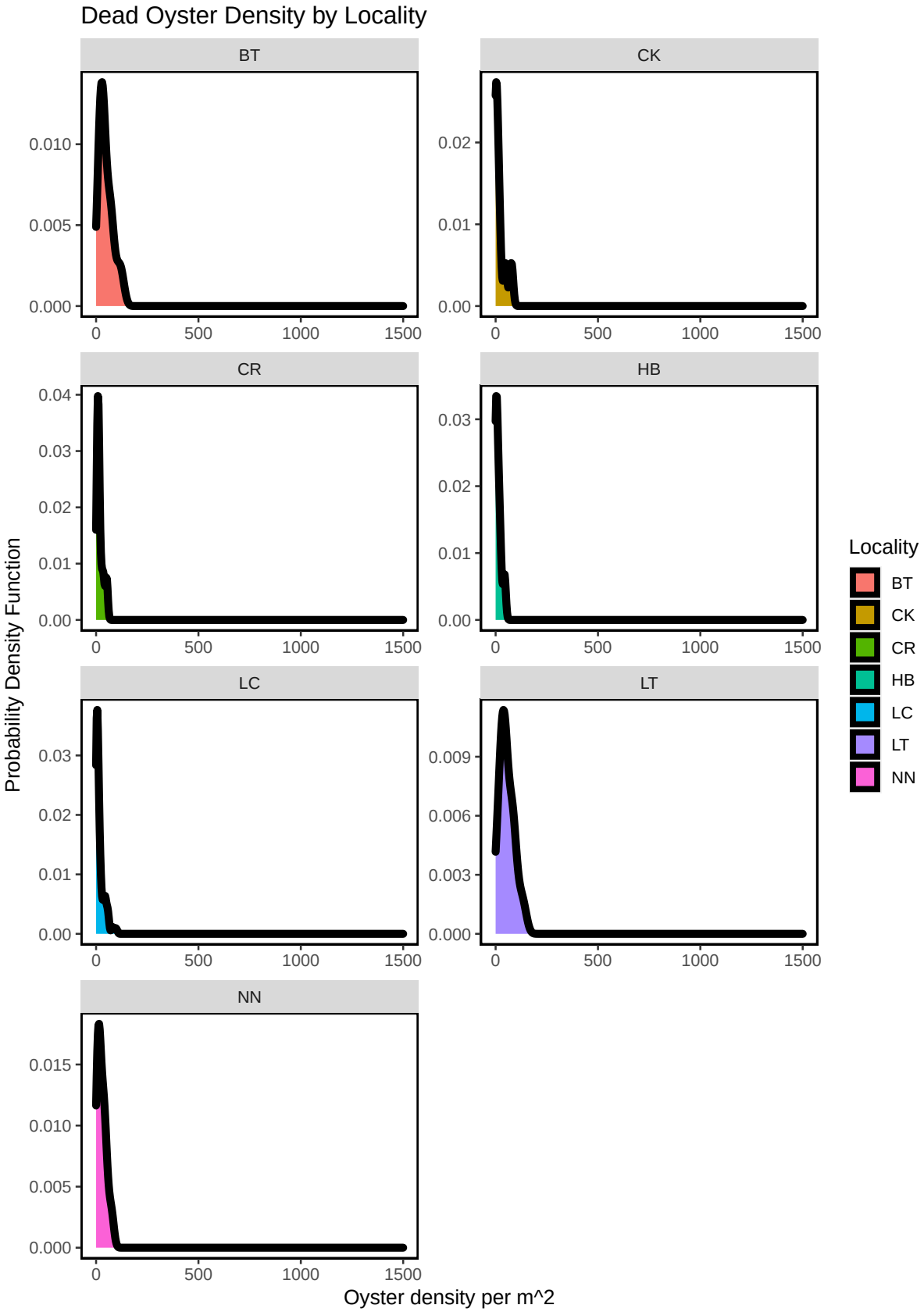
Dead Oyster Density by Period

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	1.0	4.9
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.2	4.1	12.8
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.1	3.5	6.9
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.5	2.0	7.3
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.4	18.8	34.8
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.6	11.4	24.2
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.6	20.7	35.3
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.5	21.3	36.8
24	25.7	19.1	20.9	438.3	0.81	3.02	19.83	31.7	25.9	20.3	32.0
26	10.6	10.2	1.5	2.4	0.15	0.89	8.83	12.3	10.6	9.3	12.3

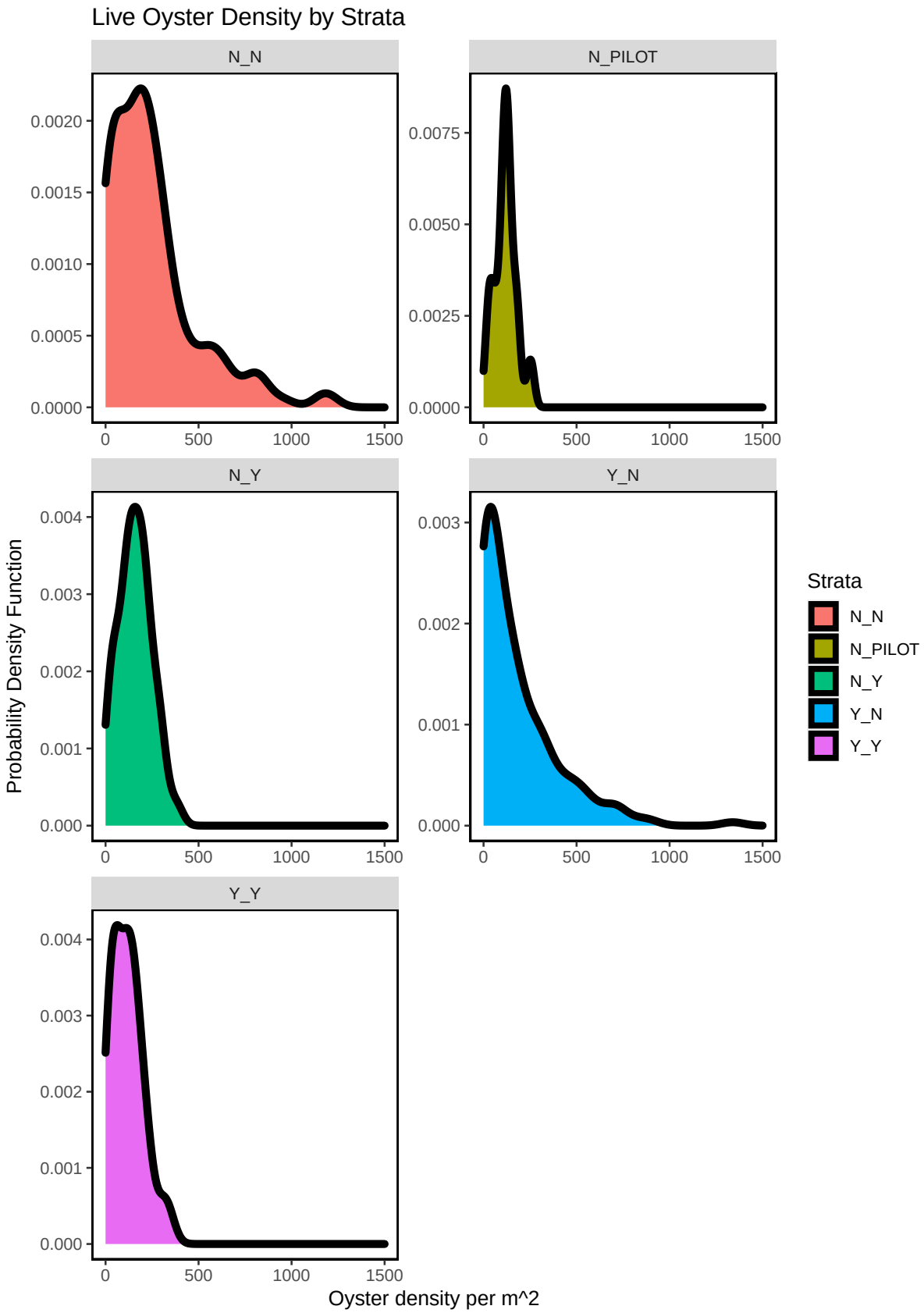
Summary Density Plots for all Periods



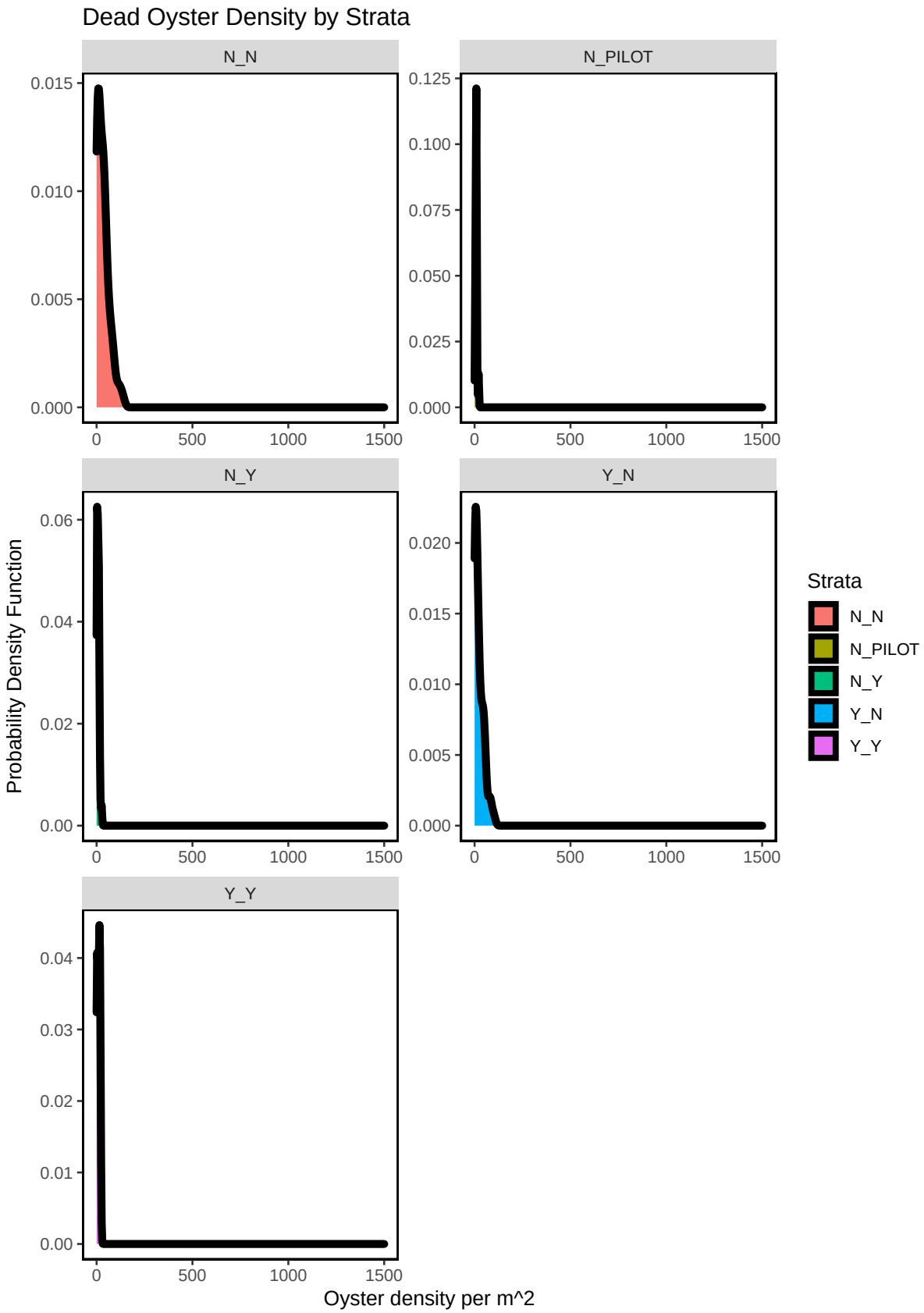
Figure− Calculated live oyster density by locality for all periods including period 22 (current period).



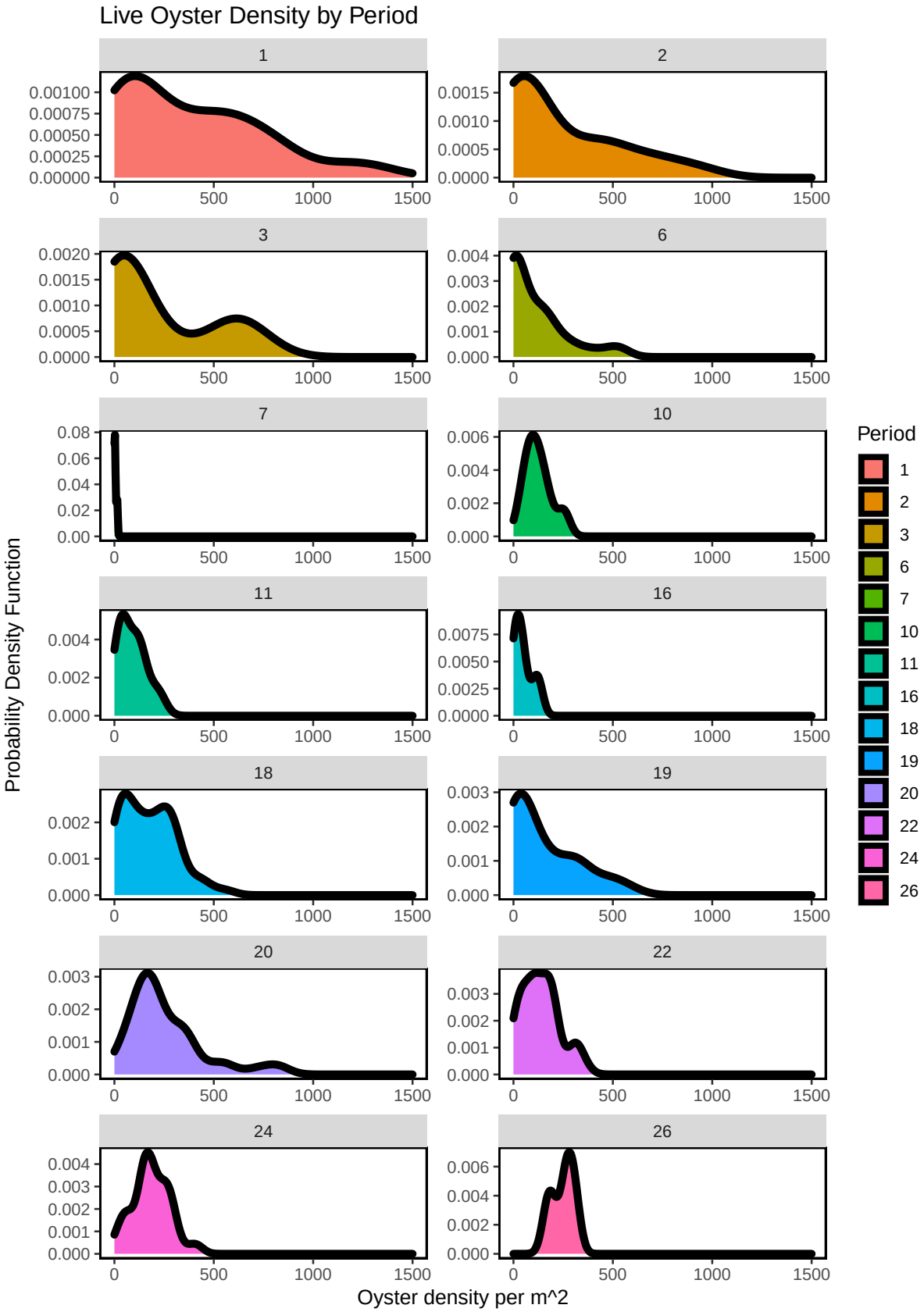
Figure− Calculated dead oyster density by locality for all periods including period 22 (current period).



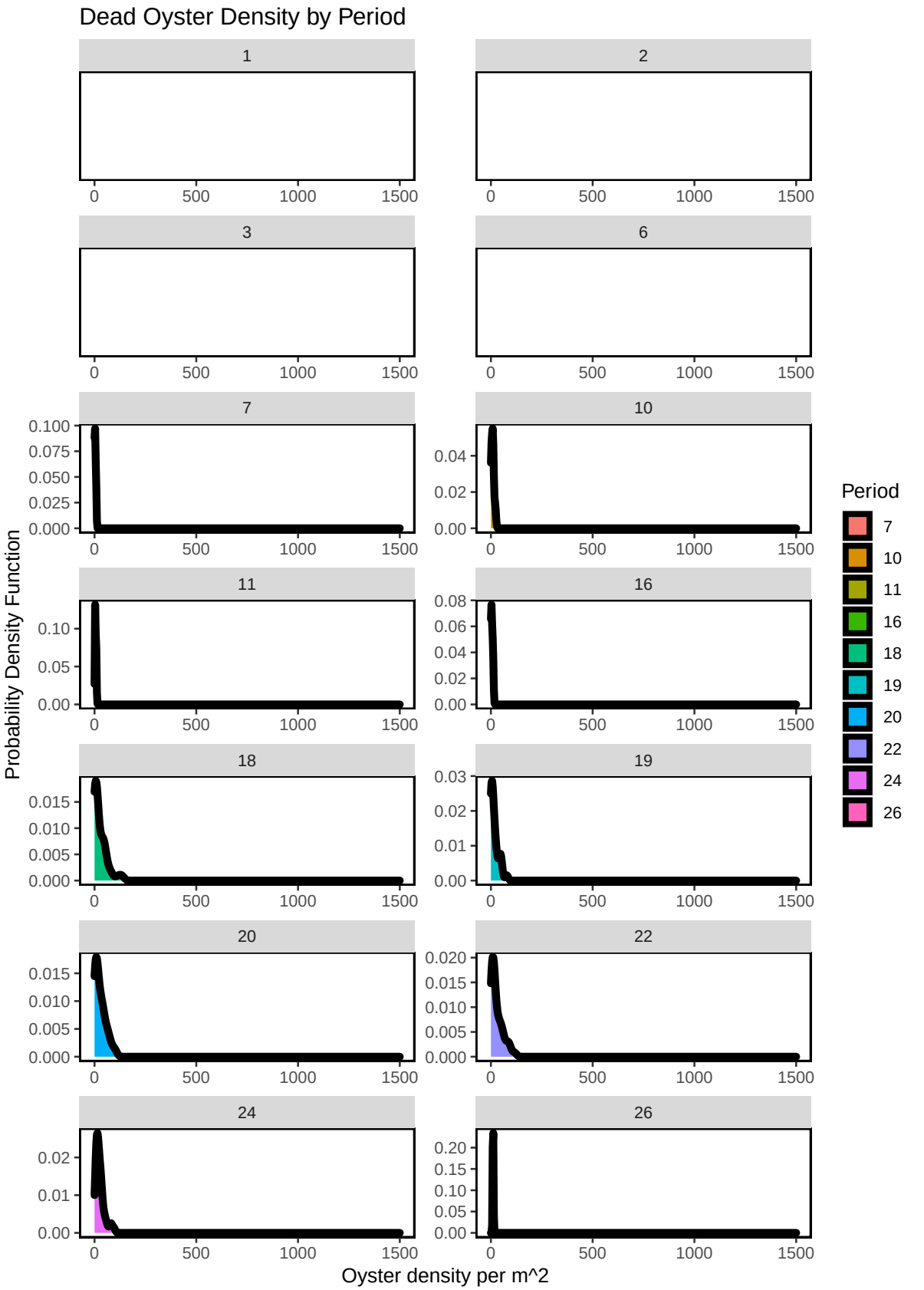
Figure− Calculated live oyster density by strata for all periods including period 22 (current period).



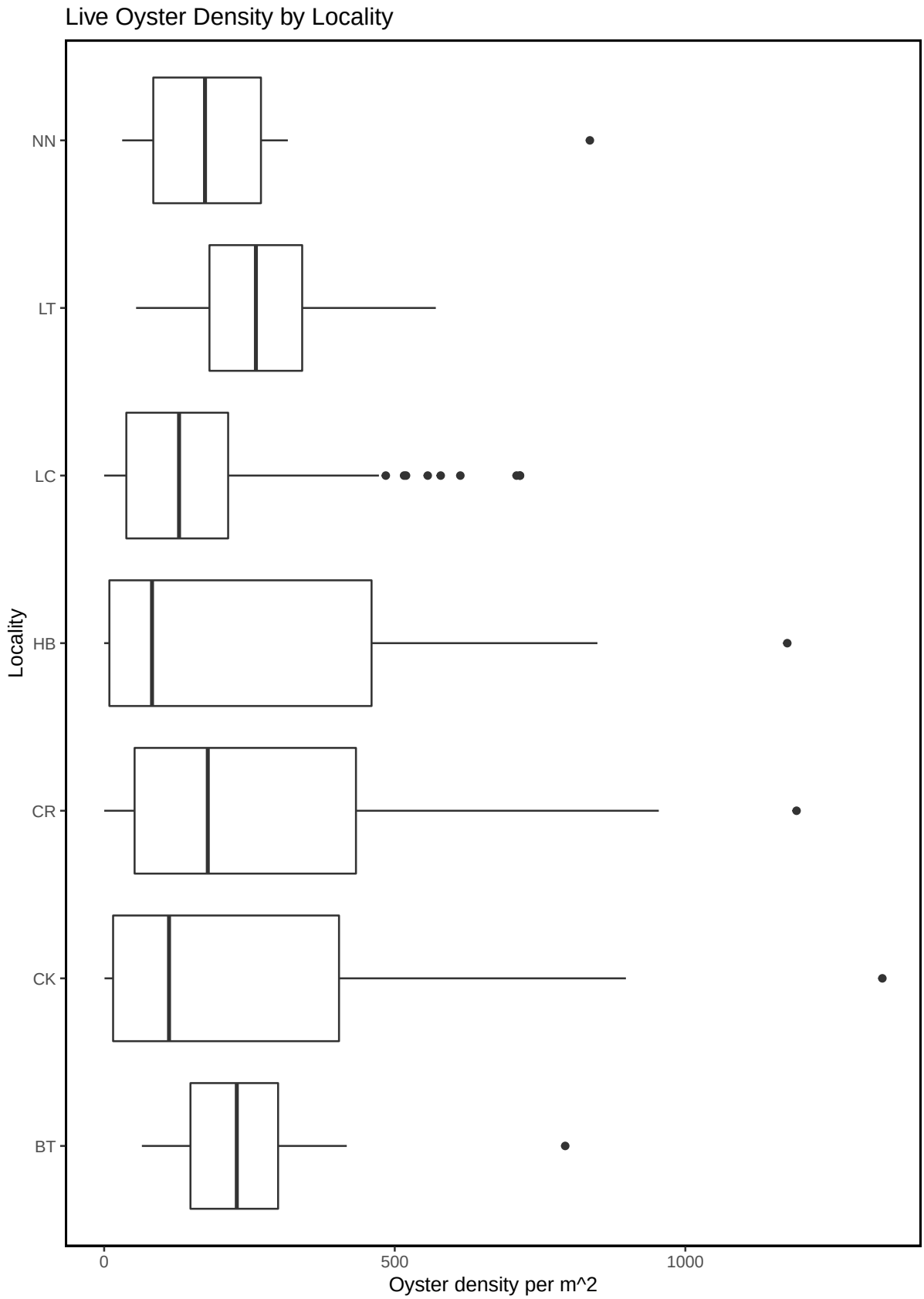
Figure− Calculated dead oyster density by strata for all periods including period 22 (current period).



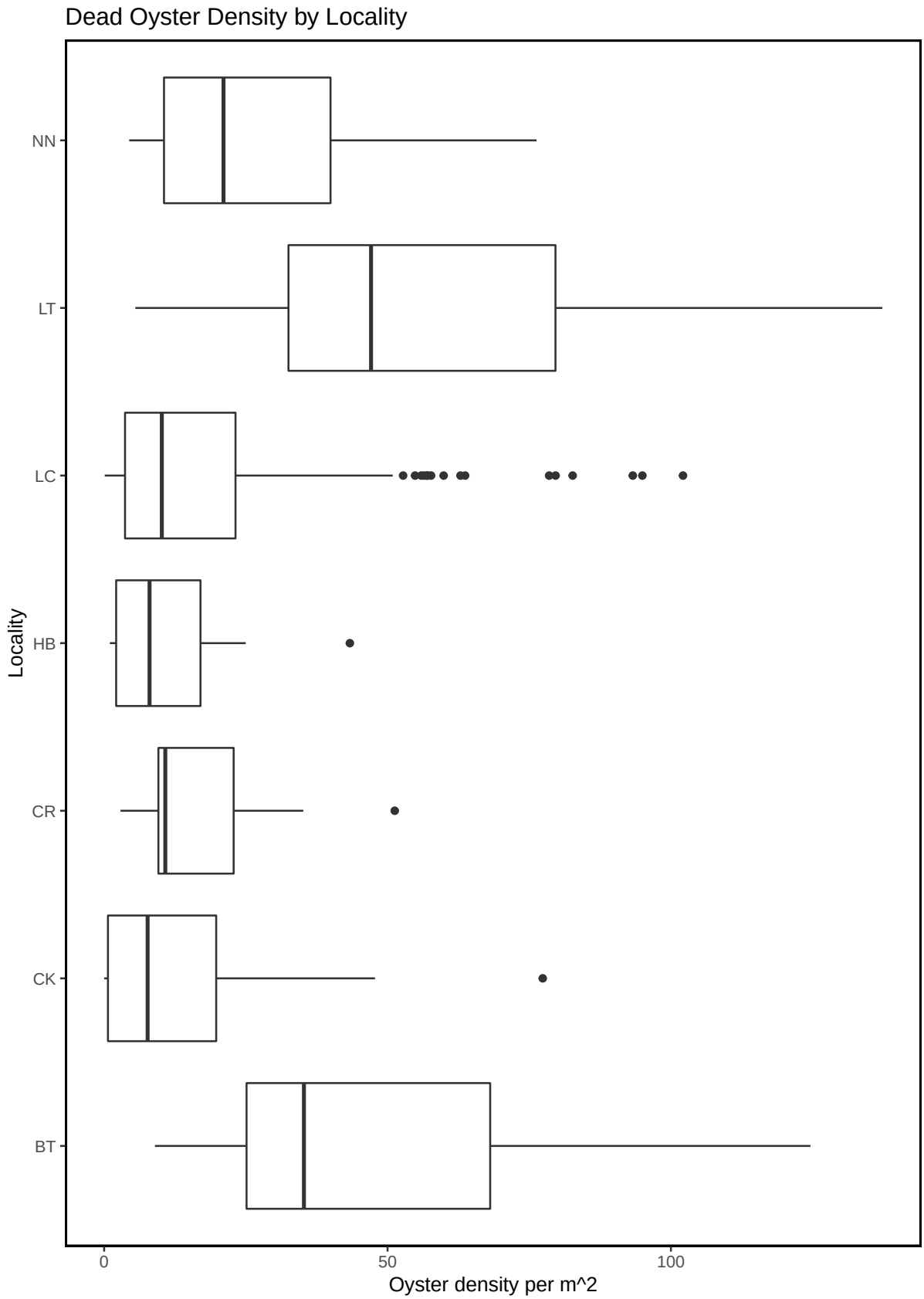
Figure− Calculated live oyster density for all periods including period 24 (current period) using a probability densit



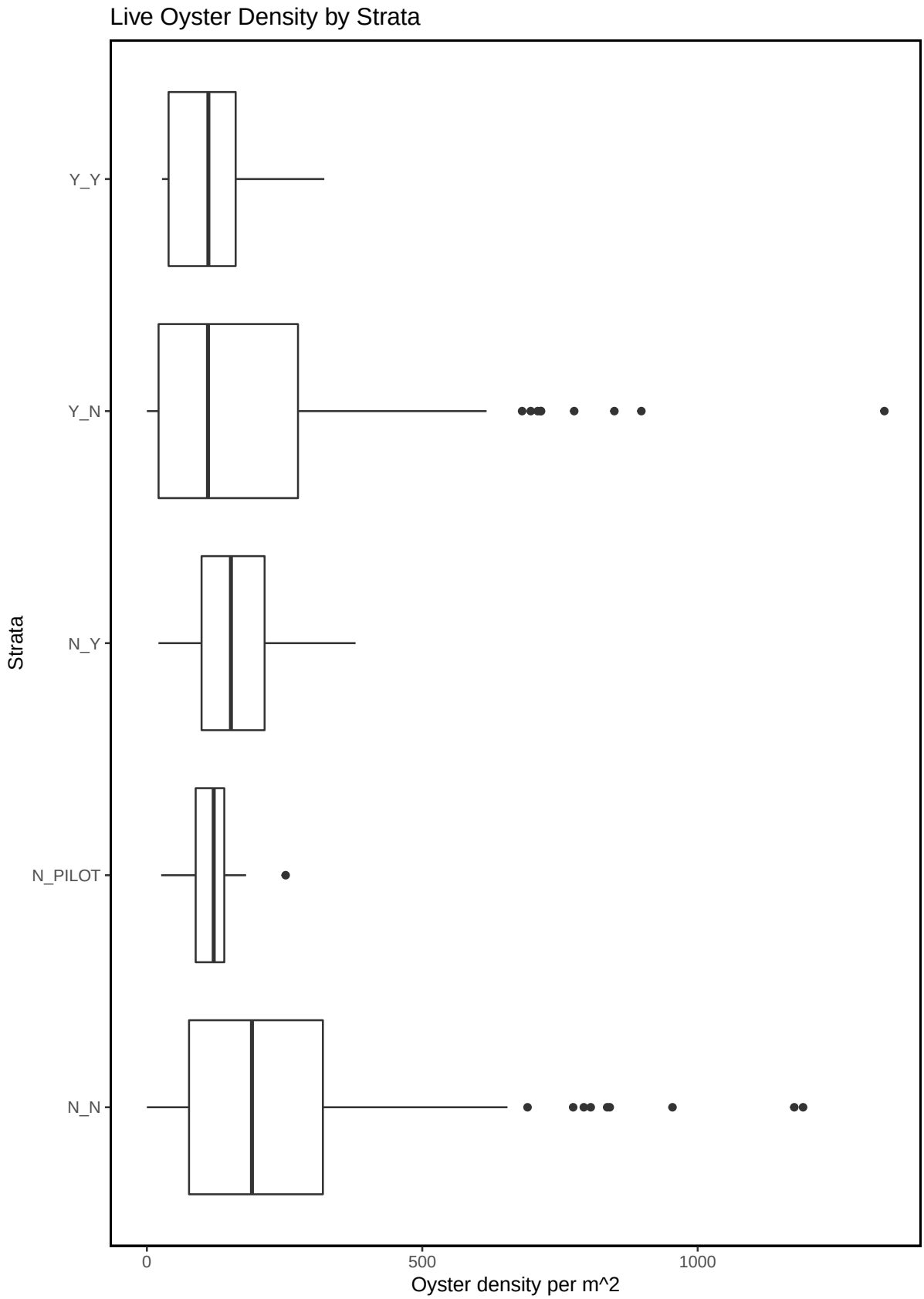
Figure− Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit



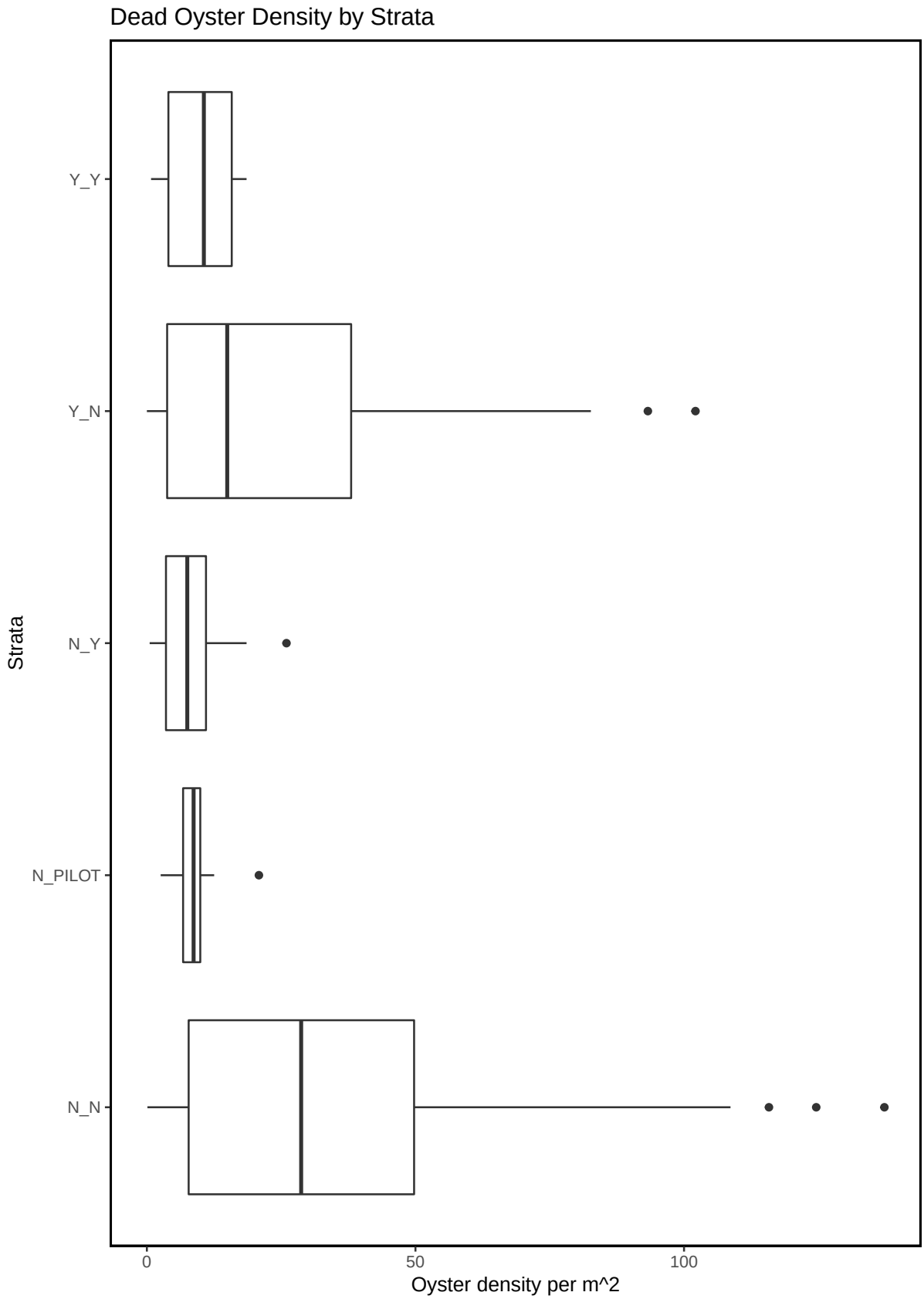
Figure− Box plot depicting live oyster density by locality for all periods including period 22 (current period).



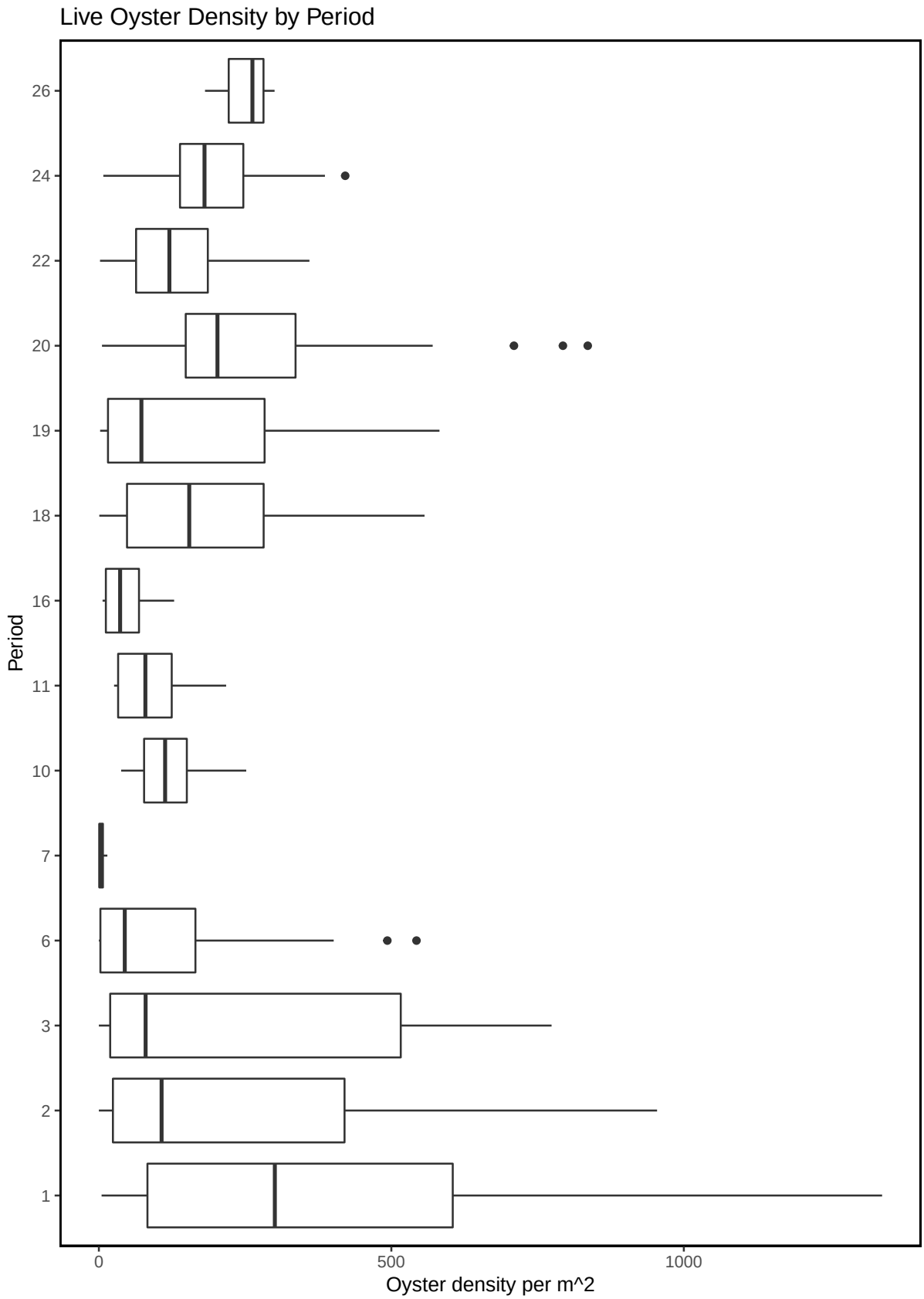
Figure− Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



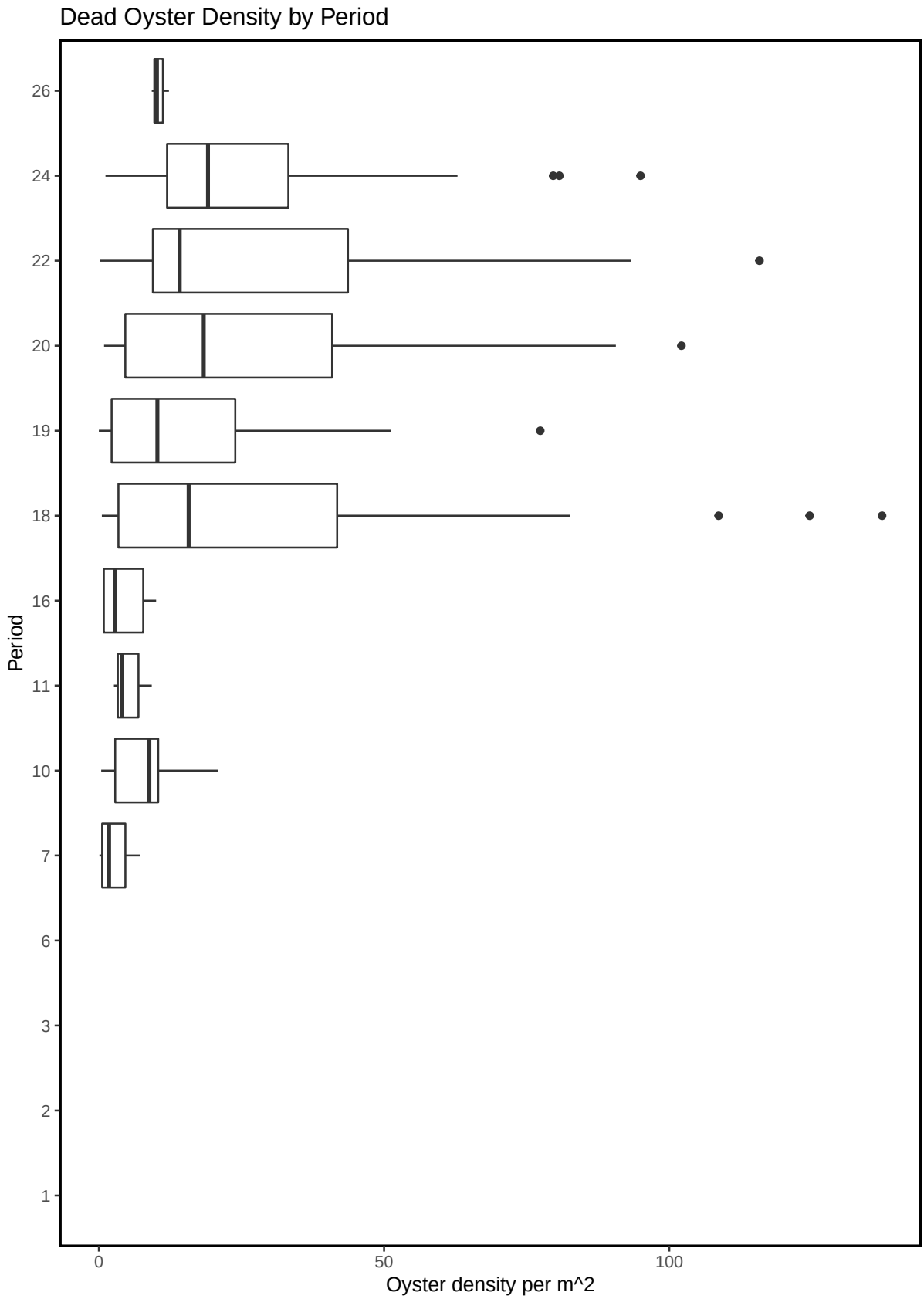
Figure− Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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).

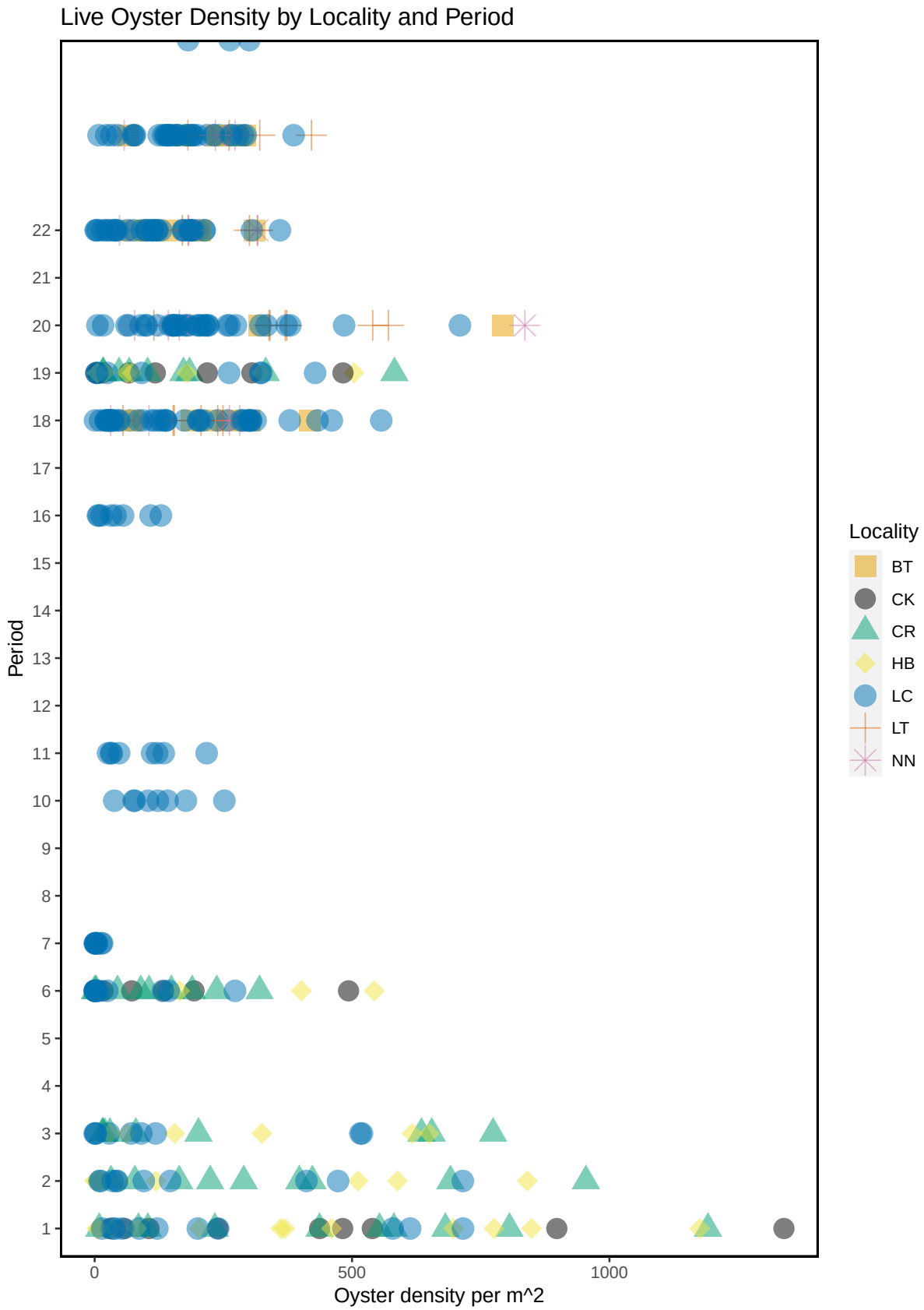


Figure − Live oyster density by locality and period for all periods including period 22 (current period).

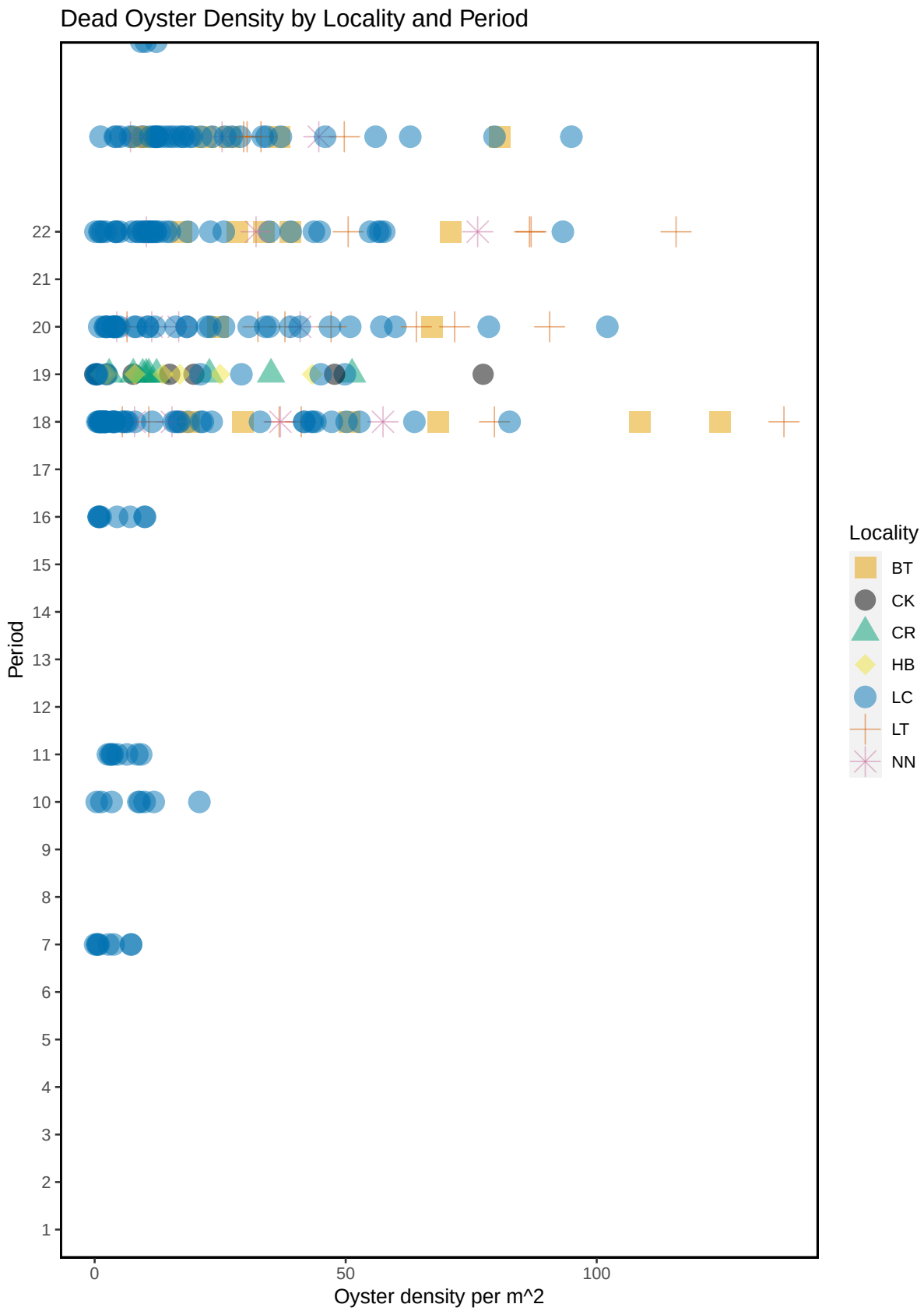


Figure − Dead oyster density by locality and period for all periods including period 22 (current period).

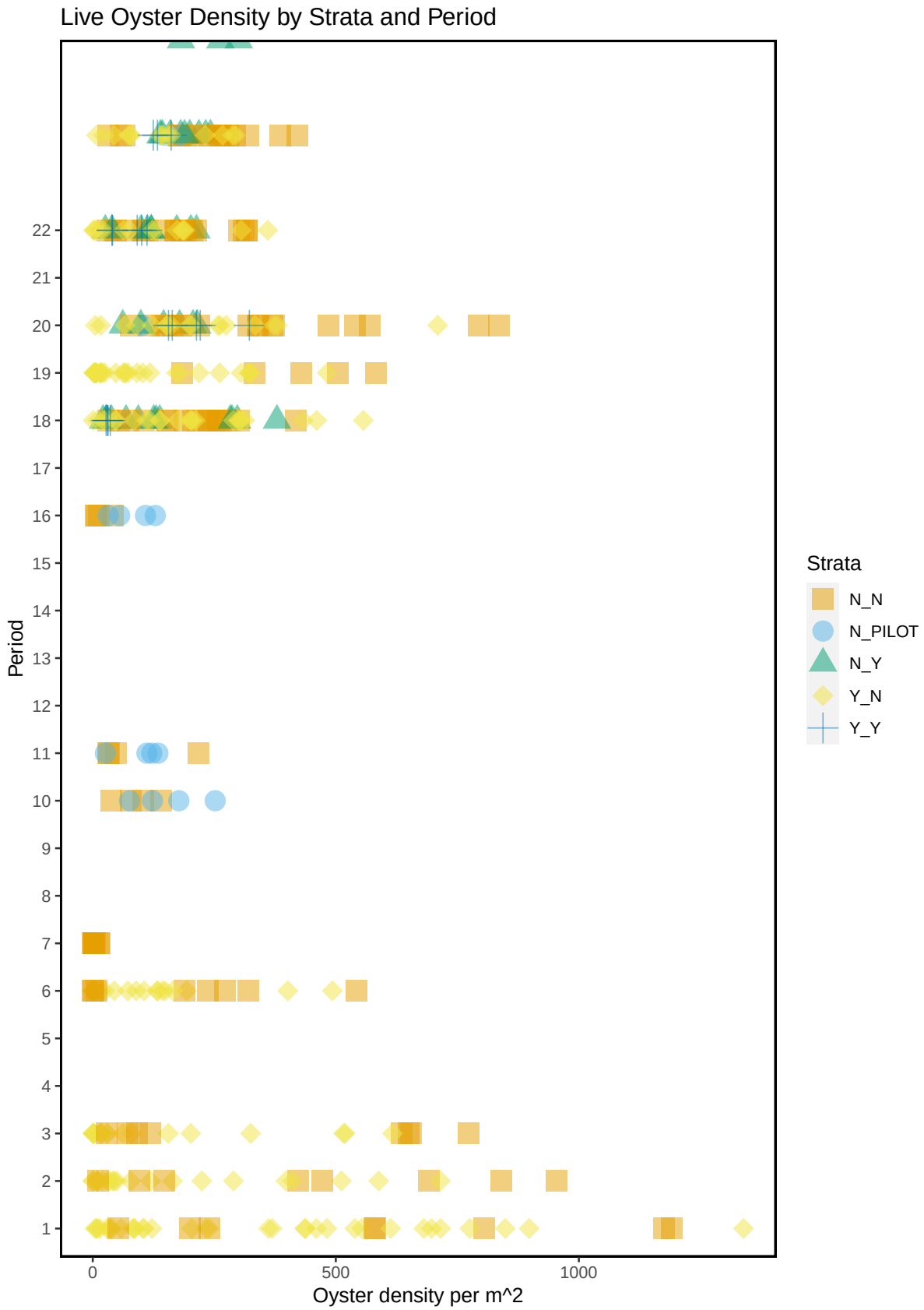


Figure − Live oyster density by strata and period for all periods including period 22 (current period).

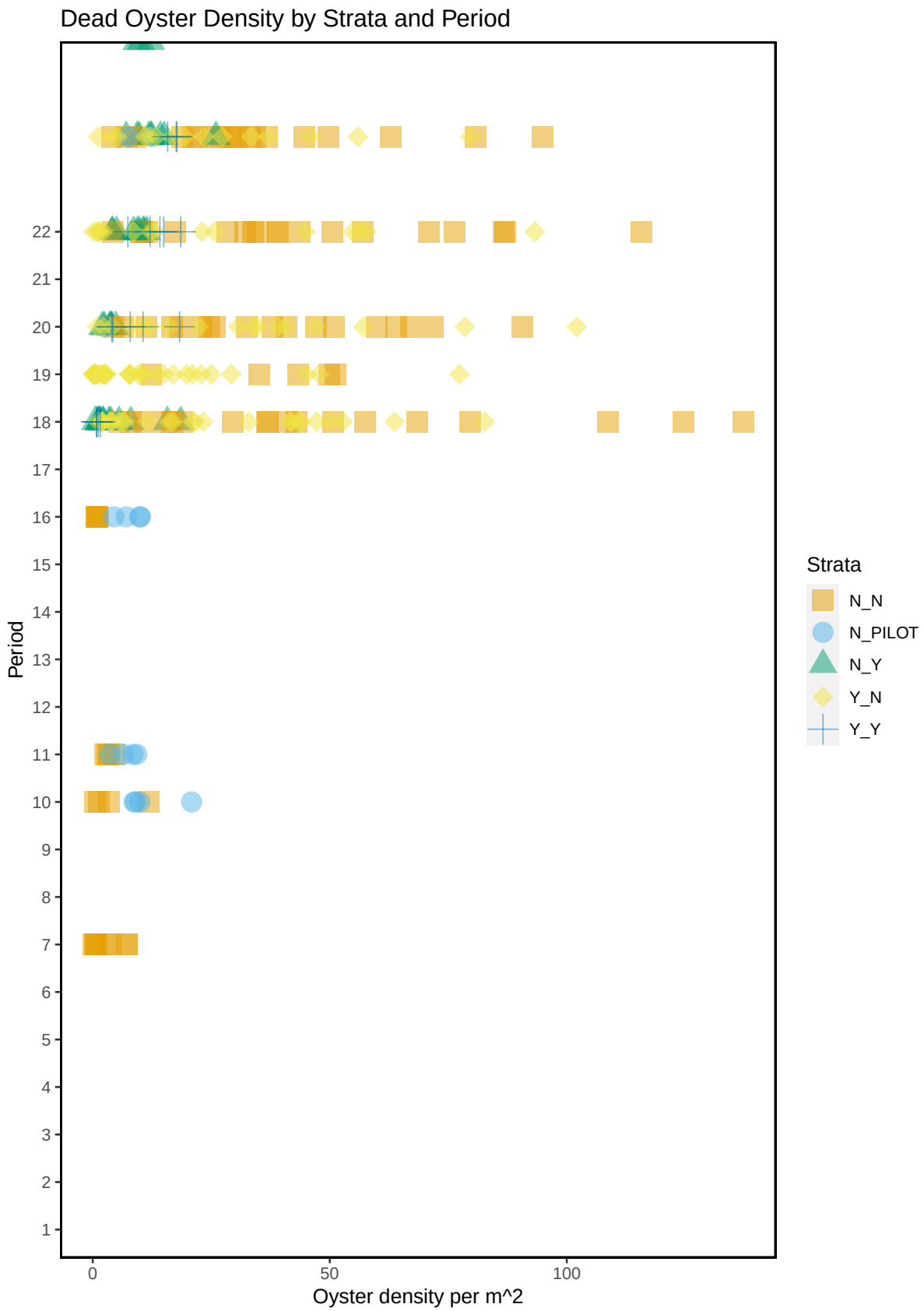


Figure − Dead oyster density by strata and period for all periods including period 22 (current period).

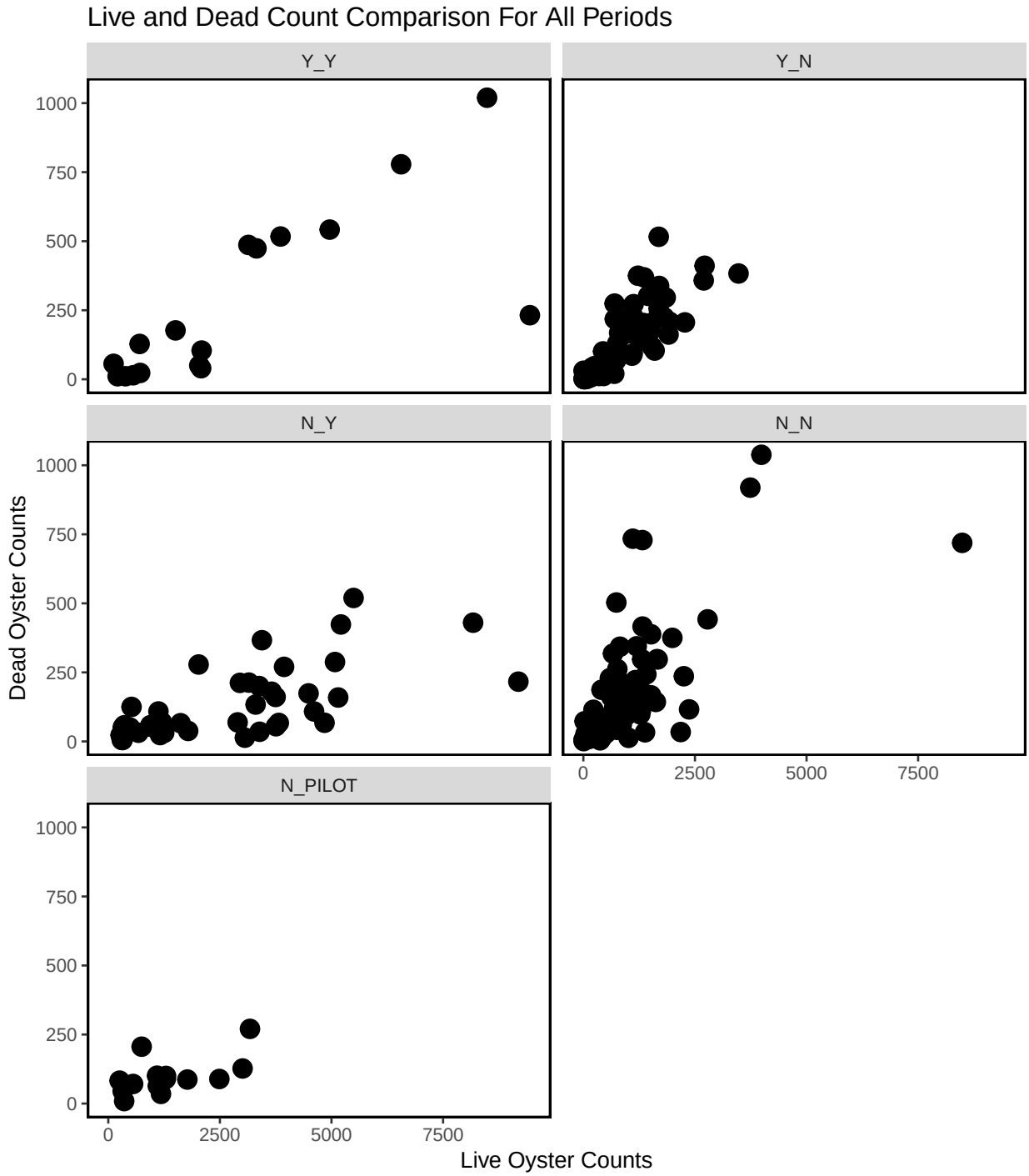


Figure- Live and dead oyster comparison for all periods, last sample date of period 26 is 2022-11-28.

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).

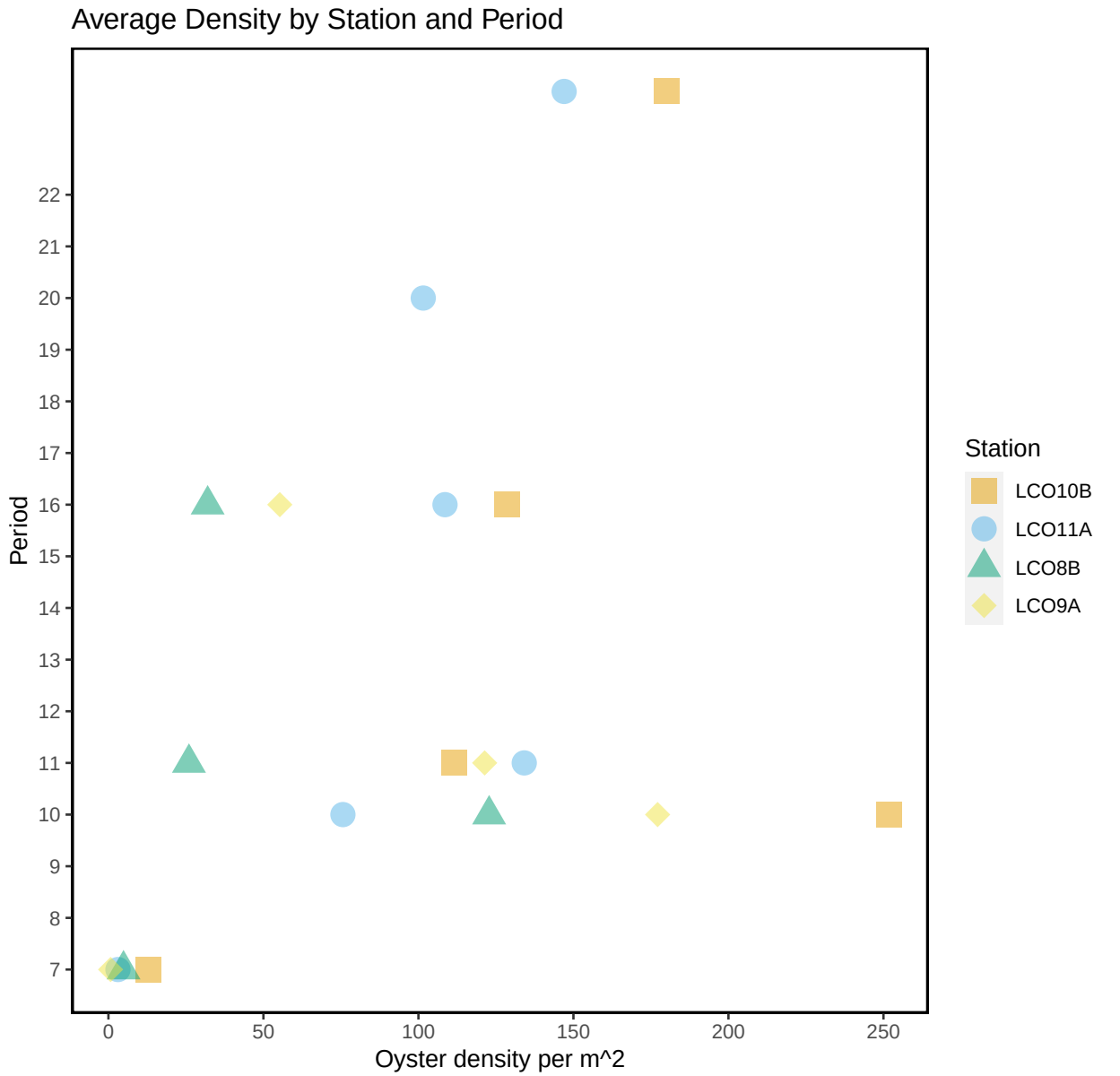


Figure − Average live oyster density comparison by station and period for all stations that were sampled during the pilc

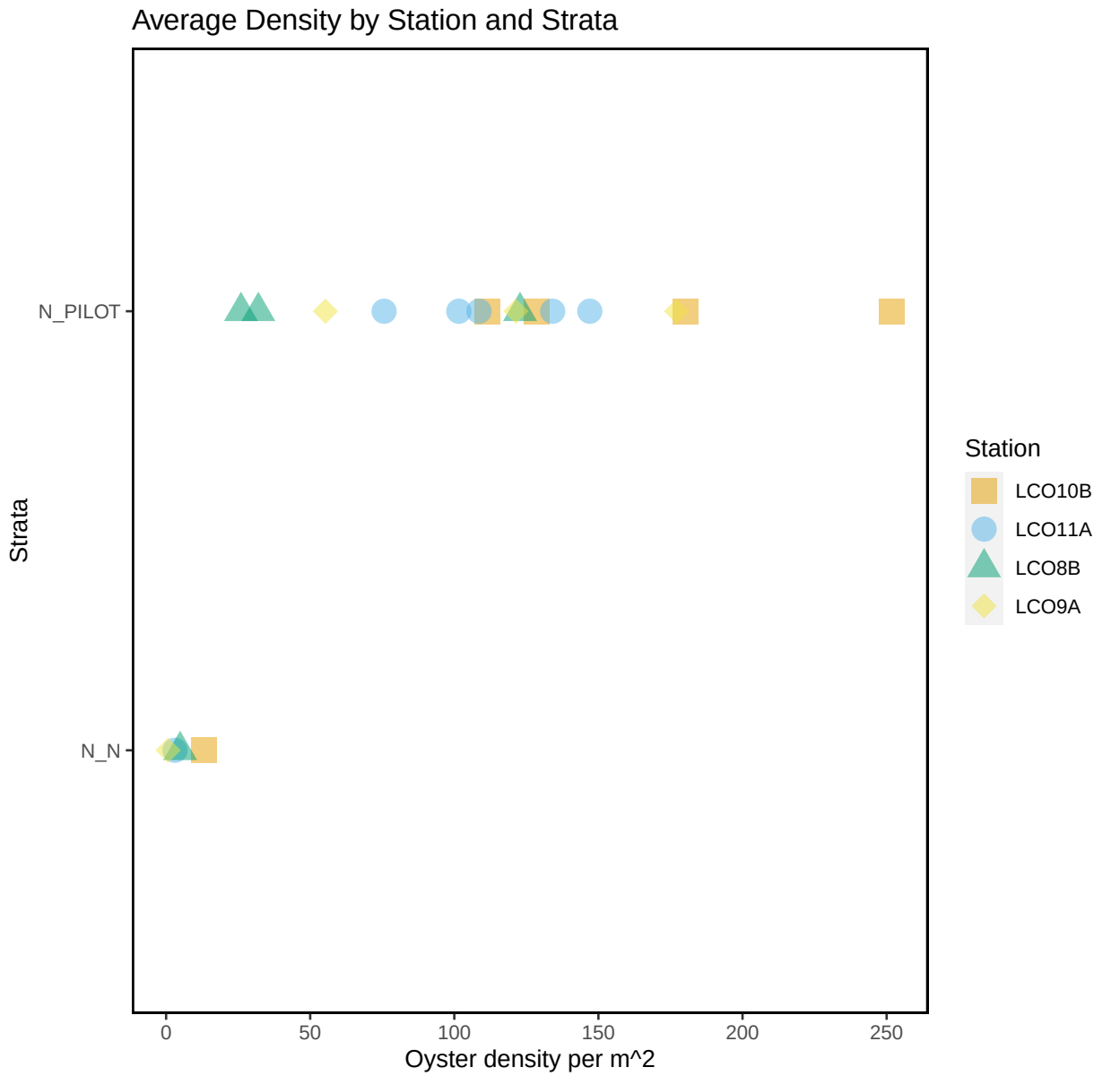


Figure − Average live oyster density comparison by station and strata for all stations that were sampled during th

Latest Data Entered

Displayed are the entries for the last date of sampling (2022-11-28).

date	station	tran_length	count_live	count_dead	treatment	strata
2022-11-28	LCO10A	2.5	73	1	rocks	N_Y
2022-11-28	LCO10A	5.0	78	2	rocks	N_Y
2022-11-28	LCO10A	7.5	97	1	rocks	N_Y
2022-11-28	LCO10A	10.0	69	6	rocks	N_Y
2022-11-28	LCO10A	12.5	109	5	rocks	N_Y
2022-11-28	LCO10A	15.0	88	6	rocks	N_Y
2022-11-28	LCO10A	17.5	92	3	rocks	N_Y
2022-11-28	LCO10A	20.0	74	4	rocks	N_Y
2022-11-28	LCO10A	22.0	83	2	rocks	N_Y
2022-11-28	LCO10A	22.2	18	0	rocks	N_Y
2022-11-28	LCO10A	2.5	178	5	rocks	N_Y
2022-11-28	LCO10A	5.0	57	2	rocks	N_Y
2022-11-28	LCO10A	7.5	246	3	rocks	N_Y
2022-11-28	LCO10A	10.0	201	1	rocks	N_Y
2022-11-28	LCO10A	12.5	46	3	rocks	N_Y
2022-11-28	LCO10A	15.0	82	4	rocks	N_Y
2022-11-28	LCO10A	17.5	95	6	rocks	N_Y
2022-11-28	LCO10A	20.0	220	4	rocks	N_Y
2022-11-28	LCO10A	22.0	79	3	rocks	N_Y
2022-11-28	LCO10A	22.4	21	0	rocks	N_Y
2022-11-28	LCO10A	2.5	179	3	rocks	N_Y
2022-11-28	LCO10A	5.0	281	6	rocks	N_Y
2022-11-28	LCO10A	7.5	116	4	rocks	N_Y
2022-11-28	LCO10A	10.0	123	3	rocks	N_Y
2022-11-28	LCO10A	12.5	315	7	rocks	N_Y
2022-11-28	LCO10A	15.0	183	7	rocks	N_Y
2022-11-28	LCO10A	17.5	139	7	rocks	N_Y
2022-11-28	LCO10A	20.0	171	5	rocks	N_Y
2022-11-28	LCO10A	22.0	106	3	rocks	N_Y
2022-11-28	LCO10A	22.7	77	2	rocks	N_Y
2022-11-28	LCO10A	2.5	170	5	rocks	N_Y
2022-11-28	LCO10A	5.0	271	3	rocks	N_Y
2022-11-28	LCO10A	7.5	93	2	rocks	N_Y
2022-11-28	LCO10A	10.0	101	4	rocks	N_Y
2022-11-28	LCO10A	12.5	216	1	rocks	N_Y
2022-11-28	LCO10A	15.0	169	6	rocks	N_Y
2022-11-28	LCO10A	17.5	130	3	rocks	N_Y
2022-11-28	LCO10A	20.0	156	1	rocks	N_Y
2022-11-28	LCO10A	22.0	86	2	rocks	N_Y
2022-11-28	LCO10A	22.7	51	2	rocks	N_Y
2022-11-28	LCO10A	2.5	175	1	rocks	N_Y
2022-11-28	LCO10A	5.0	137	8	rocks	N_Y
2022-11-28	LCO10A	7.5	127	8	rocks	N_Y
2022-11-28	LCO10A	10.0	112	3	rocks	N_Y
2022-11-28	LCO10A	12.5	184	2	rocks	N_Y
2022-11-28	LCO10A	15.0	143	7	rocks	N_Y
2022-11-28	LCO10A	17.5	83	5	rocks	N_Y
2022-11-28	LCO10A	20.0	134	9	rocks	N_Y
2022-11-28	LCO10A	22.0	152	6	rocks	N_Y

2022-11-28	LCO10A	23.1	145	5	rocks	N_Y
2022-11-28	LCO10A	2.5	3	0	rocks	N_Y
2022-11-28	LCO10A	5.0	21	0	rocks	N_Y
2022-11-28	LCO10A	7.5	49	0	rocks	N_Y
2022-11-28	LCO10A	10.0	16	1	rocks	N_Y
2022-11-28	LCO10A	12.5	14	1	rocks	N_Y
2022-11-28	LCO10A	15.0	13	2	rocks	N_Y
2022-11-28	LCO10A	17.5	9	0	rocks	N_Y
2022-11-28	LCO10A	20.0	30	0	rocks	N_Y
2022-11-28	LCO10A	22.0	21	1	rocks	N_Y
2022-11-28	LCO10A	22.2	10	1	rocks	N_Y