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 14 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, 158 days have been sampled over this entire project.

Definition of Localities

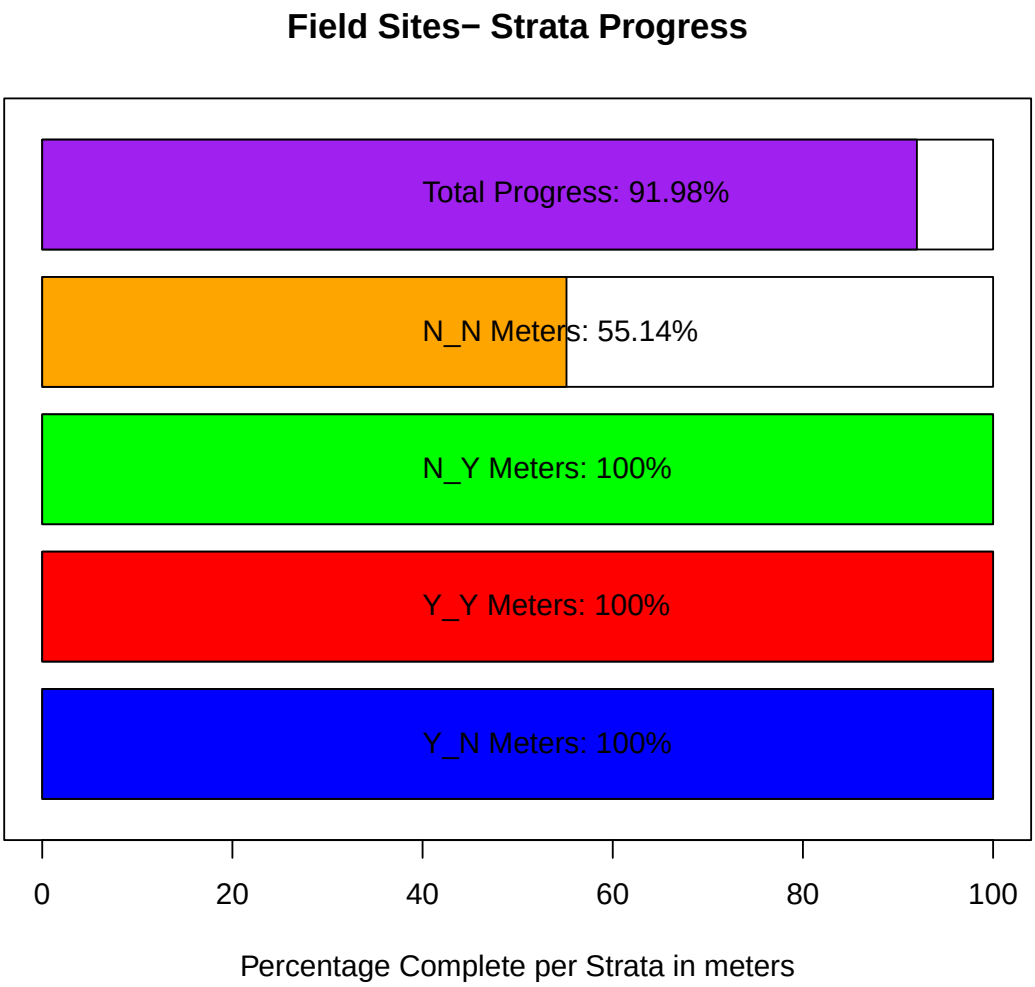
LOCALITY	LOCATION
BT	Big Trout
CK	Cedar Key
CR	Corrigan's Reef
HB	Horseshoe Beach
LC	Lone Cabbage
LT	Little Trout
NN	No Name

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	1323	819	2103	4421901	1.59	562	222	2425	1324	630	2543
LC	1889	1106	2135	4556879	1.13	186	1525	2253	1886	1550	2227
LT	1033	860	578	333617	0.56	140	759	1308	1030	806	1342
NN	842	714	639	408613	0.76	202	446	1238	856	534	1263

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1059	766	1152	1328214	1.09	145	775	1344	1058	831	1361
N_PILOT	2180	3009	1582	2501624	0.73	913	390	3970	2157	356	3174
N_Y	3723	3690	2177	4740322	0.58	404	2930	4515	3719	2930	4544
Y_N	651	496	634	402358	0.97	82	491	812	655	495	816
Y_Y	4086	3230	2739	7504509	0.67	646	2821	5352	4079	2895	5325

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	1847	1295	2506
22	1334	702	1693	2867783	1.3	242	860	1808	1337	913	1847
24	1729	942	1845	3403035	1.1	266	1207	2251	1736	1256	2296
26	2029	683	2457	6034843	1.2	456	1135	2923	2010	1166	2919

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	246	222	189	35622	0.77	50.4	147	344	248	163	346
LC	160	160	106	11195	0.66	9.2	142	178	160	143	178
LT	306	316	128	16490	0.42	31.1	245	367	305	246	365
NN	233	174	230	52911	0.99	72.7	91	376	235	128	378

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	237	192	160	25716	0.68	20	198	277	237	202	276
N_PILOT	143	147	39	1557	0.28	23	98	188	144	102	180
N_Y	172	181	73	5305	0.42	14	146	199	172	144	199
Y_N	147	139	128	16372	0.87	17	115	179	147	114	181
Y_Y	158	162	69	4829	0.44	16	126	191	159	129	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	205	309
22	137	121	93	8638	0.68	13	111	163	138	113	164
24	185	181	92	8385	0.49	13	159	211	185	161	212
26	152	162	99	9796	0.65	18	116	188	152	118	187

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	158	96	169	28554	1.07	45	69	246	160	96	253
LC	173	127	181	32746	1.05	16	142	204	173	143	201
LT	188	122	150	22552	0.80	36	116	259	188	127	261
NN	102	72	94	8760	0.92	30	44	160	103	60	165

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	164	111	164	26798	1.00	21	124	205	165	126	209
N_PILOT	136	127	131	17150	0.97	76	-13	284	135	9	270
N_Y	198	171	141	19947	0.71	26	147	250	198	151	248
Y_N	110	56	123	15020	1.11	16	80	141	111	82	141
Y_Y	344	254	271	73242	0.79	64	219	469	345	235	476

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	190
22	191	128	193	37399	1.01	28	137	245	191	142	246
24	192	130	194	37816	1.01	28	137	247	192	143	248
26	130	70	143	20435	1.10	26	79	182	131	84	186

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	35	28	22	497	0.63	6.0	24	47	35	25	48
LC	20	12	21	438	1.03	1.8	17	24	20	17	24
LT	51	47	30	915	0.59	7.3	37	66	52	36	66
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	36.8	30.4	26.0	677	0.71	3.28	30.4	43	36.7	30.3	43
N_PILOT	7.6	7.6	5.0	25	0.66	2.88	1.9	13	7.4	2.6	13
N_Y	9.4	9.5	5.2	27	0.55	0.96	7.5	11	9.3	7.7	11
Y_N	24.7	15.9	24.8	615	1.00	3.17	18.5	31	24.7	18.7	31
Y_Y	12.6	13.3	4.7	22	0.37	1.11	10.4	15	12.5	10.5	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	682	0.94	3.8	20.2	35	28	21	35
22	28	14	28	807	1.00	4.1	20.5	36	29	21	37
24	26	19	21	438	0.81	3.0	19.8	32	26	20	32
26	14	12	12	143	0.87	2.2	9.5	18	14	10	18

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

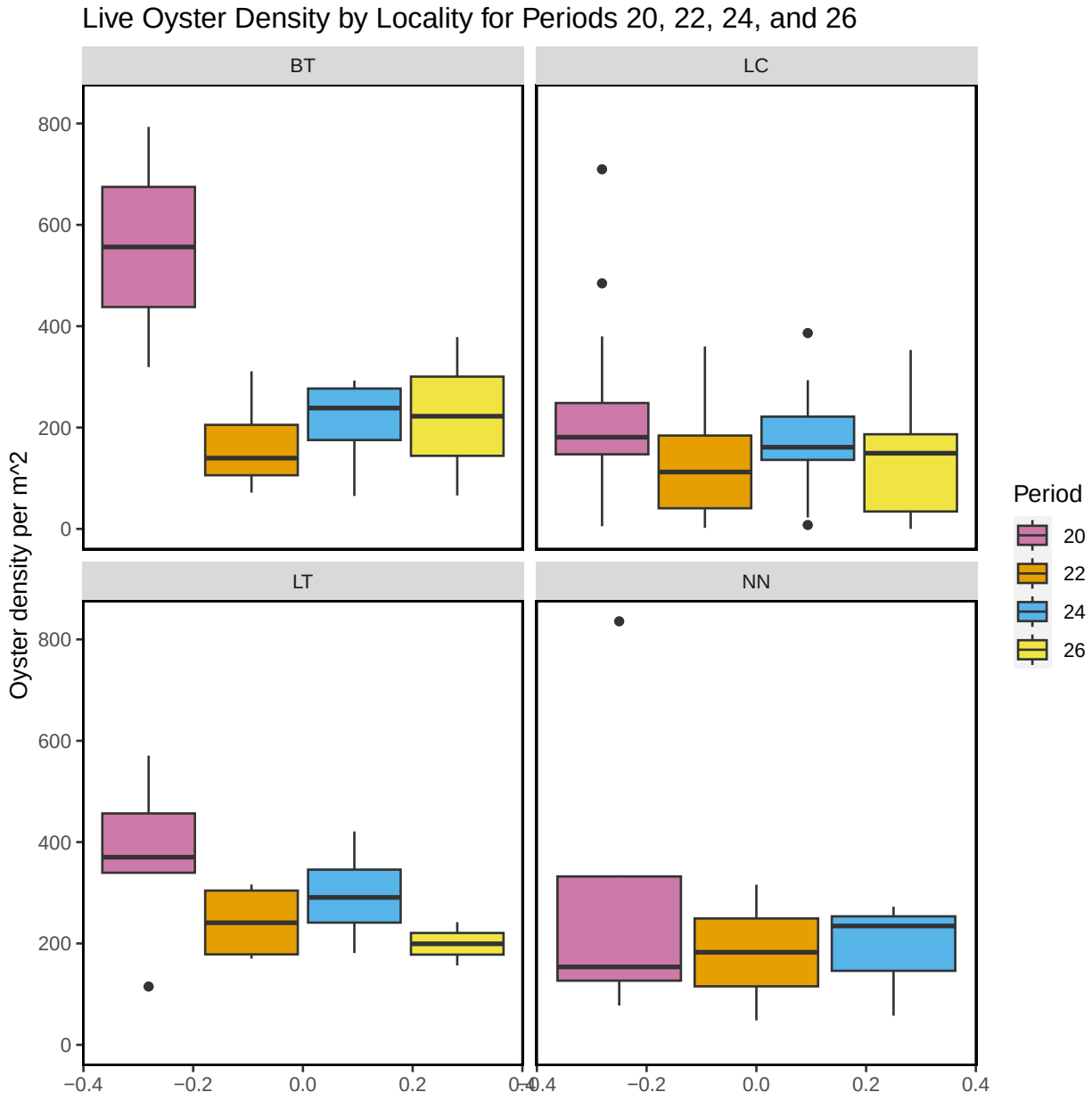


Figure- Calculated live oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-02-06.

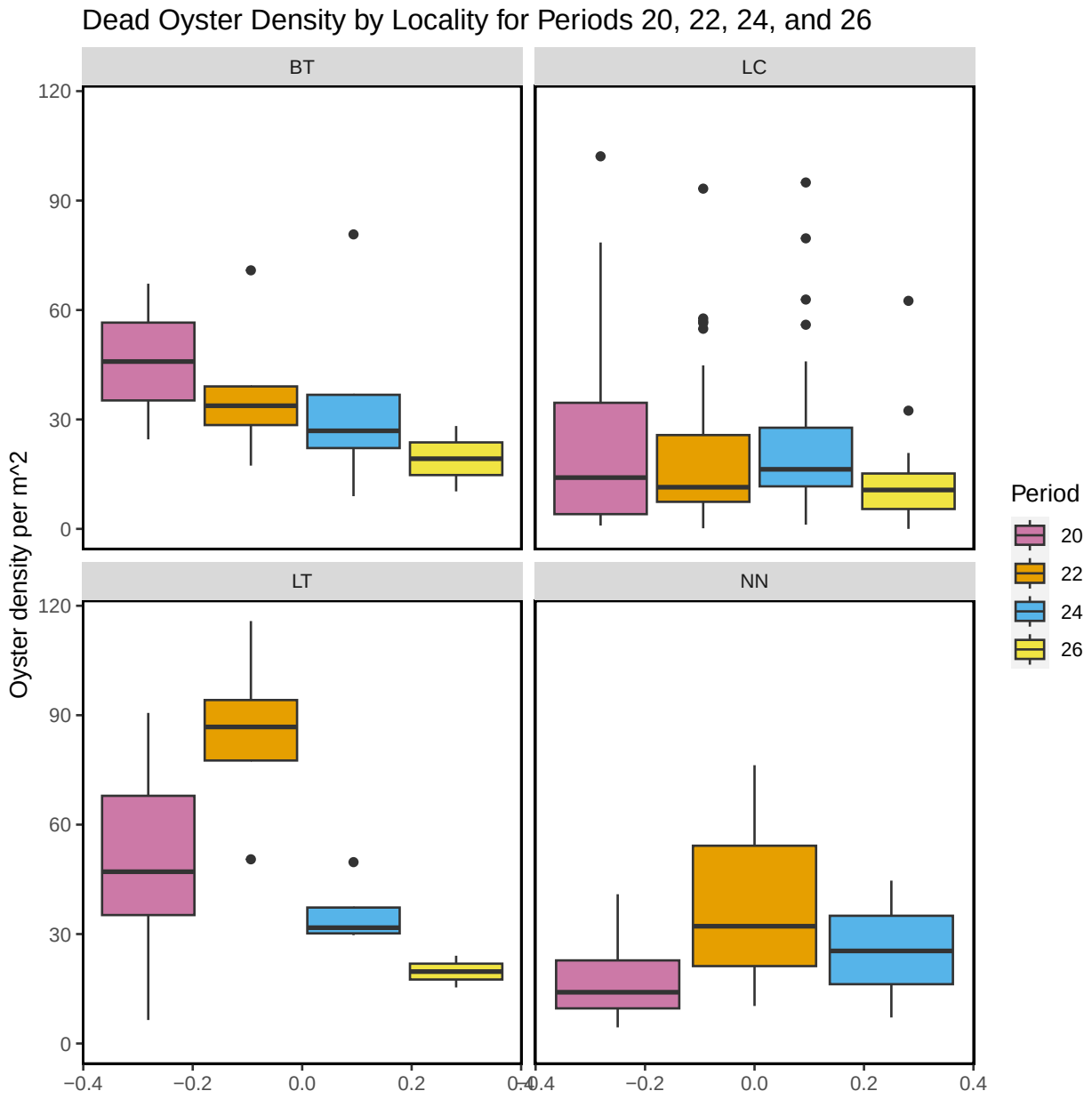


Figure- Calculated dead oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-02-06.

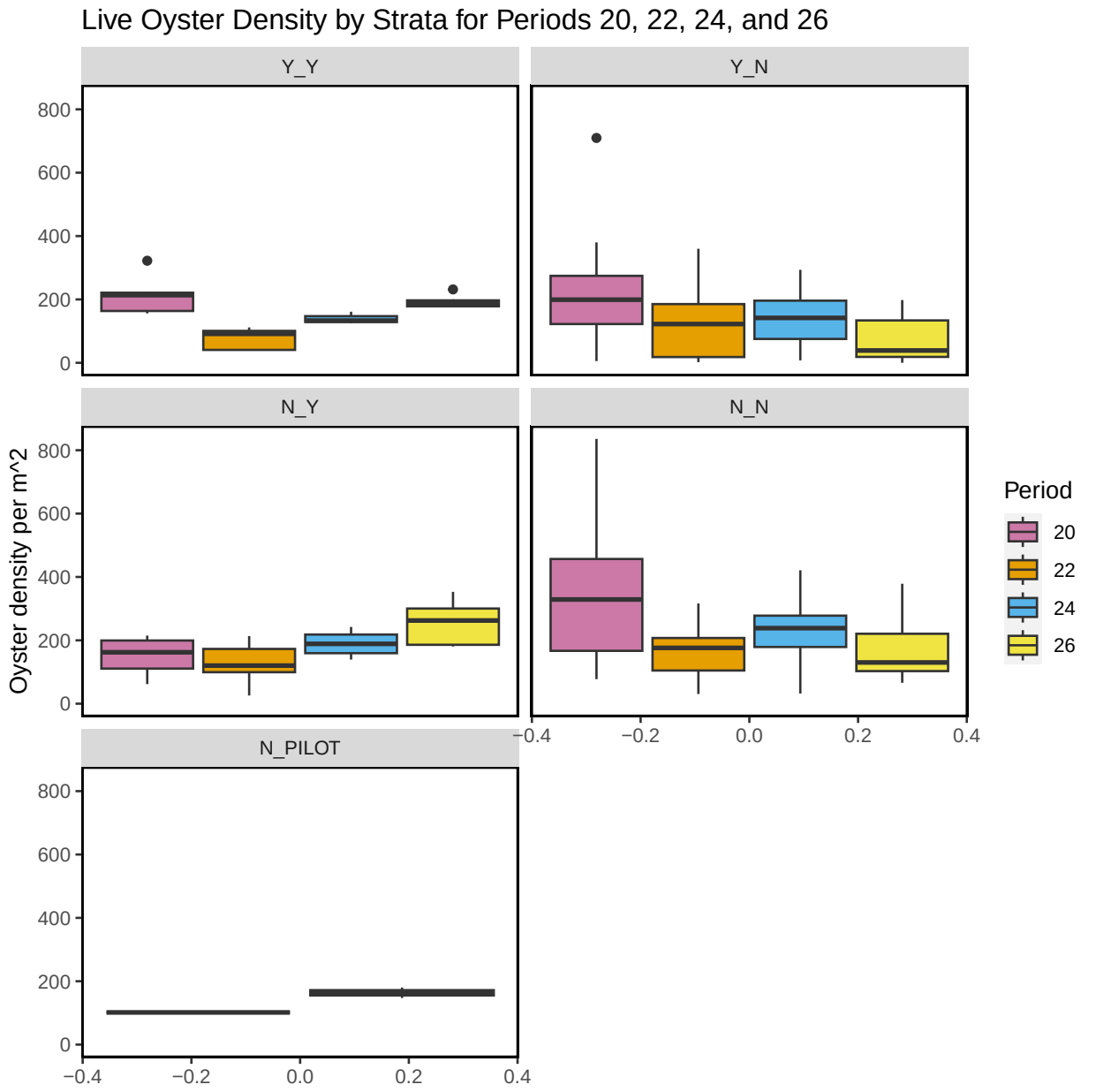


Figure- Calculated live oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-02-06.

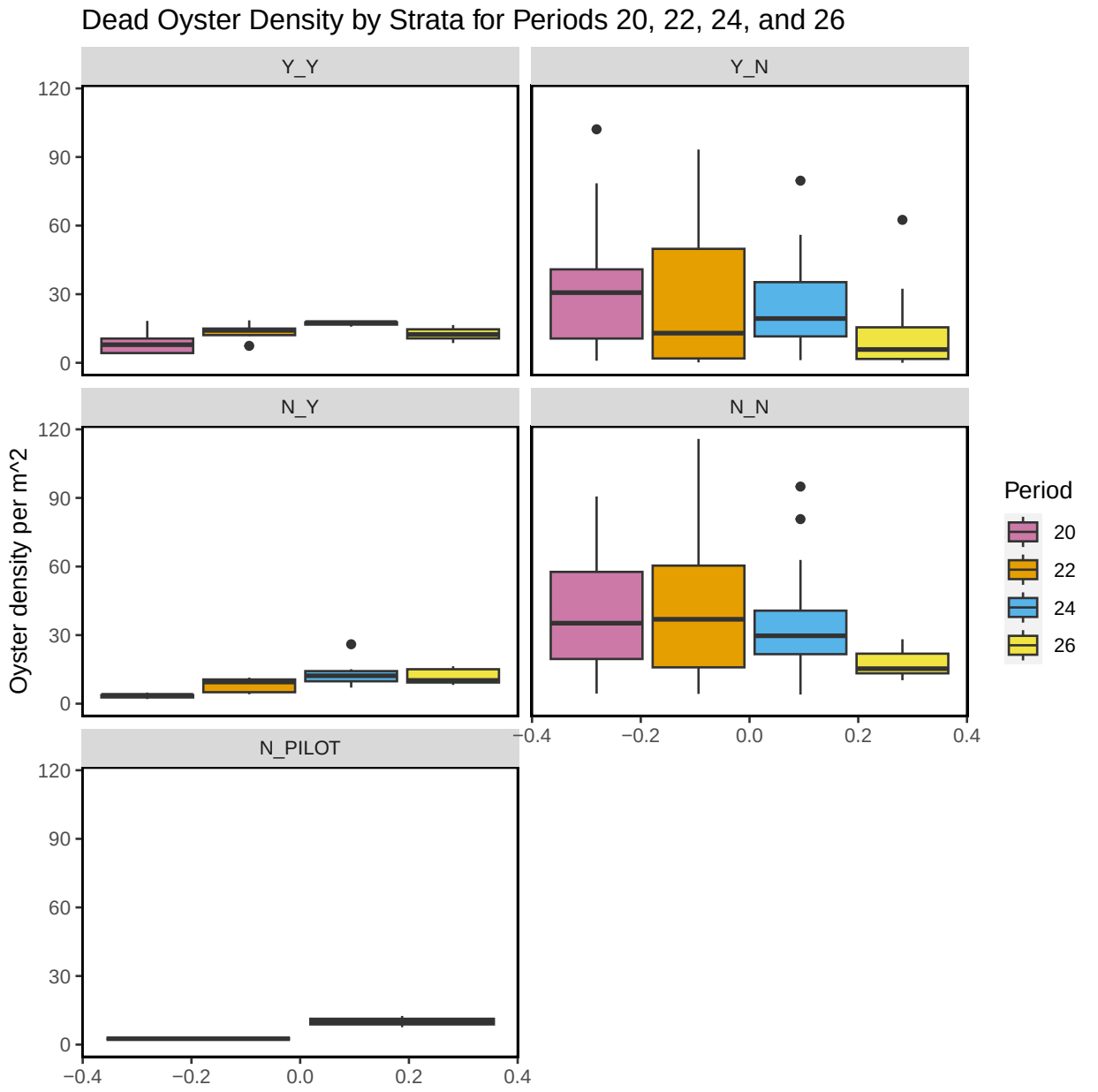


Figure- Calculated dead oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-02-06.

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.

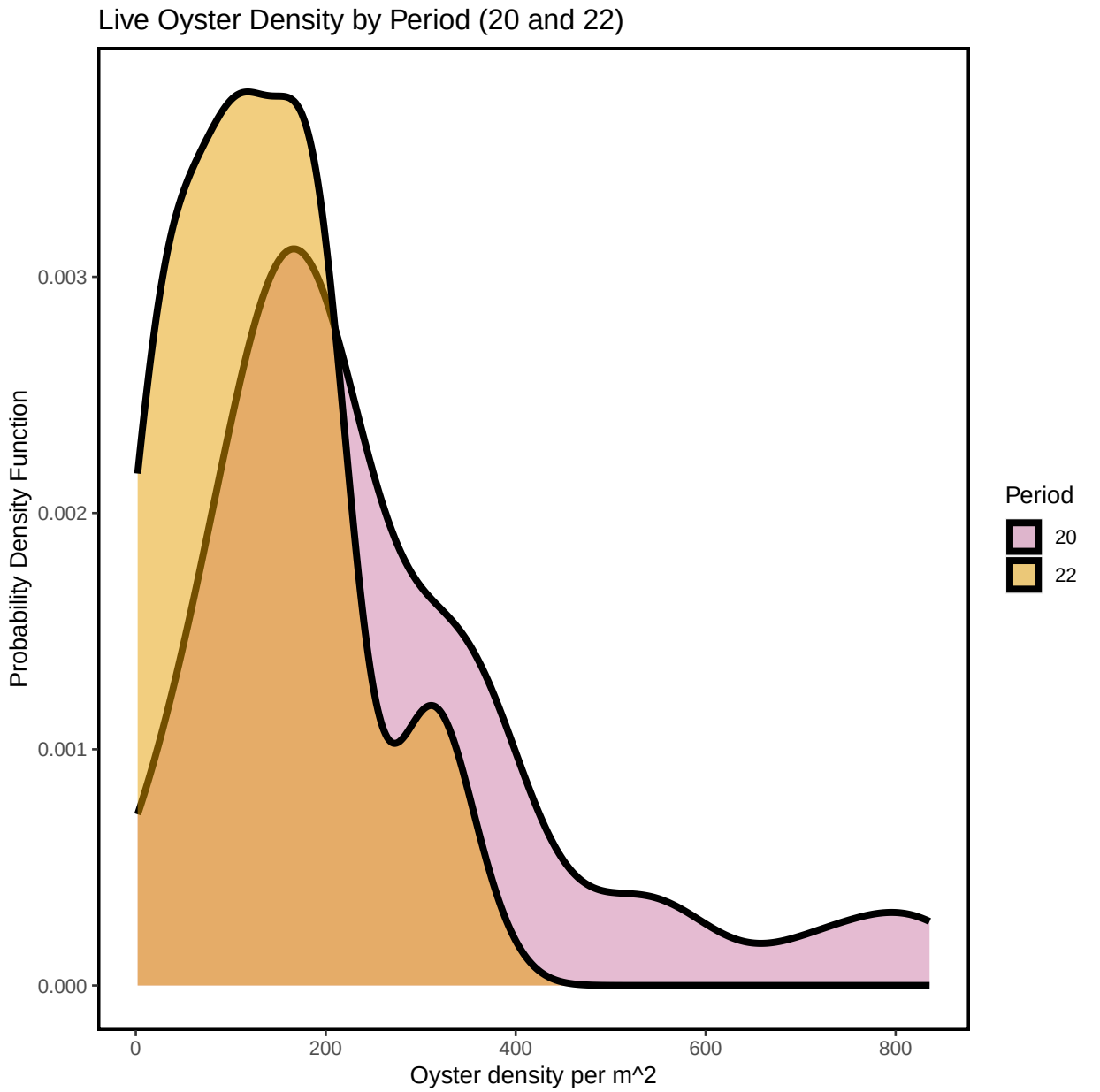


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2023-02-06.

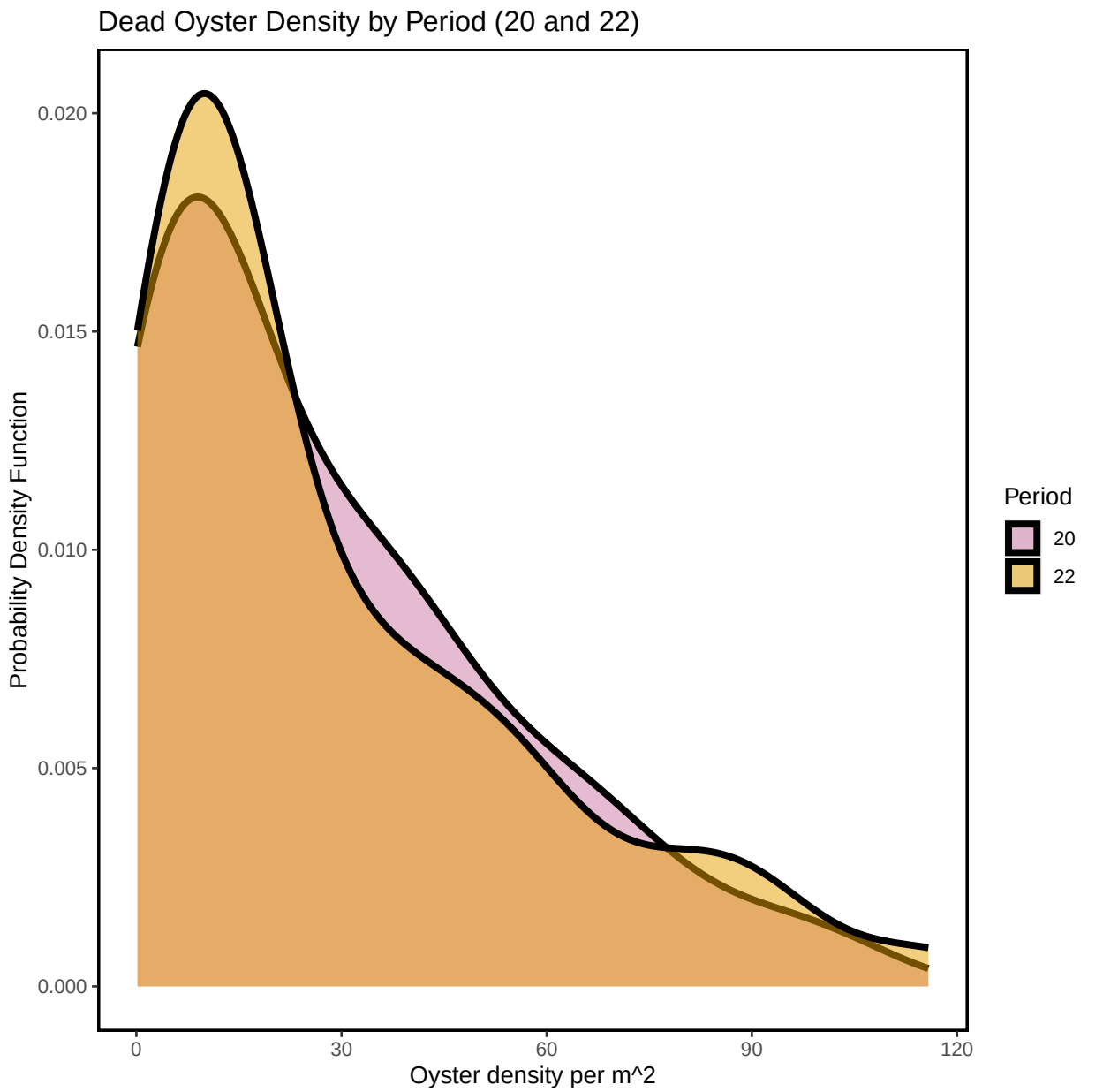


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2023-02-06.

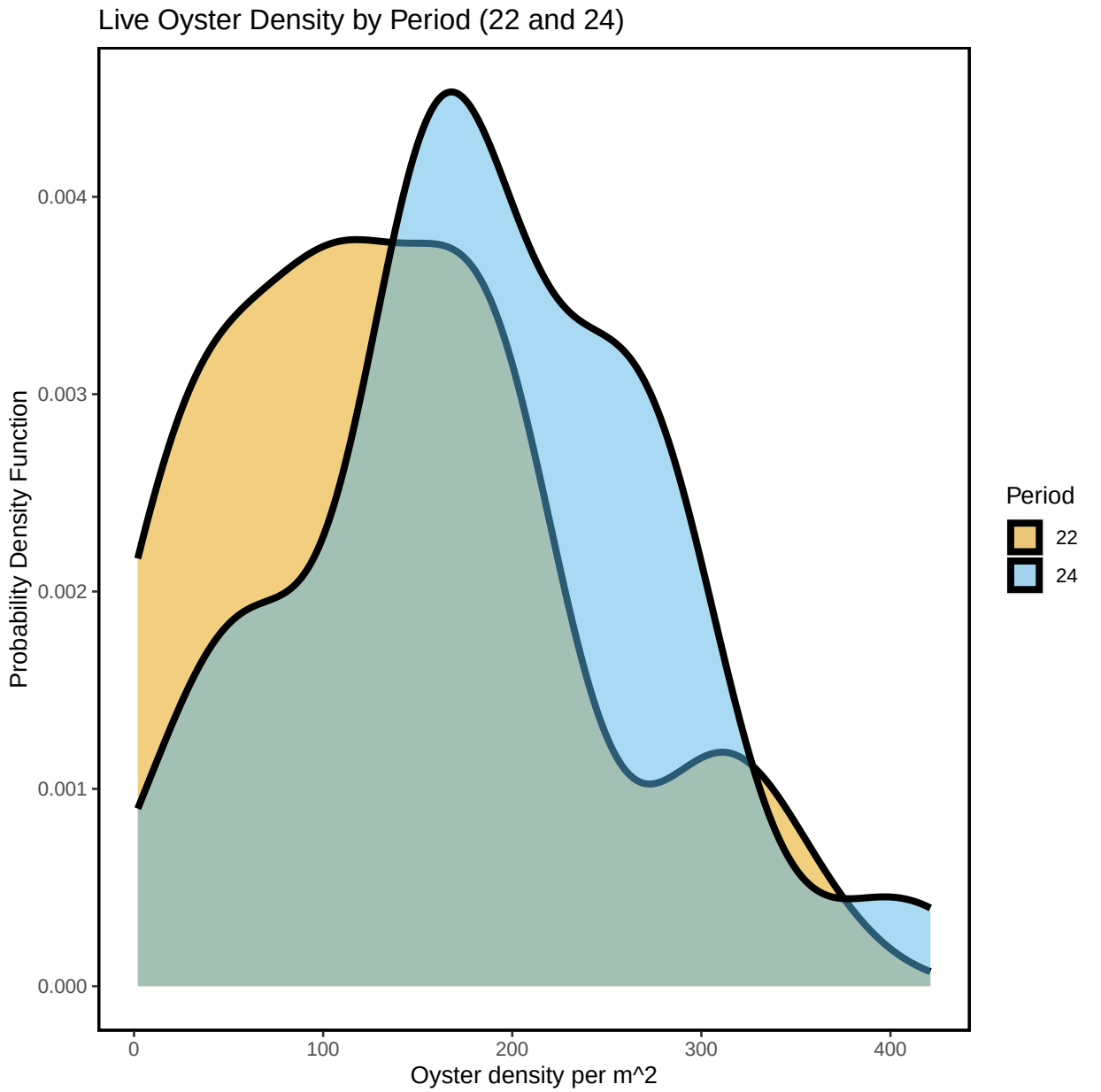


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2023-02-06.

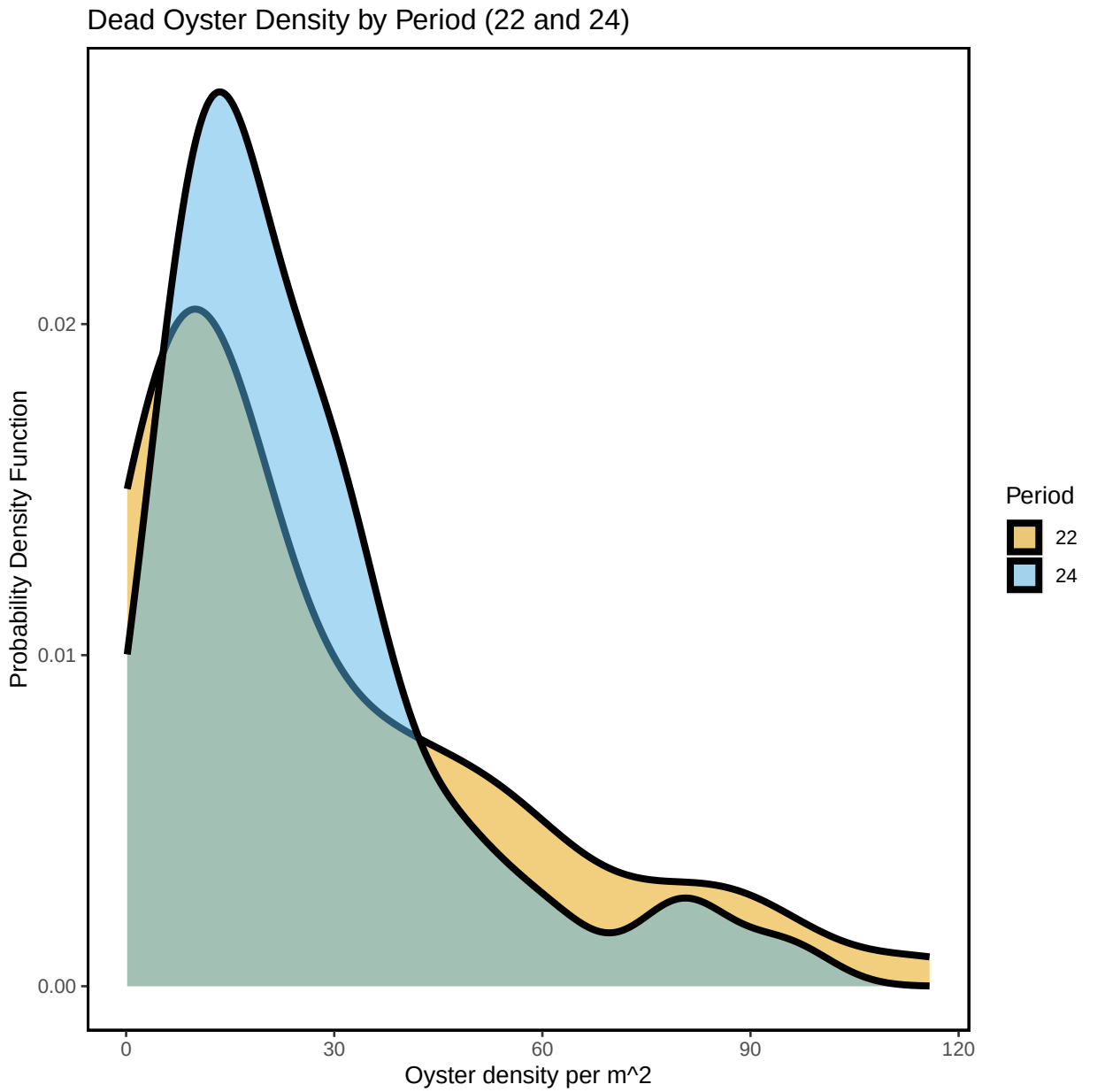


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2023-02-06.

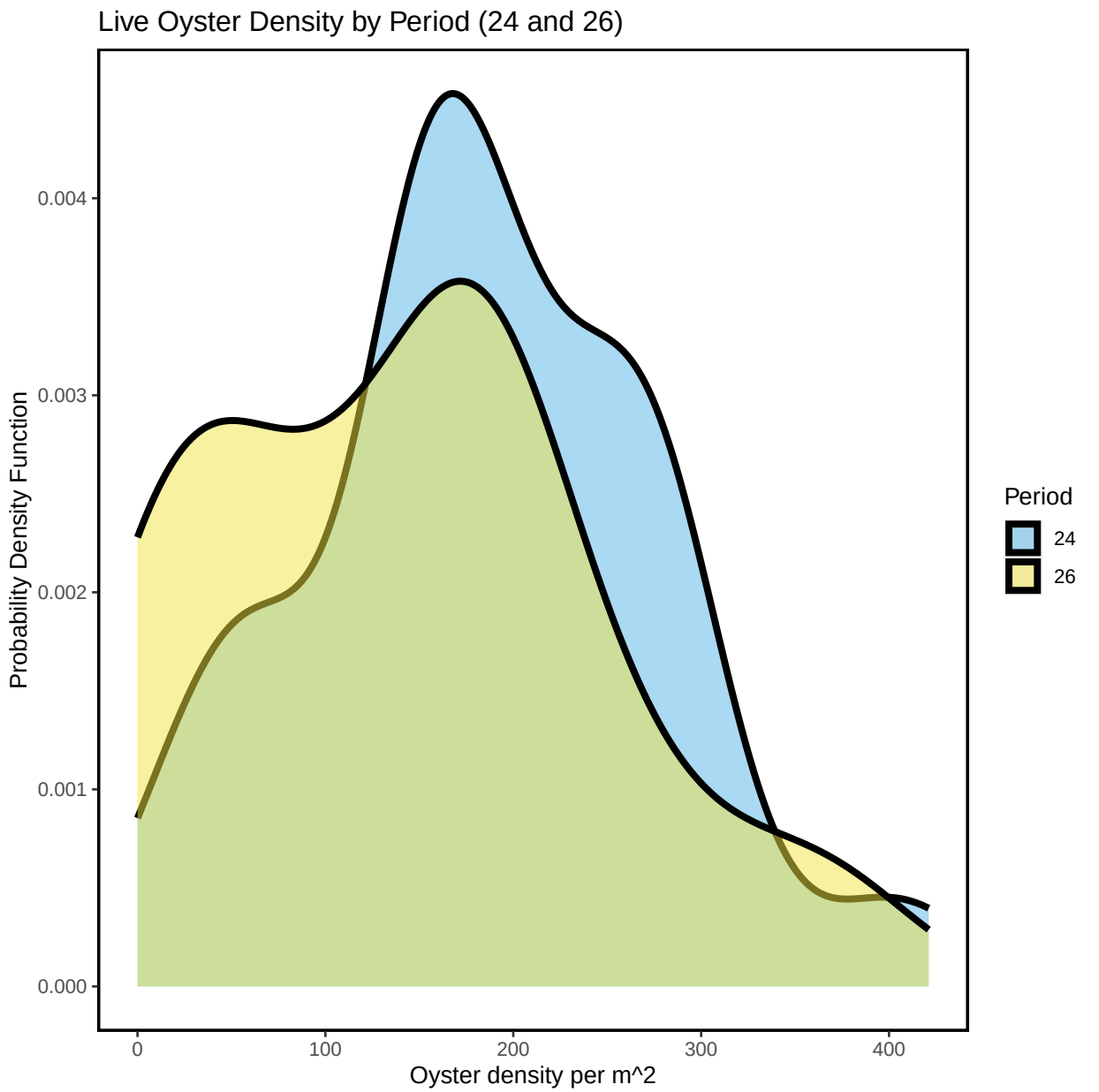


Figure- Calculated live oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2023-02-06.

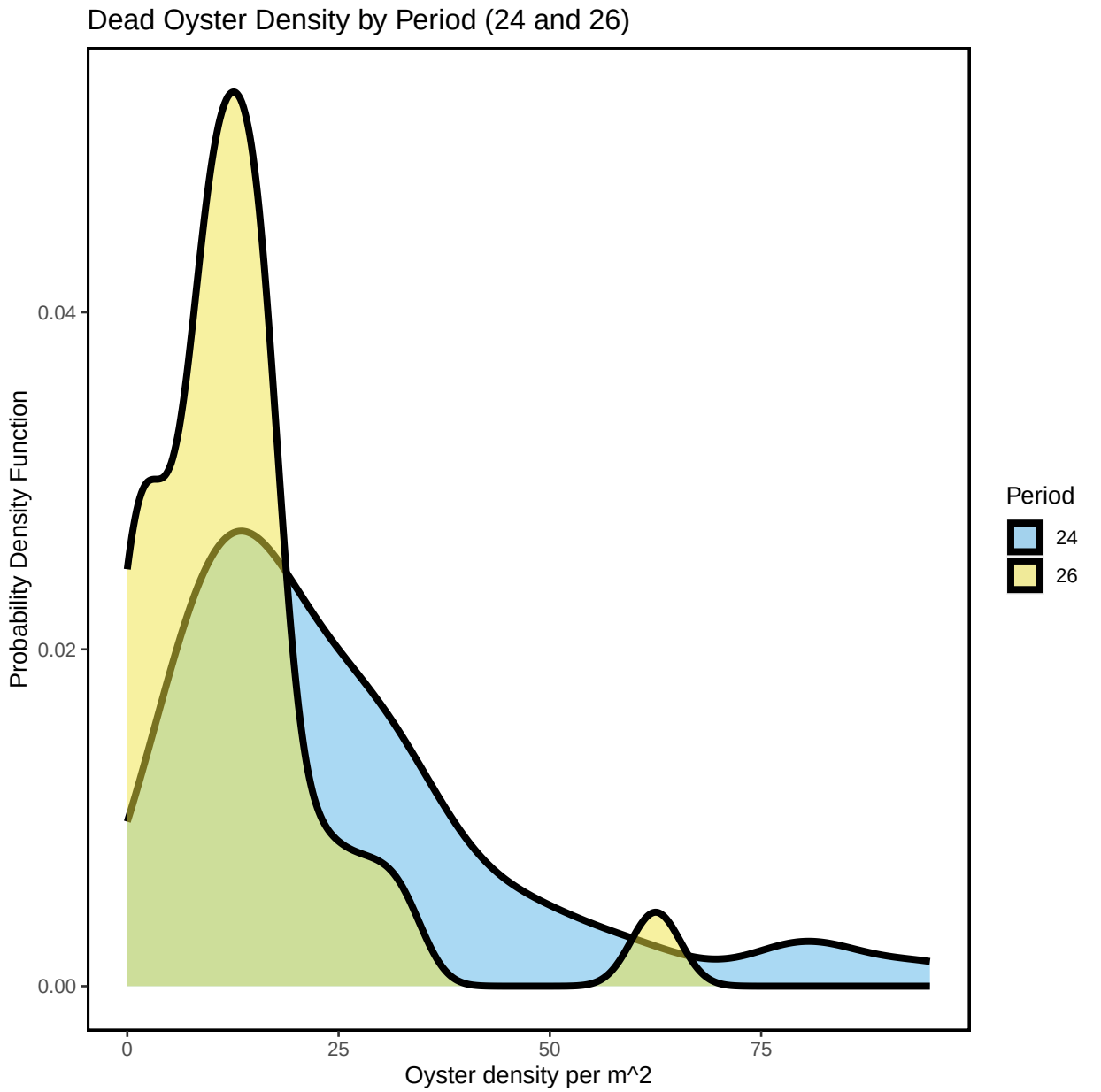


Figure- Calculated dead oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2023-02-06.

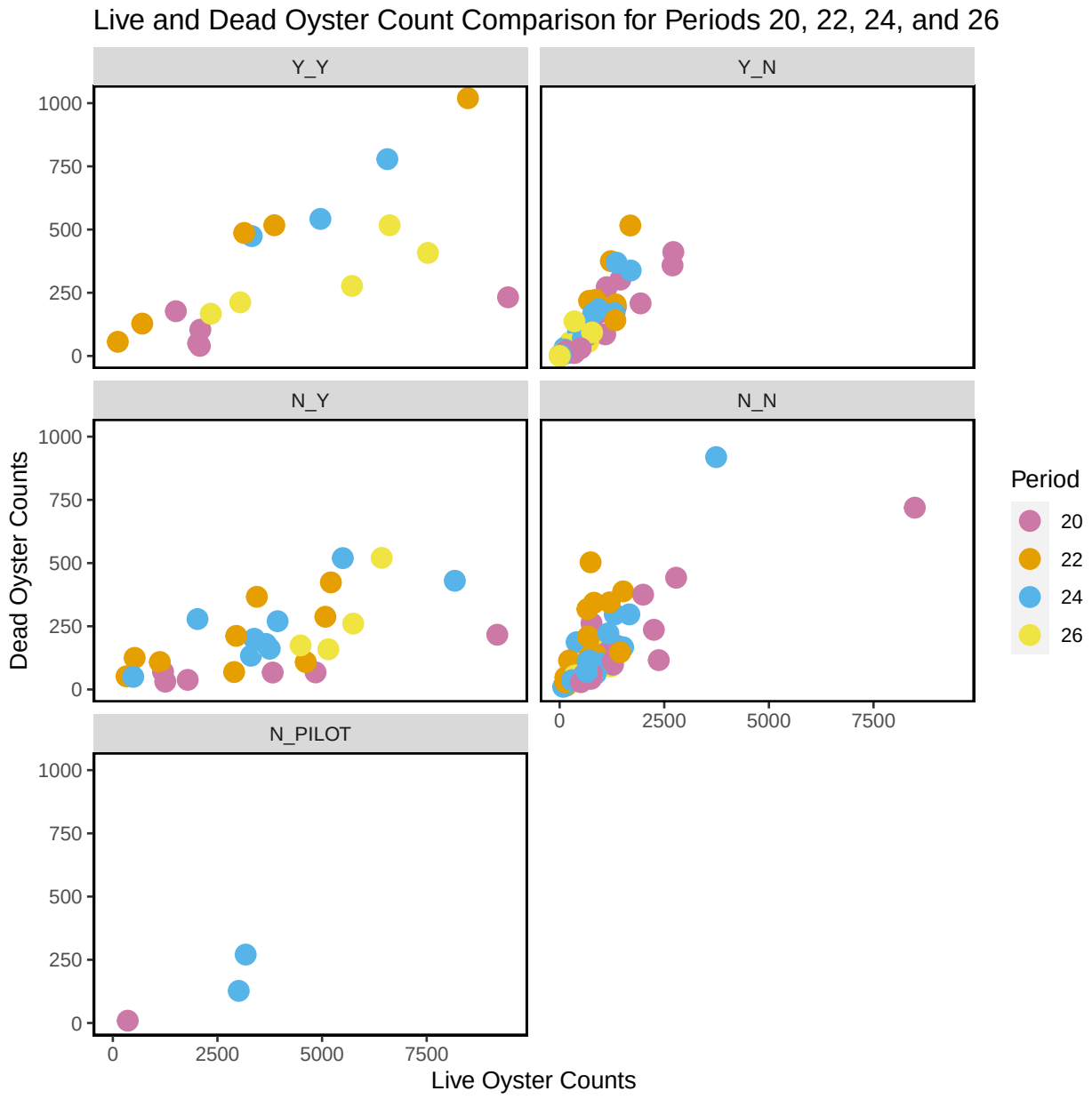


Figure- Live and dead oyster count comparison by periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) last sample date of period 26 as 2023-02-06.

Live Counts Double Pass Results

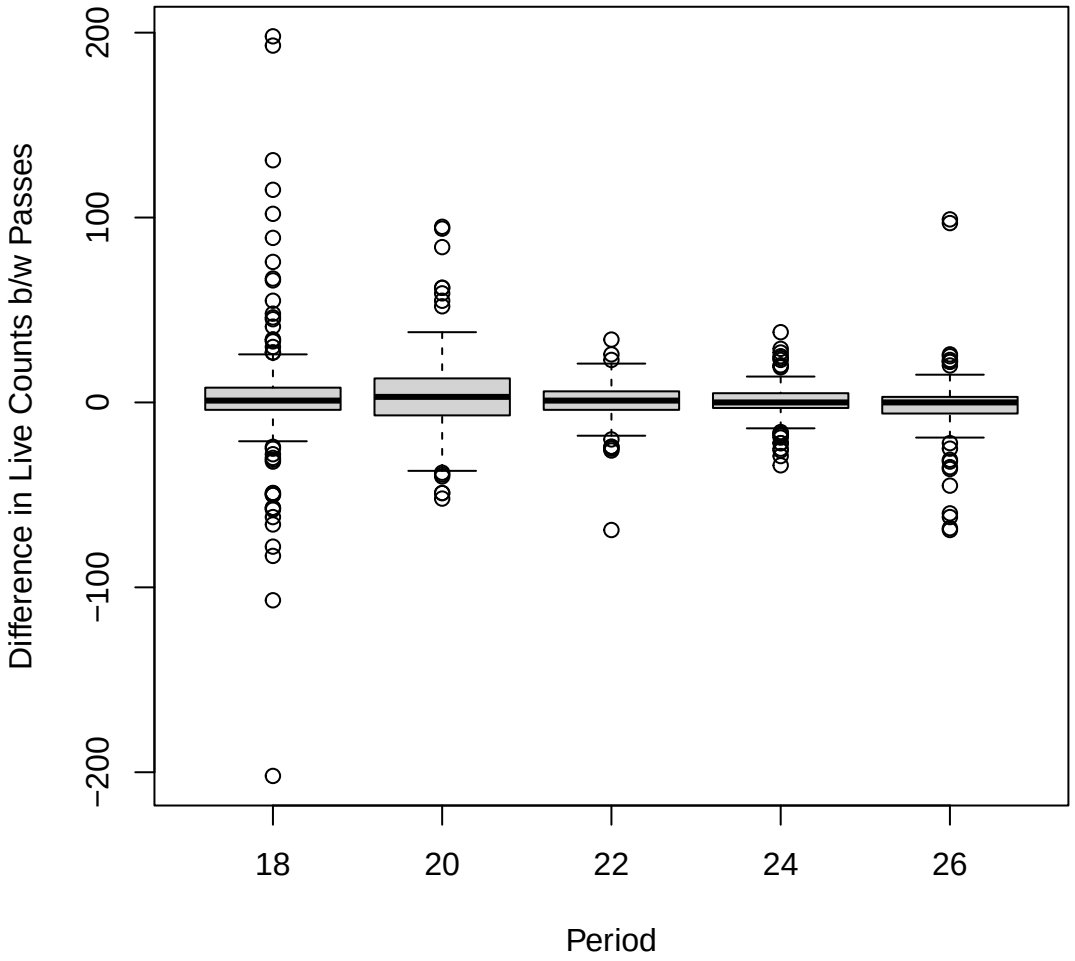


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, 24, and 26

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	-1.87	23.0	-12.3

LT	26	-1.50	3.8	-2.6

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

Dead Counts Double Pass Results

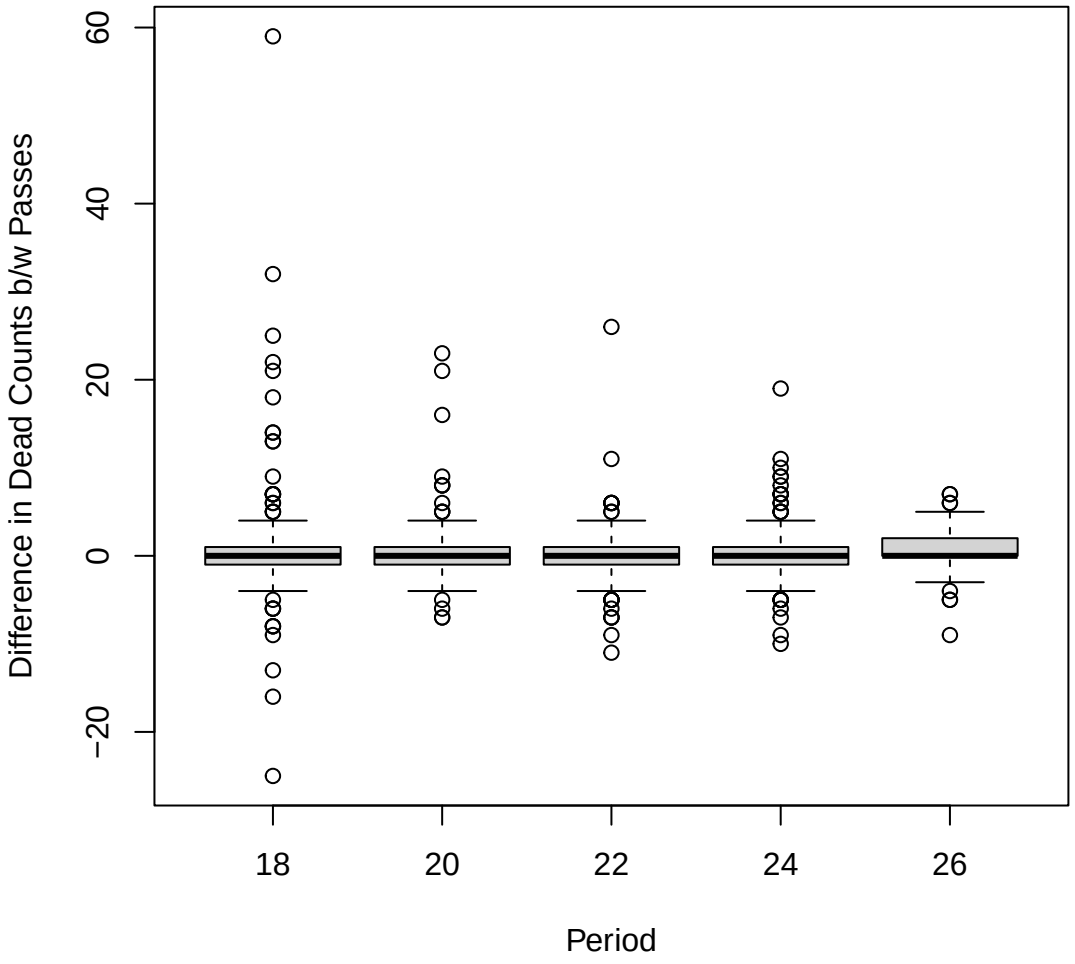


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, 24, and 26

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	0.88	1.13

```
LT     26 0.65 0.61
```

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 2023-02-06. 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

PERIOD	SEASON	YEAR
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	20	661
CK	26	734
CR	46	1375
HB	45	1129
LC	259	15565
LT	23	577
NN	14	357

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	138	4467
N_PILOT	15	1050
N_Y	42	5106
Y_N	216	6216
Y_Y	22	3557

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	31	2159

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	2	73
26	LC	27	2050
26	LT	2	35
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	6	216
26	N_Y	5	729
26	Y_N	15	342
26	Y_Y	5	871
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

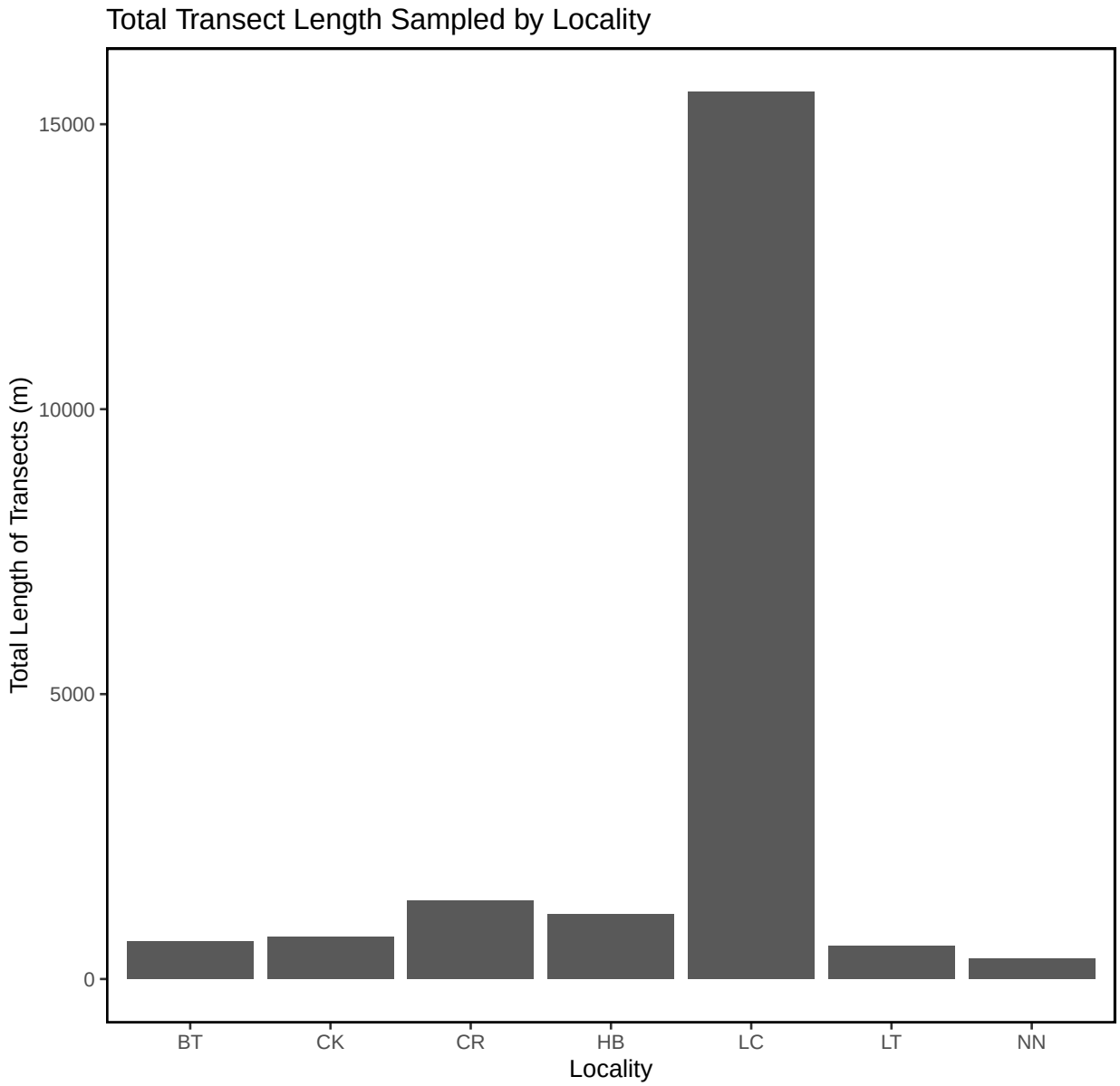


Figure − Bar plot of total transect length in meters sampled by locality for all periods.

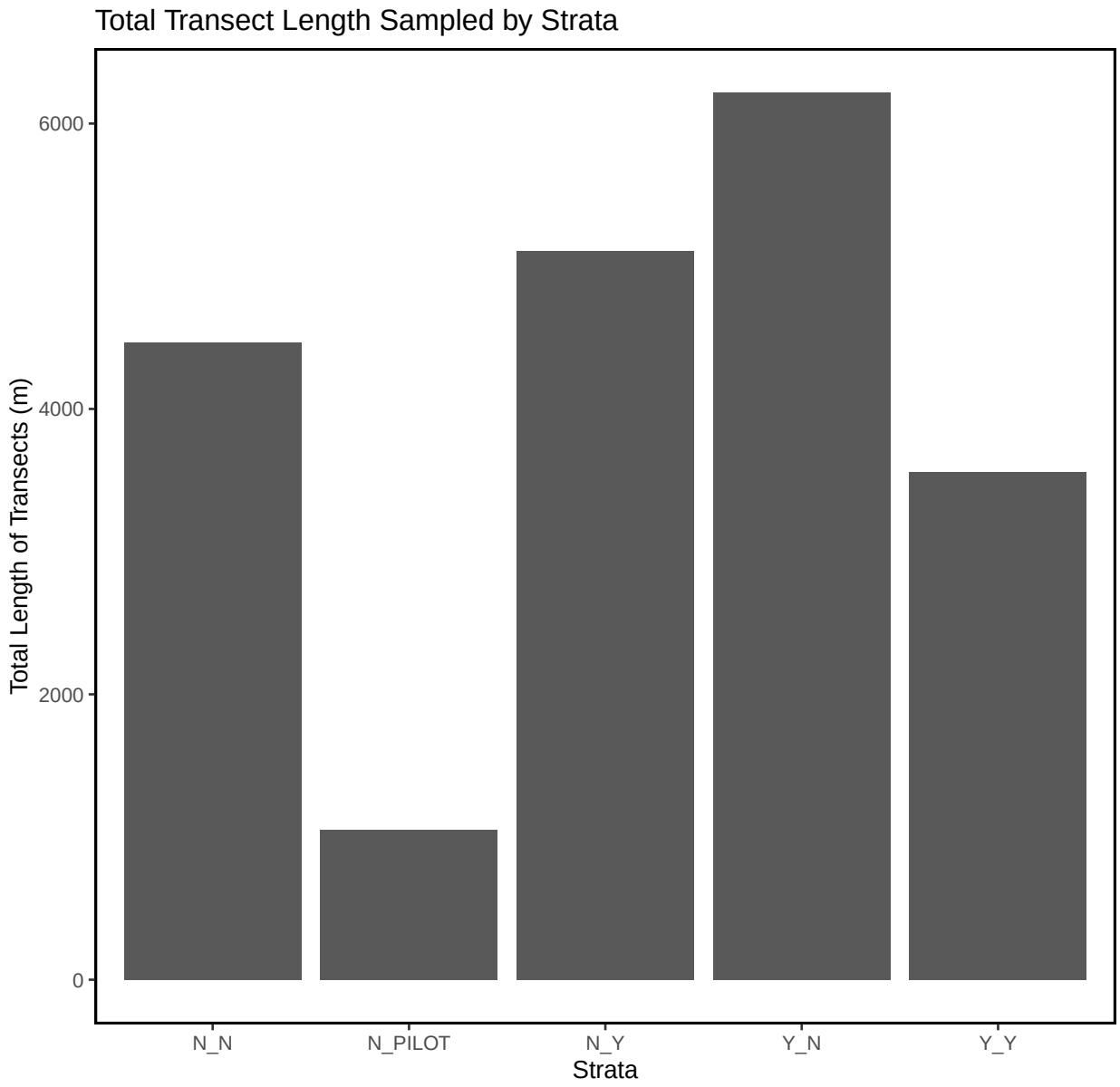
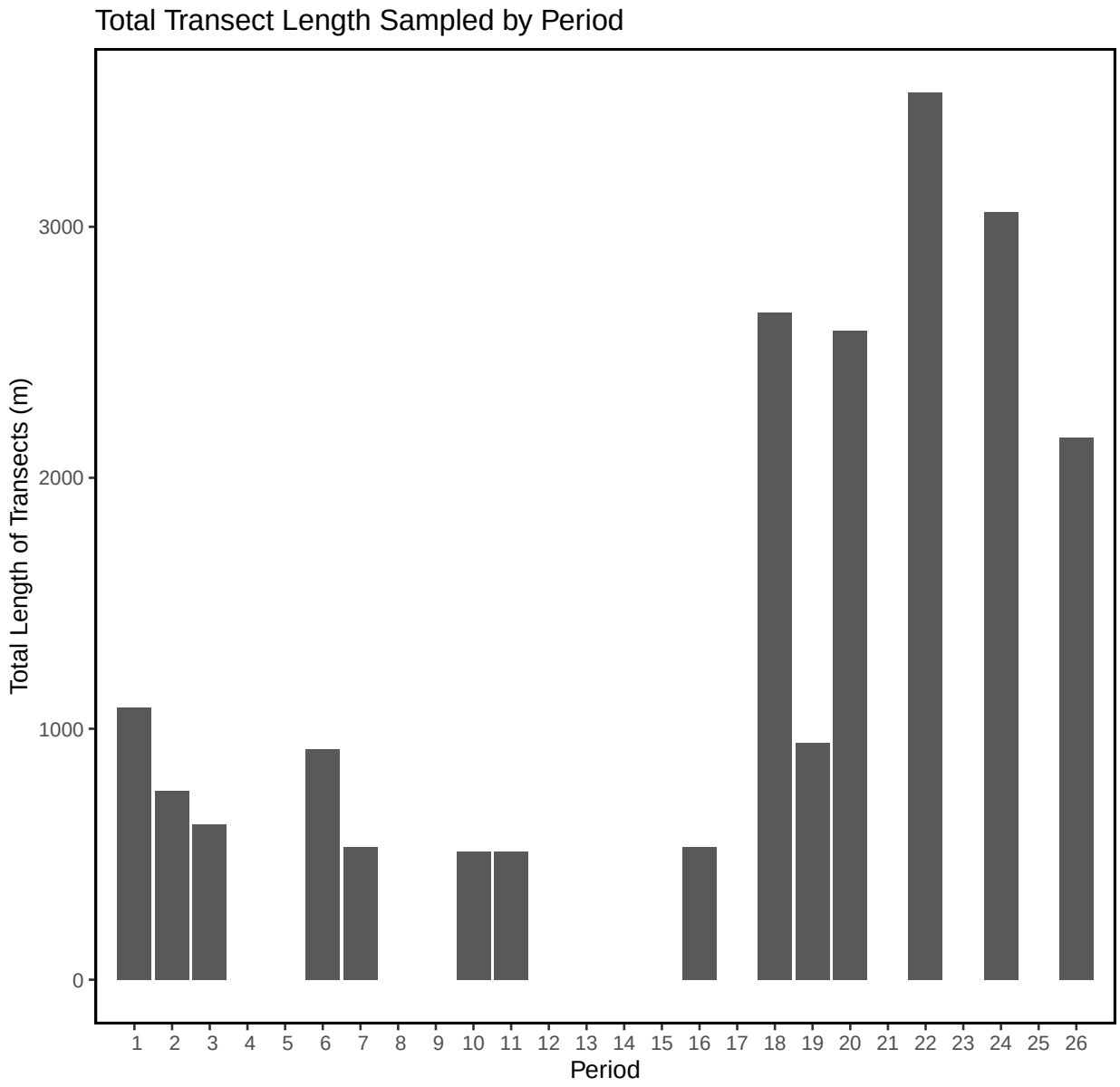


Figure − Bar plot of total transect length in meters sampled by strata for all periods.



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	1364	884	1857	3448519	1.36	415	550	2178	1352	740	2251
CK	857	444	1091	1190933	1.27	214	438	1277	867	487	1336
CR	1026	716	1035	1072162	1.01	153	727	1325	1035	750	1347
HB	902	364	1047	1095622	1.16	158	592	1211	898	609	1214
LC	1342	700	1730	2994208	1.29	109	1129	1555	1336	1150	1555
LT	985	860	546	297979	0.55	114	762	1208	983	797	1208
NN	735	674	584	341295	0.79	156	429	1041	733	482	1067

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	981	761	1000	1000337	1.02	85	813	1148	982	836	1164
N_PILOT	1318	1136	925	856059	0.70	239	850	1787	1318	868	1792
N_Y	2979	3180	2228	4964363	0.75	344	2305	3653	2991	2347	3663
Y_N	737	408	875	766122	1.19	60	619	855	737	623	856
Y_Y	3428	2693	2850	8123998	0.83	608	2237	4619	3441	2274	4684

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	1408	1028	1788
2	890	476	945	893727	1.06	176	546	1234	891	568	1240
3	738	296	817	668064	1.11	167	411	1065	734	431	1052
6	433	176	534	284791	1.23	96	245	621	433	253	623
7	50	29	56	3186	1.12	20	11	90	50	17	86
10	1207	1074	671	449607	0.56	237	743	1672	1208	815	1687
11	886	776	678	459708	0.77	240	416	1356	893	490	1344
16	494	366	467	217855	0.95	165	170	817	506	211	818
18	982	695	935	874733	0.95	120	748	1217	983	760	1228
19	555	329	573	328431	1.03	97	365	745	556	365	751
20	1844	1253	2125	4517189	1.15	310	1236	2451	1846	1319	2503
22	1334	702	1693	2867783	1.27	242	860	1808	1330	904	1854
24	1729	942	1845	3403035	1.07	266	1207	2251	1728	1240	2260
26	2029	683	2457	6034843	1.21	456	1135	2923	2026	1224	2934

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	245	228	167	27863	0.68	37.3	172	318	244	186	318
CK	241	112	321	102927	1.33	62.9	118	364	241	134	377
CR	283	178	294	86605	1.04	43.4	198	368	281	199	367
HB	257	101	303	92052	1.18	45.7	168	347	258	175	348
LC	153	131	137	18697	0.89	8.6	136	170	154	136	171
LT	272	249	129	16564	0.47	26.8	219	325	272	223	323
NN	215	174	202	40919	0.94	54.1	109	321	216	130	326

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	252	190	236	55636	0.94	20	213	292	253	215	296
N_PILOT	118	121	59	3467	0.50	15	88	148	118	90	148
N_Y	165	166	90	8154	0.55	14	137	192	164	139	191
Y_N	177	111	207	42879	1.17	14	149	205	178	152	209
Y_Y	135	145	80	6429	0.59	17	102	169	135	103	167

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	394	285.9	503.7
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	255	157.0	360.2
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	236	138.4	340.4
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	120	73.1	175.0
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.8	8.8
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	123	83.3	171.2
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	90	48.4	135.4
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	48	20.2	78.8
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	177	143.3	212.0
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	153	102.7	209.1
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	256	208.0	312.8
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	137	111.6	162.6
24	185	180.6	91.6	8385	0.49	13	159.3	211.1	186	158.0	211.2
26	152	161.5	99.0	9796	0.65	18	115.8	187.9	153	118.2	189.6

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	241	138	273	74407	1.13	61	121.1	360	241	136	369
CK	78	32	106	11170	1.36	37	4.3	151	79	17	157
CR	60	47	38	1444	0.63	13	35.2	85	60	38	85
HB	44	21	45	2000	1.02	15	14.8	73	44	19	73
LC	133	72	158	24898	1.19	11	111.7	154	133	114	154
LT	203	137	179	31877	0.88	37	130.2	276	205	136	281
NN	98	72	87	7493	0.88	23	52.5	143	98	60	142

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	153	87	187	34827	1.22	18	118	189	153	119	192
N_PILOT	98	89	65	4243	0.67	17	65	131	98	69	133
N_Y	148	89	140	19622	0.95	22	105	190	148	108	192
Y_N	96	50	110	12013	1.14	10	76	116	97	77	117
Y_Y	284	194	276	76137	0.97	59	169	399	282	180	394

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	48
10	80	88	65	4245	0.82	23.0	34.5	125	80	40	123
11	50	40	25	620	0.49	8.8	33.2	68	51	35	68
16	44	28	41	1708	0.93	14.6	15.6	73	45	21	71
18	133	55	192	36903	1.44	24.6	85.1	182	132	89	182
19	63	44	67	4548	1.08	11.6	40.0	85	63	41	86
20	148	107	140	19727	0.95	20.5	107.6	188	149	114	191
22	191	128	193	37399	1.01	27.6	137.2	245	191	142	251
24	192	130	194	37816	1.01	28.1	136.8	247	191	140	250
26	130	70	143	20435	1.10	26.1	79.2	182	130	83	180

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	45	32	32	1035	0.72	7.2	30.7	59	45	31.4	60
CK	21	11	28	757	1.29	9.7	2.3	40	21	5.7	40
CR	18	11	16	247	0.87	5.2	7.8	28	18	9.7	29
HB	13	8	14	201	1.12	4.7	3.4	22	13	4.8	22
LC	17	11	20	396	1.14	1.3	14.8	20	17	14.9	20
LT	51	41	35	1222	0.68	7.3	37.2	66	51	37.7	66
NN	28	21	22	463	0.78	5.7	16.4	39	27	17.1	39

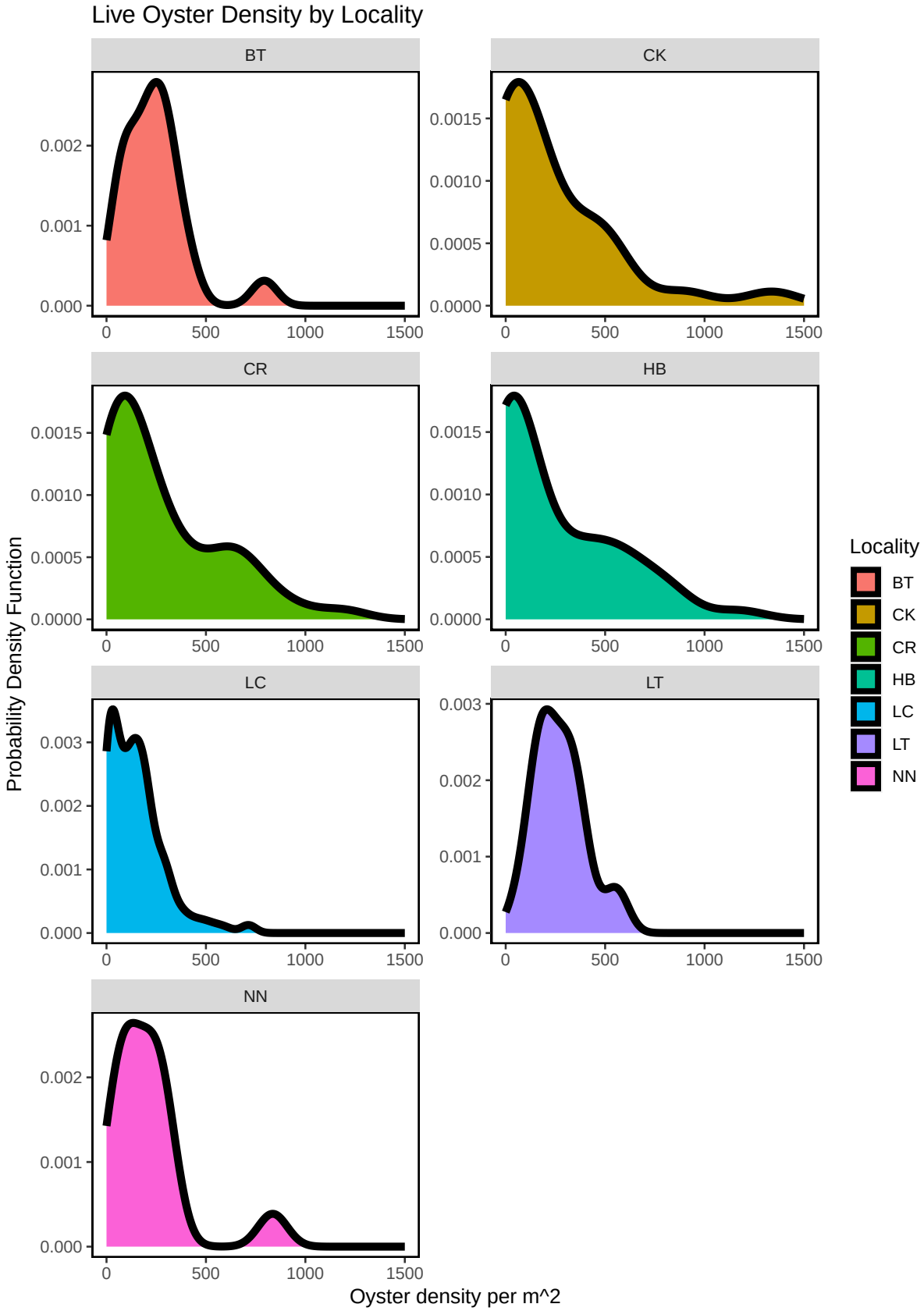
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	32.6	26.3	30.0	900	0.92	2.91	26.9	38.3	32.6	27.5	38.5
N_PILOT	8.7	8.7	4.3	18	0.49	1.11	6.5	10.9	8.7	6.8	10.8
N_Y	8.0	8.1	5.7	32	0.70	0.87	6.3	9.7	8.0	6.5	9.8
Y_N	22.1	13.5	23.1	531	1.04	2.14	17.9	26.3	22.2	18.0	26.5
Y_Y	10.5	11.4	6.2	38	0.59	1.32	7.9	13.1	10.5	7.9	13.0

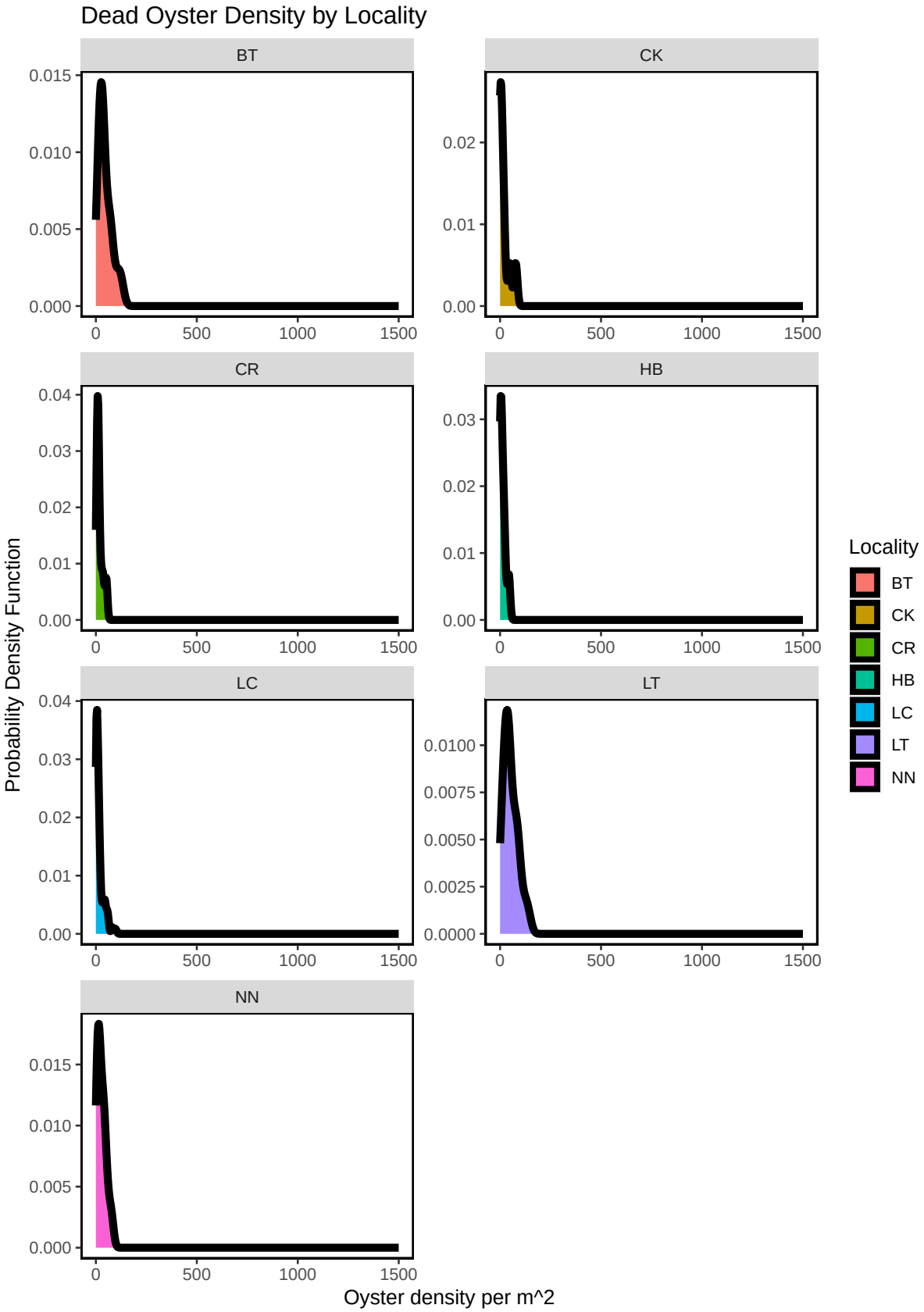
Dead Oyster Density by Period

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	0.93	5.0
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.1	3.96	13.0
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.57	6.9
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	1.86	7.1
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.3	19.04	34.4
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.5	11.35	24.3
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.7	20.48	36.1
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.3	20.70	36.5
24	25.7	19.1	20.9	438.3	0.81	3.02	19.83	31.7	25.8	20.58	31.4
26	13.8	11.6	12.0	143.0	0.87	2.18	9.53	18.1	13.8	10.20	18.4

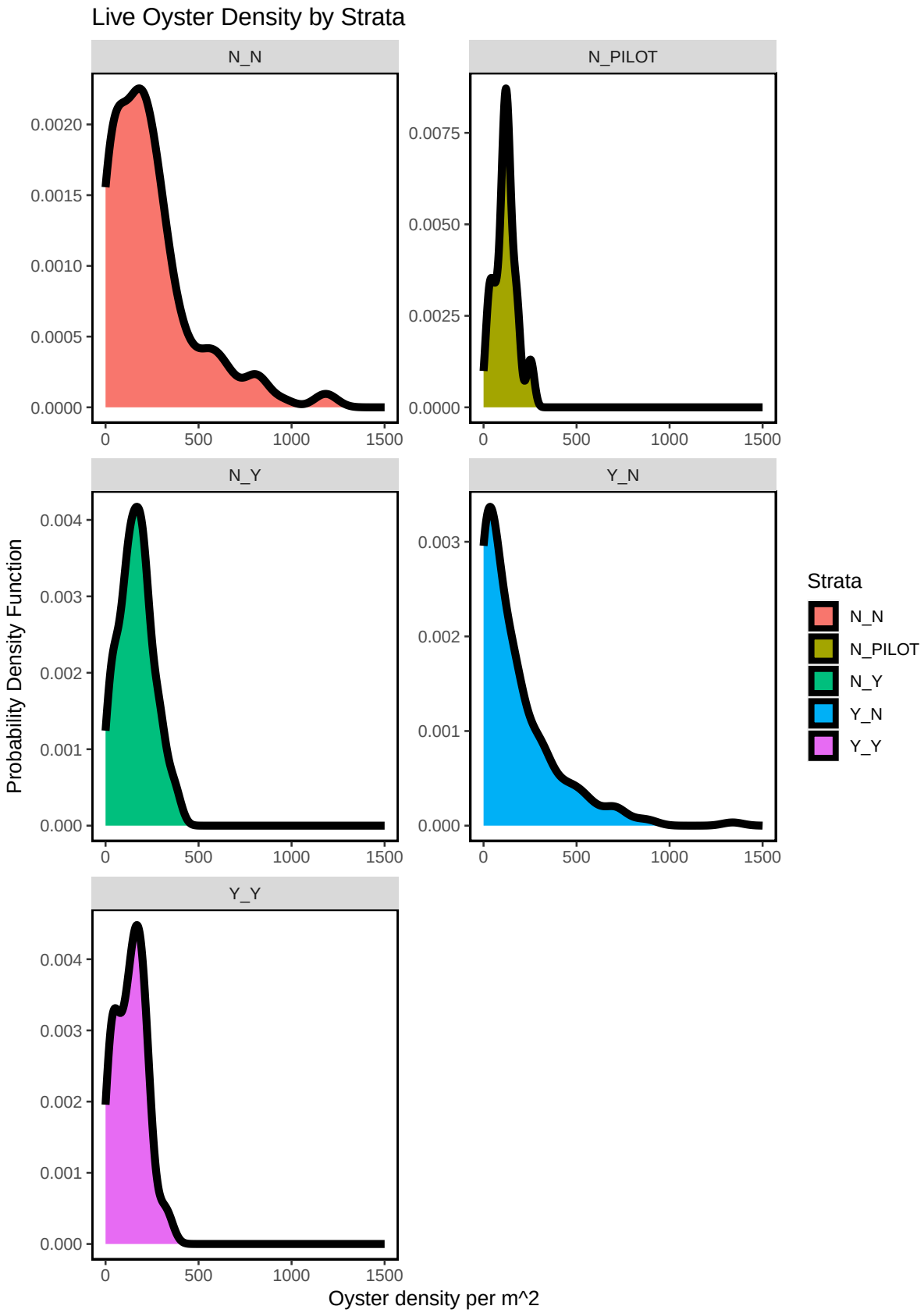
Summary Density Plots for all Periods



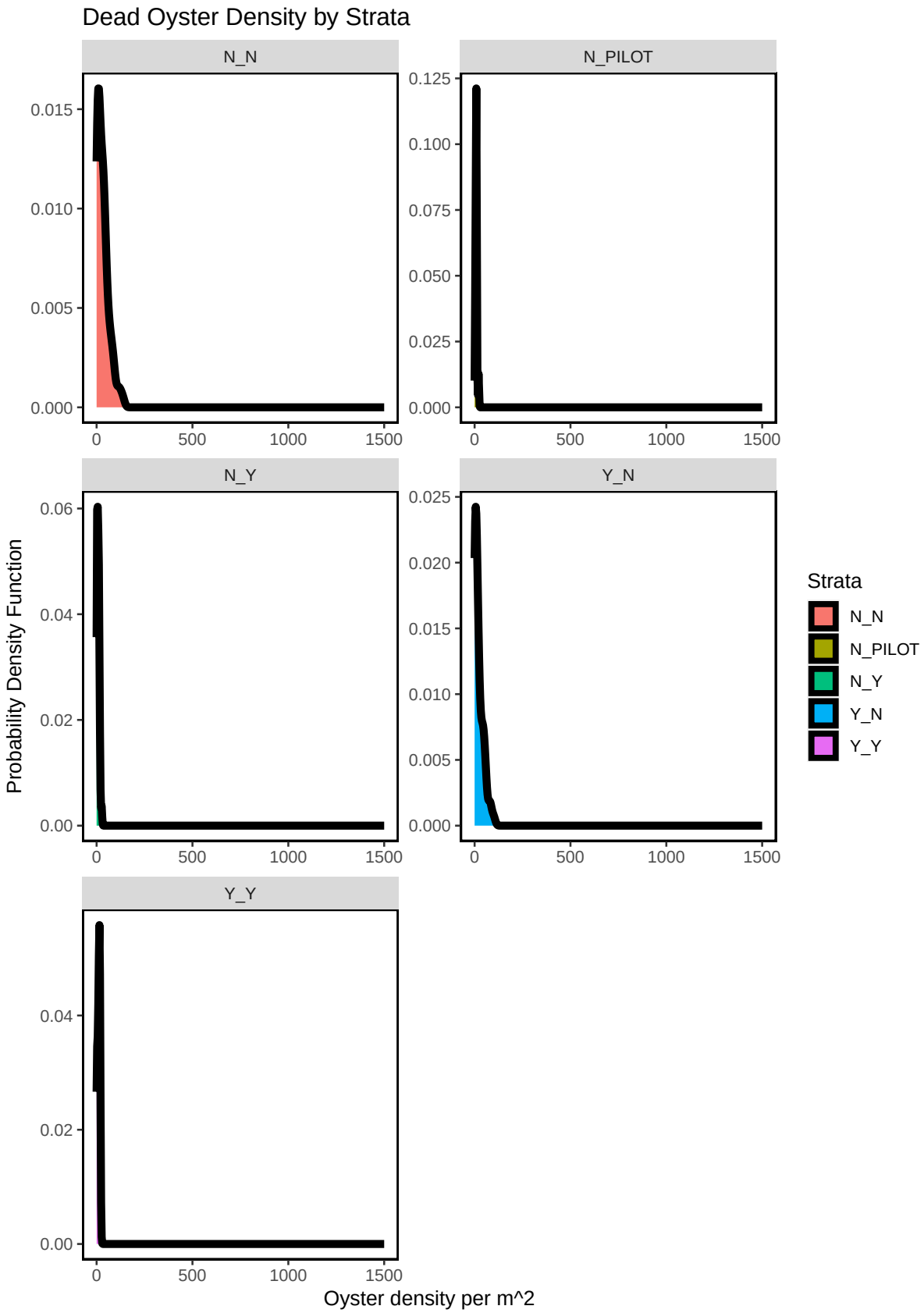
Figure− Calculated live oyster density by locality for all periods including period 22 (current period).



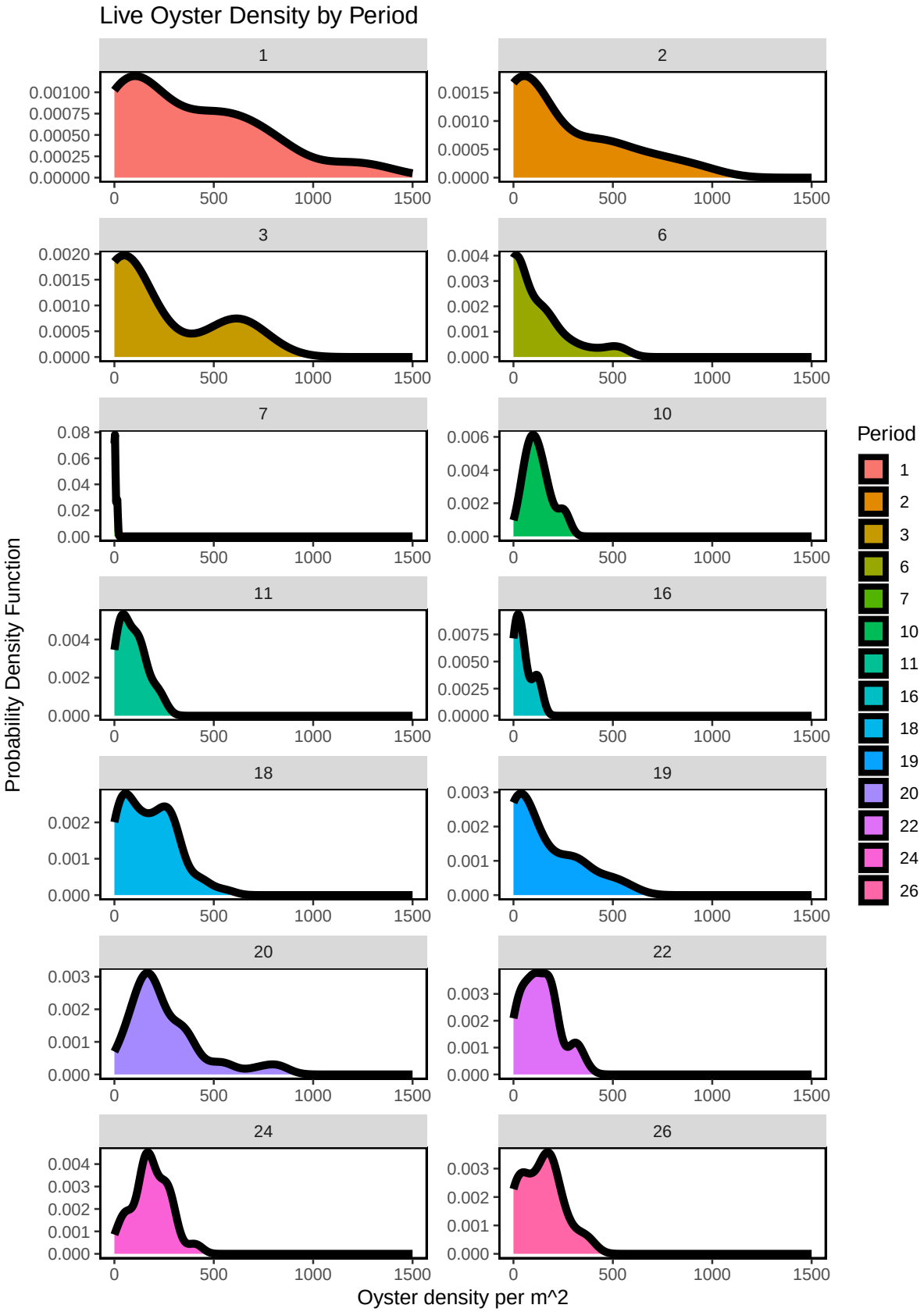
Figure− Calculated dead oyster density by locality for all periods including period 22 (current period).



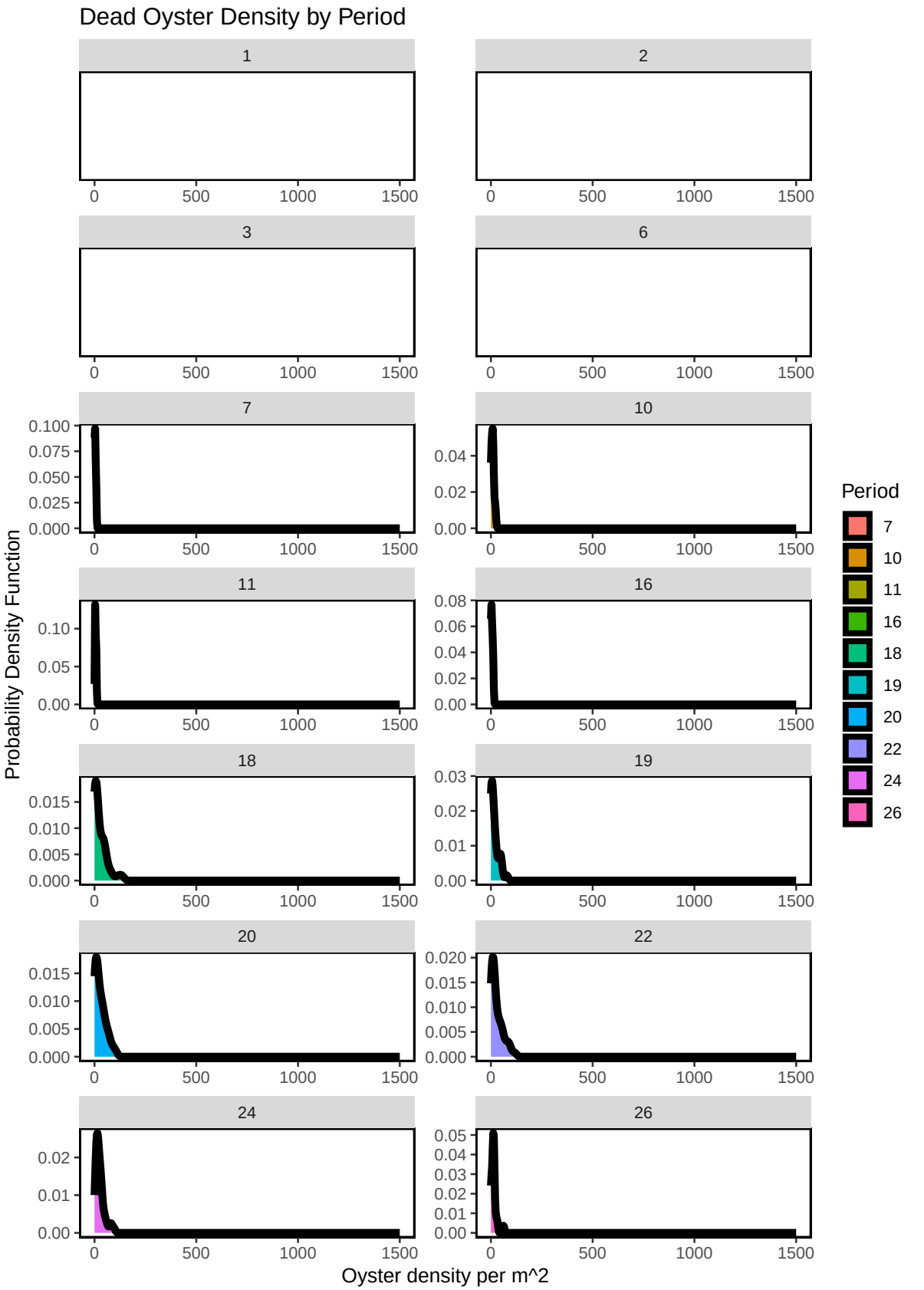
Figure− Calculated live oyster density by strata for all periods including period 22 (current period).



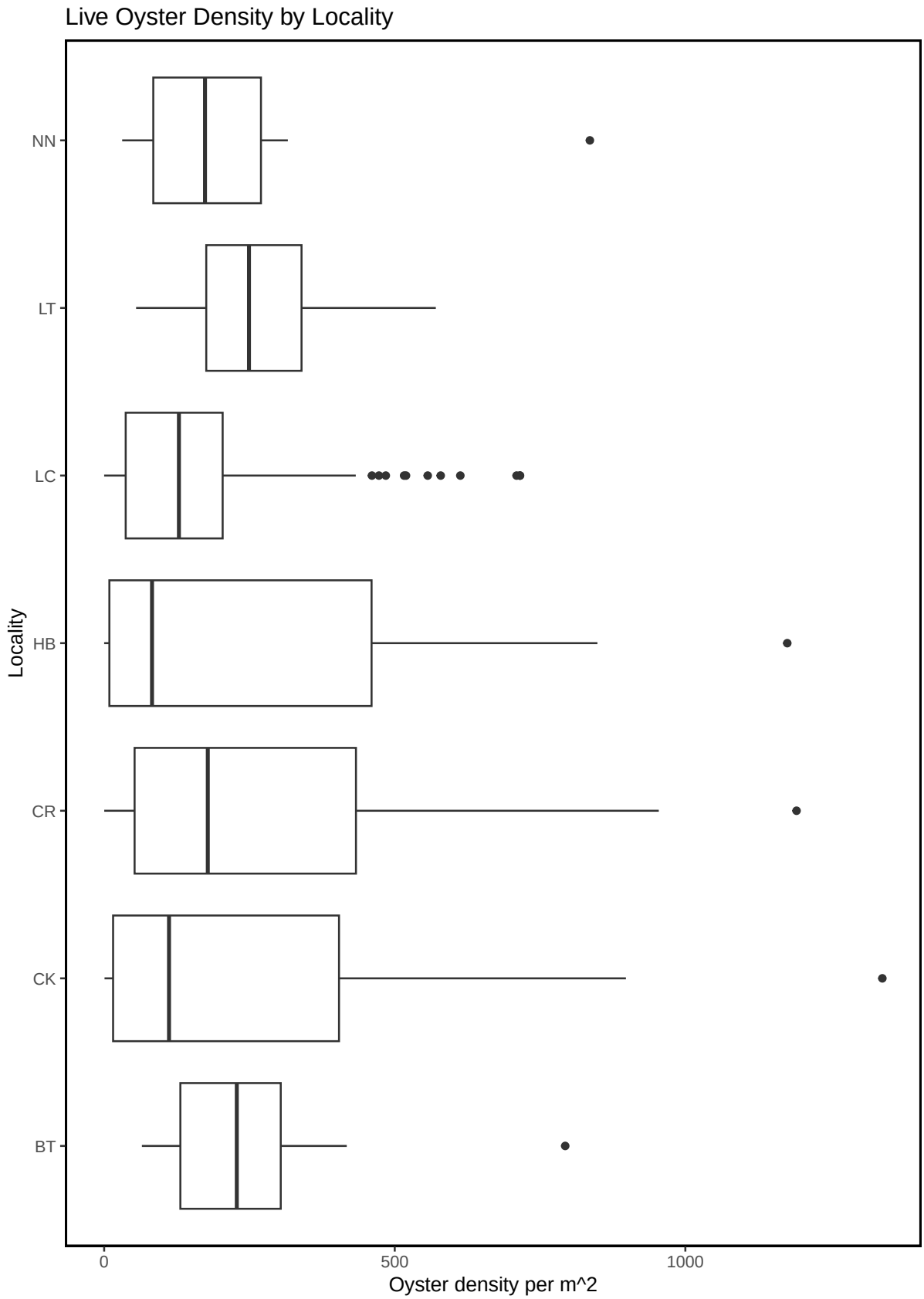
Figure− Calculated dead oyster density by strata for all periods including period 22 (current period).



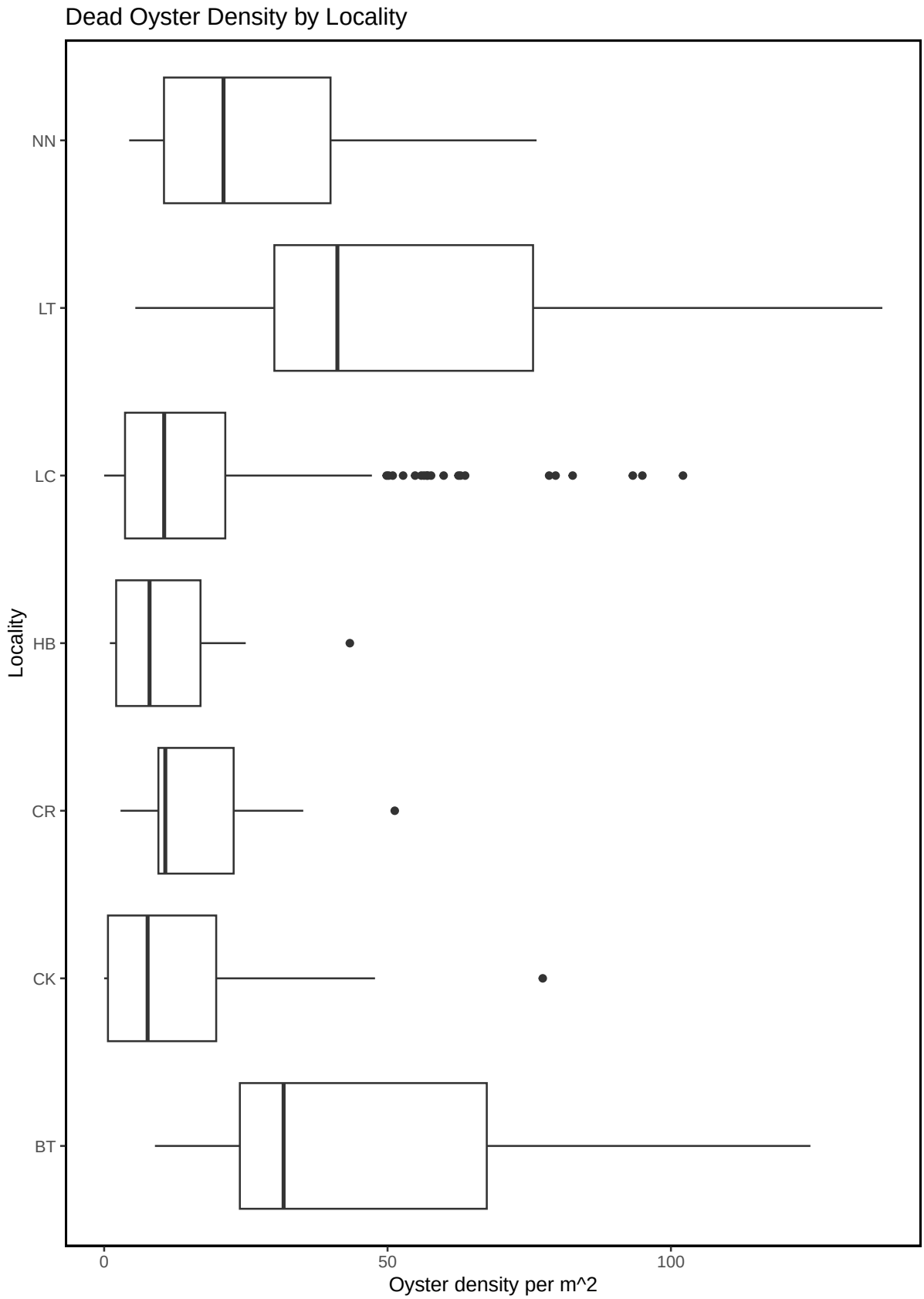
Figure− Calculated live oyster density for all periods including period 24 (current period) using a probability densit



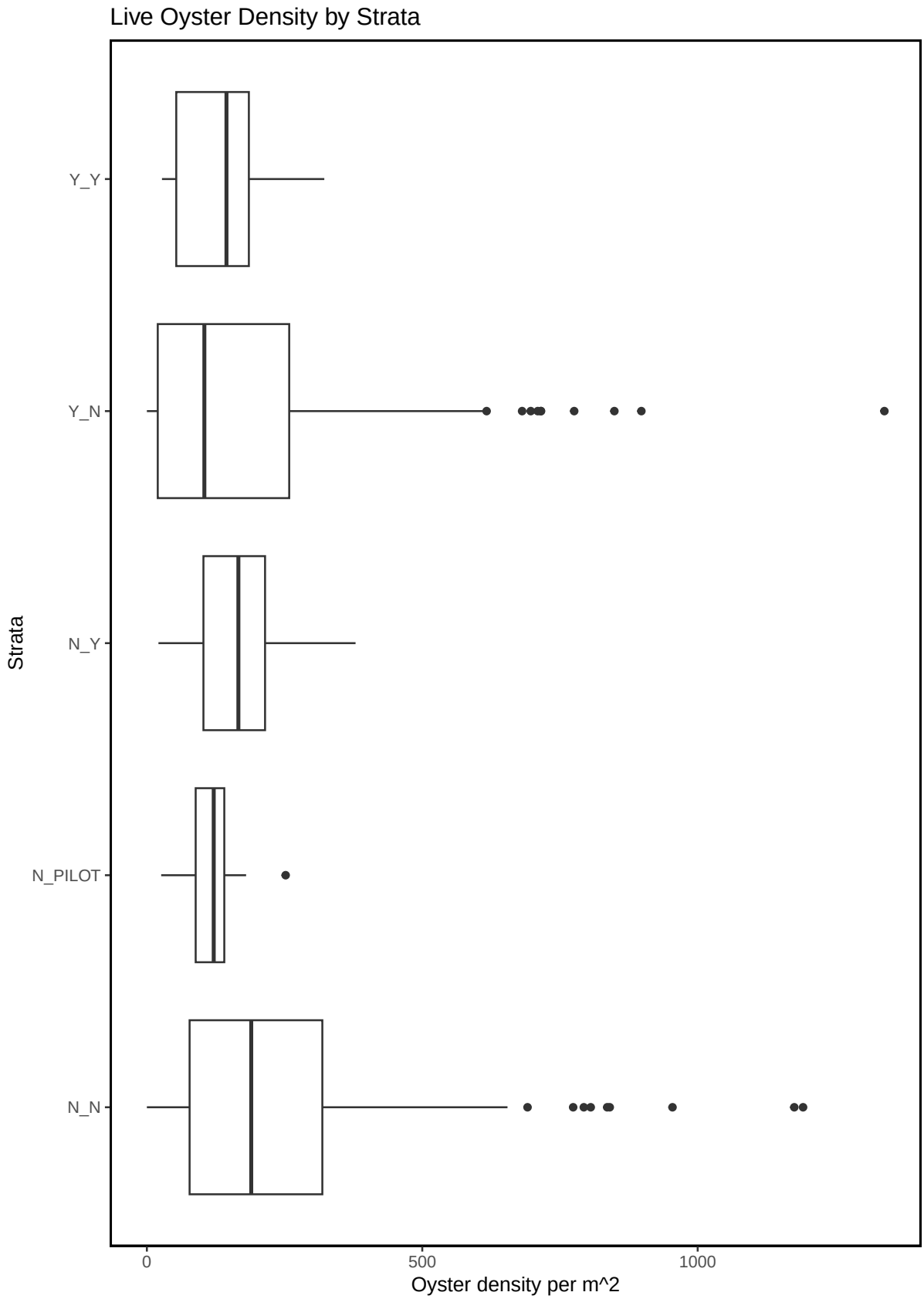
Figure− Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit



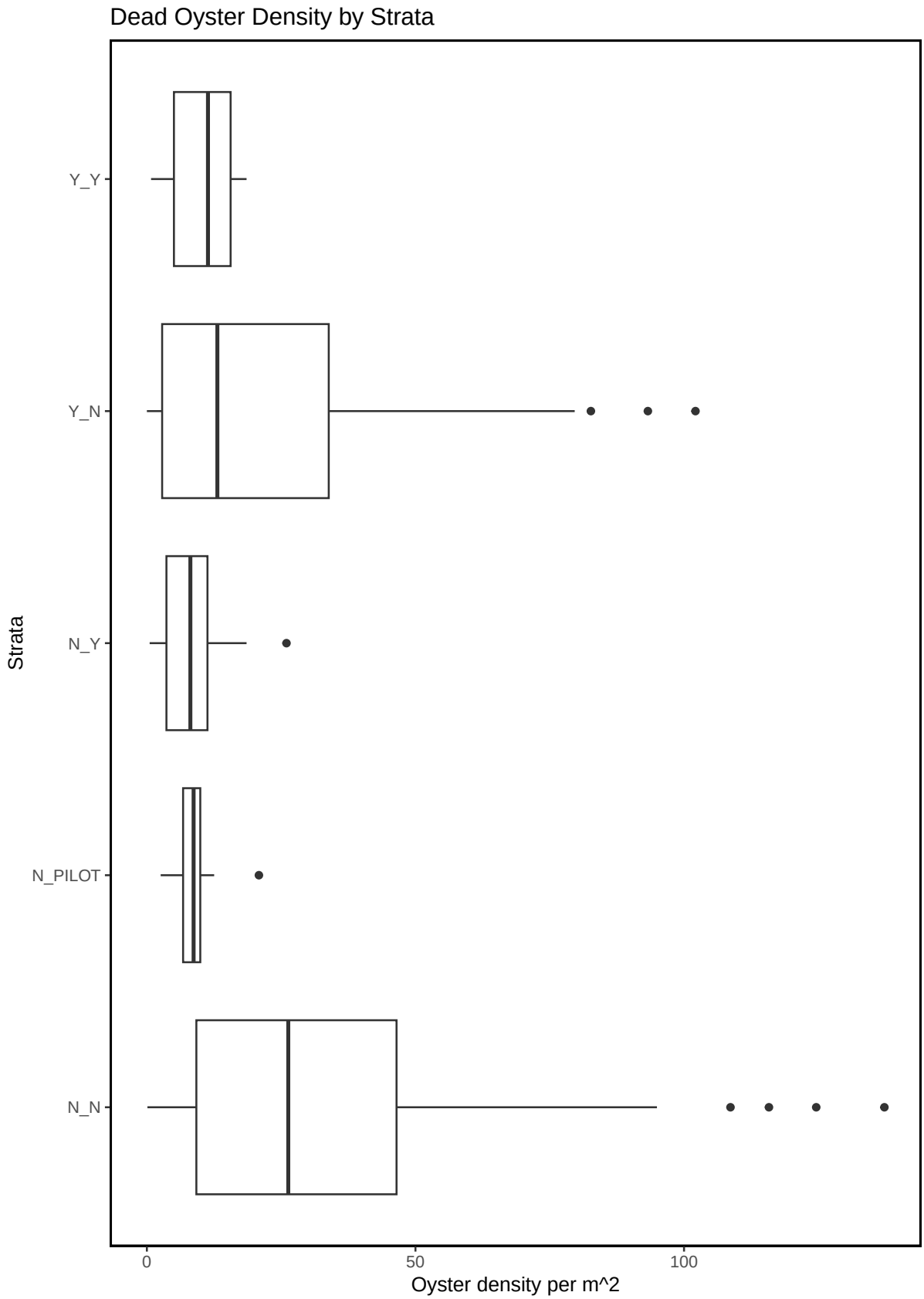
Figure− Box plot depicting live oyster density by locality for all periods including period 22 (current period).



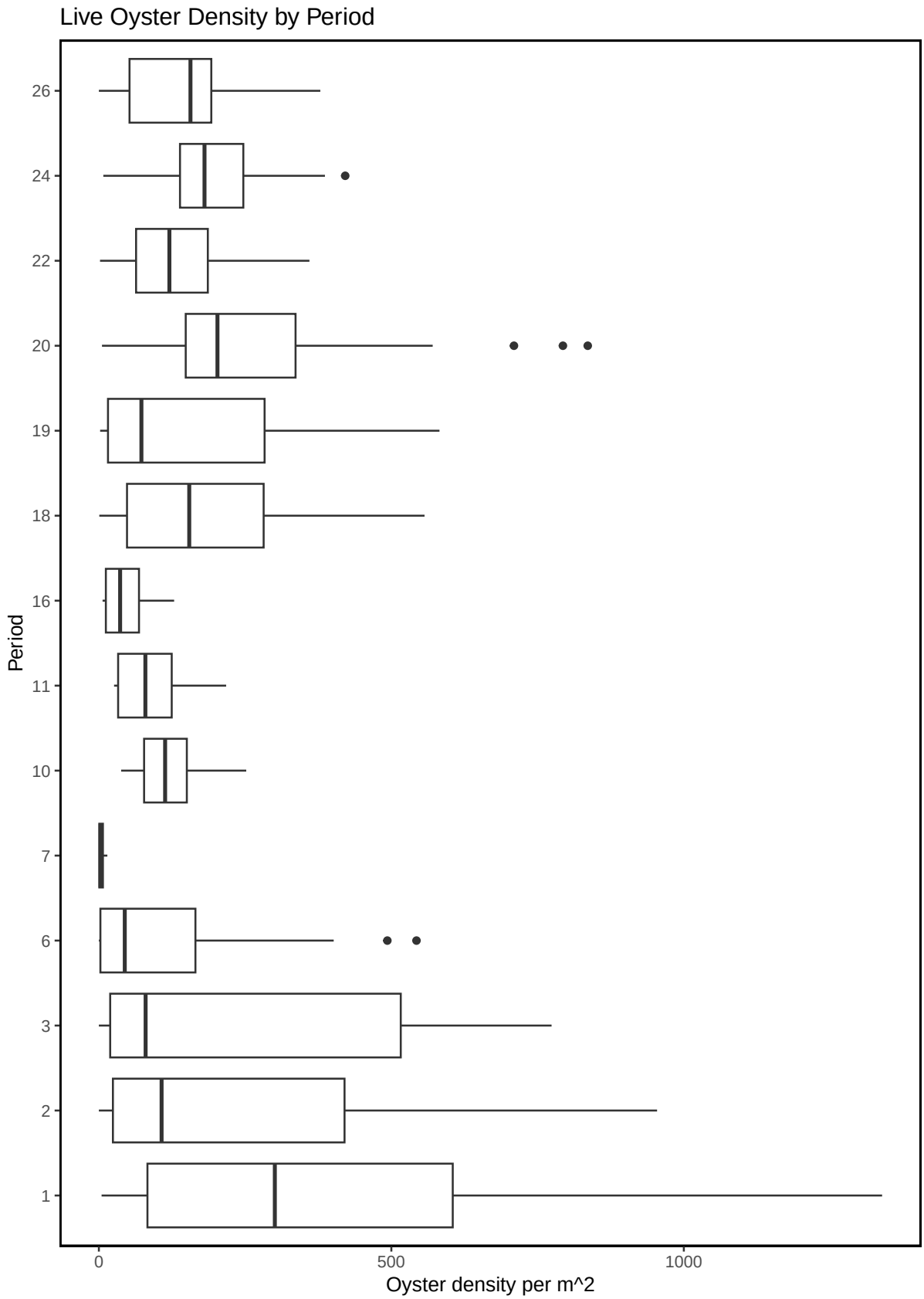
Figure− Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



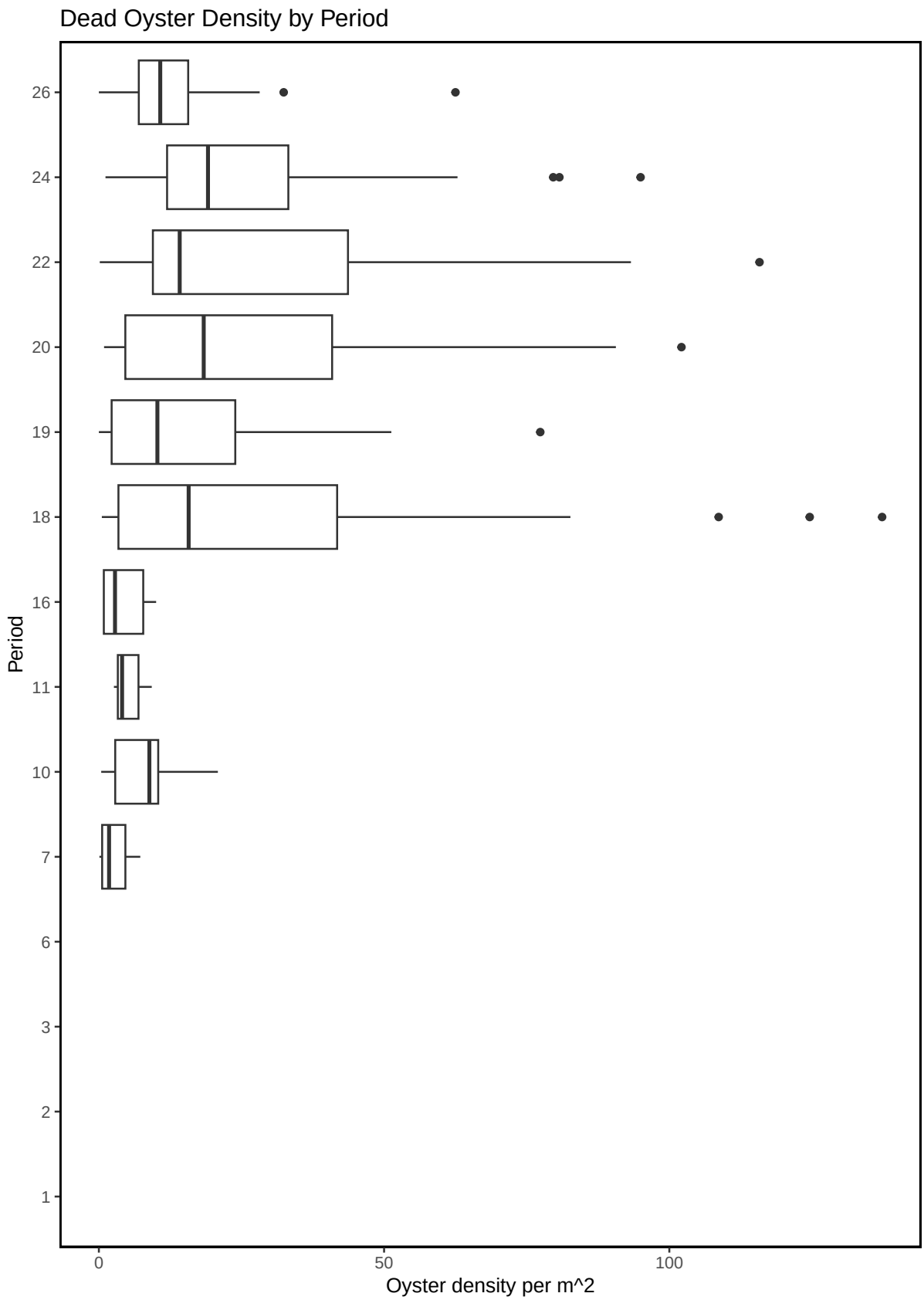
Figure− Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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).

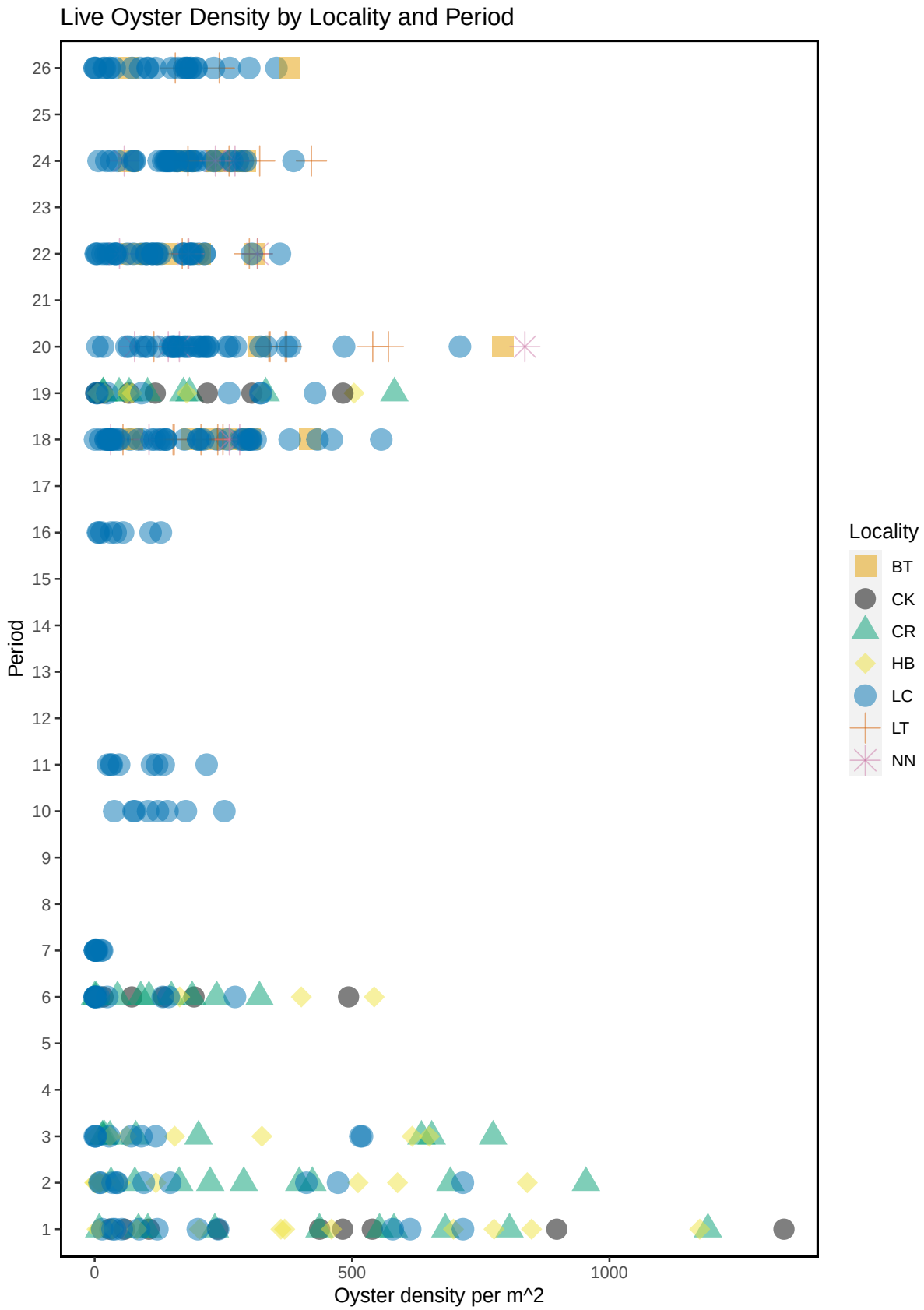


Figure − Live oyster density by locality and period for all periods including period 22 (current period).

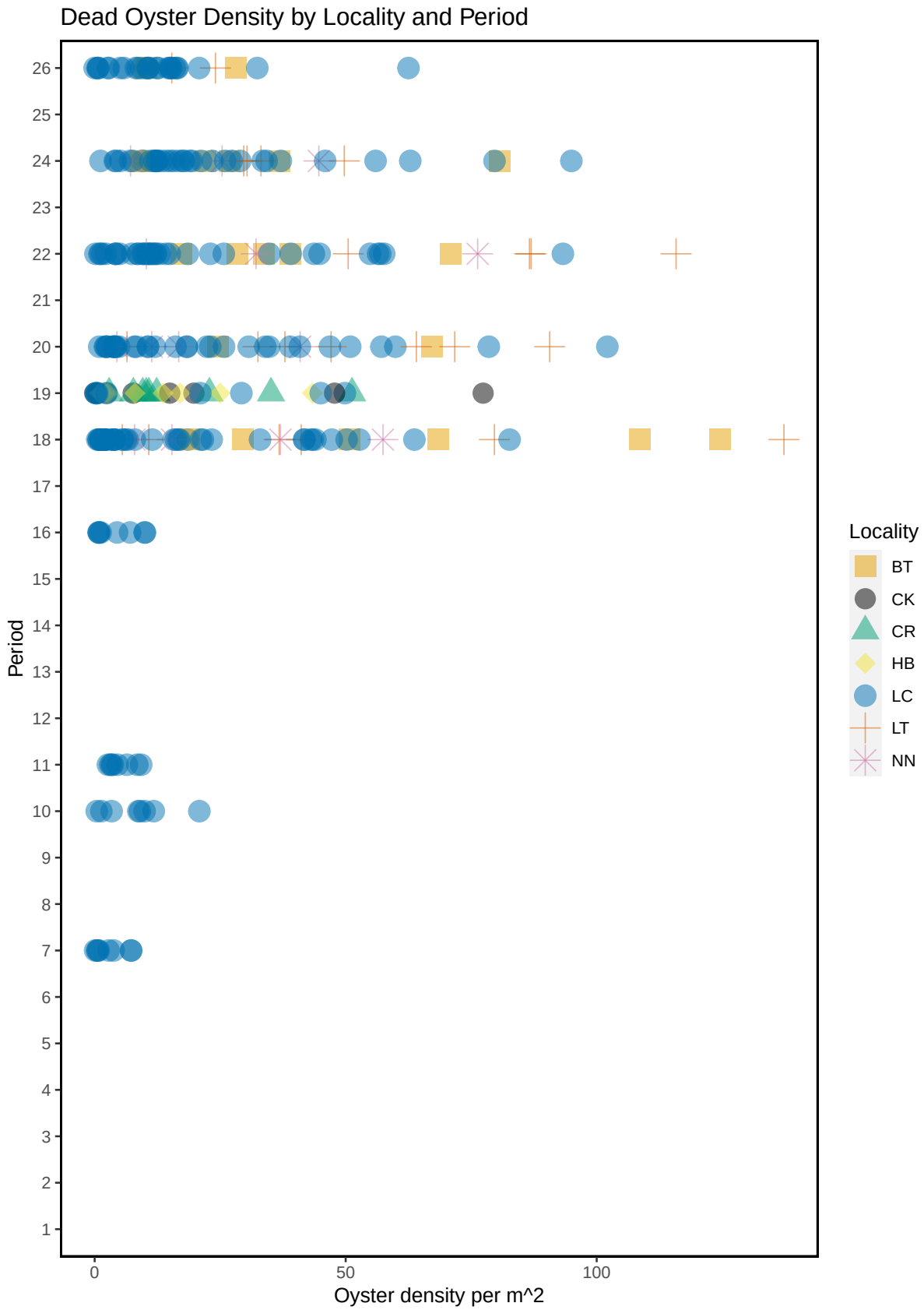


Figure − Dead oyster density by locality and period for all periods including period 22 (current period).

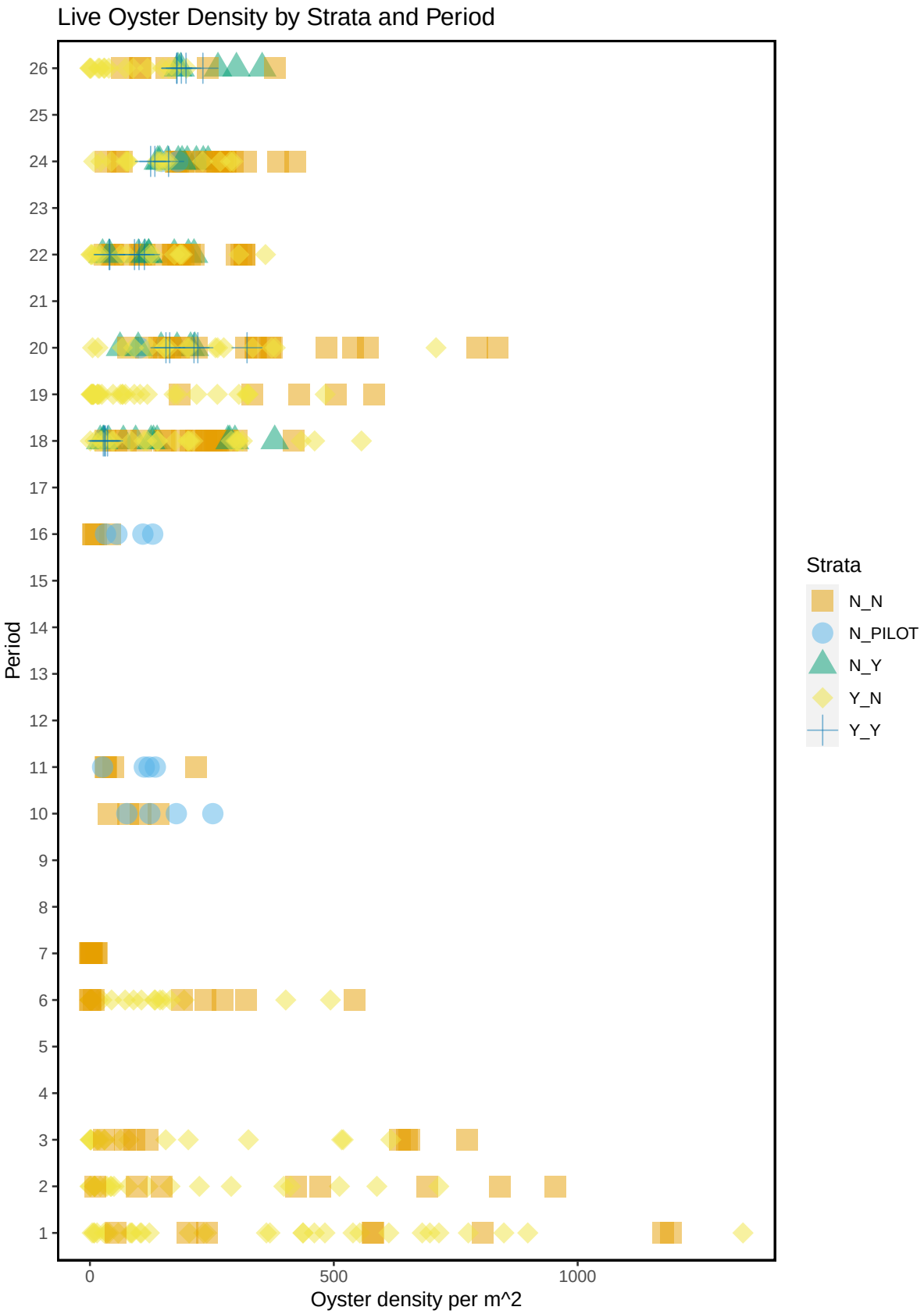


Figure − Live oyster density by strata and period for all periods including period 22 (current period).

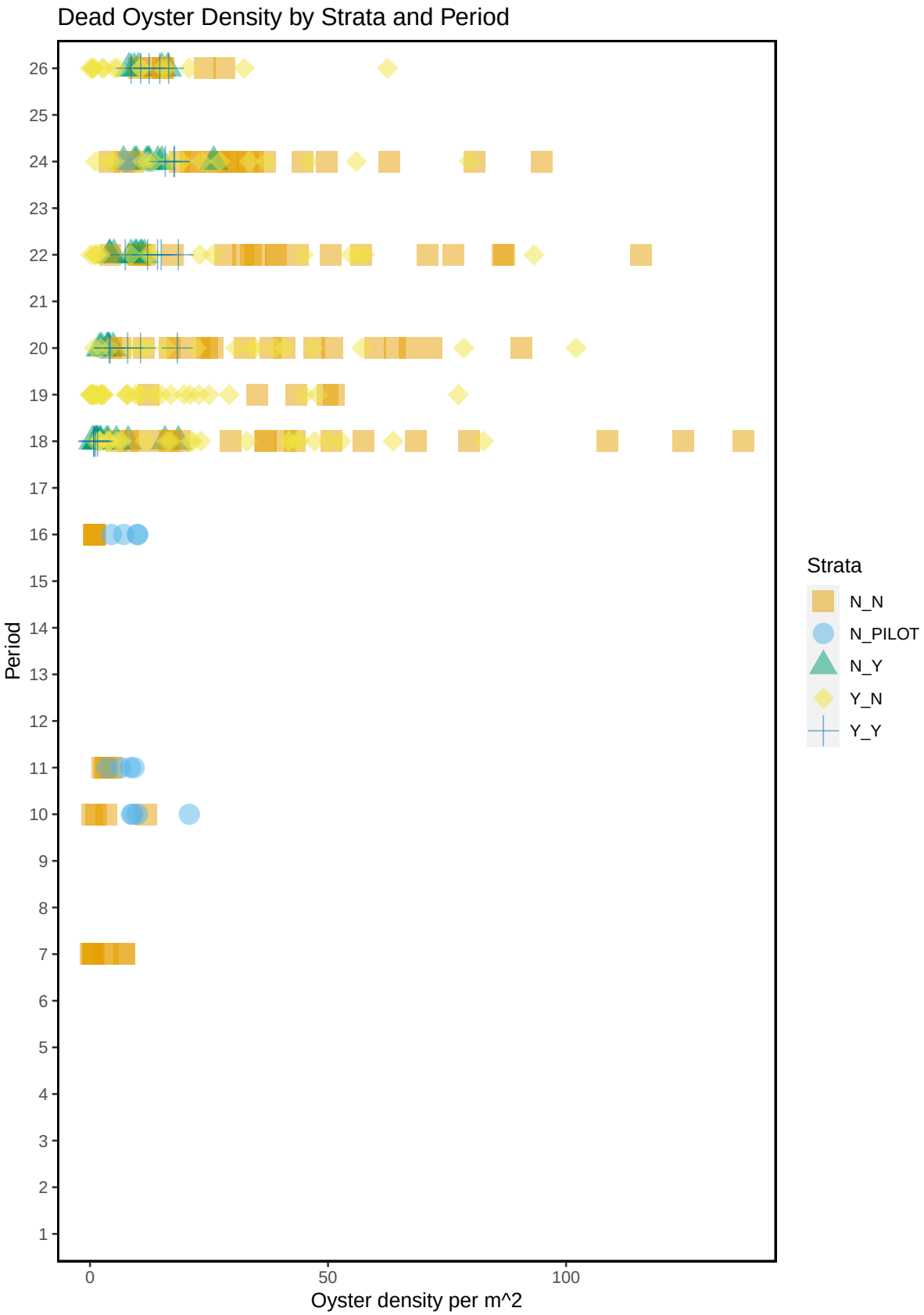


Figure − Dead oyster density by strata and period for all periods including period 22 (current period).

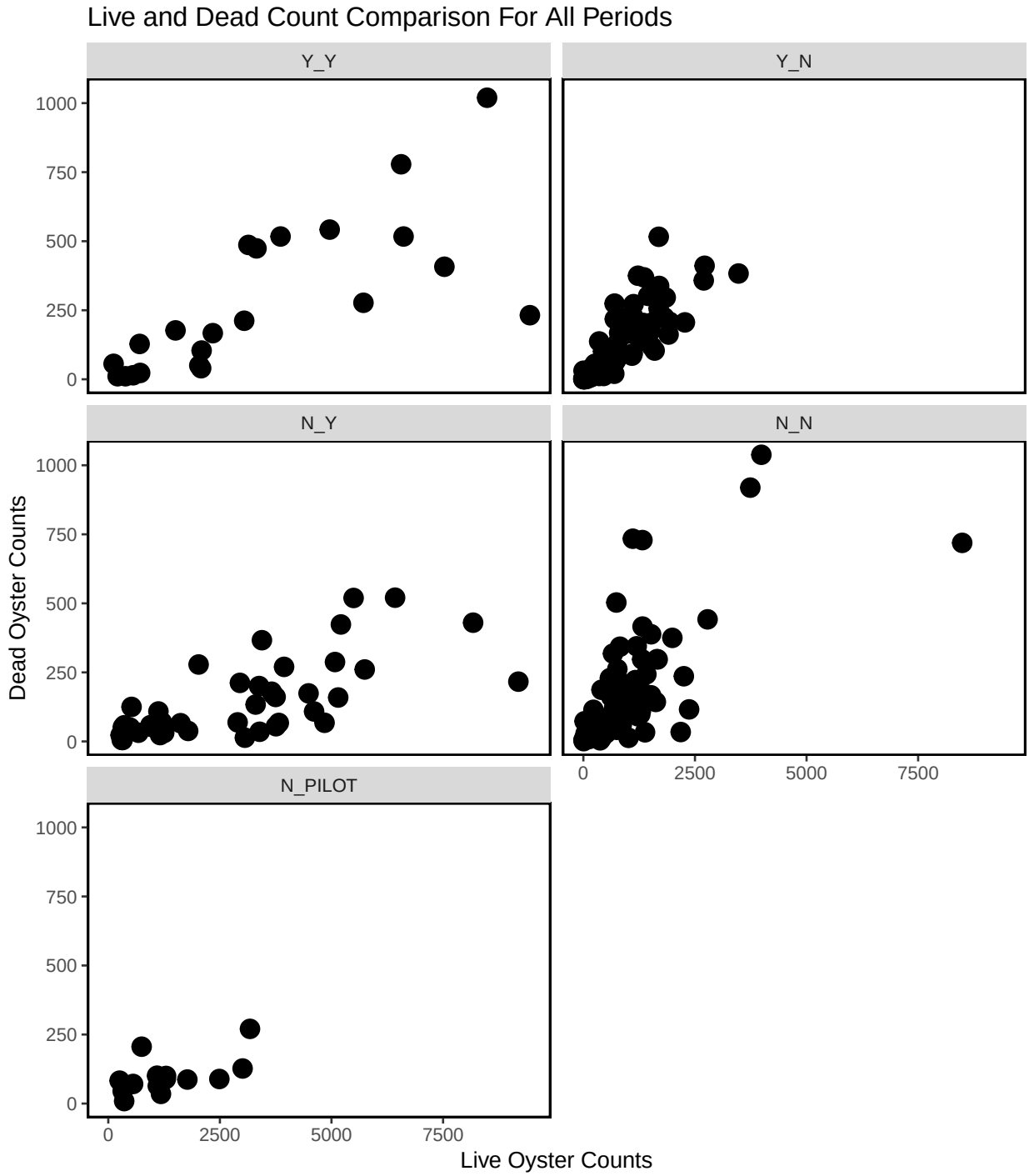


Figure- Live and dead oyster comparison for all periods, last sample date of period 26 is 2023-02-06.

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).

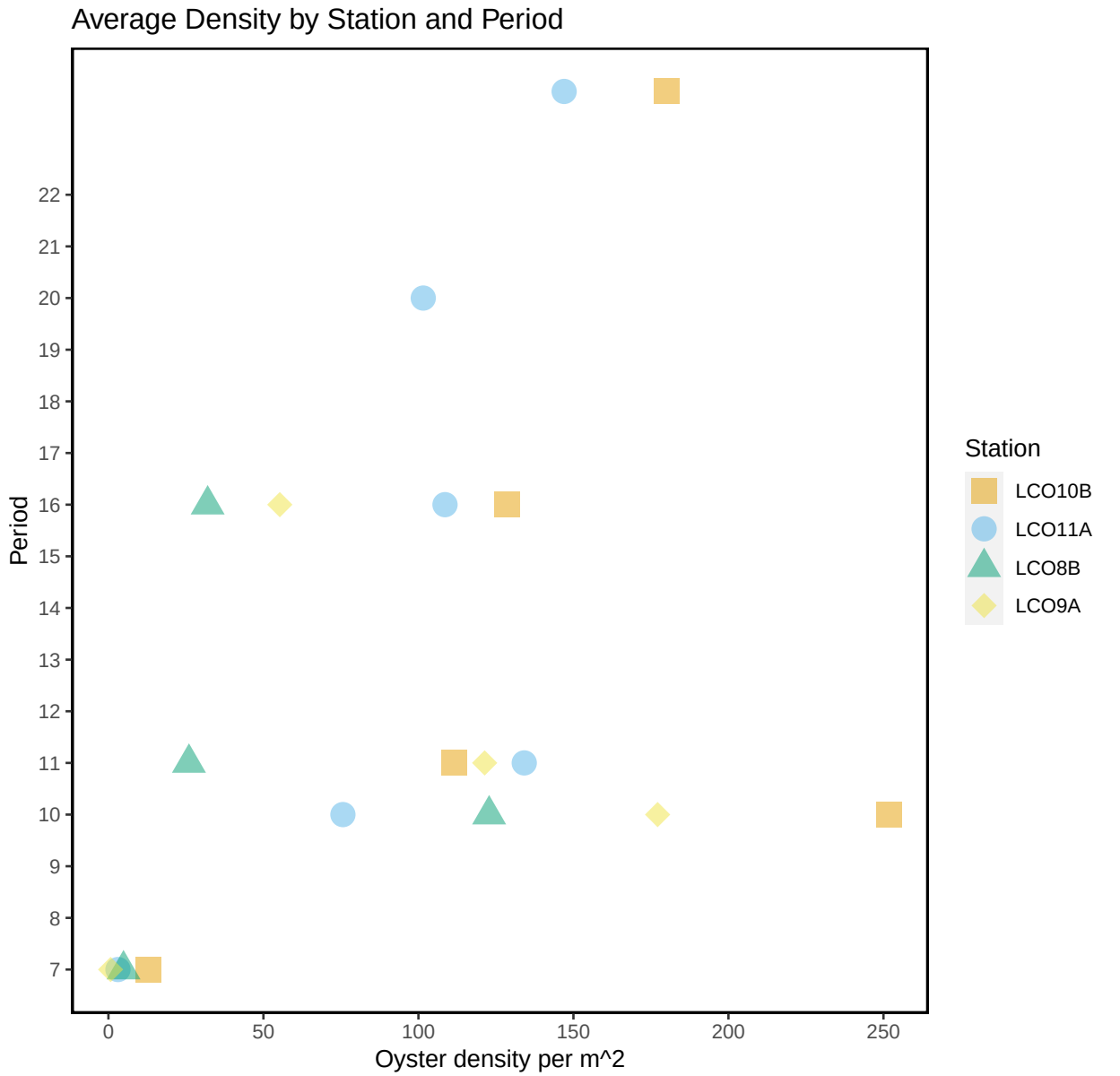


Figure − Average live oyster density comparison by station and period for all stations that were sampled during the pilc

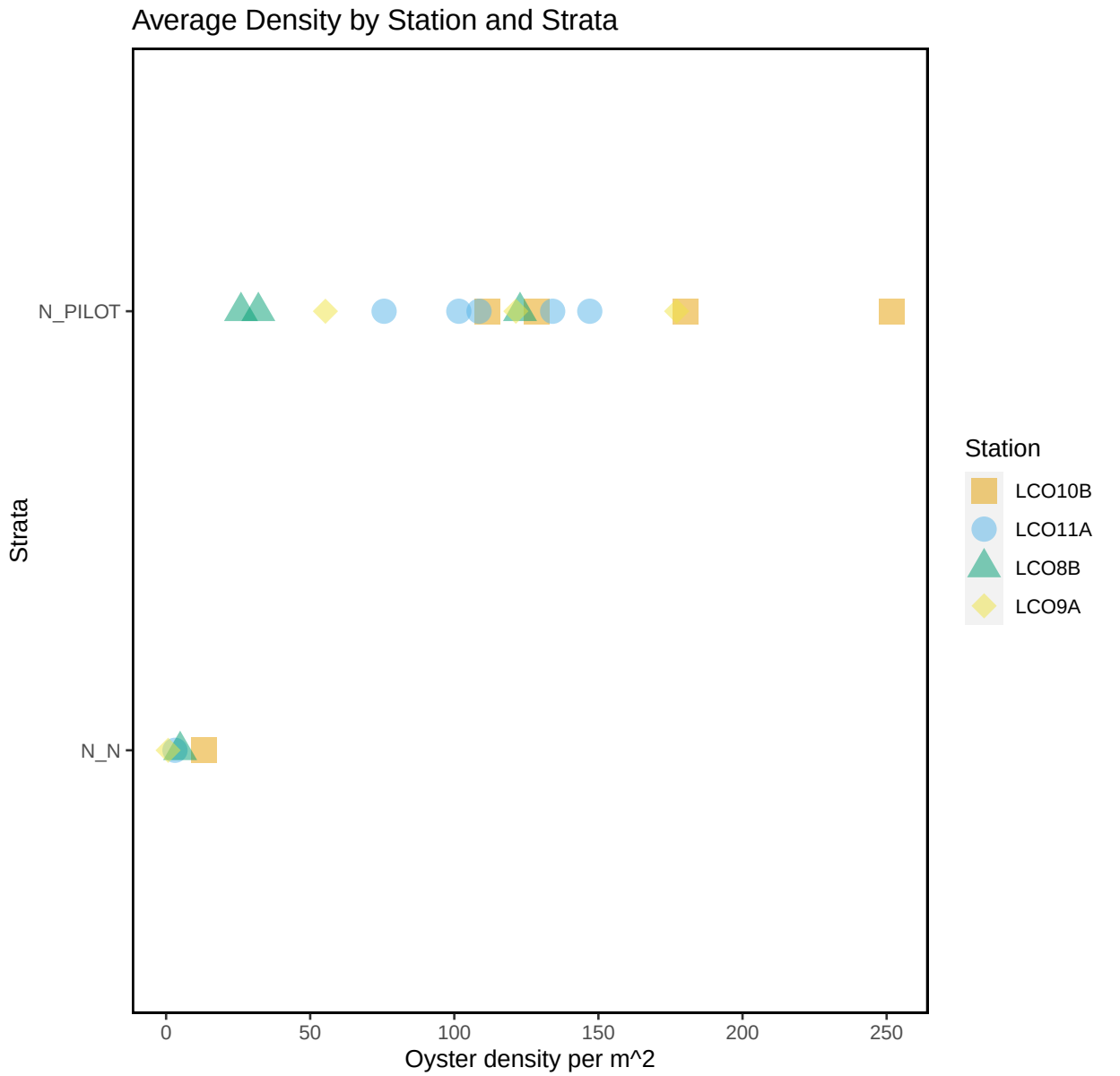


Figure − Average live oyster density comparison by station and strata for all stations that were sampled during th

Latest Data Entered

Displayed are the entries for the last date of sampling (2023-02-06).

date	station	tran_length	count_live	count_dead	treatment	strata
2023-02-06	LCO17	2.5	4	0	control	Y_Y
2023-02-06	LCO17	5.0	24	4	control	Y_Y
2023-02-06	LCO17	7.5	60	1	control	Y_Y
2023-02-06	LCO17	10.0	15	3	control	Y_Y
2023-02-06	LCO17	12.5	1	0	control	Y_Y
2023-02-06	LCO17	15.0	0	0	control	Y_Y
2023-02-06	LCO17	17.5	6	1	control	Y_Y
2023-02-06	LCO17	20.0	47	2	control	Y_Y
2023-02-06	LCO17	22.0	4	0	control	Y_Y
2023-02-06	LCO17	2.5	96	5	control	Y_Y
2023-02-06	LCO17	5.0	86	4	control	Y_Y
2023-02-06	LCO17	7.5	73	2	control	Y_Y
2023-02-06	LCO17	10.0	102	5	control	Y_Y
2023-02-06	LCO17	12.5	119	7	control	Y_Y
2023-02-06	LCO17	15.0	97	4	control	Y_Y
2023-02-06	LCO17	17.5	80	3	control	Y_Y
2023-02-06	LCO17	20.0	83	7	control	Y_Y
2023-02-06	LCO17	22.0	89	8	control	Y_Y
2023-02-06	LCO17	22.2	12	2	control	Y_Y
2023-02-06	LCO17	2.5	42	3	control	Y_Y
2023-02-06	LCO17	5.0	33	1	control	Y_Y
2023-02-06	LCO17	7.5	87	4	control	Y_Y
2023-02-06	LCO17	10.0	124	6	control	Y_Y
2023-02-06	LCO17	12.5	84	6	control	Y_Y
2023-02-06	LCO17	15.0	120	9	control	Y_Y
2023-02-06	LCO17	17.5	42	3	control	Y_Y
2023-02-06	LCO17	20.0	75	8	control	Y_Y
2023-02-06	LCO17	22.0	61	5	control	Y_Y
2023-02-06	LCO17	22.8	21	0	control	Y_Y
2023-02-06	LCO17	2.5	53	1	control	Y_Y
2023-02-06	LCO17	5.0	110	9	control	Y_Y
2023-02-06	LCO17	7.5	87	6	control	Y_Y
2023-02-06	LCO17	10.0	93	7	control	Y_Y
2023-02-06	LCO17	12.5	70	8	control	Y_Y
2023-02-06	LCO17	15.0	92	12	control	Y_Y
2023-02-06	LCO17	17.5	84	6	control	Y_Y
2023-02-06	LCO17	20.0	125	6	control	Y_Y
2023-02-06	LCO17	22.0	122	2	control	Y_Y
2023-02-06	LCO17	22.6	29	5	control	Y_Y
2023-02-06	LCO17	2.5	20	1	control	Y_Y
2023-02-06	LCO17	5.0	81	3	control	Y_Y
2023-02-06	LCO17	7.5	41	2	control	Y_Y
2023-02-06	LCO17	10.0	37	2	control	Y_Y
2023-02-06	LCO17	12.5	20	2	control	Y_Y
2023-02-06	LCO17	15.0	45	5	control	Y_Y
2023-02-06	LCO17	17.5	151	23	control	Y_Y
2023-02-06	LCO17	20.0	49	6	control	Y_Y
2023-02-06	LCO17	22.0	42	3	control	Y_Y
2023-02-06	LCO17	22.4	7	0	control	Y_Y