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 11 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, 155 days have been sampled over this entire project.

Definition of Localities

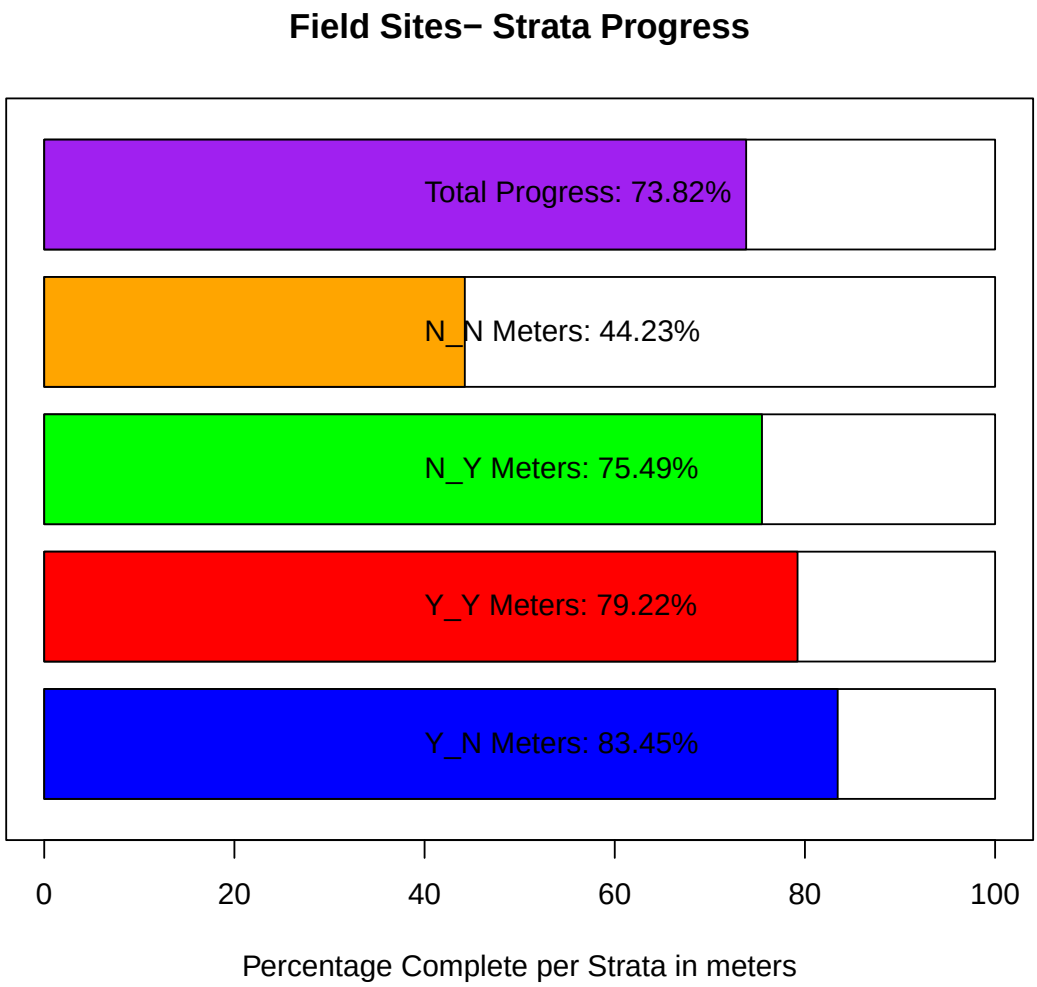
LOCALITY	LOCATION
BT	Big Trout
CK	Cedar Key
CR	Corrigan's Reef
HB	Horseshoe Beach
LC	Lone Cabbage
LT	Little Trout
NN	No Name

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	1324	573	2704
LC	1877	1106	2126	4519935	1.13	189	1506	2249	1889	1534	2240
LT	1097	877	582	338863	0.53	150	802	1392	1098	851	1412
NN	842	714	639	408613	0.76	202	446	1238	835	515	1218

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1083	767	1185	1403189	1.09	154	781	1385	1084	826	1452
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	3658	2884	4510
Y_N	669	526	638	406598	0.95	84	505	833	671	530	838
Y_Y	4206	3590	2823	7971481	0.67	706	2823	5589	4224	3037	5575

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	1846	1304	2490
22	1334	702	1693	2867783	1.3	242	860	1808	1333	872	1826
24	1729	942	1845	3403035	1.1	266	1207	2251	1712	1227	2251
26	2186	654	2633	6934945	1.2	589	1032	3340	2171	1160	3354

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	53.4	131	340	236	150	349
LC	163	160	108	11754	0.67	9.7	144	181	163	146	183
LT	320	321	129	16749	0.40	33.4	255	386	319	260	382
NN	233	174	230	52911	0.99	72.7	91	376	231	125	386

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	239	192	163	26724	0.69	21	197	280	237	200	280
N_PILOT	143	147	39	1557	0.28	23	98	188	144	102	180
N_Y	179	180	83	6878	0.46	16	148	209	178	150	208
Y_N	150	144	128	16508	0.85	17	117	184	151	121	185
Y_Y	152	159	71	5024	0.47	18	117	187	152	119	188

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	256	203	187	35057	0.73	27	203	310	256	203	312
22	137	121	93	8638	0.68	13	111	163	137	113	164
24	185	181	92	8385	0.49	13	159	211	185	162	211
26	151	155	108	11763	0.72	24	103	198	152	105	198

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	161	97	264
LC	173	127	181	32903	1.05	16	142	205	173	143	206
LT	206	137	151	22760	0.73	39	130	282	207	136	283
NN	102	72	94	8760	0.92	30	44	160	102	57	163

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	171	115	167	27877	0.97	22	129	214	171	132	213
N_PILOT	136	127	131	17150	0.97	76	-13	284	133	9	270
N_Y	196	166	143	20537	0.73	27	143	249	196	147	248
Y_N	113	66	124	15270	1.09	16	82	145	113	83	147
Y_Y	347	269	280	78219	0.81	70	210	484	350	224	494

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	111	189
22	191	128	193	37399	1.01	28	137	245	191	141	247
24	192	130	194	37816	1.01	28	137	247	192	144	246
26	129	81	140	19677	1.09	31	69	189	130	72	197

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	36	28	23	534	0.64	6.4	23	48	36	25	48
LC	21	12	21	454	1.02	1.9	17	25	21	17	25
LT	56	50	30	881	0.53	7.7	41	71	55	41	70
NN	27	21	22	500	0.83	7.1	13	41	27	15	42

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	37.9	32.5	26.5	700	0.70	3.4	31.2	45	38.0	31.4	45
N_PILOT	7.6	7.6	5.0	25	0.66	2.9	1.9	13	7.6	2.6	13
N_Y	9.9	9.6	6.4	42	0.65	1.2	7.5	12	10.0	7.9	12
Y_N	25.3	16.1	25.0	624	0.99	3.3	18.9	32	25.4	18.8	32
Y_Y	11.9	11.4	4.9	24	0.41	1.2	9.5	14	12.0	9.6	14

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	20.6	35
22	28	14	28	807	1.00	4.1	20.5	36	28	21.0	37
24	26	19	21	438	0.81	3.0	19.8	32	26	19.9	32
26	14	10	14	195	1.01	3.0	7.8	20	14	8.6	20

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

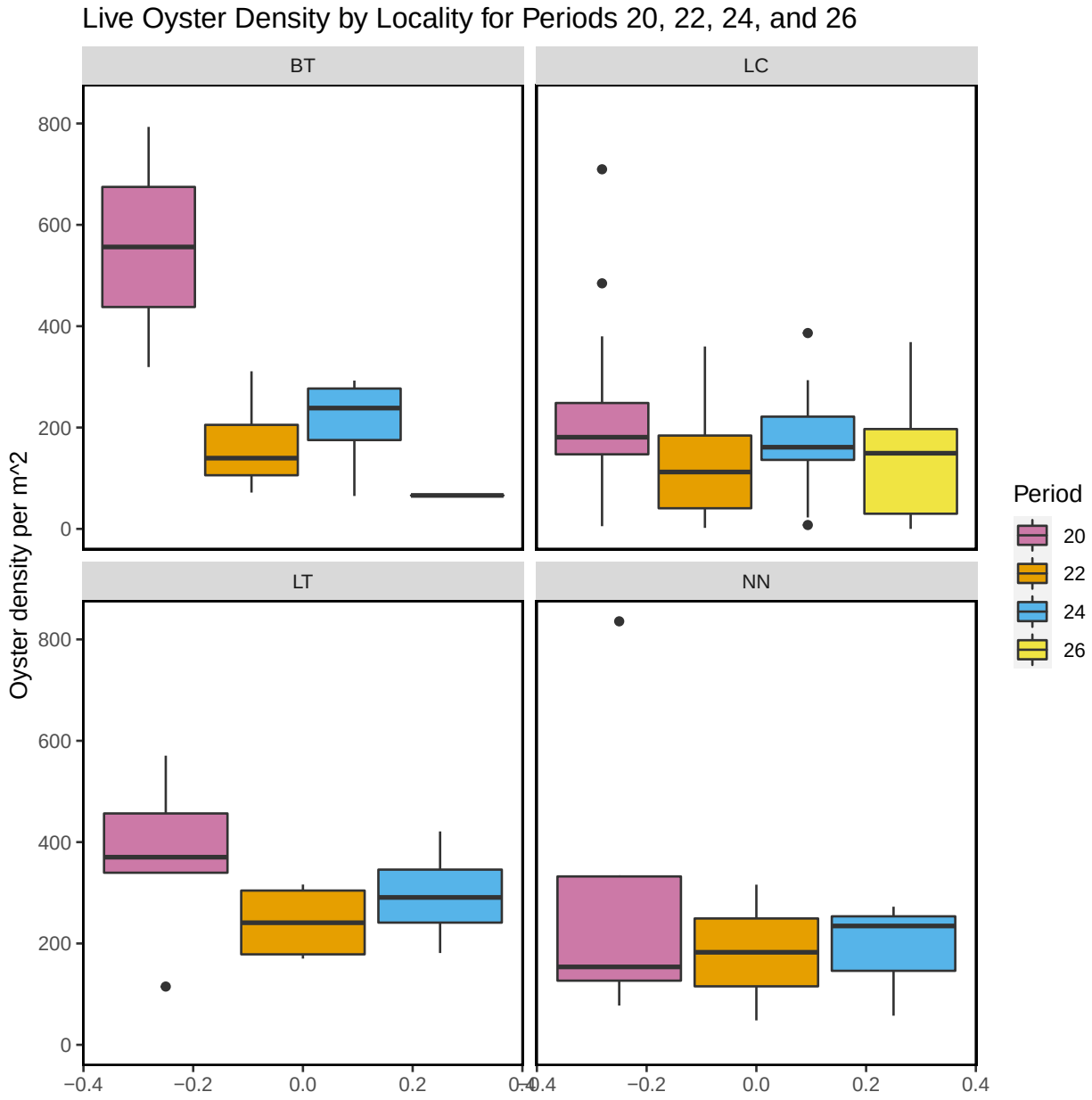


Figure- Calculated live oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-01-09.

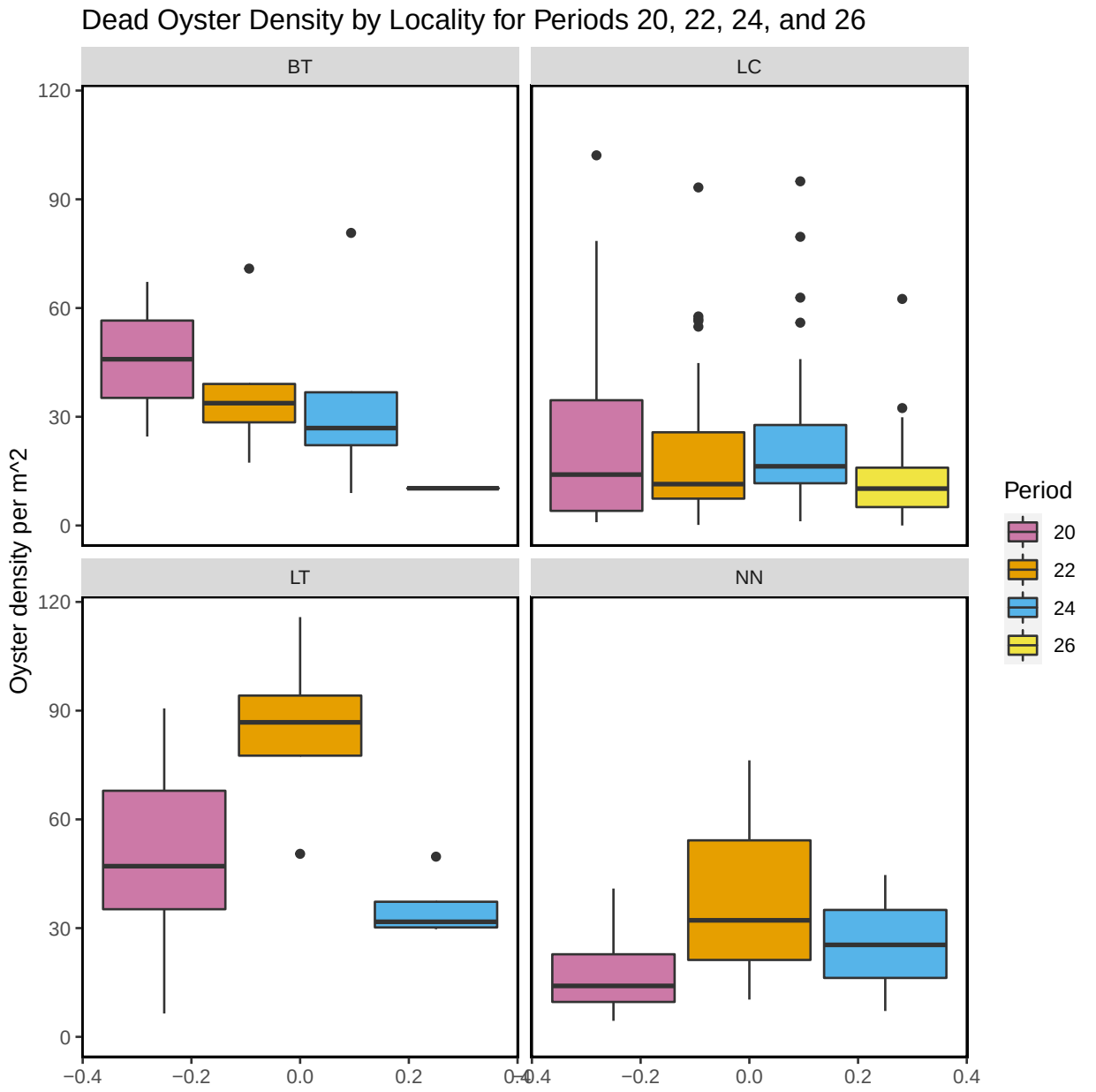


Figure- Calculated dead oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-01-09.

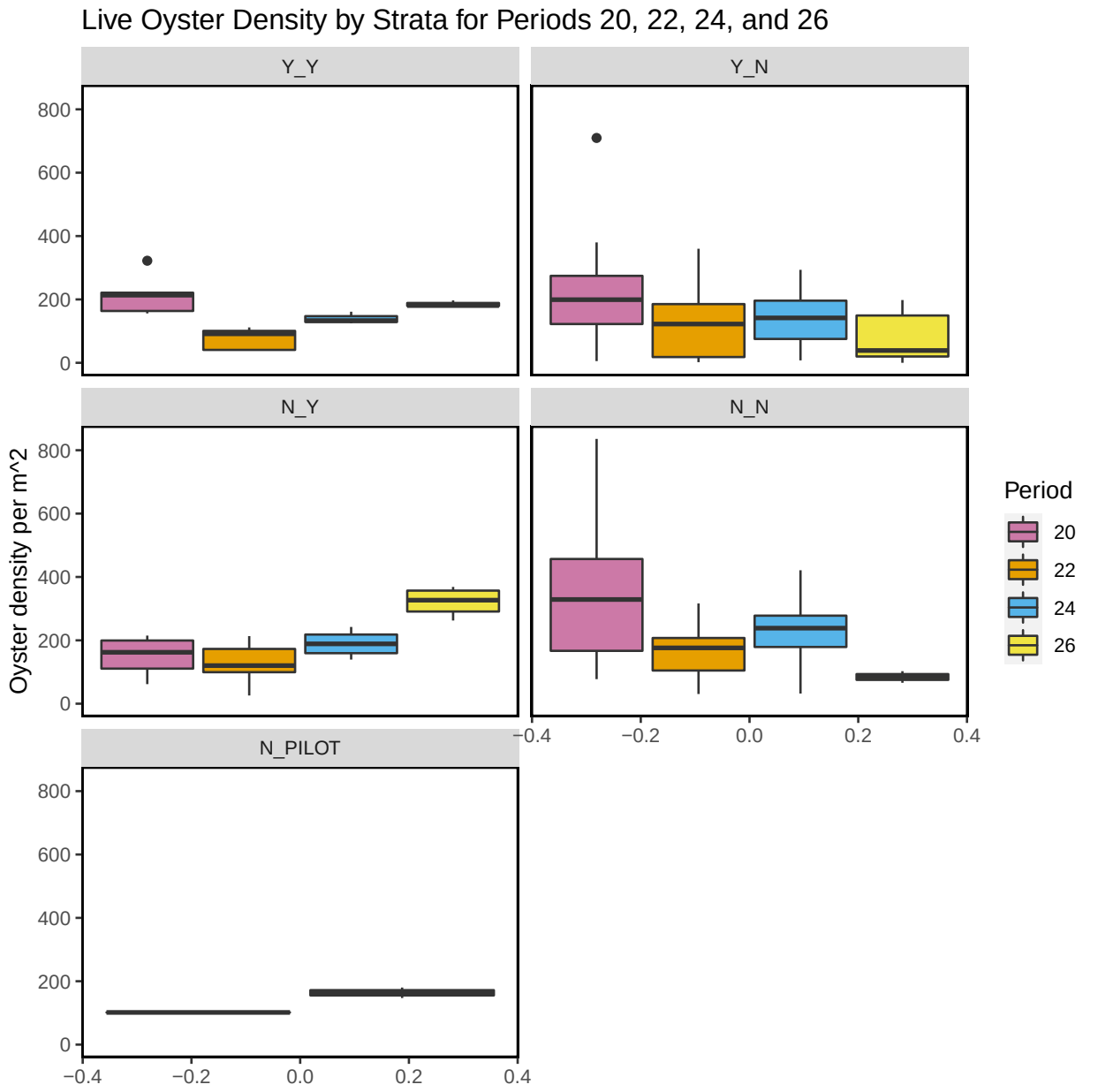


Figure- Calculated live oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-01-09.

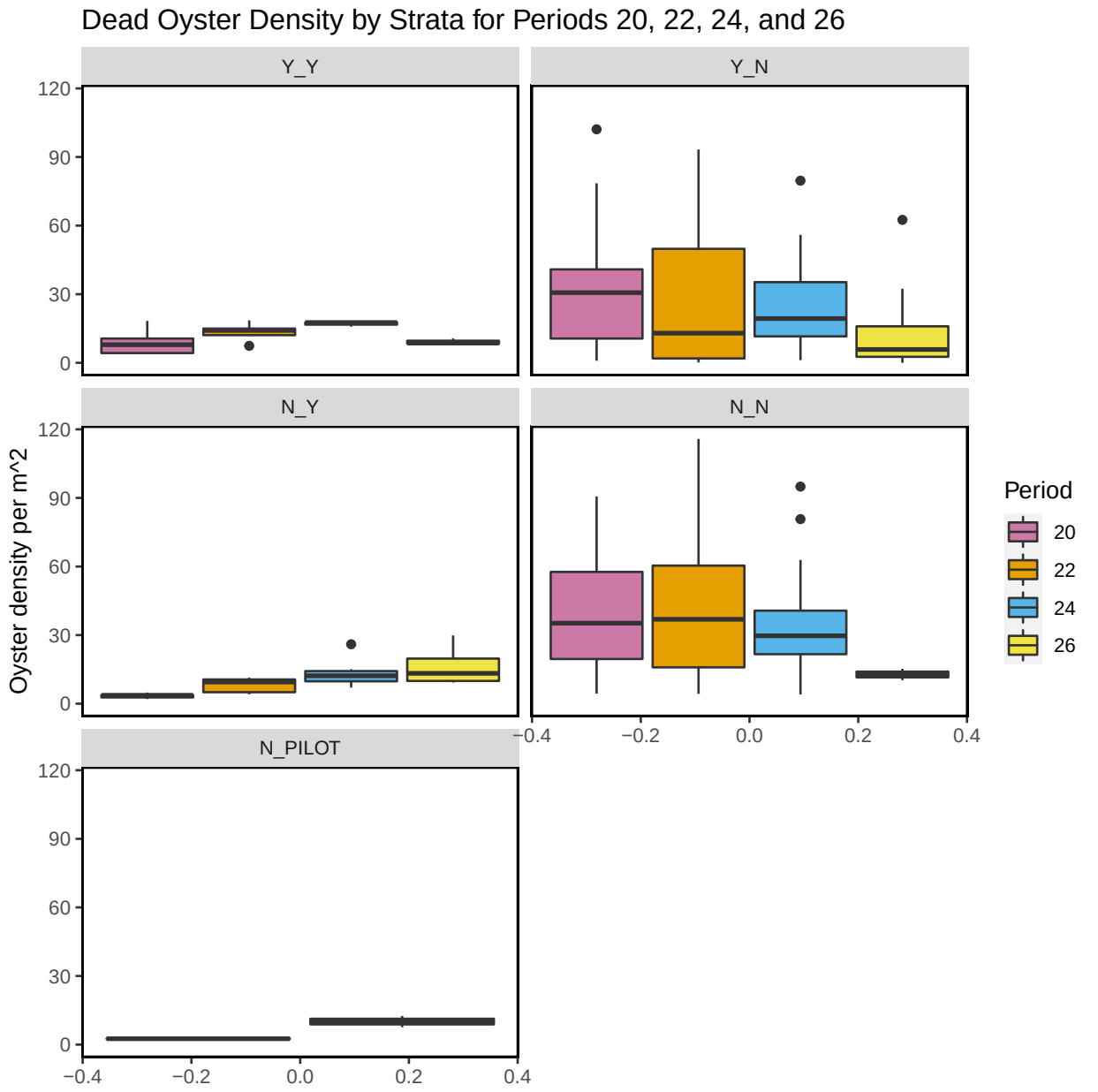


Figure- Calculated dead oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-01-09.

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.

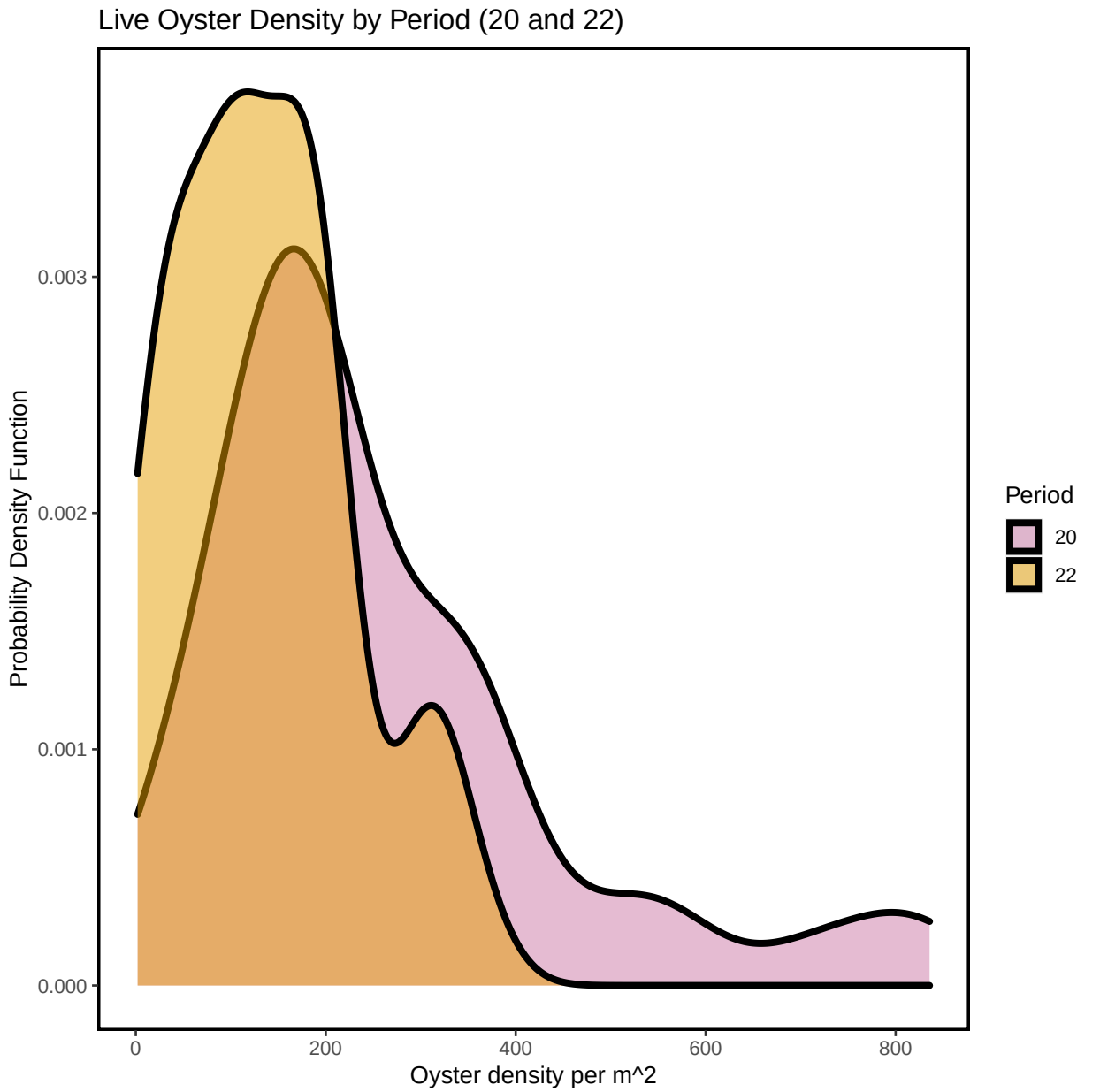


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2023-01-09.

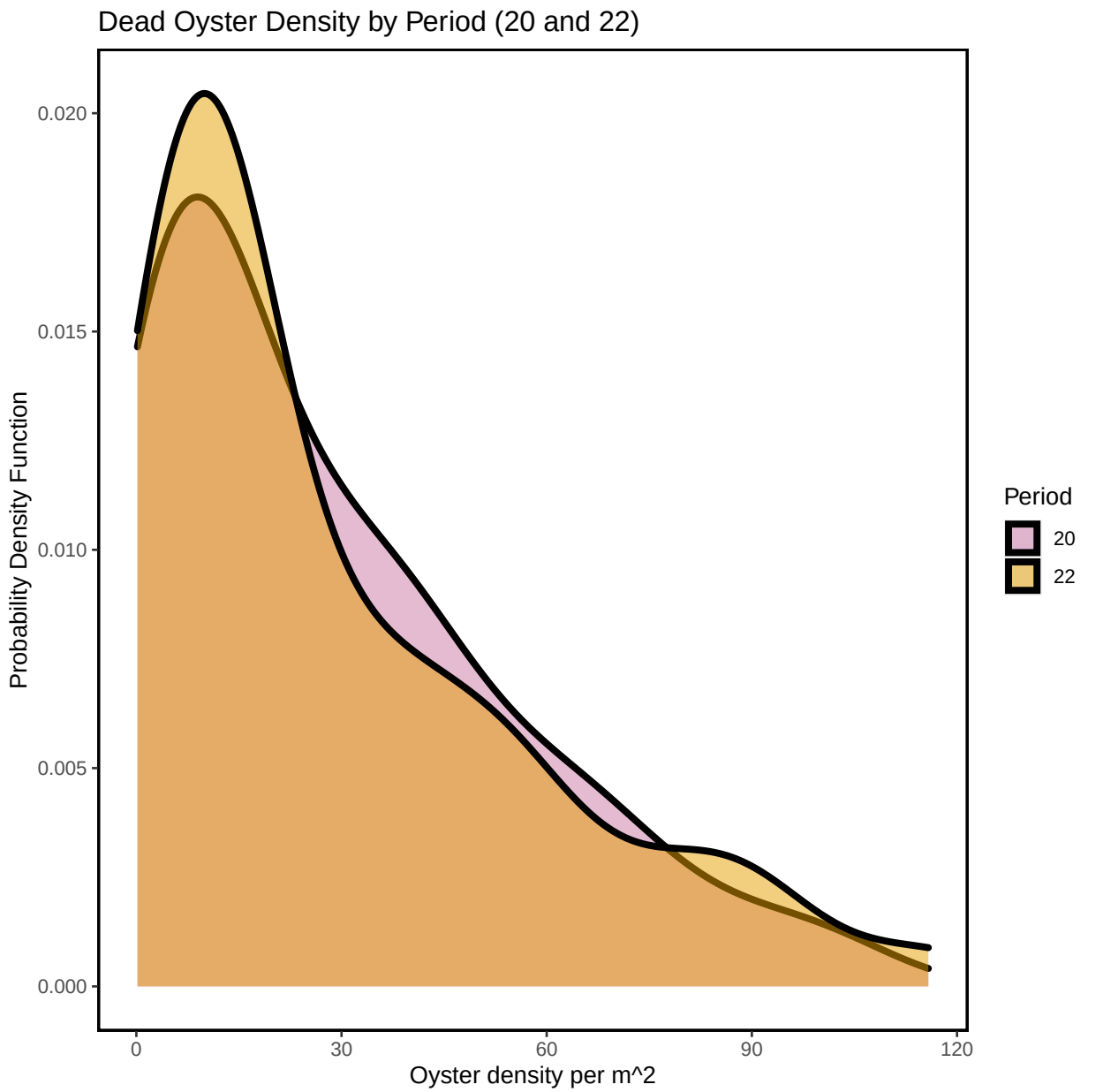


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2023-01-09.

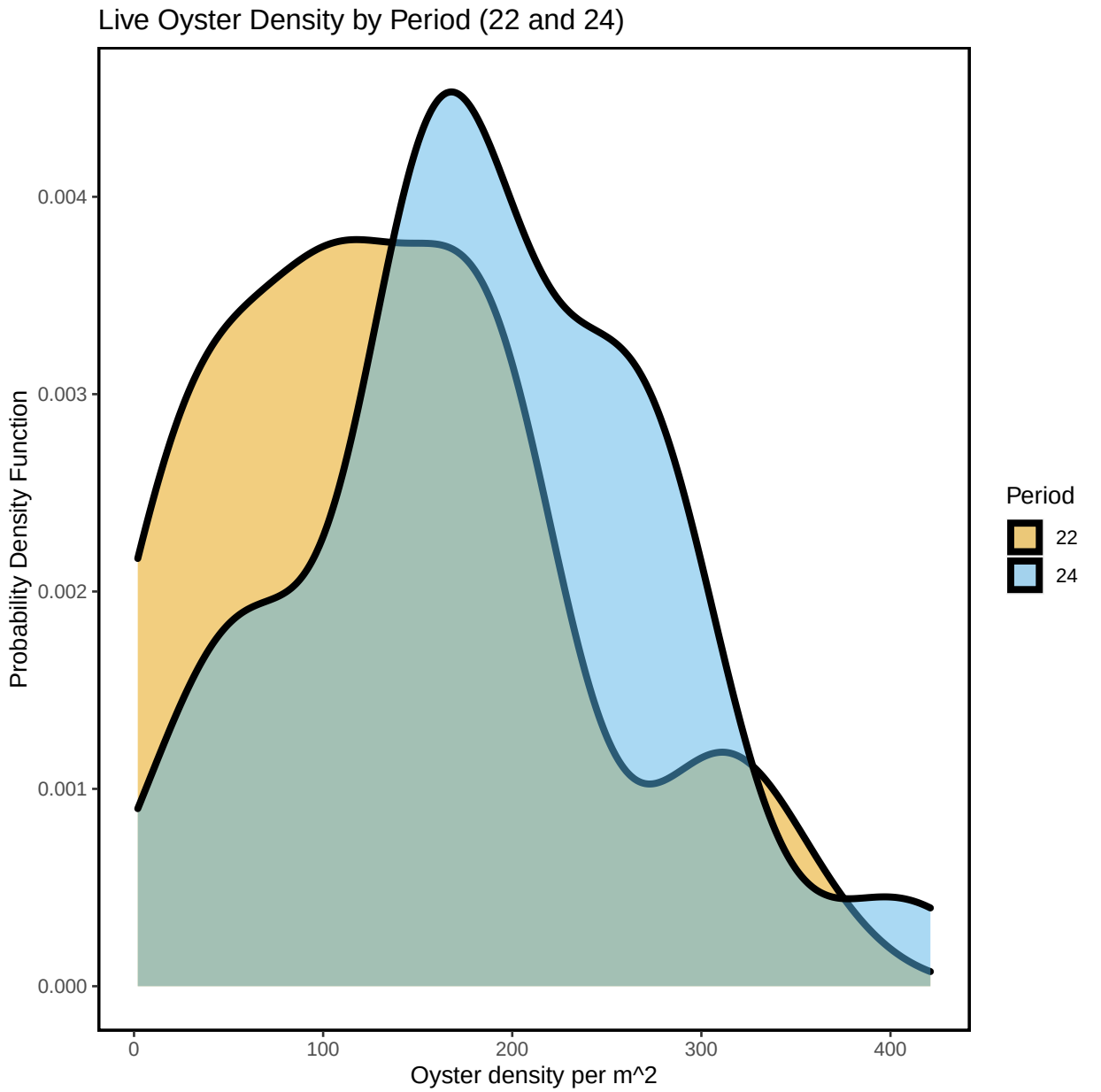


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2023-01-09.

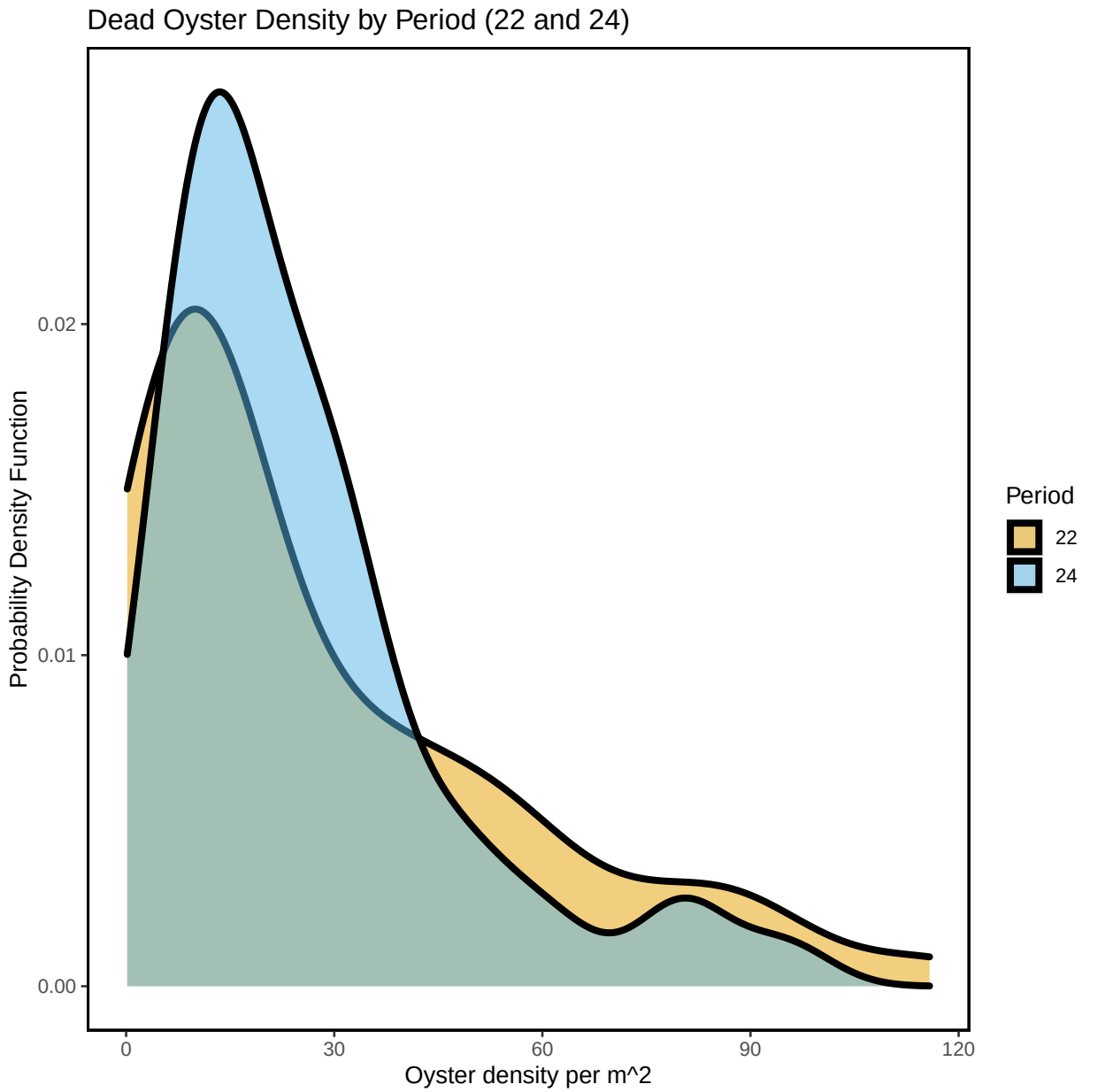


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2023-01-09.

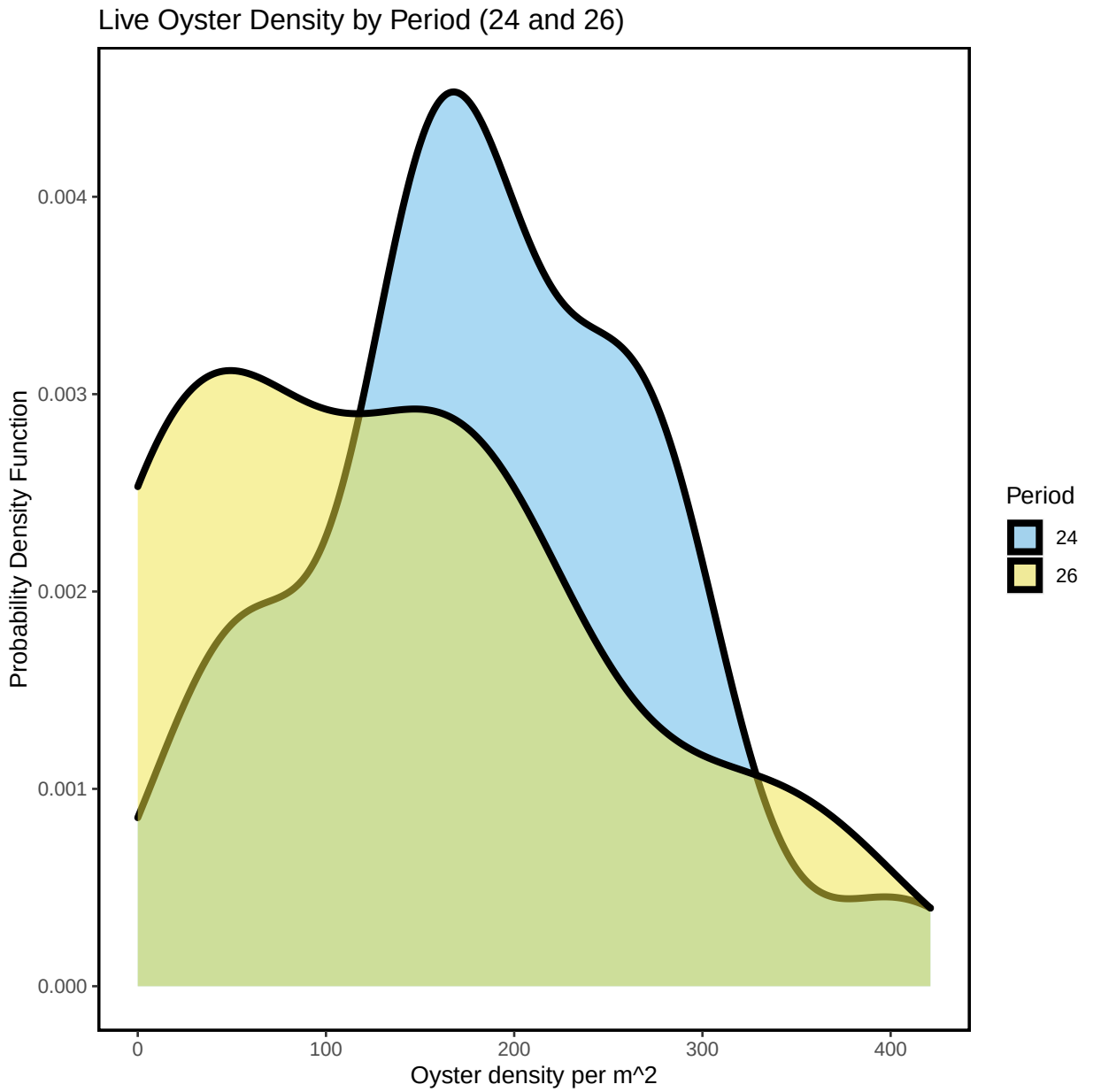


Figure- Calculated live oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2023-01-09.

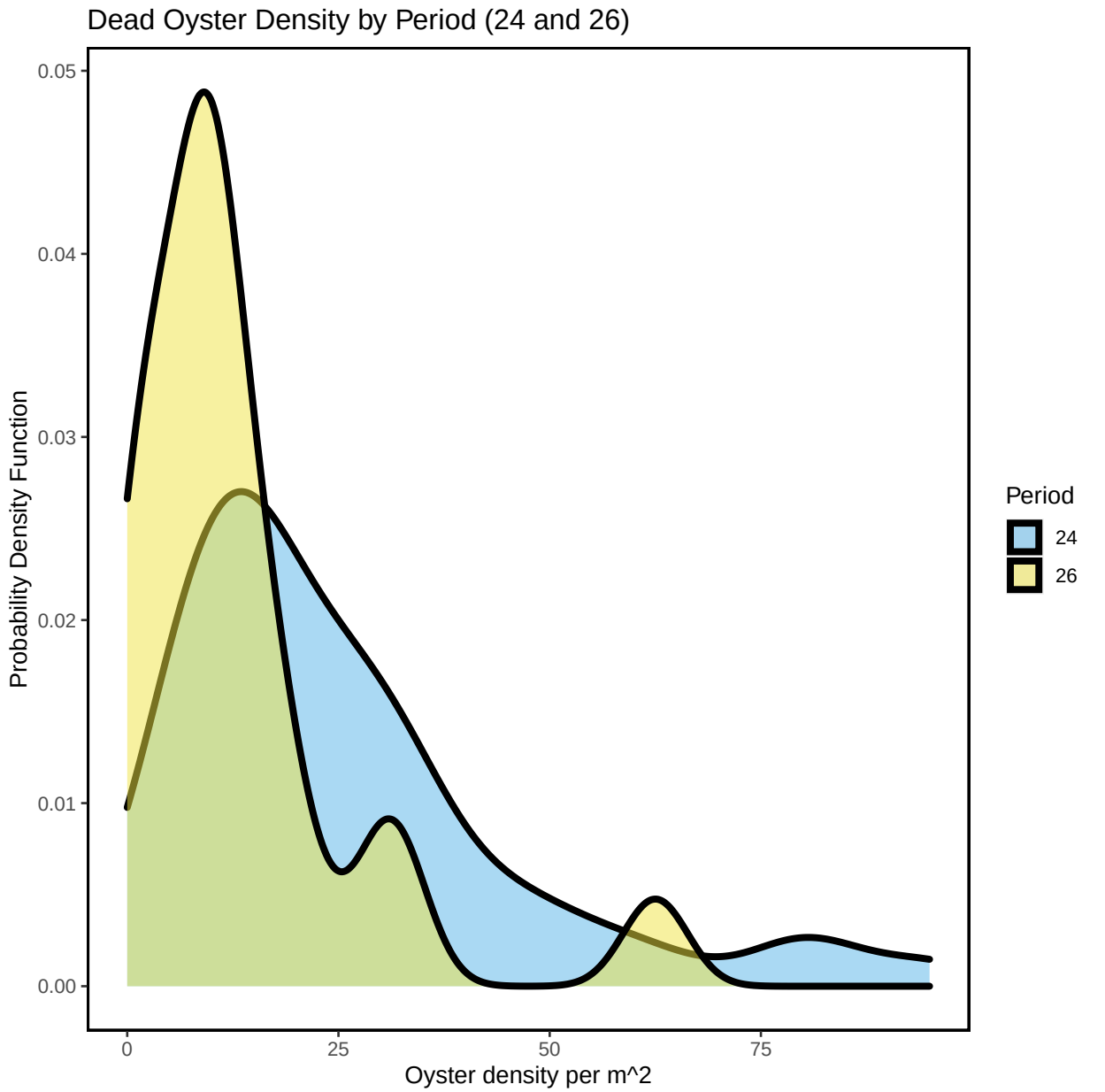


Figure- Calculated dead oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2023-01-09.

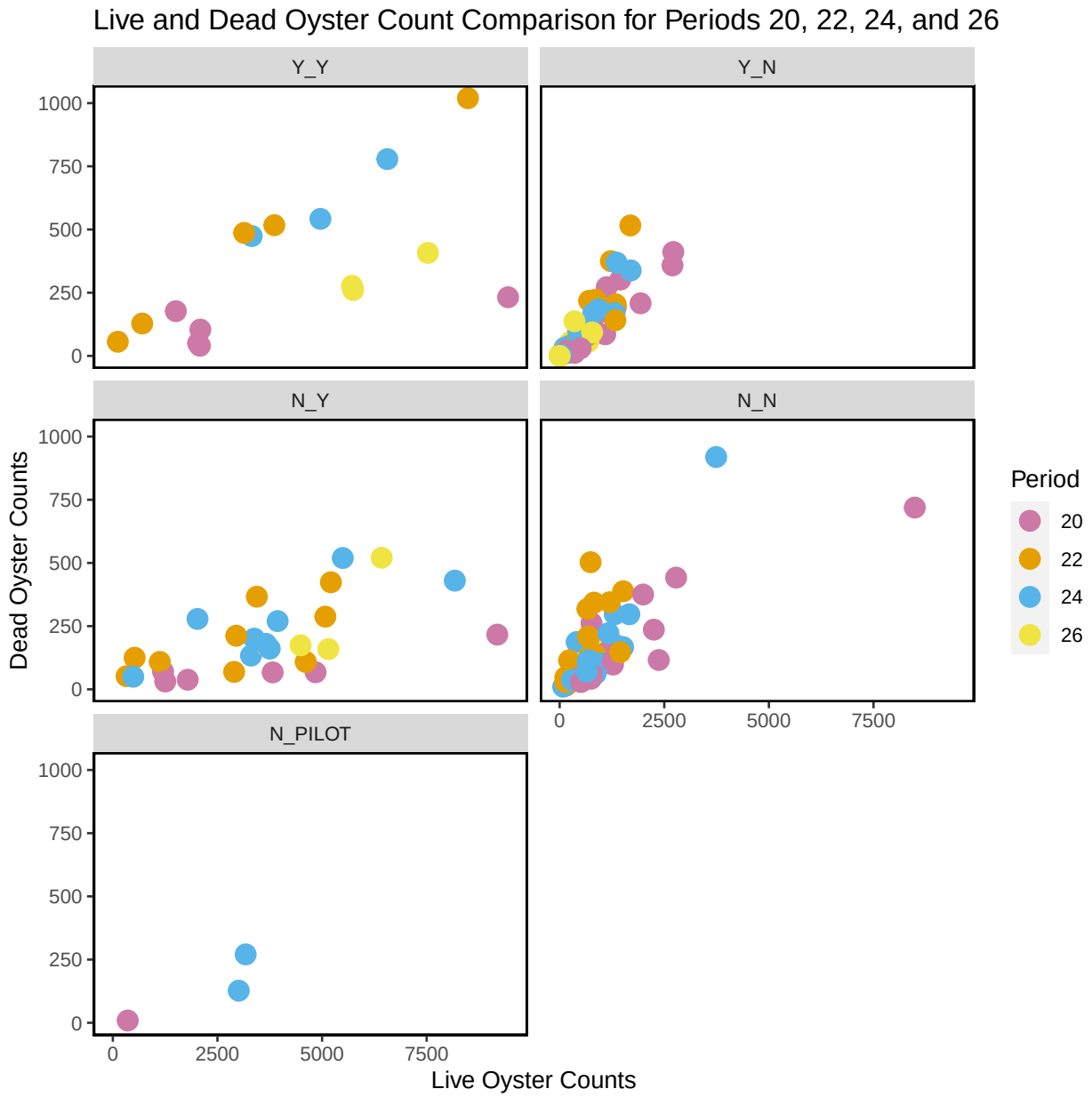


Figure- Live and dead oyster count comparison by periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) last sample date of period 26 as 2023-01-09.

Live Counts Double Pass Results

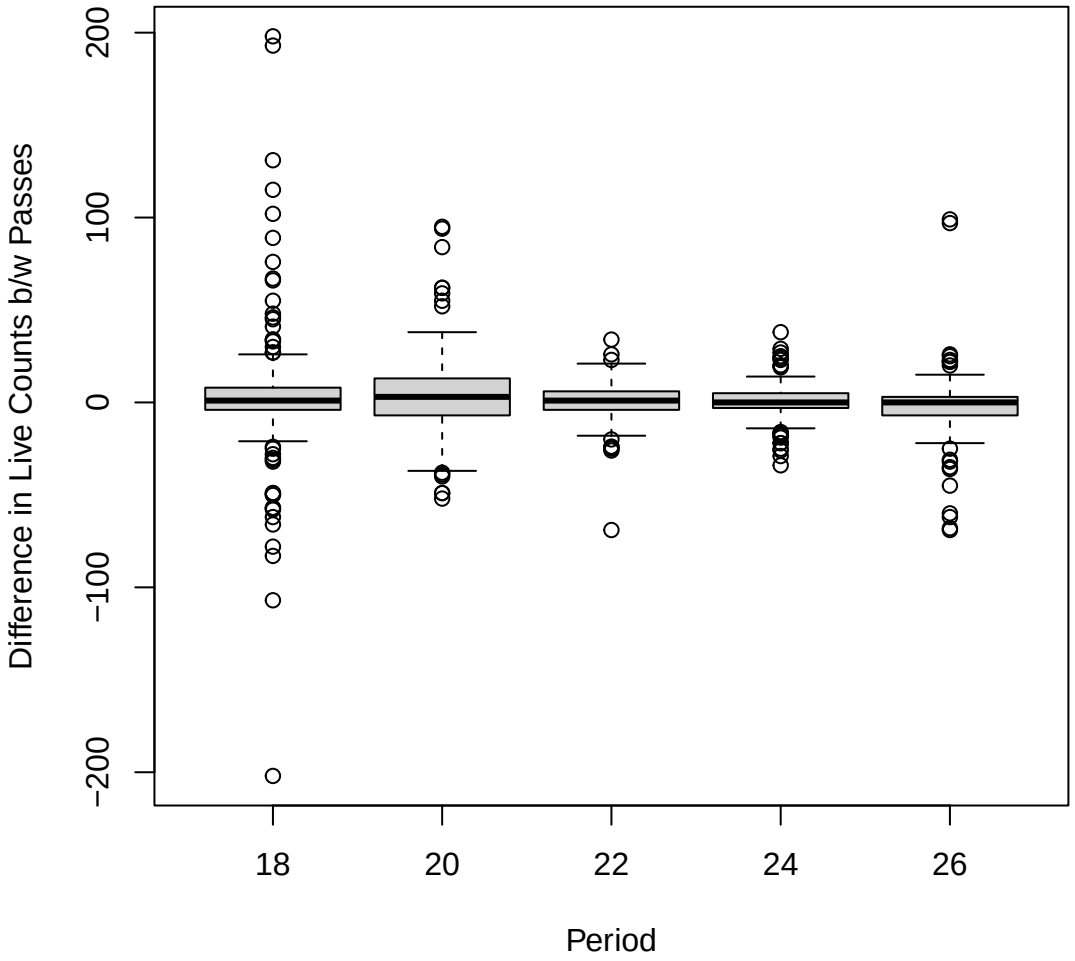


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, 24, and 26

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

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

Dead Counts Double Pass Results

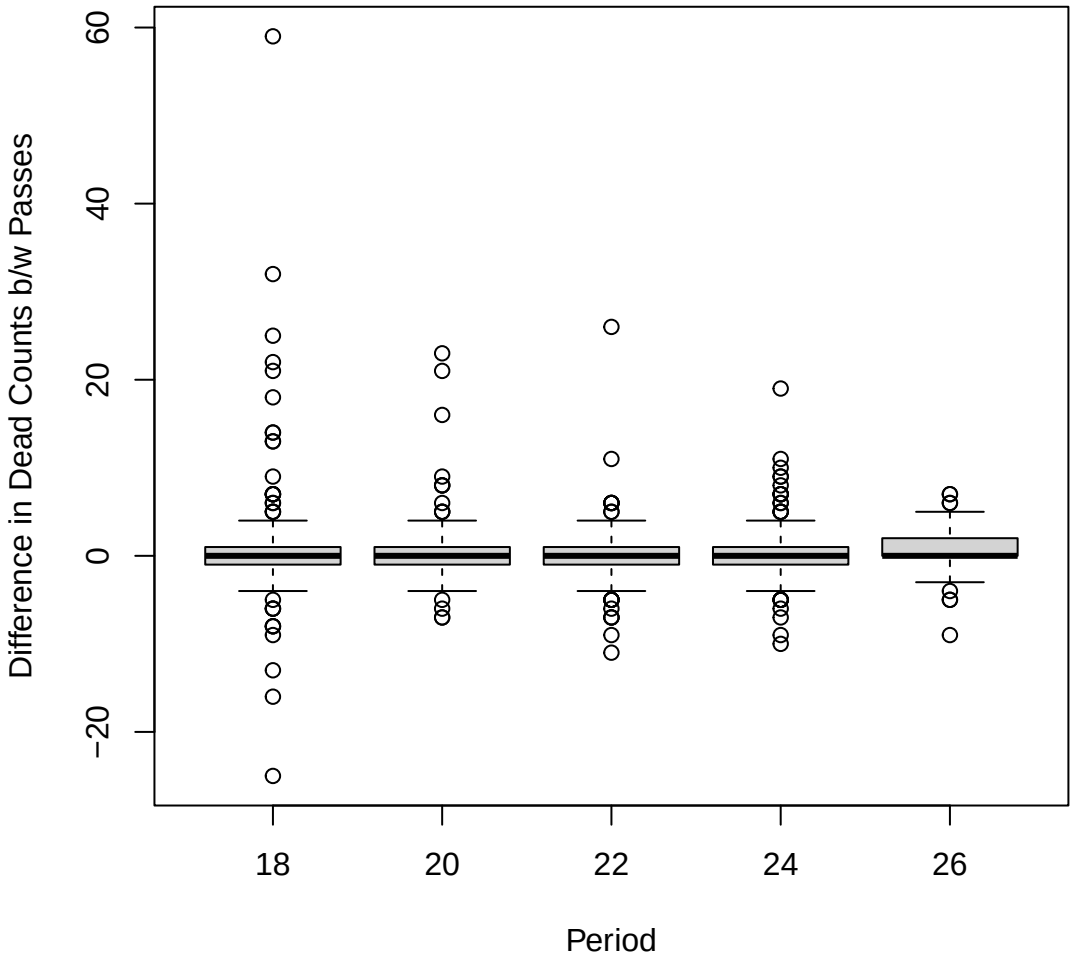


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, 24, and 26

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

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 2023-01-09. 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	253	14939
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	214	6144
Y_Y	20	3356

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	22	1476

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	21	1424
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	13	270
26	Y_Y	3	670
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

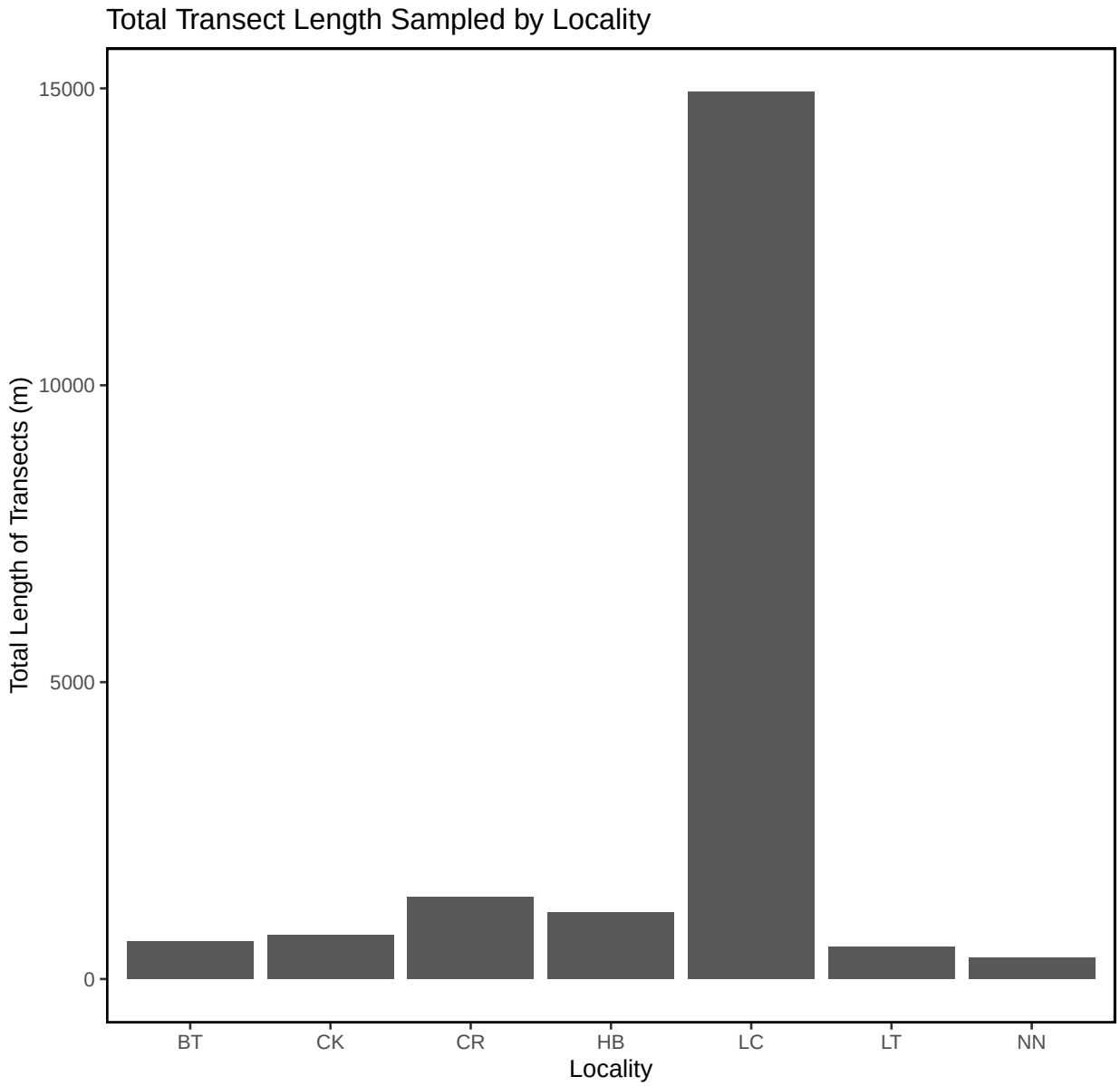


Figure − Bar plot of total transect length in meters sampled by locality for all periods.

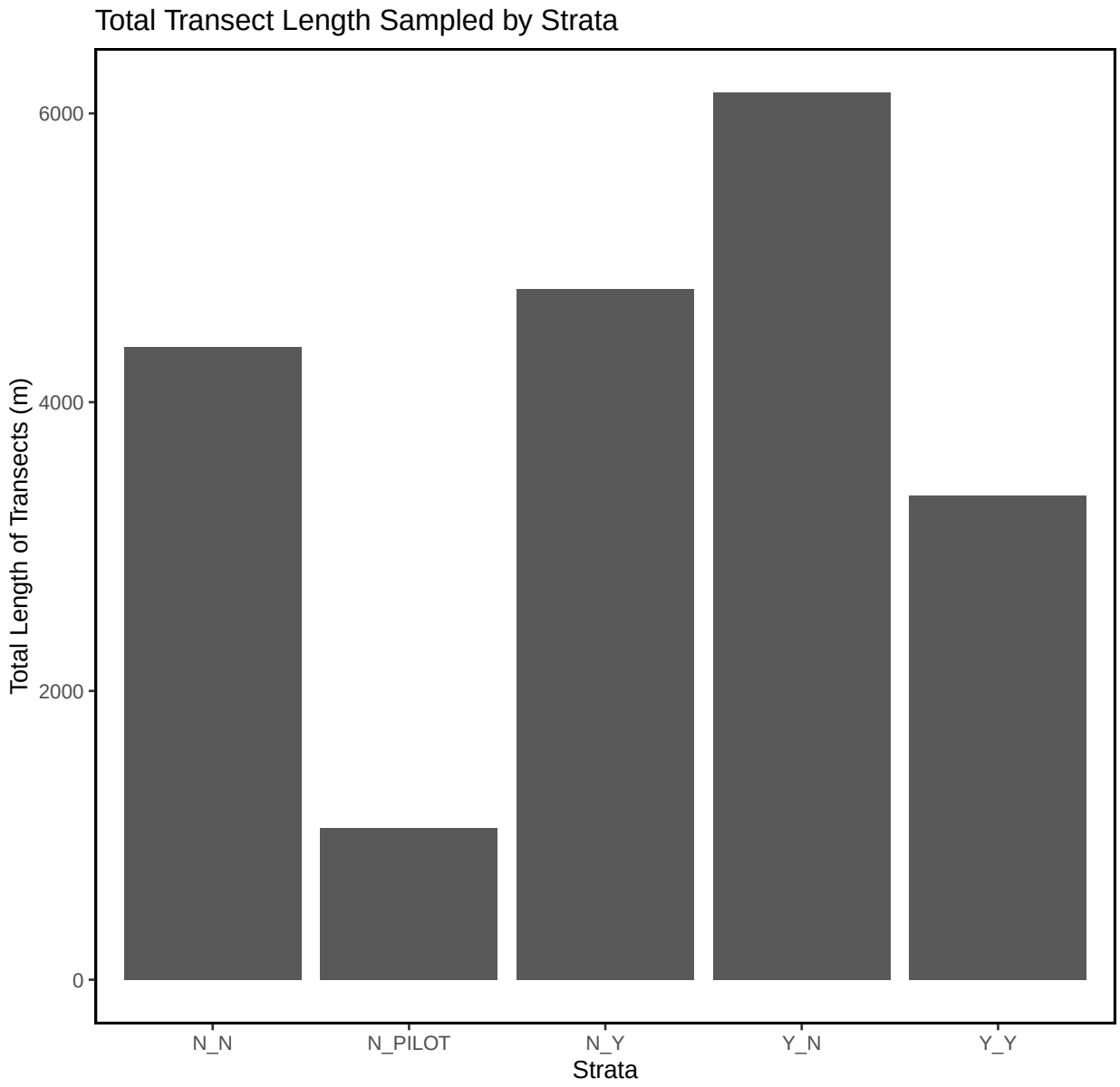
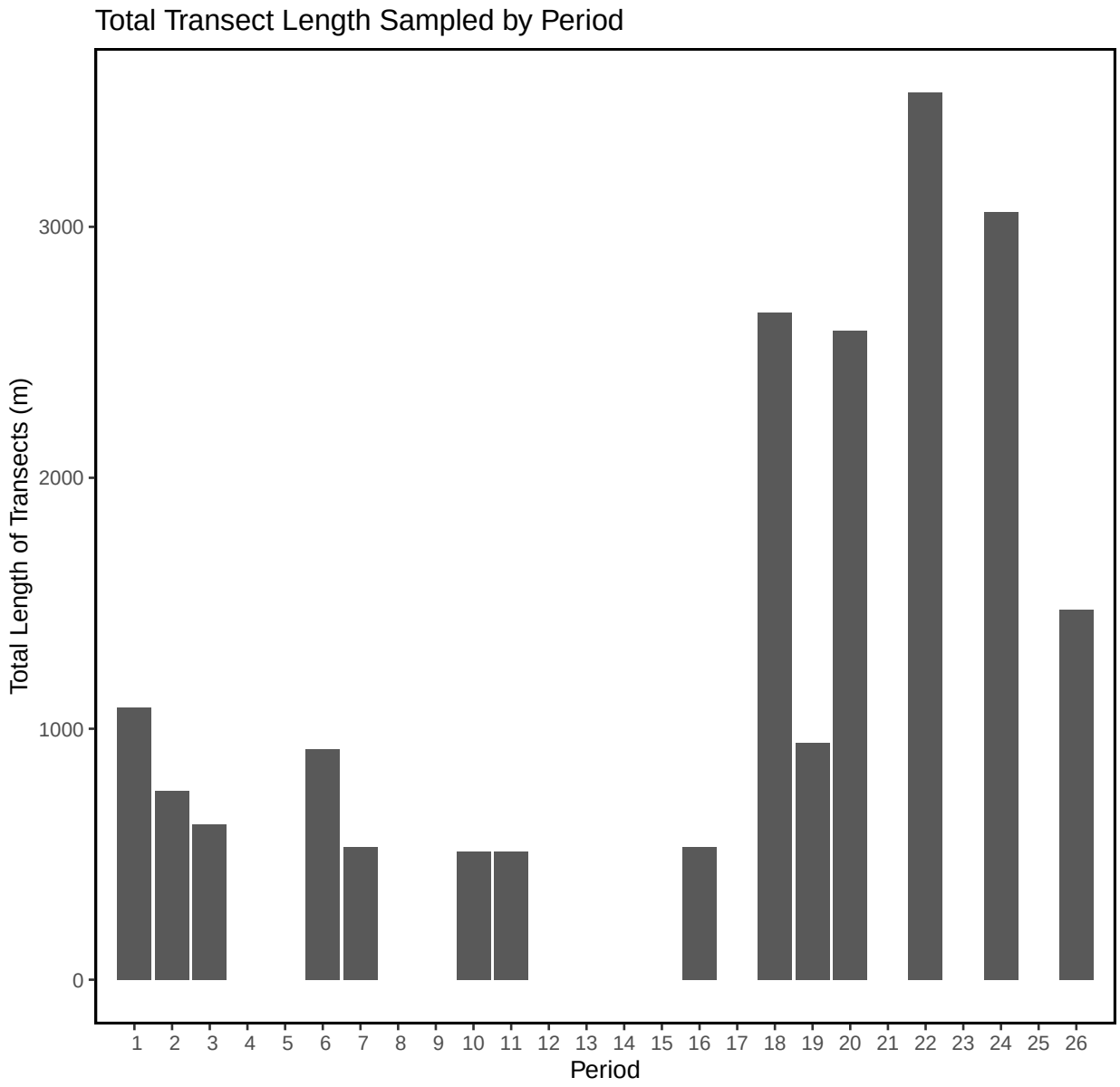


Figure − Bar plot of total transect length in meters sampled by strata for all periods.



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)
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- 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	1364	732	2325
CK	857	444	1091	1190933	1.27	214	438	1277	863	493	1314
CR	1026	716	1035	1072162	1.01	153	727	1325	1022	737	1323
HB	902	364	1047	1095622	1.16	158	592	1211	901	587	1201
LC	1323	700	1710	2923556	1.29	109	1110	1535	1322	1124	1532
LT	1026	877	551	303721	0.54	120	790	1262	1029	820	1265
NN	735	674	584	341295	0.79	156	429	1041	731	471	1071

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	989	766	1012	1025017	1.02	88	817	1161	991	832	1171
N_PILOT	1318	1136	925	856059	0.70	239	850	1787	1318	905	1767
N_Y	2912	3060	2212	4892643	0.76	345	2235	3589	2899	2262	3580
Y_N	743	428	877	769929	1.18	61	624	862	745	633	869
Y_Y	3458	2615	2942	8656147	0.85	658	2169	4748	3475	2252	4830

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	1064	1775
2	890	476	945	893727	1.06	176	546	1234	893	579	1251
3	738	296	817	668064	1.11	167	411	1065	742	427	1069
6	433	176	534	284791	1.23	96	245	621	434	262	642
7	50	29	56	3186	1.12	20	11	90	50	17	89
10	1207	1074	671	449607	0.56	237	743	1672	1208	817	1646
11	886	776	678	459708	0.77	240	416	1356	893	458	1353
16	494	366	467	217855	0.95	165	170	817	501	222	827
18	982	695	935	874733	0.95	120	748	1217	991	775	1256
19	555	329	573	328431	1.03	97	365	745	550	382	747
20	1844	1253	2125	4517189	1.15	310	1236	2451	1861	1303	2506
22	1334	702	1693	2867783	1.27	242	860	1808	1341	916	1843
24	1729	942	1845	3403035	1.07	266	1207	2251	1734	1286	2241
26	2186	654	2633	6934945	1.20	589	1032	3340	2196	1207	3310

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	239	170	321
CK	241	112	321	102927	1.33	62.9	118	364	240	129	377
CR	283	178	294	86605	1.04	43.4	198	368	280	198	364
HB	257	101	303	92052	1.18	45.7	168	347	257	171	348
LC	154	131	139	19183	0.90	8.8	137	172	154	137	173
LT	279	261	132	17460	0.47	28.8	222	335	280	227	340
NN	215	174	202	40919	0.94	54.1	109	321	214	127	327

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	214	292
N_PILOT	118	121	59	3467	0.50	15	88	148	119	92	149
N_Y	169	159	97	9362	0.57	15	139	198	169	140	201
Y_N	179	117	208	43104	1.16	14	151	207	179	153	210
Y_Y	128	129	80	6428	0.63	18	93	163	127	93	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	392	286.5	510.8
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	253	154.5	362.8
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	234	125.9	347.3
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	121	71.2	180.5
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.7	9.4
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	124	82.1	169.6
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	91	48.4	137.3
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49	20.0	80.6
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	176	145.6	209.5
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	153	102.7	209.2
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	256	203.8	314.4
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	137	111.4	163.7
24	185	180.6	91.6	8385	0.49	13	159.3	211.1	185	161.3	210.0
26	151	155.4	108.5	11763	0.72	24	103.3	198.4	150	104.6	198.4

Dead Count Statistics for all Periods

Dead Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	249	160	278	77231	1.12	64	123.6	374	250	140	391
CK	78	32	106	11170	1.36	37	4.3	151	77	17	154
CR	60	47	38	1444	0.63	13	35.2	85	60	39	84
HB	44	21	45	2000	1.02	15	14.8	73	43	19	70
LC	132	72	157	24733	1.19	11	110.5	153	131	112	152
LT	218	141	180	32543	0.83	39	140.5	295	216	146	294
NN	98	72	87	7493	0.88	23	52.5	143	99	60	153

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	156	122	194
N_PILOT	98	89	65	4243	0.67	17	65	131	98	70	132
N_Y	145	70	141	19786	0.97	22	102	188	145	105	187
Y_N	98	54	110	12129	1.13	10	77	118	98	79	119
Y_Y	280	204	283	80317	1.01	63	156	405	278	163	400

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	50
10	80	88	65	4245	0.82	23.0	34.5	125	78	42	122
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	134	91	184
19	63	44	67	4548	1.08	11.6	40.0	85	63	42	87
20	148	107	140	19727	0.95	20.5	107.6	188	148	113	187
22	191	128	193	37399	1.01	27.6	137.2	245	191	139	251
24	192	130	194	37816	1.01	28.1	136.8	247	191	139	251
26	129	81	140	19677	1.09	30.6	69.0	189	130	80	190

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	32.5	62
CK	21	11	28	757	1.29	9.7	2.3	40	22	5.8	40
CR	18	11	16	247	0.87	5.2	7.8	28	18	9.3	28
HB	13	8	14	201	1.12	4.7	3.4	22	13	4.6	22
LC	18	10	20	407	1.14	1.4	15.0	20	18	15.0	21
LT	54	47	35	1232	0.64	7.7	39.5	70	54	40.0	69
NN	28	21	22	463	0.78	5.7	16.4	39	28	17.7	39

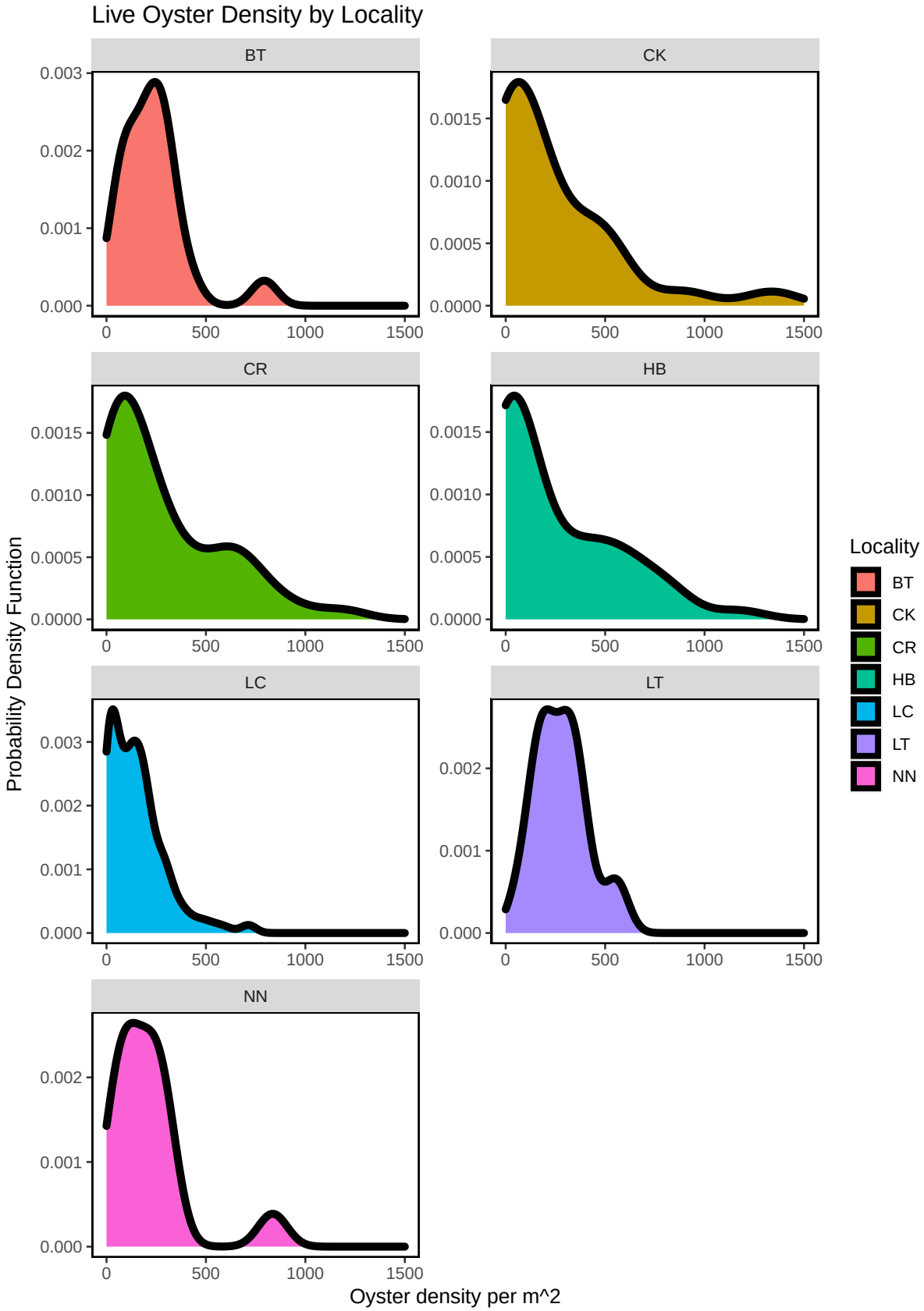
Dead Oyster Density by Strata

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	32.9	27.3	39
N_PILOT	8.7	8.7	4.3	18	0.49	1.1	6.5	11	8.7	6.8	11
N_Y	8.4	8.0	6.6	43	0.78	1.0	6.4	10	8.4	6.7	11
Y_N	22.3	13.5	23.2	536	1.04	2.2	18.1	27	22.3	18.3	27
Y_Y	9.8	9.6	6.3	39	0.64	1.4	7.0	13	9.8	6.9	12

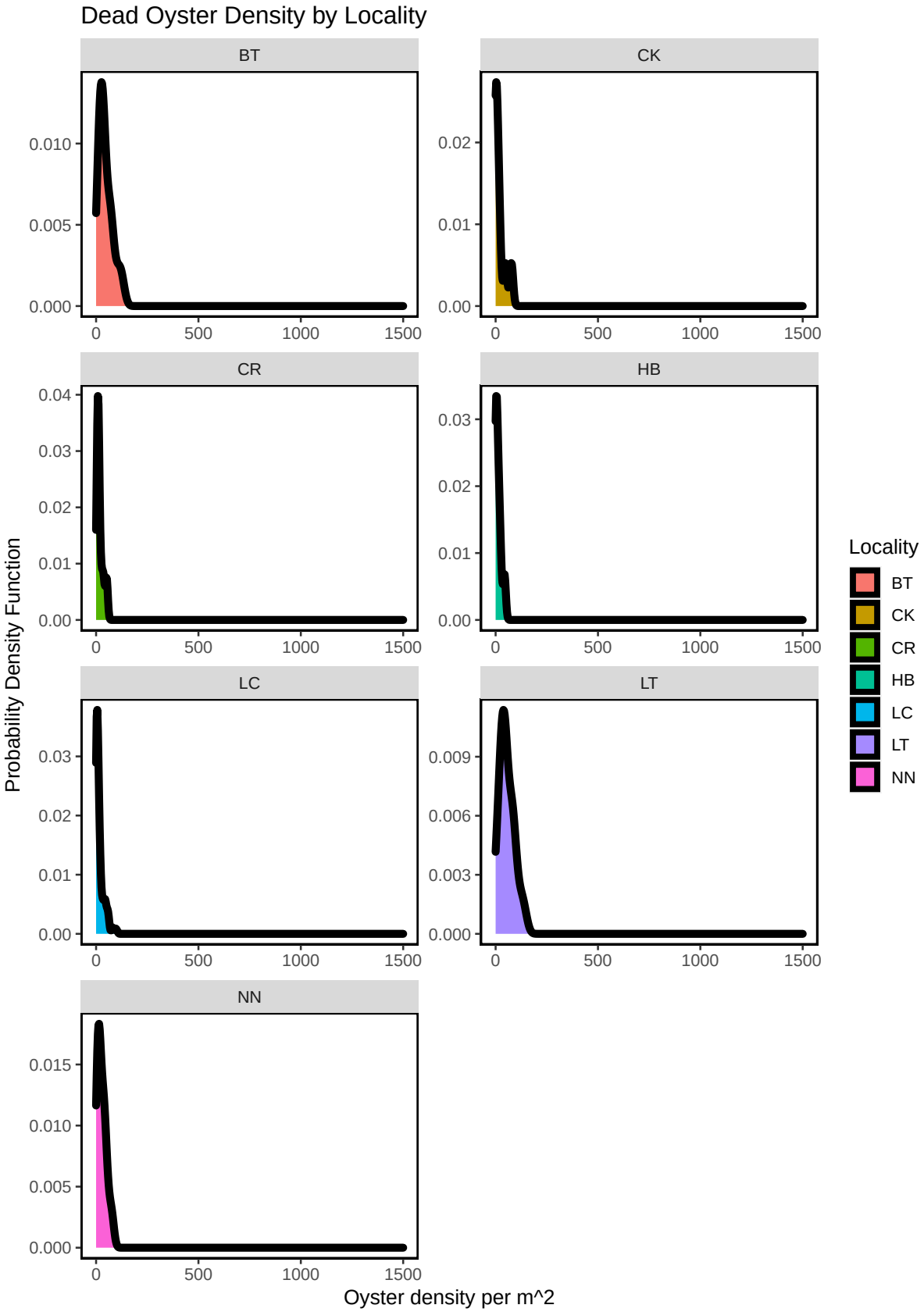
Dead Oyster Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
7	2.9	1.8	3.0	8.9	1.03	1.05	0.82	4.9	2.9	1.0	4.8
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.3	3.9	13.1
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.7	6.8
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	26.1	18.6	33.5
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.5	11.9	23.9
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.9	20.5	35.6
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.3	21.2	36.2
24	25.7	19.1	20.9	438.3	0.81	3.02	19.83	31.7	25.9	20.3	31.8
26	13.8	10.3	14.0	195.3	1.01	3.05	7.80	19.8	13.7	8.7	20.1

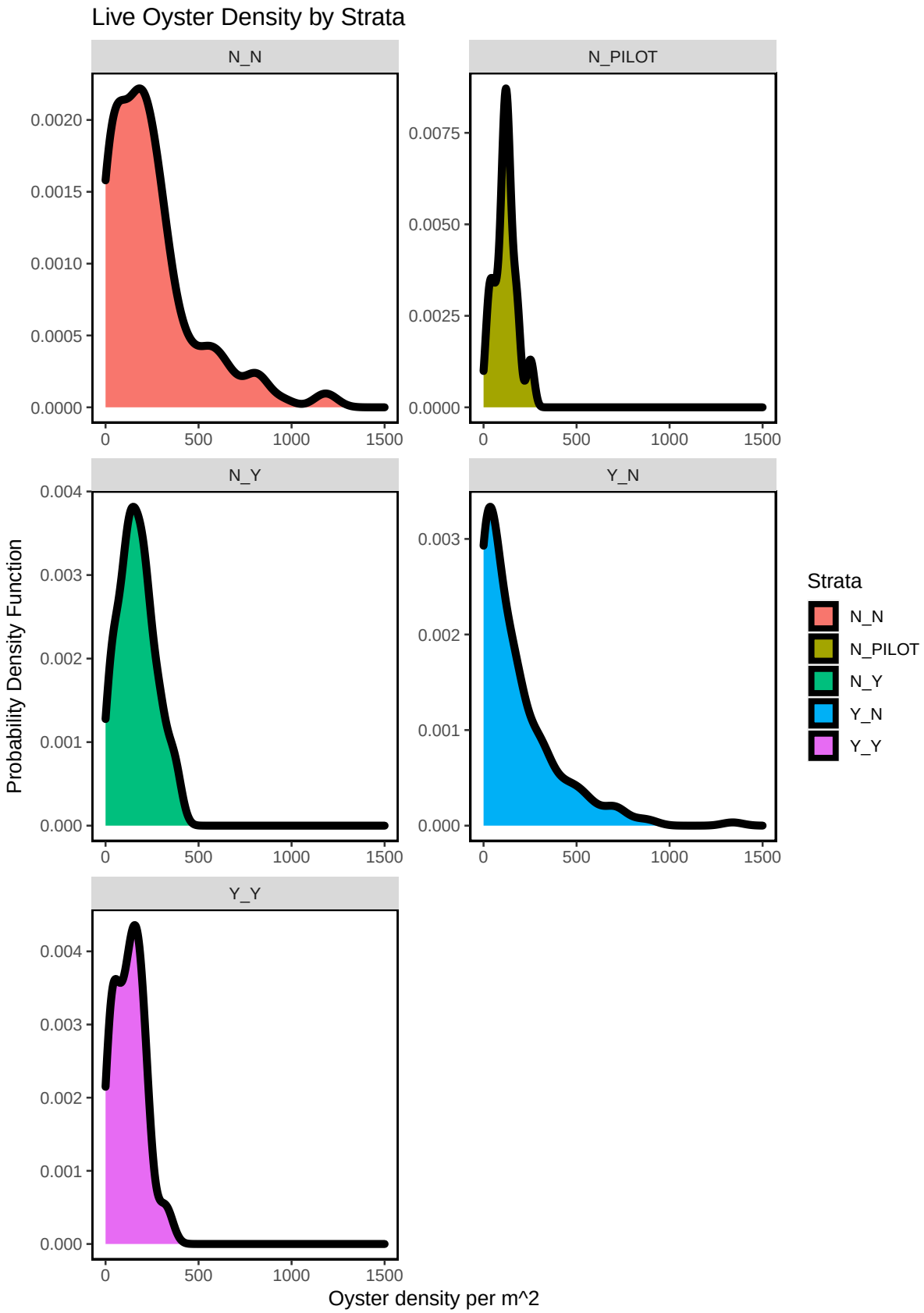
Summary Density Plots for all Periods



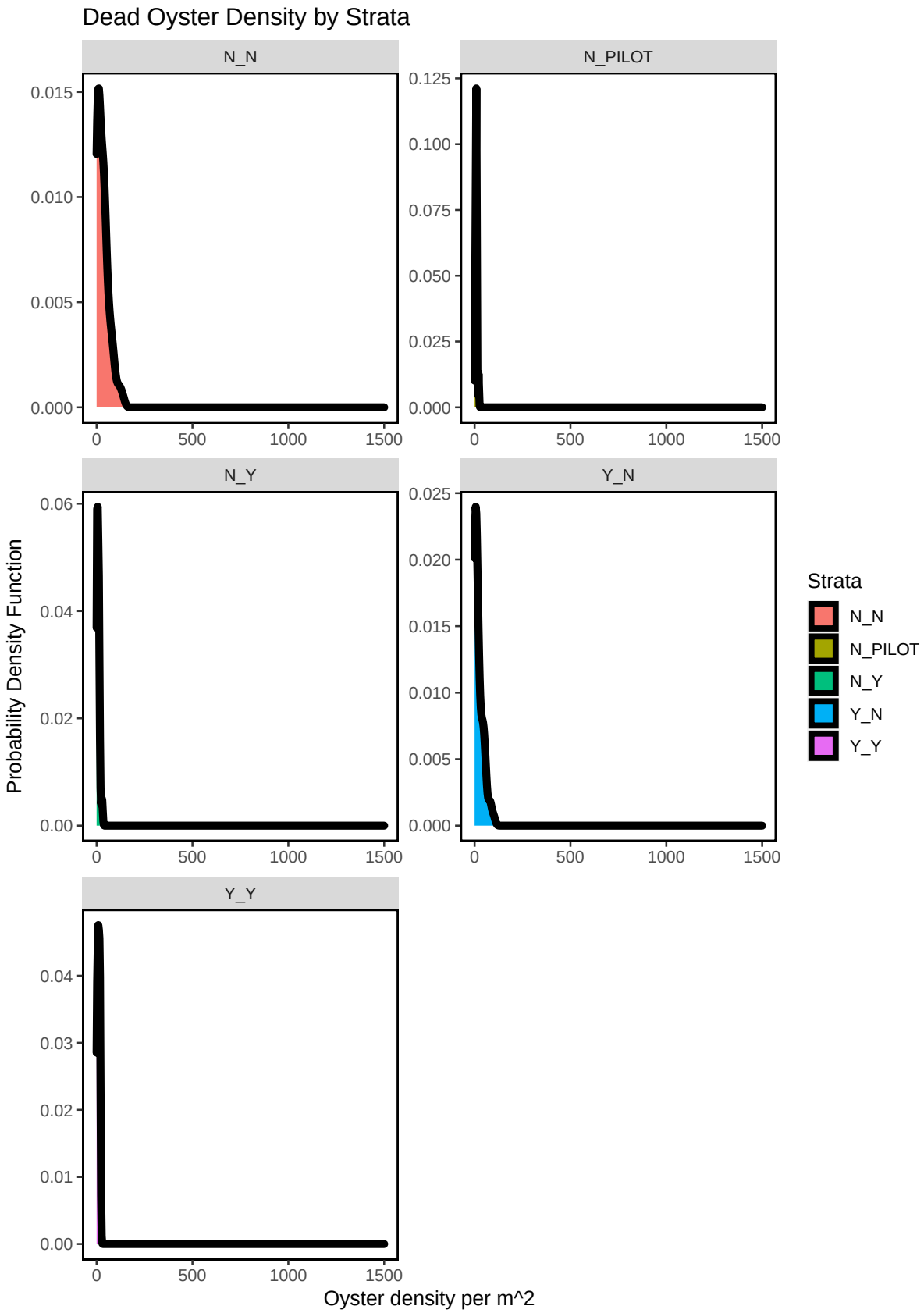
Figure− Calculated live oyster density by locality for all periods including period 22 (current period).



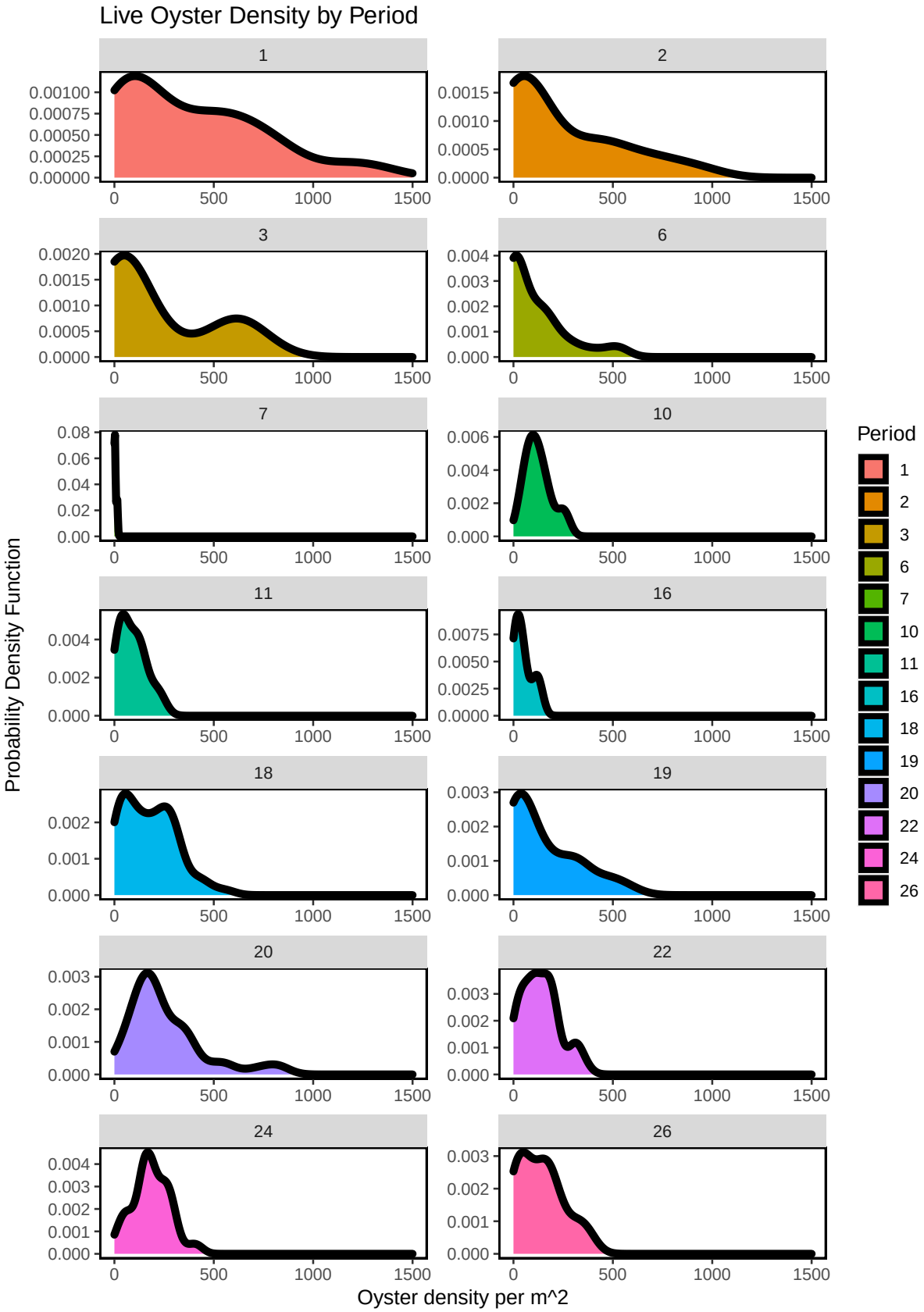
Figure− Calculated dead oyster density by locality for all periods including period 22 (current period).



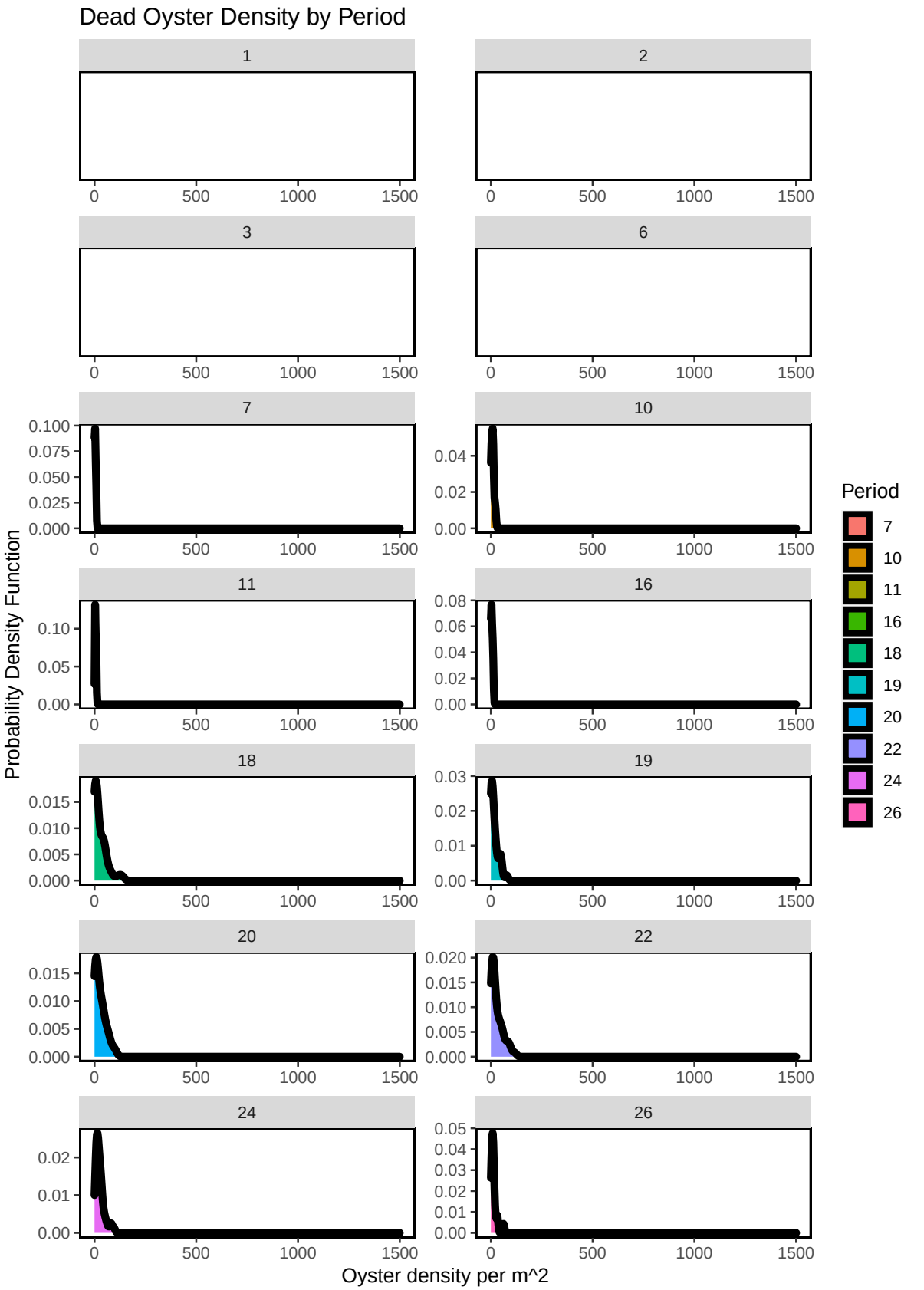
Figure− Calculated live oyster density by strata for all periods including period 22 (current period).



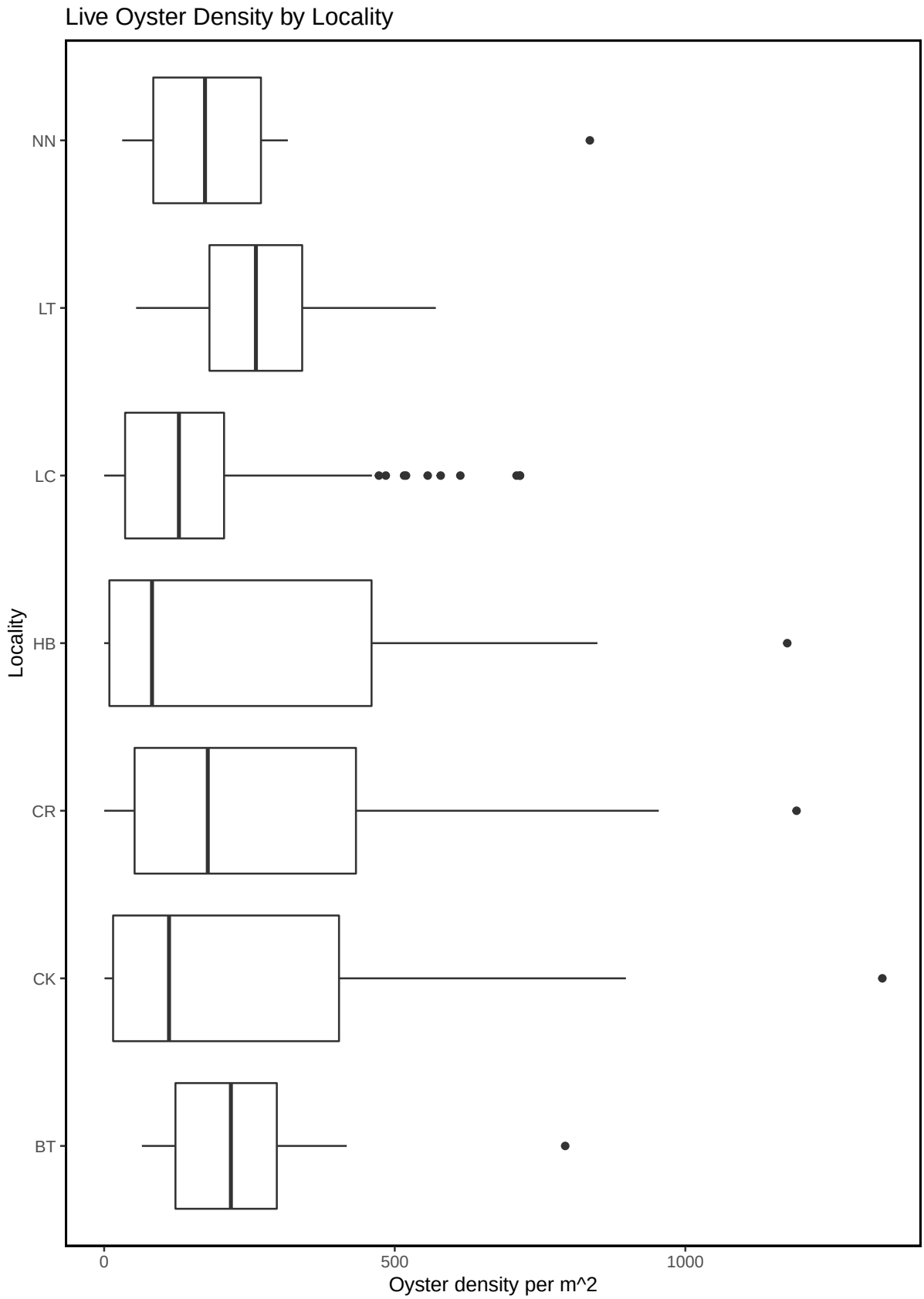
Figure− Calculated dead oyster density by strata for all periods including period 22 (current period).



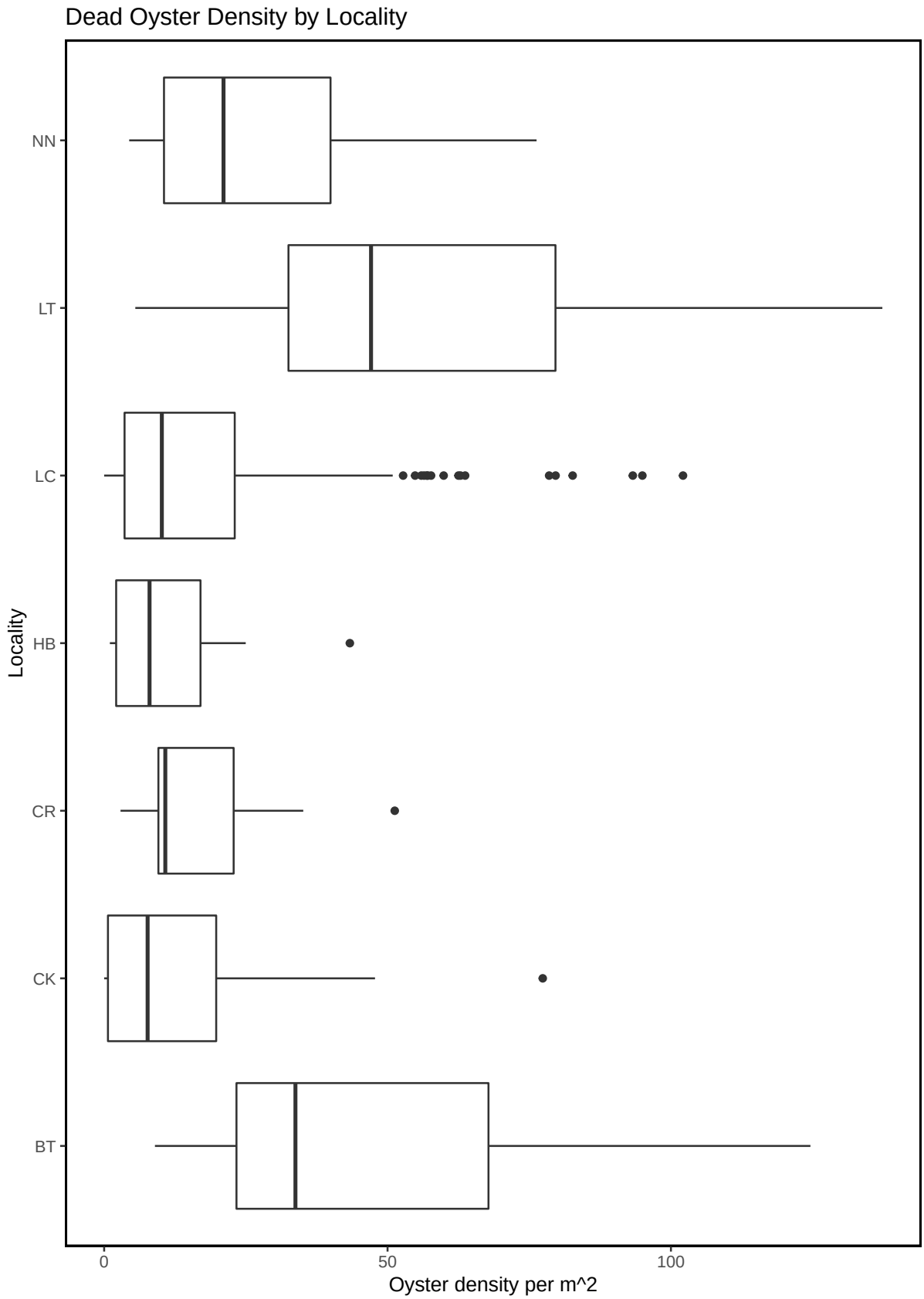
Figure− Calculated live oyster density for all periods including period 24 (current period) using a probability densit



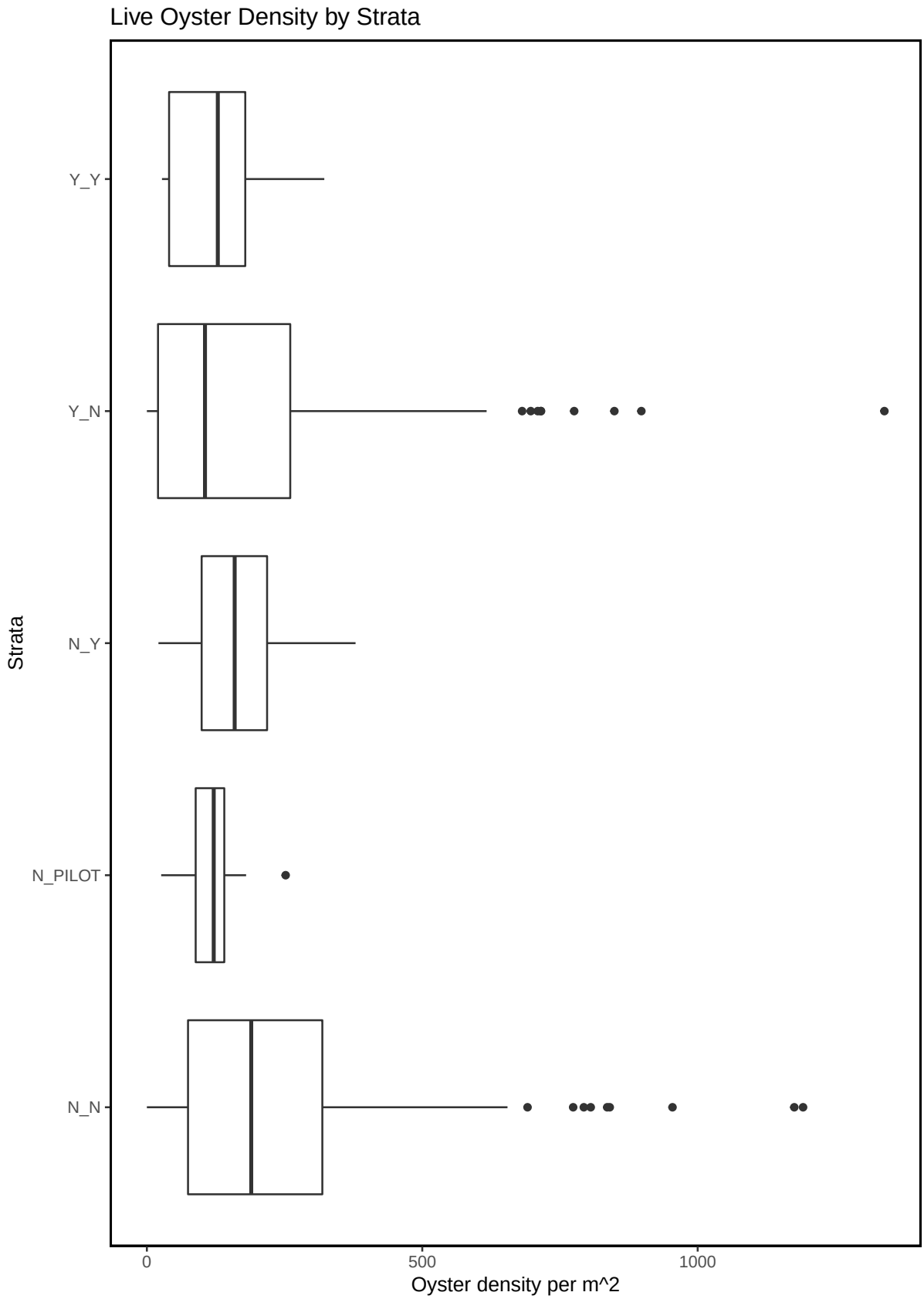
Figure− Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit



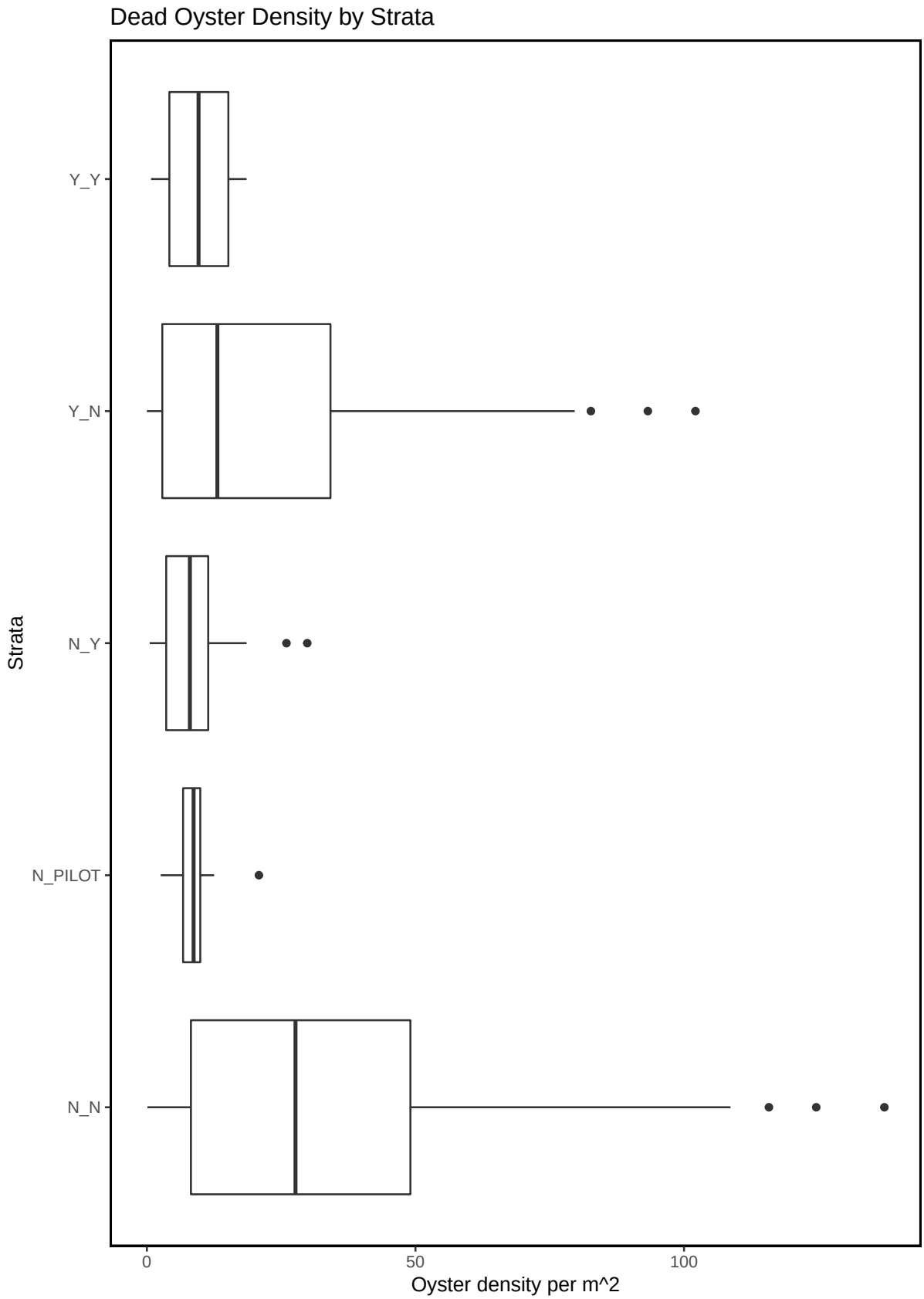
Figure− Box plot depicting live oyster density by locality for all periods including period 22 (current period).



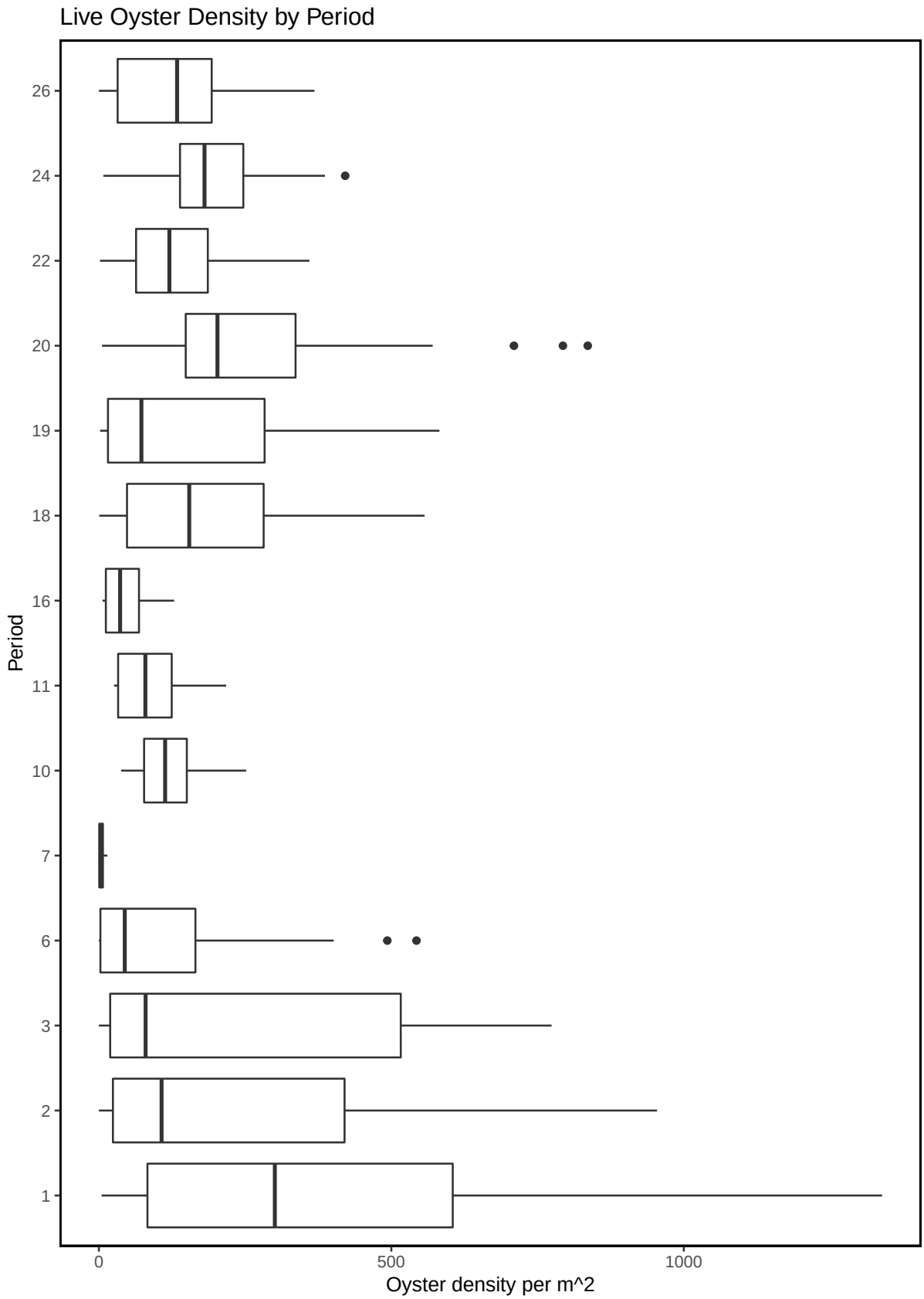
Figure− Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



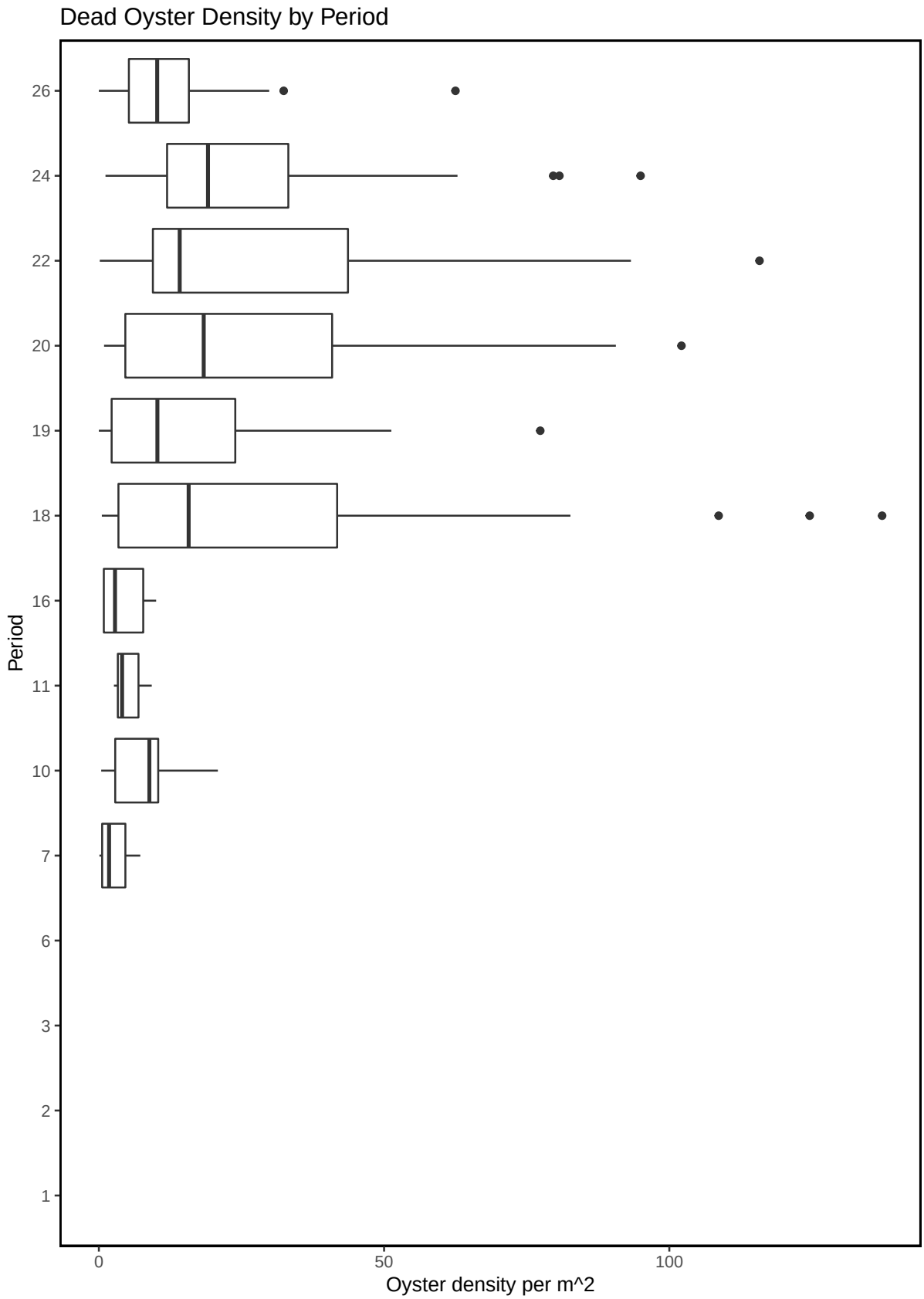
Figure− Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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).

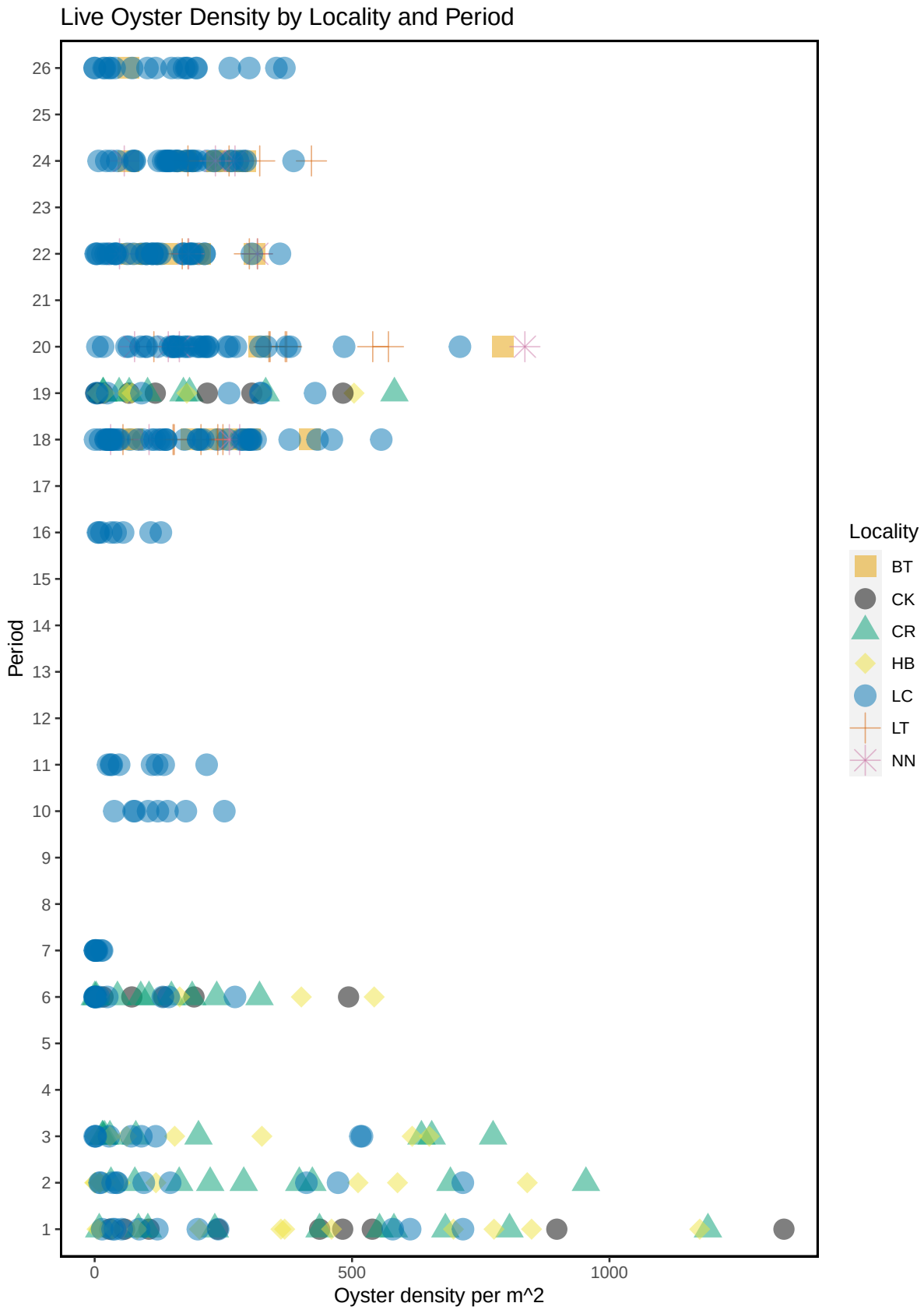


Figure − Live oyster density by locality and period for all periods including period 22 (current period).

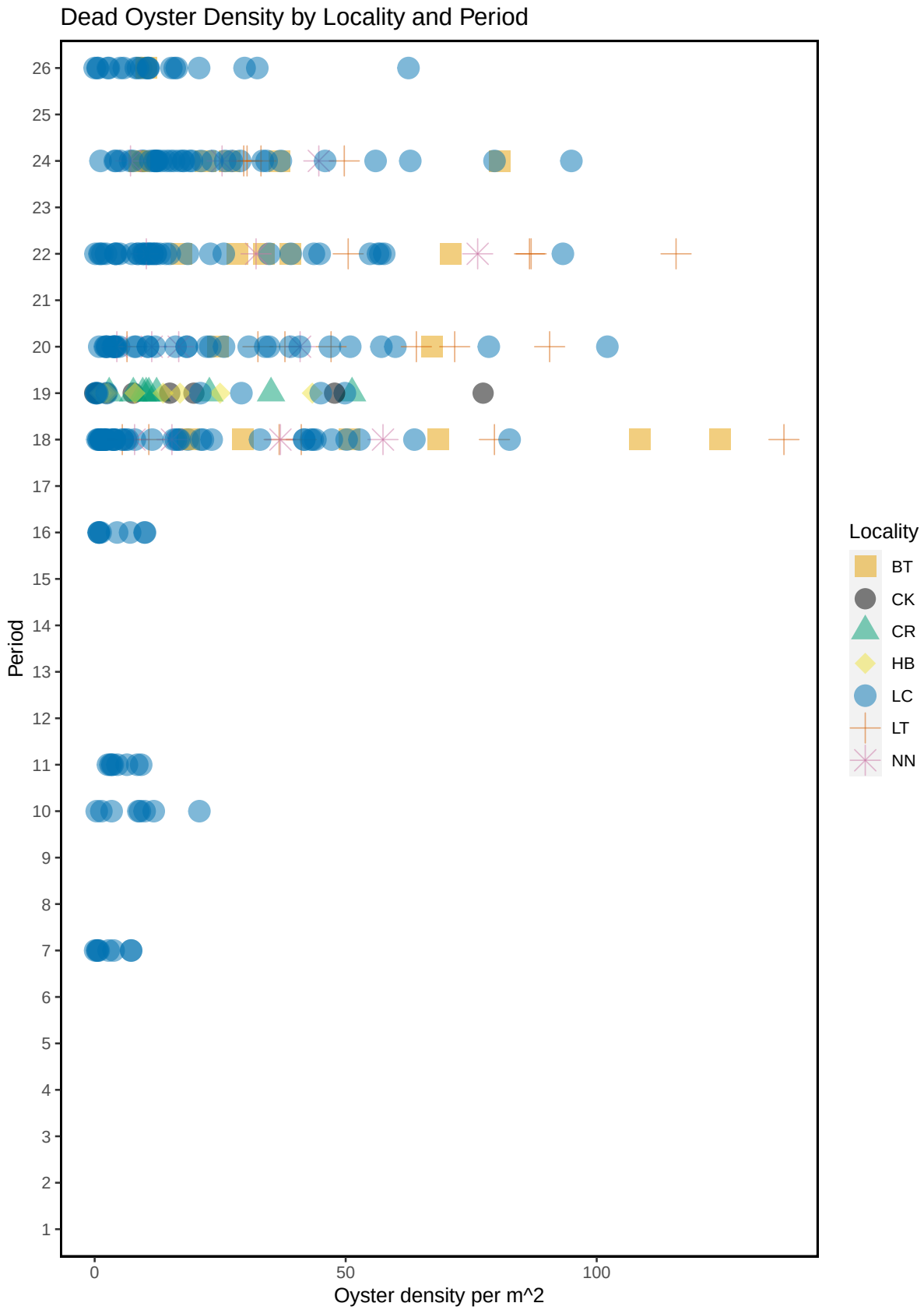


Figure − Dead oyster density by locality and period for all periods including period 22 (current period).

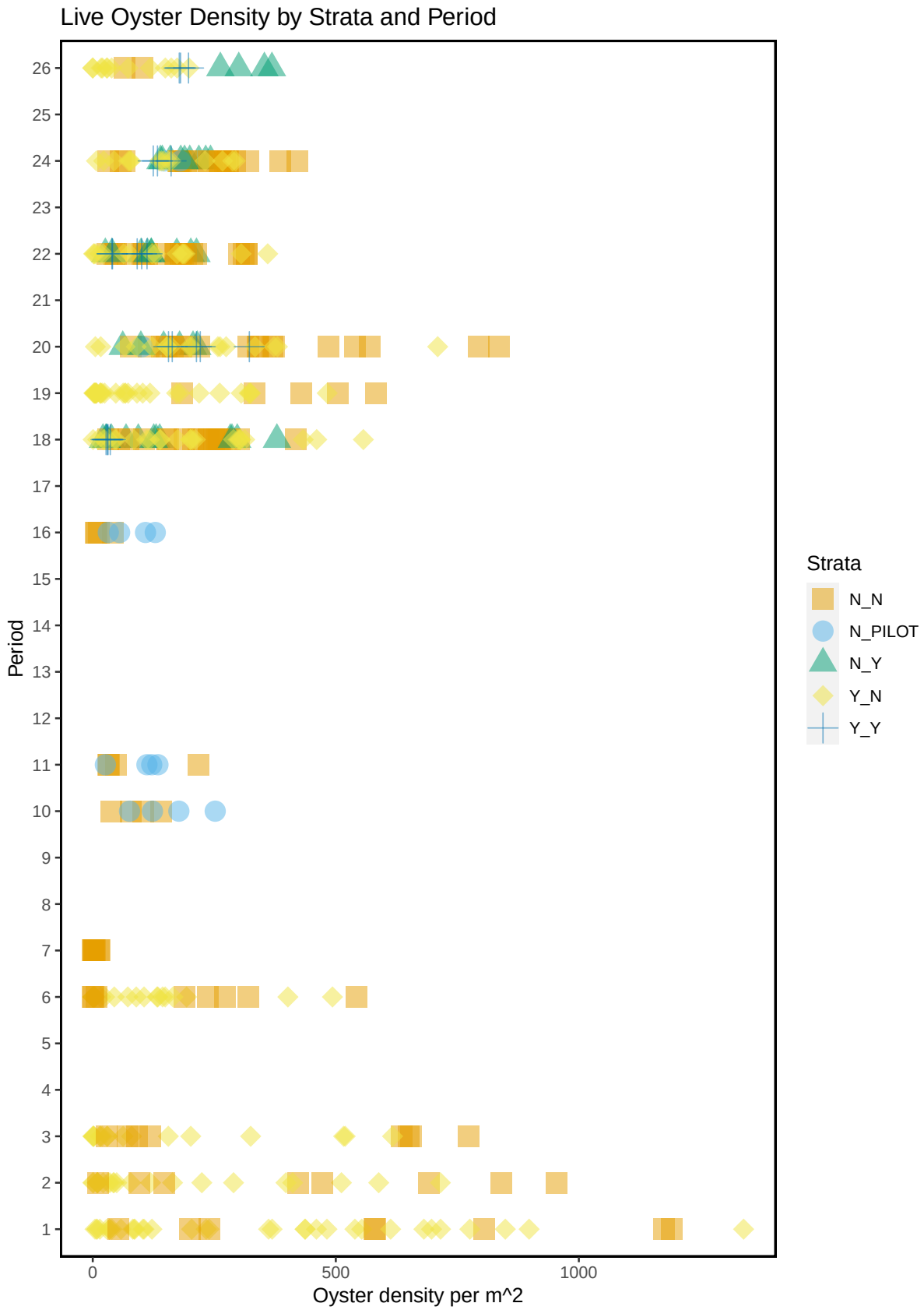


Figure − Live oyster density by strata and period for all periods including period 22 (current period).

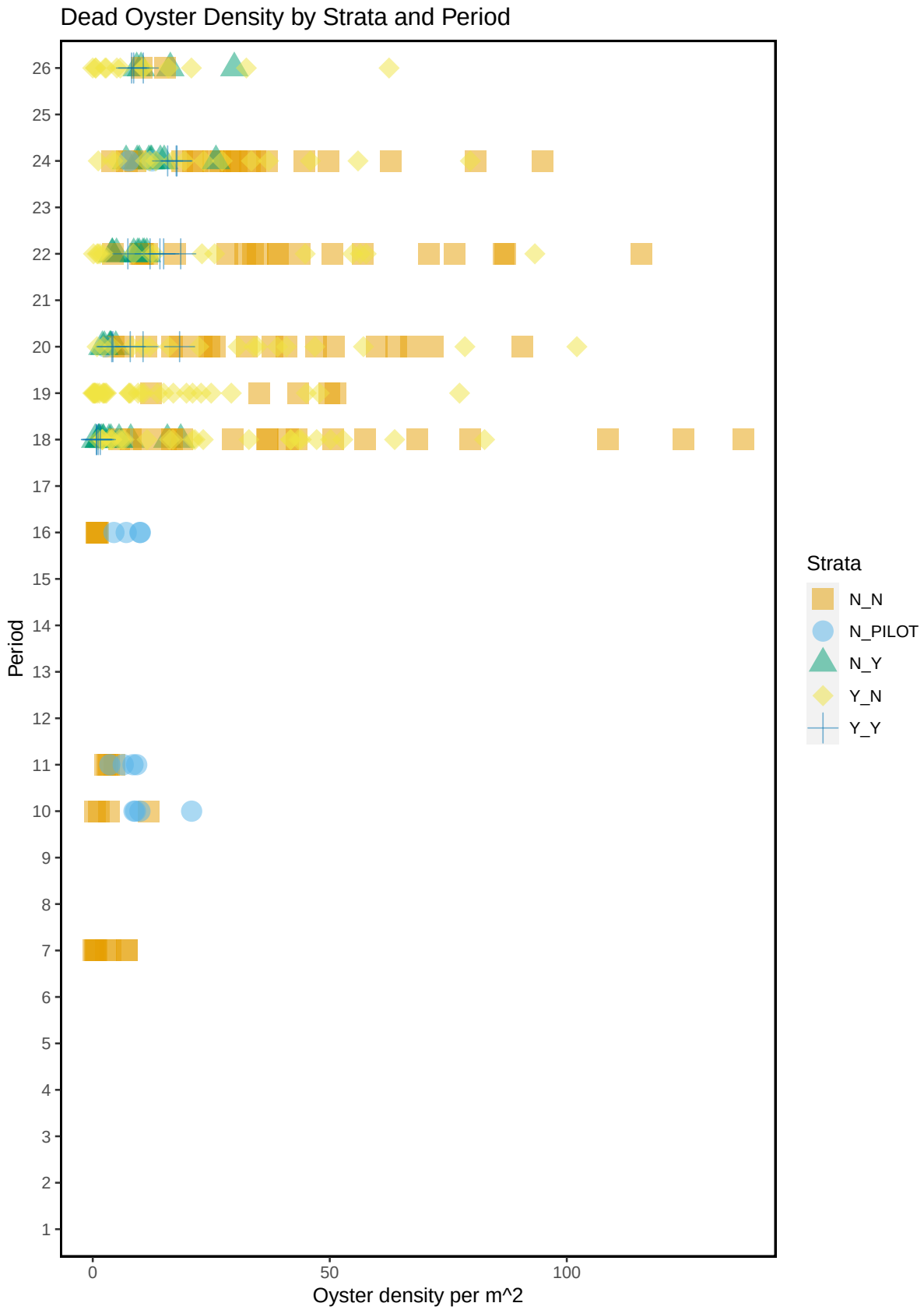


Figure − Dead oyster density by strata and period for all periods including period 22 (current period).

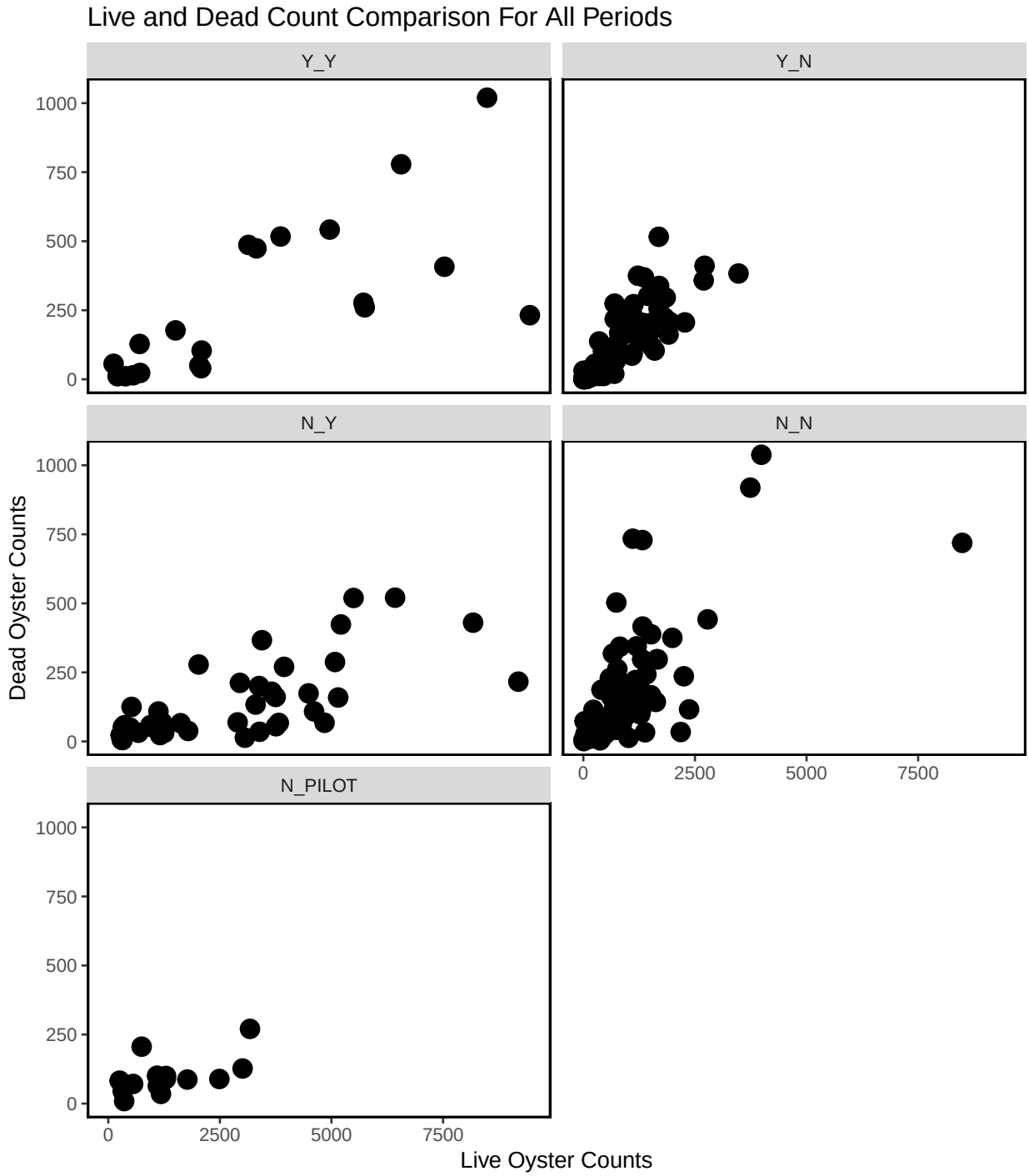


Figure- Live and dead oyster comparison for all periods, last sample date of period 26 is 2023-01-09.

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).

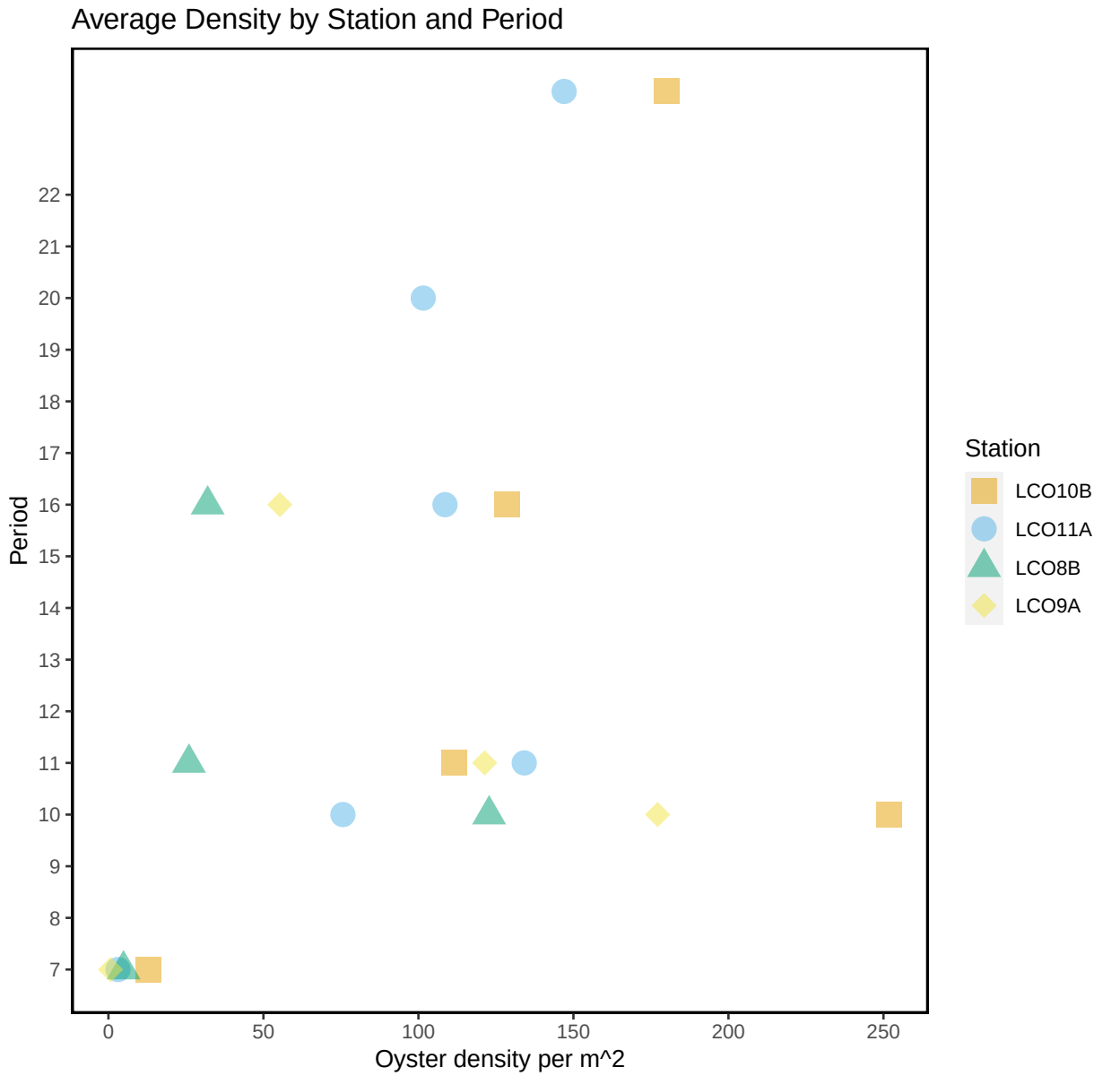


Figure − Average live oyster density comparison by station and period for all stations that were sampled during the pilc

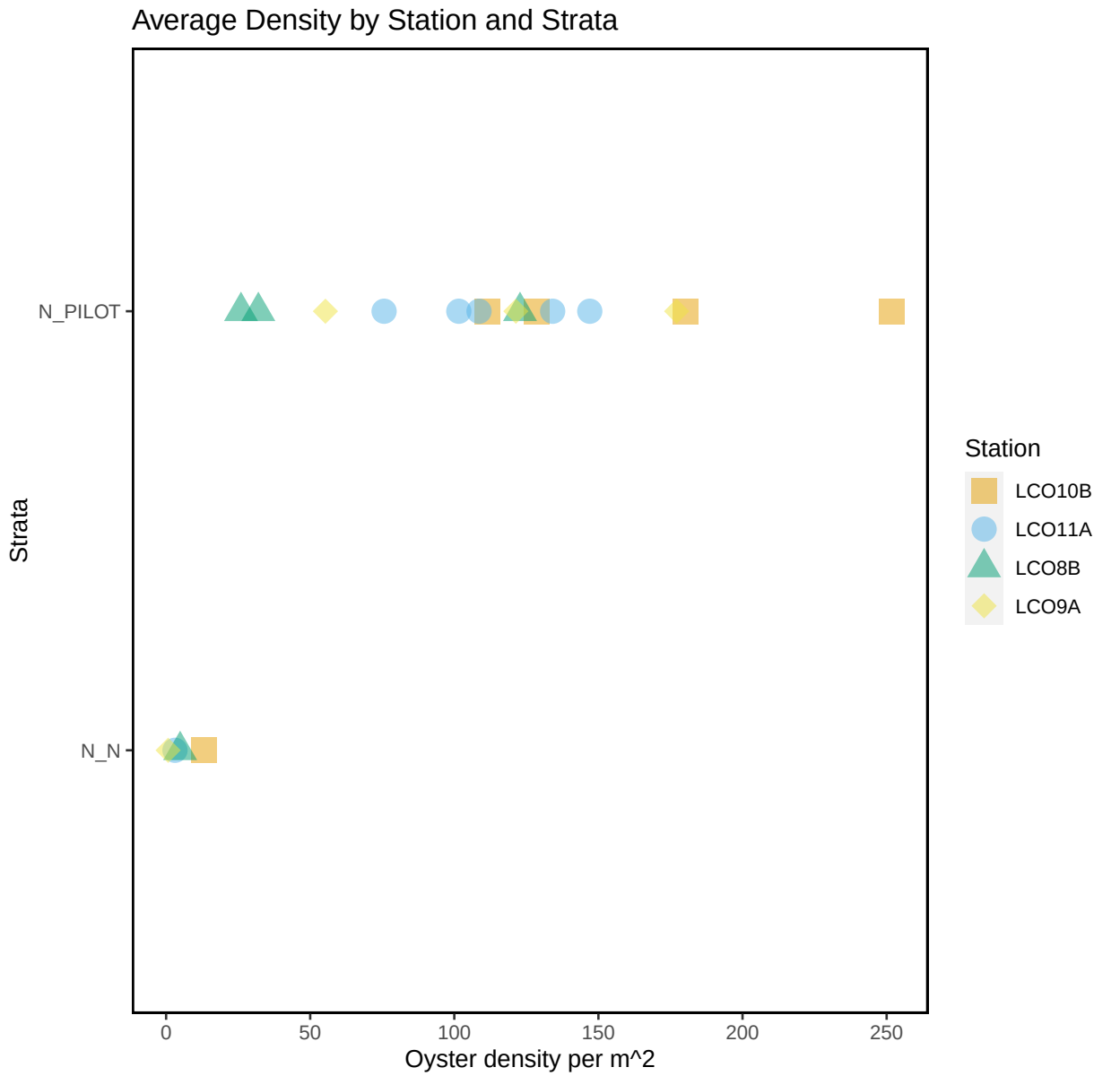


Figure − Average live oyster density comparison by station and strata for all stations that were sampled during th

Latest Data Entered

Displayed are the entries for the last date of sampling (2023-01-09).

date	station	tran_length	count_live	count_dead	treatment	strata
2023-01-09	LCO20	2.5	58	4	rocks	Y_Y
2023-01-09	LCO20	5.0	41	4	rocks	Y_Y
2023-01-09	LCO20	7.5	0	0	rocks	Y_Y
2023-01-09	LCO20	10.0	0	0	rocks	Y_Y
2023-01-09	LCO20	12.5	3	0	rocks	Y_Y
2023-01-09	LCO20	15.0	1	0	rocks	Y_Y
2023-01-09	LCO20	17.5	5	1	rocks	Y_Y
2023-01-09	LCO20	20.0	0	0	rocks	Y_Y
2023-01-09	LCO20	22.0	0	0	rocks	Y_Y
2023-01-09	LCO20	2.5	51	11	rocks	Y_Y
2023-01-09	LCO20	5.0	70	8	rocks	Y_Y
2023-01-09	LCO20	7.5	86	4	rocks	Y_Y
2023-01-09	LCO20	10.0	46	3	rocks	Y_Y
2023-01-09	LCO20	12.5	110	8	rocks	Y_Y
2023-01-09	LCO20	15.0	101	4	rocks	Y_Y
2023-01-09	LCO20	17.5	6	0	rocks	Y_Y
2023-01-09	LCO20	20.0	27	2	rocks	Y_Y
2023-01-09	LCO20	22.0	2	0	rocks	Y_Y
2023-01-09	LCO20	2.5	85	3	rocks	Y_Y
2023-01-09	LCO20	5.0	82	5	rocks	Y_Y
2023-01-09	LCO20	7.5	94	2	rocks	Y_Y
2023-01-09	LCO20	10.0	78	4	rocks	Y_Y
2023-01-09	LCO20	12.5	73	0	rocks	Y_Y
2023-01-09	LCO20	15.0	122	8	rocks	Y_Y
2023-01-09	LCO20	17.5	86	7	rocks	Y_Y
2023-01-09	LCO20	20.0	89	7	rocks	Y_Y
2023-01-09	LCO20	22.0	128	3	rocks	Y_Y
2023-01-09	LCO20	25.0	38	2	rocks	Y_Y
2023-01-09	LCO20	2.5	132	2	rocks	Y_Y
2023-01-09	LCO20	5.0	104	1	rocks	Y_Y
2023-01-09	LCO20	7.5	69	2	rocks	Y_Y
2023-01-09	LCO20	10.0	71	0	rocks	Y_Y
2023-01-09	LCO20	12.5	210	9	rocks	Y_Y
2023-01-09	LCO20	15.0	101	1	rocks	Y_Y
2023-01-09	LCO20	17.5	96	4	rocks	Y_Y
2023-01-09	LCO20	20.0	99	2	rocks	Y_Y
2023-01-09	LCO20	22.0	102	1	rocks	Y_Y
2023-01-09	LCO20	22.5	20	2	rocks	Y_Y
2023-01-09	LCO20	2.5	31	2	rocks	Y_Y
2023-01-09	LCO20	5.0	0	0	rocks	Y_Y
2023-01-09	LCO20	7.5	8	0	rocks	Y_Y
2023-01-09	LCO20	10.0	25	2	rocks	Y_Y
2023-01-09	LCO20	12.5	34	3	rocks	Y_Y
2023-01-09	LCO20	15.0	40	8	rocks	Y_Y
2023-01-09	LCO20	17.5	40	4	rocks	Y_Y
2023-01-09	LCO20	20.0	61	4	rocks	Y_Y
2023-01-09	LCO20	22.0	8	0	rocks	Y_Y
2023-01-09	LCO20	2.5	68	2	rocks	Y_Y
2023-01-09	LCO20	5.0	167	8	rocks	Y_Y

2023-01-09	LCO20	7.5	135	6	rocks	Y_Y
2023-01-09	LCO20	10.0	144	4	rocks	Y_Y
2023-01-09	LCO20	12.5	147	4	rocks	Y_Y
2023-01-09	LCO20	15.0	70	7	rocks	Y_Y
2023-01-09	LCO20	17.5	111	4	rocks	Y_Y
2023-01-09	LCO20	20.0	113	10	rocks	Y_Y
2023-01-09	LCO20	22.0	62	4	rocks	Y_Y
2023-01-09	LCO20	23.6	81	5	rocks	Y_Y
2023-01-09	LCO20	2.5	65	2	rocks	Y_Y
2023-01-09	LCO20	5.0	90	3	rocks	Y_Y
2023-01-09	LCO20	7.5	29	2	rocks	Y_Y
2023-01-09	LCO20	10.0	83	3	rocks	Y_Y
2023-01-09	LCO20	12.5	53	2	rocks	Y_Y
2023-01-09	LCO20	15.0	49	6	rocks	Y_Y
2023-01-09	LCO20	17.5	109	2	rocks	Y_Y
2023-01-09	LCO20	20.0	62	6	rocks	Y_Y
2023-01-09	LCO20	22.0	44	2	rocks	Y_Y
2023-01-09	LCO20	24.1	62	4	rocks	Y_Y
2023-01-09	LCO20	2.5	62	4	rocks	Y_Y
2023-01-09	LCO20	5.0	109	7	rocks	Y_Y
2023-01-09	LCO20	7.5	56	3	rocks	Y_Y
2023-01-09	LCO20	10.0	96	7	rocks	Y_Y
2023-01-09	LCO20	12.5	98	5	rocks	Y_Y
2023-01-09	LCO20	15.0	71	2	rocks	Y_Y
2023-01-09	LCO20	17.5	69	1	rocks	Y_Y
2023-01-09	LCO20	20.0	90	4	rocks	Y_Y
2023-01-09	LCO20	22.0	75	4	rocks	Y_Y
2023-01-09	LCO20	25.0	96	3	rocks	Y_Y
2023-01-09	LCO20	2.5	107	5	rocks	Y_Y
2023-01-09	LCO20	5.0	106	4	rocks	Y_Y
2023-01-09	LCO20	7.5	73	2	rocks	Y_Y
2023-01-09	LCO20	10.0	132	1	rocks	Y_Y
2023-01-09	LCO20	12.5	93	2	rocks	Y_Y
2023-01-09	LCO20	15.0	106	2	rocks	Y_Y
2023-01-09	LCO20	17.5	101	4	rocks	Y_Y
2023-01-09	LCO20	20.0	121	5	rocks	Y_Y
2023-01-09	LCO20	22.0	75	2	rocks	Y_Y
2023-01-09	LCO20	25.0	156	3	rocks	Y_Y
2023-01-09	LCO20	2.5	42	6	rocks	Y_Y
2023-01-09	LCO20	5.0	31	2	rocks	Y_Y
2023-01-09	LCO20	7.5	35	3	rocks	Y_Y
2023-01-09	LCO20	10.0	25	2	rocks	Y_Y
2023-01-09	LCO20	12.5	5	0	rocks	Y_Y
2023-01-09	LCO20	15.0	9	0	rocks	Y_Y
2023-01-09	LCO20	17.5	64	3	rocks	Y_Y
2023-01-09	LCO20	20.0	34	2	rocks	Y_Y
2023-01-09	LCO20	22.0	39	0	rocks	Y_Y
2023-01-09	LCO20	24.5	9	1	rocks	Y_Y
2023-01-09	LCI25	2.5	2	0	control	Y_N
2023-01-09	LCI25	5.0	4	0	control	Y_N
2023-01-09	LCI25	7.5	0	0	control	Y_N
2023-01-09	LCI25	10.0	1	0	control	Y_N
2023-01-09	LCI25	12.5	15	2	control	Y_N
2023-01-09	LCI25	15.0	7	0	control	Y_N

2023-01-09	LCI25	17.5	31	3	control	Y_N
2023-01-09	LCI25	20.0	48	3	control	Y_N
2023-01-09	LCI25	22.5	37	5	control	Y_N
2023-01-09	LCI25	25.0	15	3	control	Y_N
2023-01-09	LCI25	26.5	6	2	control	Y_N
2023-01-09	LCI25	2.5	2	1	control	Y_N
2023-01-09	LCI25	5.0	5	0	control	Y_N
2023-01-09	LCI25	7.5	1	1	control	Y_N
2023-01-09	LCI25	10.0	2	0	control	Y_N
2023-01-09	LCI25	12.5	20	3	control	Y_N
2023-01-09	LCI25	15.0	4	0	control	Y_N
2023-01-09	LCI25	17.5	30	7	control	Y_N
2023-01-09	LCI25	20.0	26	4	control	Y_N
2023-01-09	LCI25	22.5	39	3	control	Y_N
2023-01-09	LCI25	25.0	13	3	control	Y_N
2023-01-09	LCI25	26.5	5	1	control	Y_N
2023-01-09	LCI18	2.5	0	0	control	Y_N
2023-01-09	LCI18	5.0	0	0	control	Y_N
2023-01-09	LCI18	7.5	0	0	control	Y_N
2023-01-09	LCI18	10.0	14	2	control	Y_N
2023-01-09	LCI18	12.5	2	0	control	Y_N
2023-01-09	LCI18	15.0	0	0	control	Y_N
2023-01-09	LCI18	17.5	0	2	control	Y_N
2023-01-09	LCI18	20.0	0	0	control	Y_N
2023-01-09	LCI18	22.5	0	0	control	Y_N
2023-01-09	LCI18	25.0	55	17	control	Y_N
2023-01-09	LCI18	27.5	30	2	control	Y_N
2023-01-09	LCI18	30.0	38	4	control	Y_N
2023-01-09	LCI18	30.5	0	0	control	Y_N