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 12 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, 156 days have been sampled over this entire project.

Definition of Localities

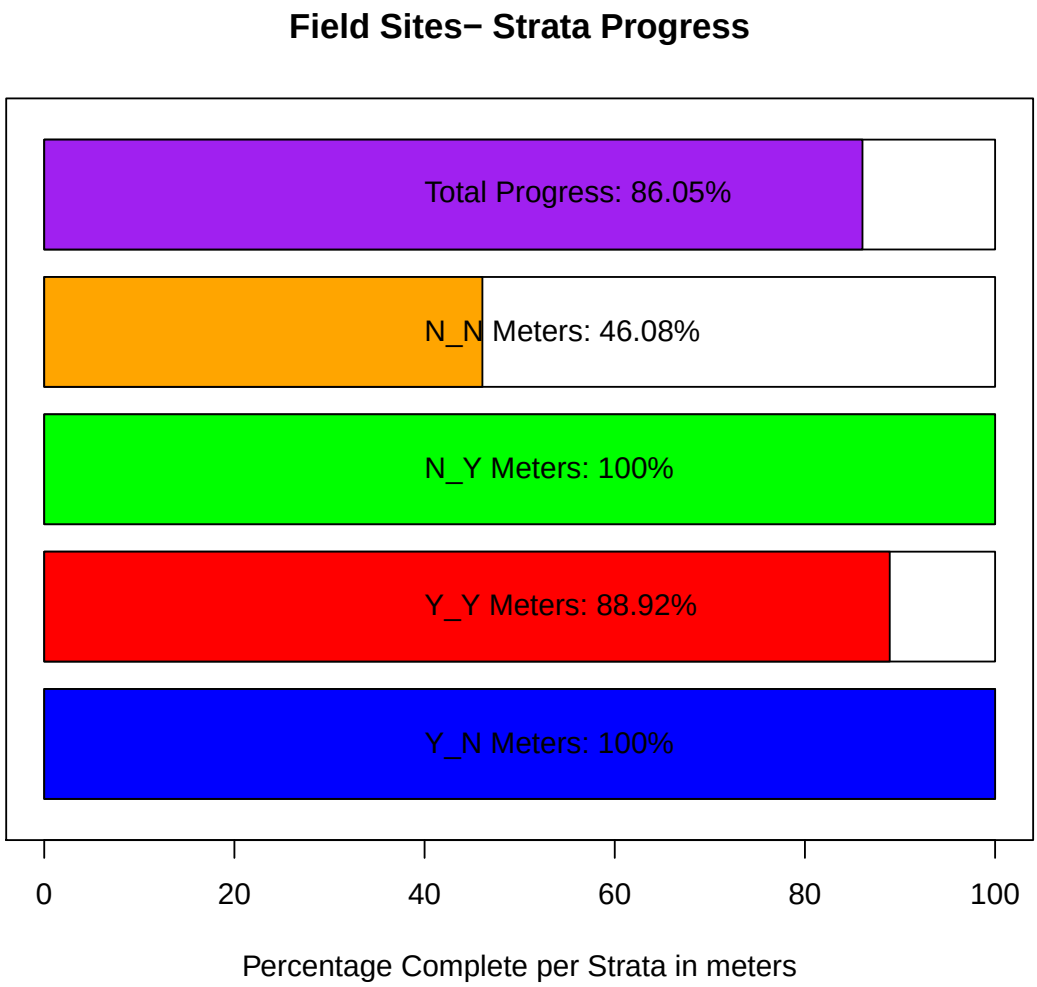
LOCALITY	LOCATION
BT	Big Trout
CK	Cedar Key
CR	Corrigan's Reef
HB	Horseshoe Beach
LC	Lone Cabbage
LT	Little Trout
NN	No Name

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	1306	611	2492
LC	1880	1089	2140	4581574	1.14	187	1514	2247	1882	1520	2246
LT	1097	877	582	338863	0.53	150	802	1392	1100	857	1399
NN	842	714	639	408613	0.76	202	446	1238	839	526	1249

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1076	767	1167	1362485	1.09	149	783	1369	1070	830	1396
N_PILOT	2180	3009	1582	2501624	0.73	913	390	3970	2152	356	3174
N_Y	3723	3690	2177	4740322	0.58	404	2930	4515	3738	2998	4550
Y_N	651	496	634	402358	0.97	82	491	812	653	501	820
Y_Y	4148	3320	2811	7901788	0.68	682	2811	5484	4118	2898	5422

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	1840	1299	2492
22	1334	702	1693	2867783	1.3	242	860	1808	1314	906	1800
24	1729	942	1845	3403035	1.1	266	1207	2251	1729	1255	2336
26	2103	654	2556	6535513	1.2	501	1120	3086	2102	1203	3155

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	244	160	351
LC	160	159	106	11278	0.67	9.3	141	178	160	143	179
LT	320	321	129	16749	0.40	33.4	255	386	319	259	386
NN	233	174	230	52911	0.99	72.7	91	376	234	123	378

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	239	192	163	26463	0.68	21	198	280	238	199	285
N_PILOT	143	147	39	1557	0.28	23	98	188	143	102	180
N_Y	172	181	73	5305	0.42	14	146	199	172	148	196
Y_N	147	139	128	16372	0.87	17	115	179	148	118	181
Y_Y	157	161	71	5104	0.45	17	123	191	157	124	193

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
20	256	203	187	35057	0.73	27	203	310	255	206	310
22	137	121	93	8638	0.68	13	111	163	136	110	162
24	185	181	92	8385	0.49	13	159	211	186	160	211
26	147	155	103	10594	0.70	20	108	187	147	109	188

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	97	263
LC	173	126	182	32984	1.05	16	142	204	173	144	203
LT	206	137	151	22760	0.73	39	130	282	207	139	286
NN	102	72	94	8760	0.92	30	44	160	102	56	162

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	168	114	165	27251	0.98	21	127	210	169	132	211
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	199	151	249
Y_N	110	56	123	15020	1.11	16	80	141	111	83	141
Y_Y	351	277	277	76673	0.79	67	220	483	350	232	487

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	111	190
22	191	128	193	37399	1.01	28	137	245	192	143	248
24	192	130	194	37816	1.01	28	137	247	192	145	246
26	133	81	148	22050	1.12	29	77	189	134	85	188

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	24	47
LC	20	12	21	441	1.03	1.8	17	24	20	17	24
LT	56	50	30	881	0.53	7.7	41	71	55	42	70
NN	27	21	22	500	0.83	7.1	13	41	27	15	41

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	37.4	32.1	26.2	688	0.70	3.36	30.8	44	37.4	30.7	44
N_PILOT	7.6	7.6	5.0	25	0.66	2.88	1.9	13	7.7	2.6	13
N_Y	9.4	9.5	5.2	27	0.55	0.96	7.5	11	9.3	7.6	11
Y_N	24.7	15.9	24.8	615	1.00	3.17	18.5	31	24.7	18.4	31
Y_Y	12.6	14.2	4.8	23	0.38	1.17	10.3	15	12.6	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	20.6	35
22	28	14	28	807	1.00	4.1	20.5	36	29	20.9	37
24	26	19	21	438	0.81	3.0	19.8	32	26	20.4	32
26	13	11	12	155	0.93	2.4	8.7	18	13	9.1	19

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

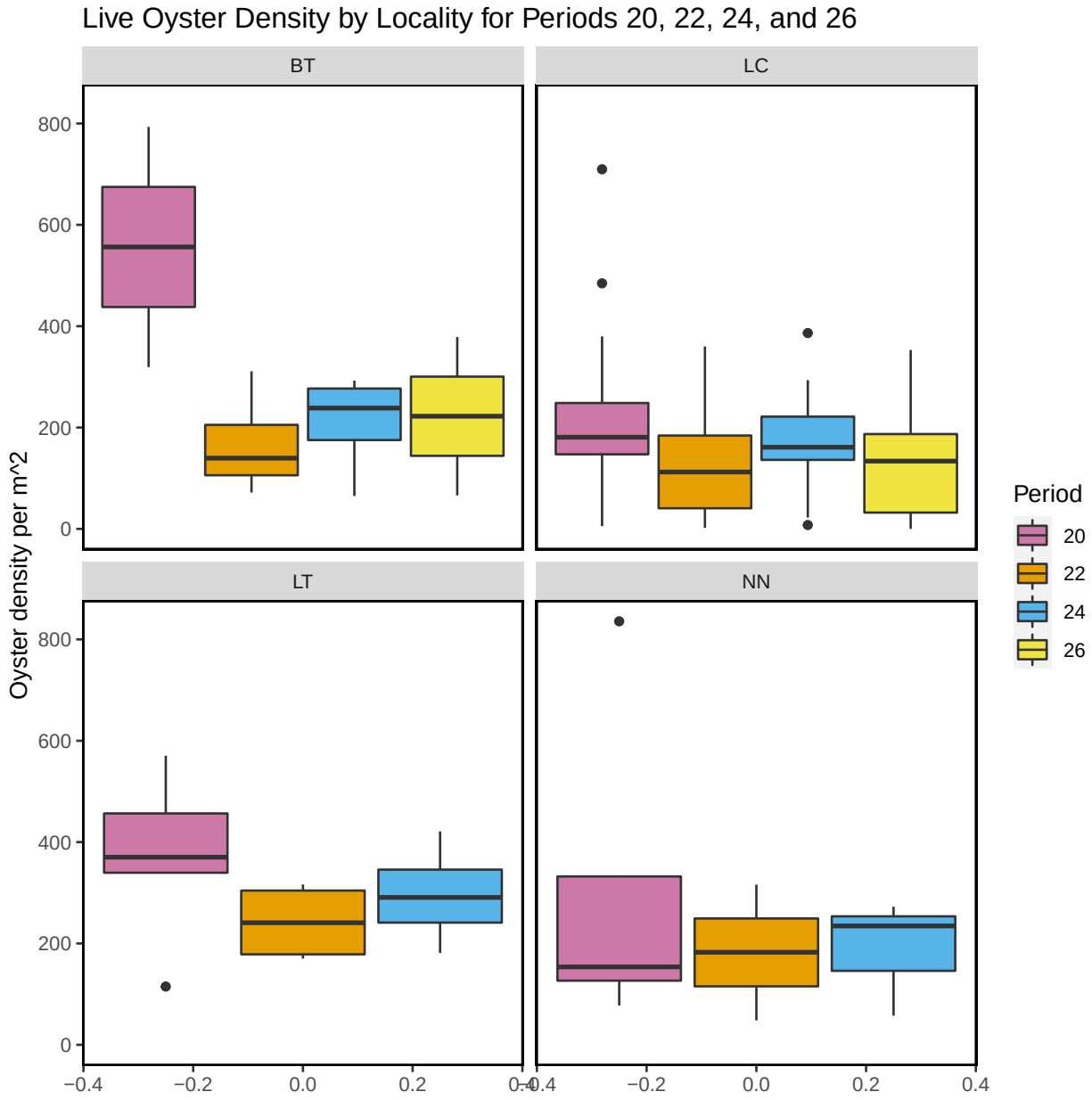


Figure- Calculated live oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-01-24.

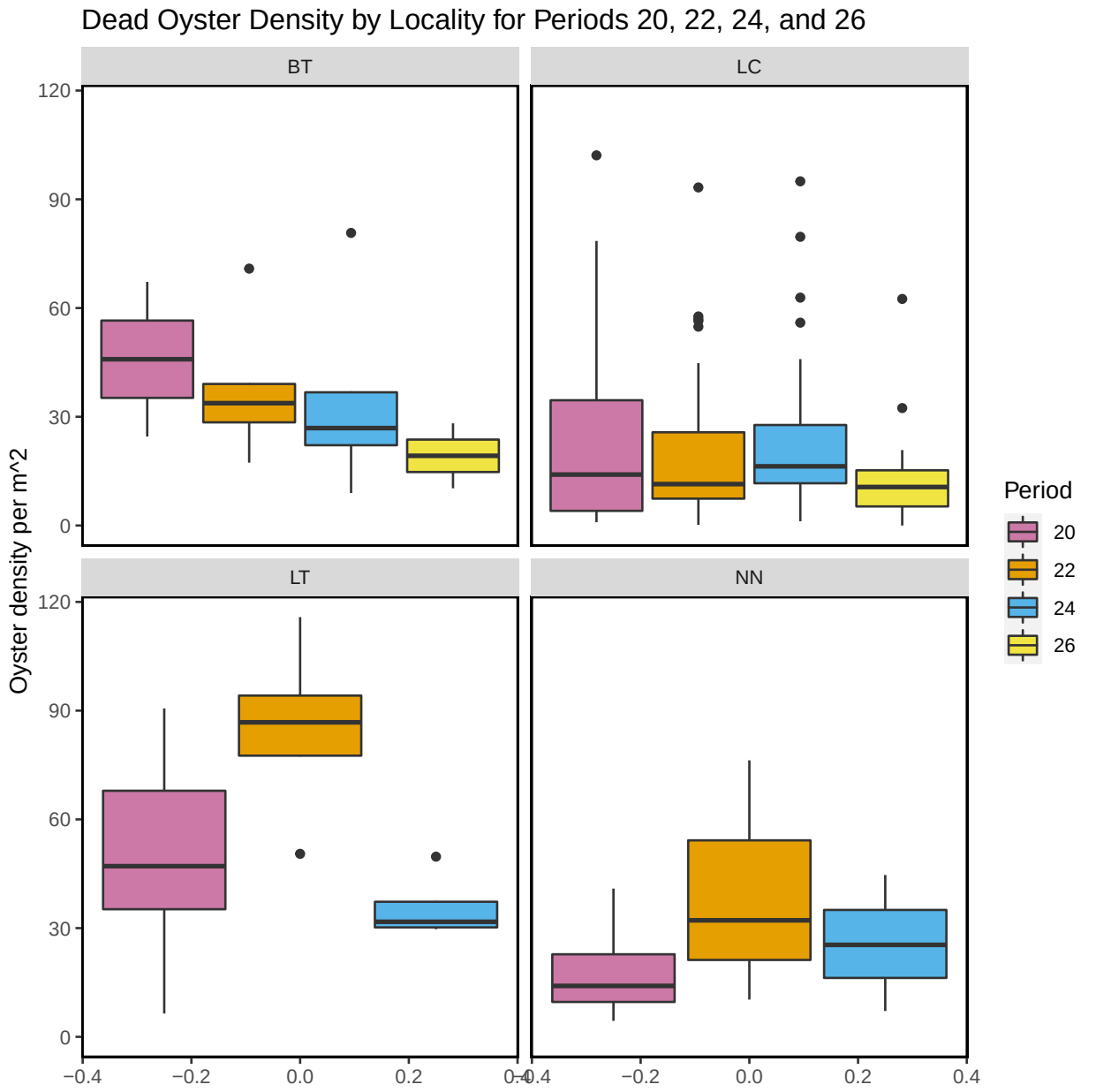


Figure- Calculated dead oyster density by locality for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-01-24.

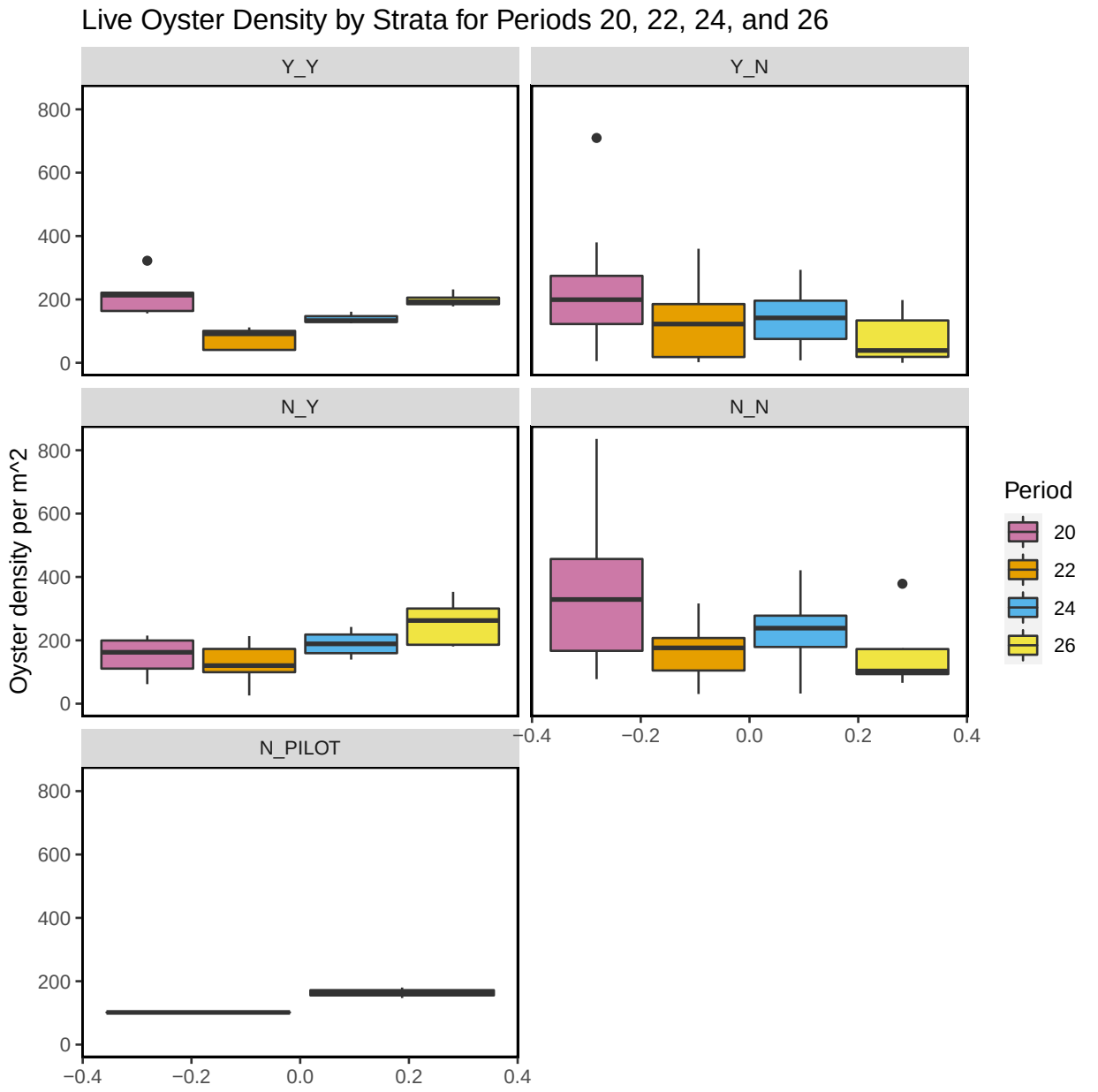


Figure- Calculated live oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-01-24.

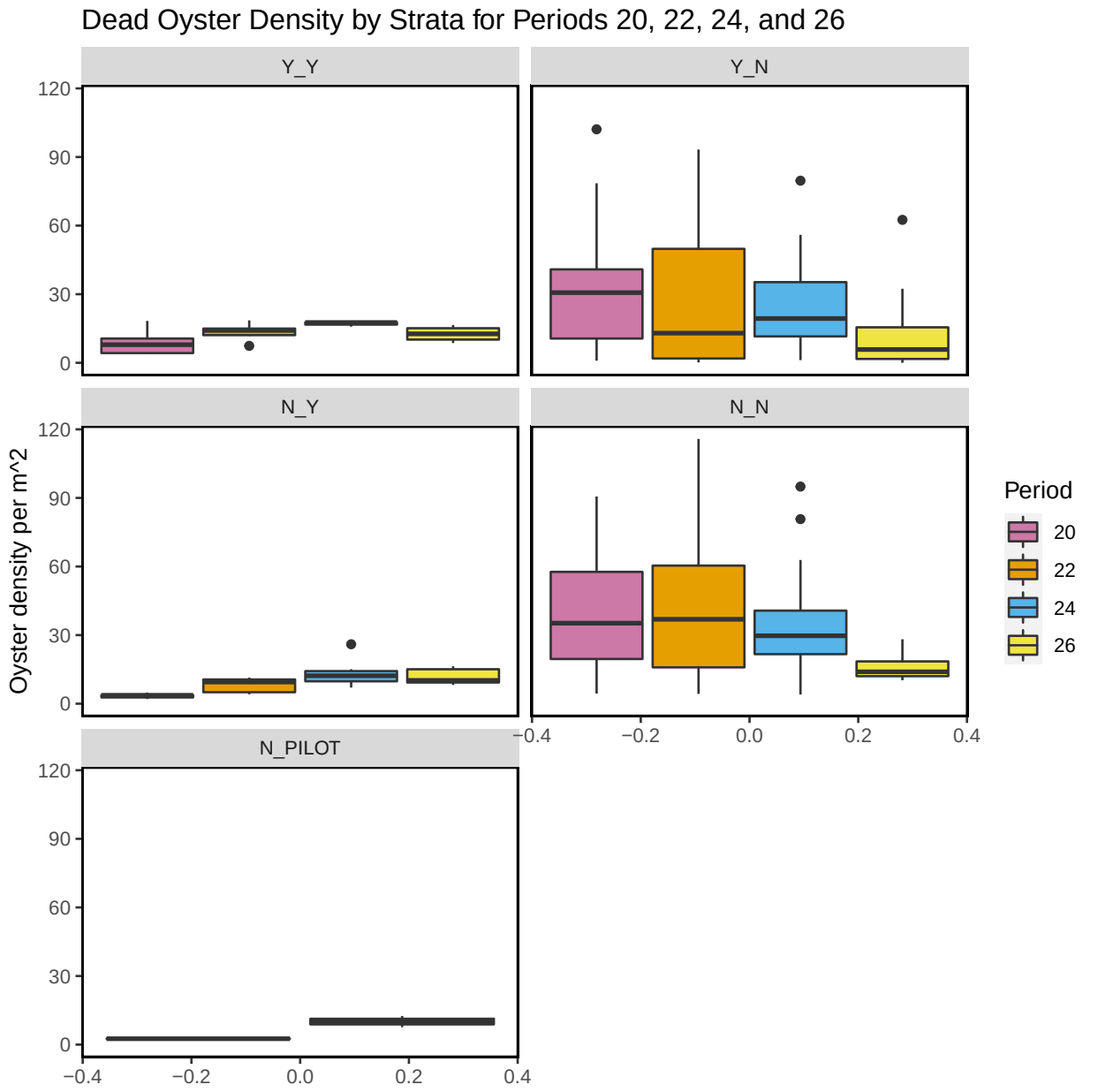


Figure- Calculated dead oyster density by strata for periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) with the last sample date of period 26 as 2023-01-24.

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.

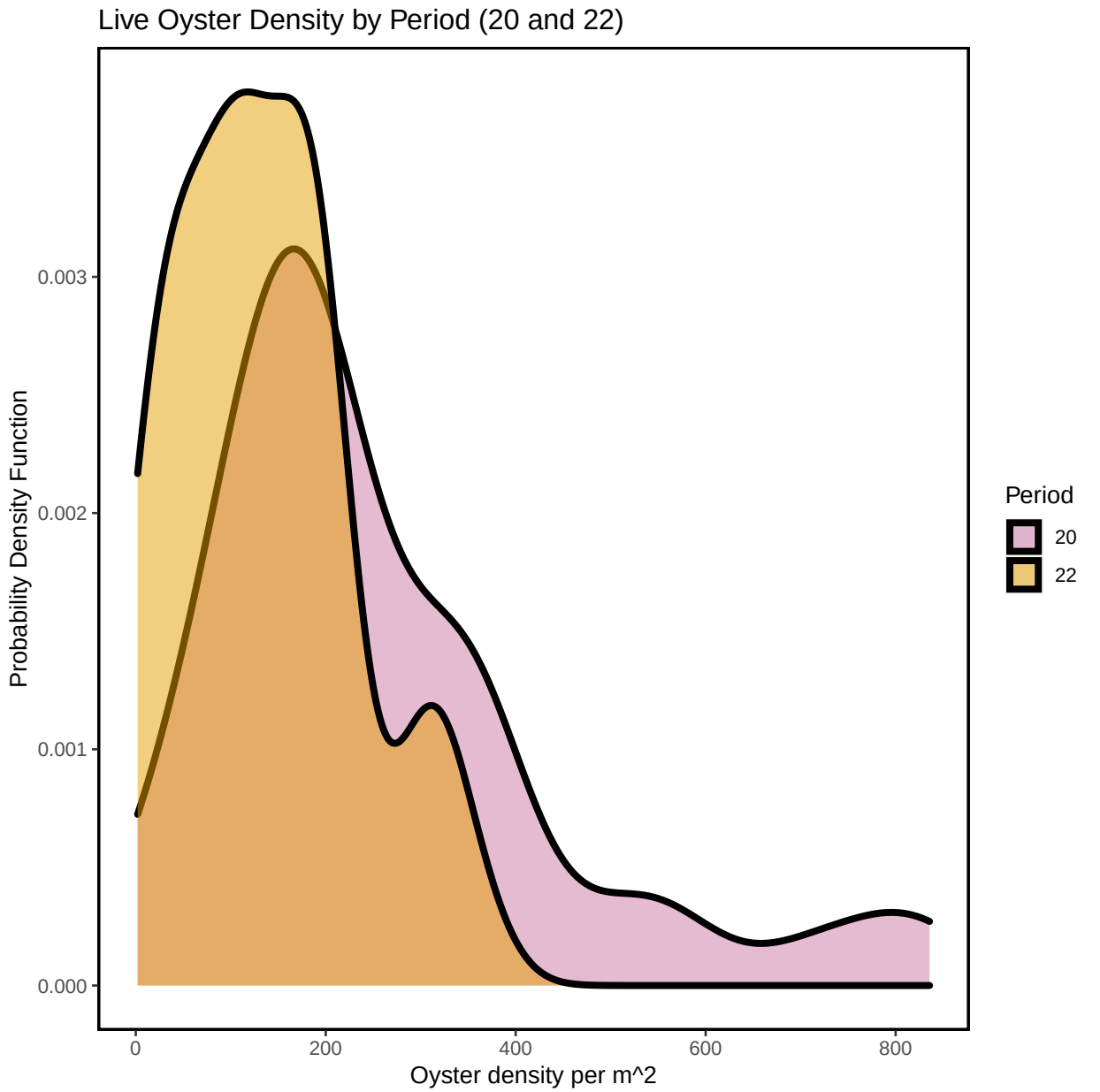


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2023-01-24.

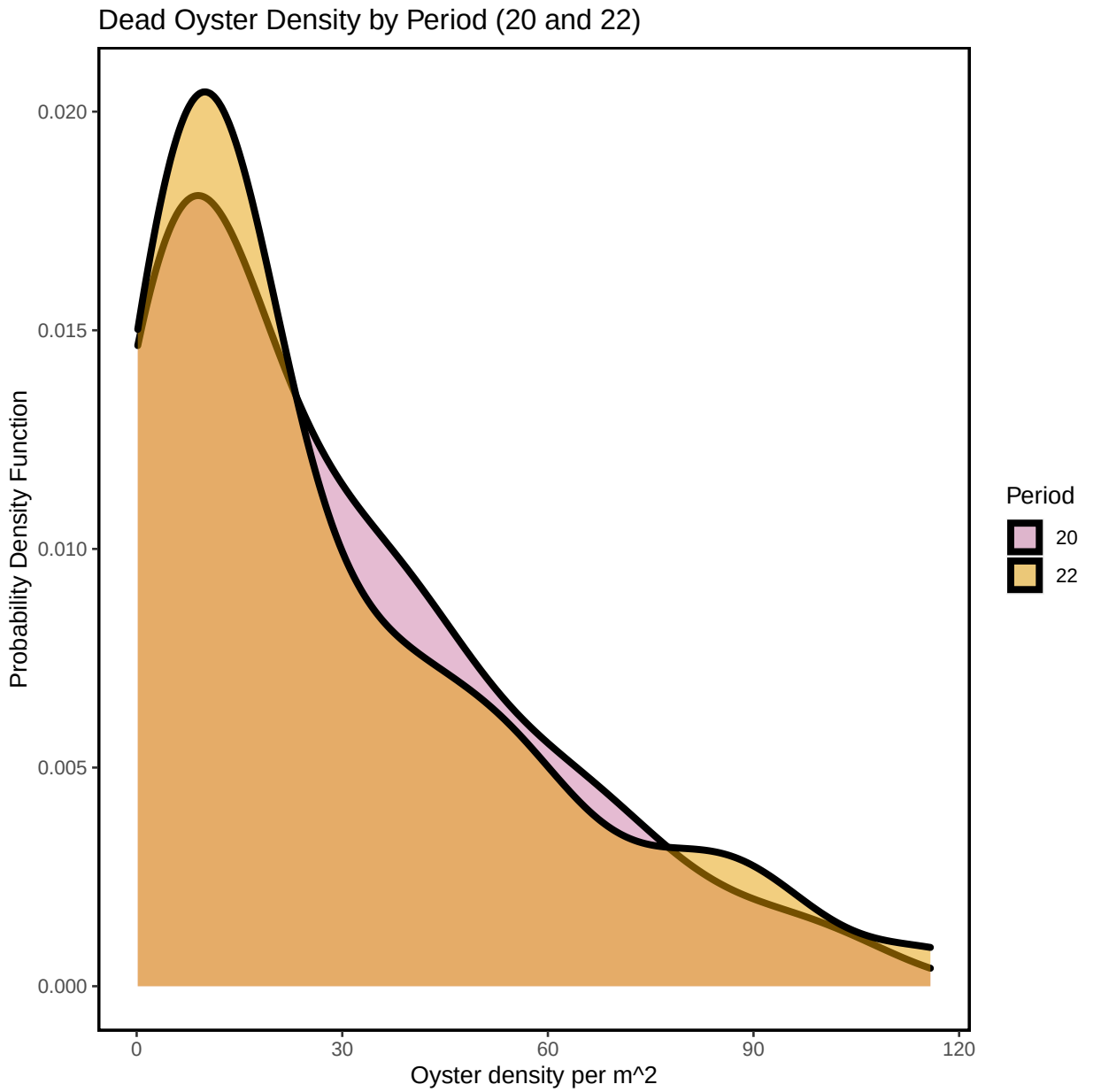


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2023-01-24.

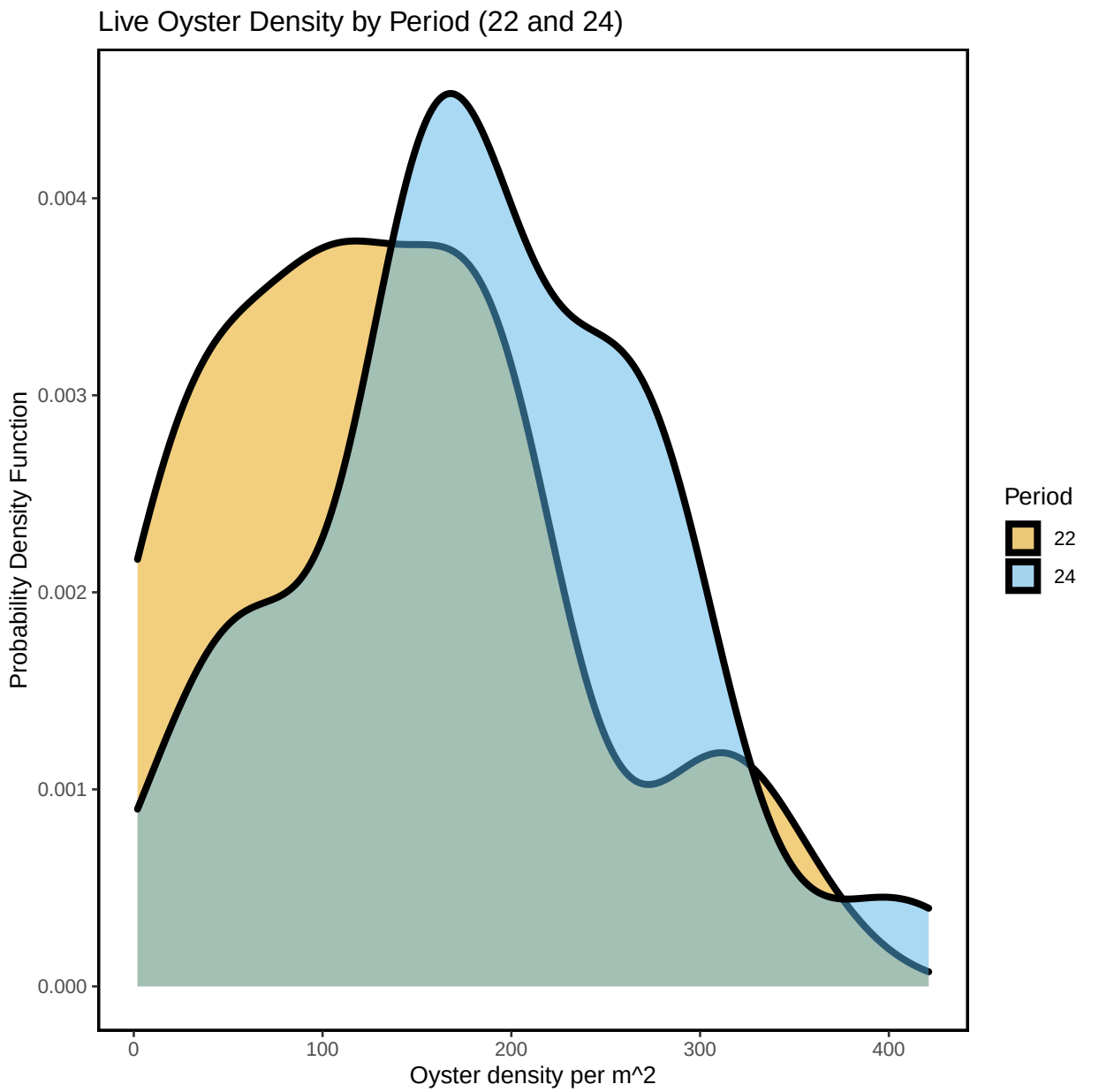


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2023-01-24.

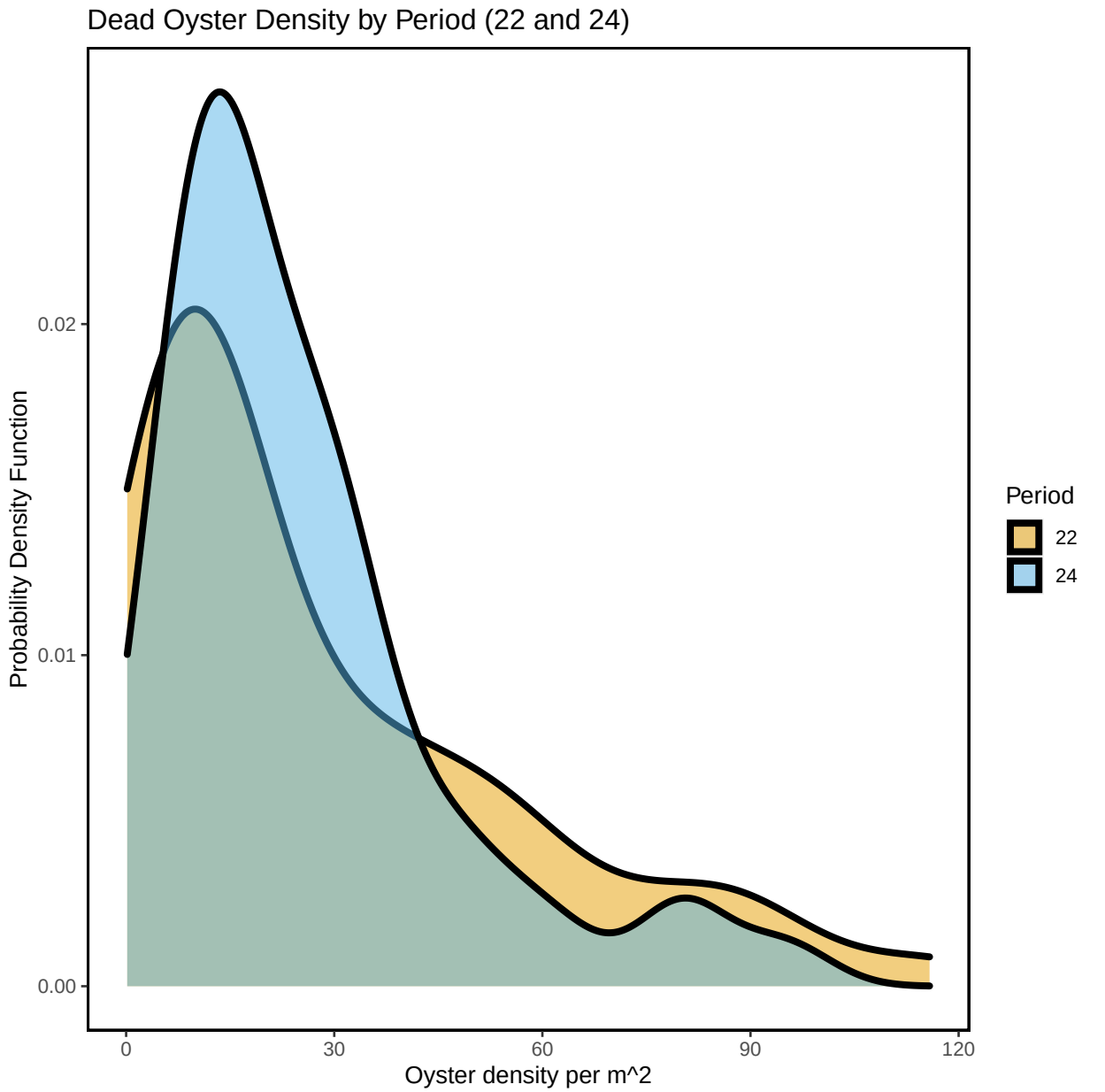


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2023-01-24.

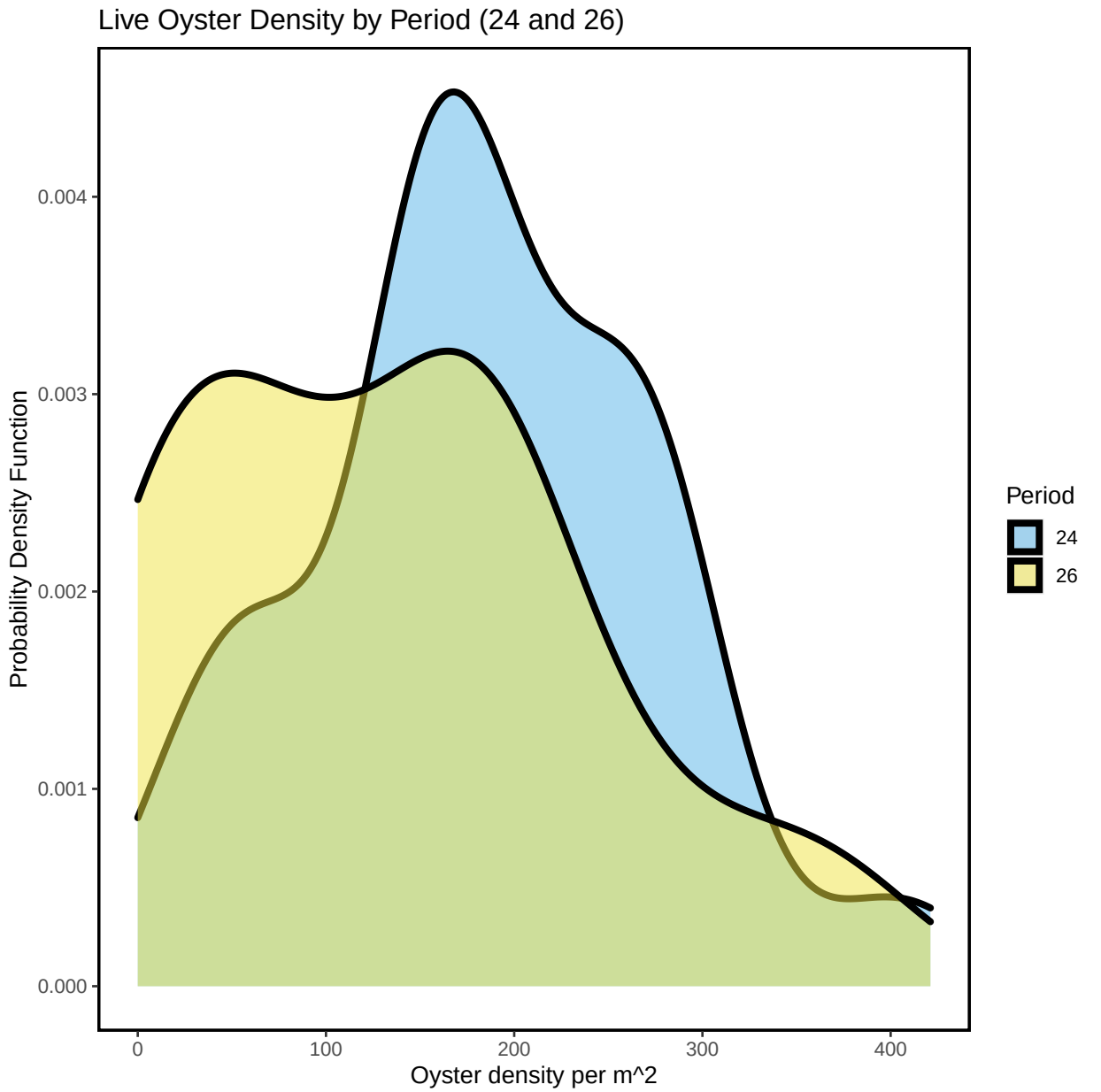


Figure- Calculated live oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2023-01-24.

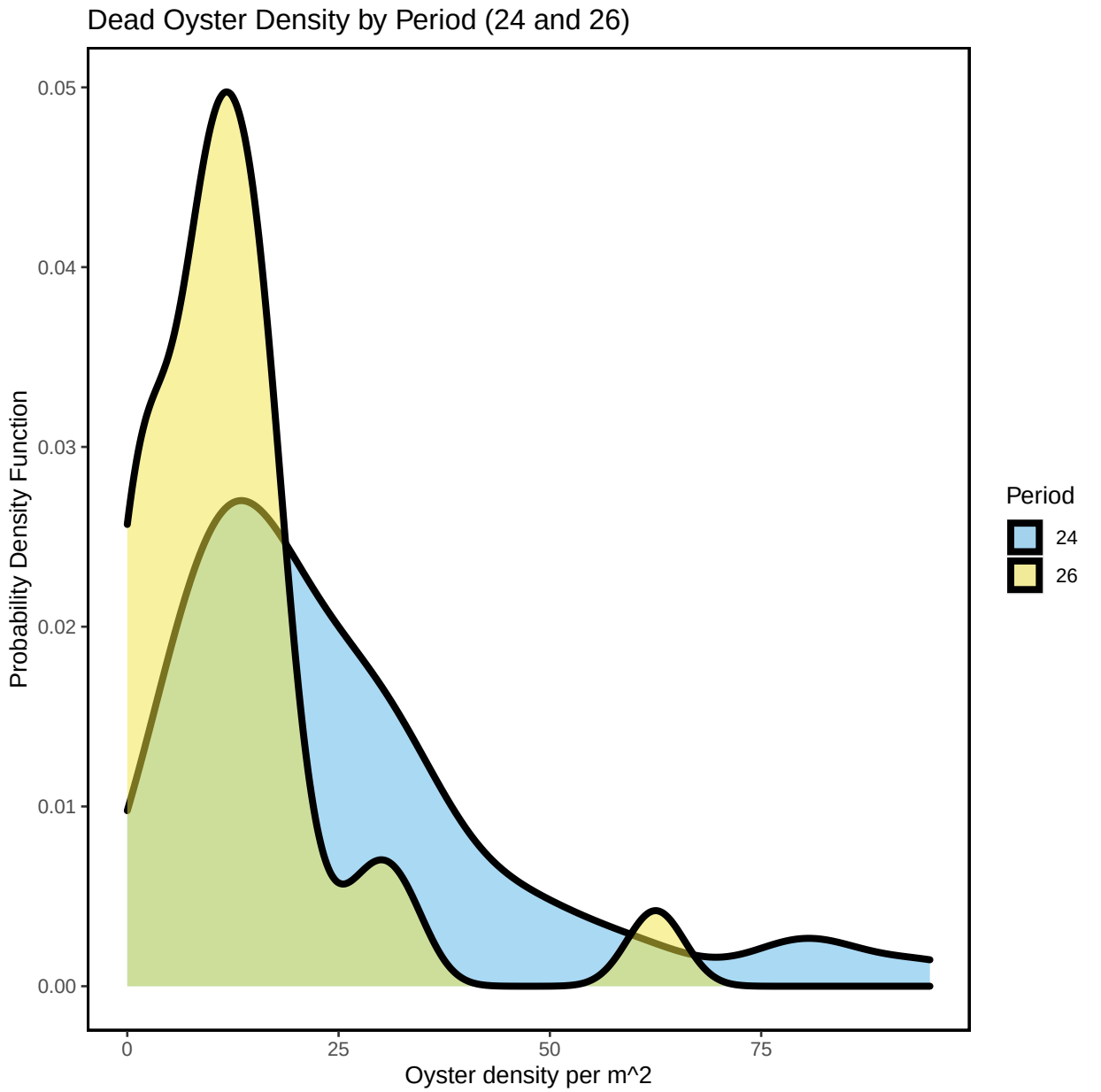


Figure- Calculated dead oyster density by periods 24 (Winter 2021-2022) and 26 (Winter 2022-2023) using a probability density function with the last sample date of period 26 as 2023-01-24.

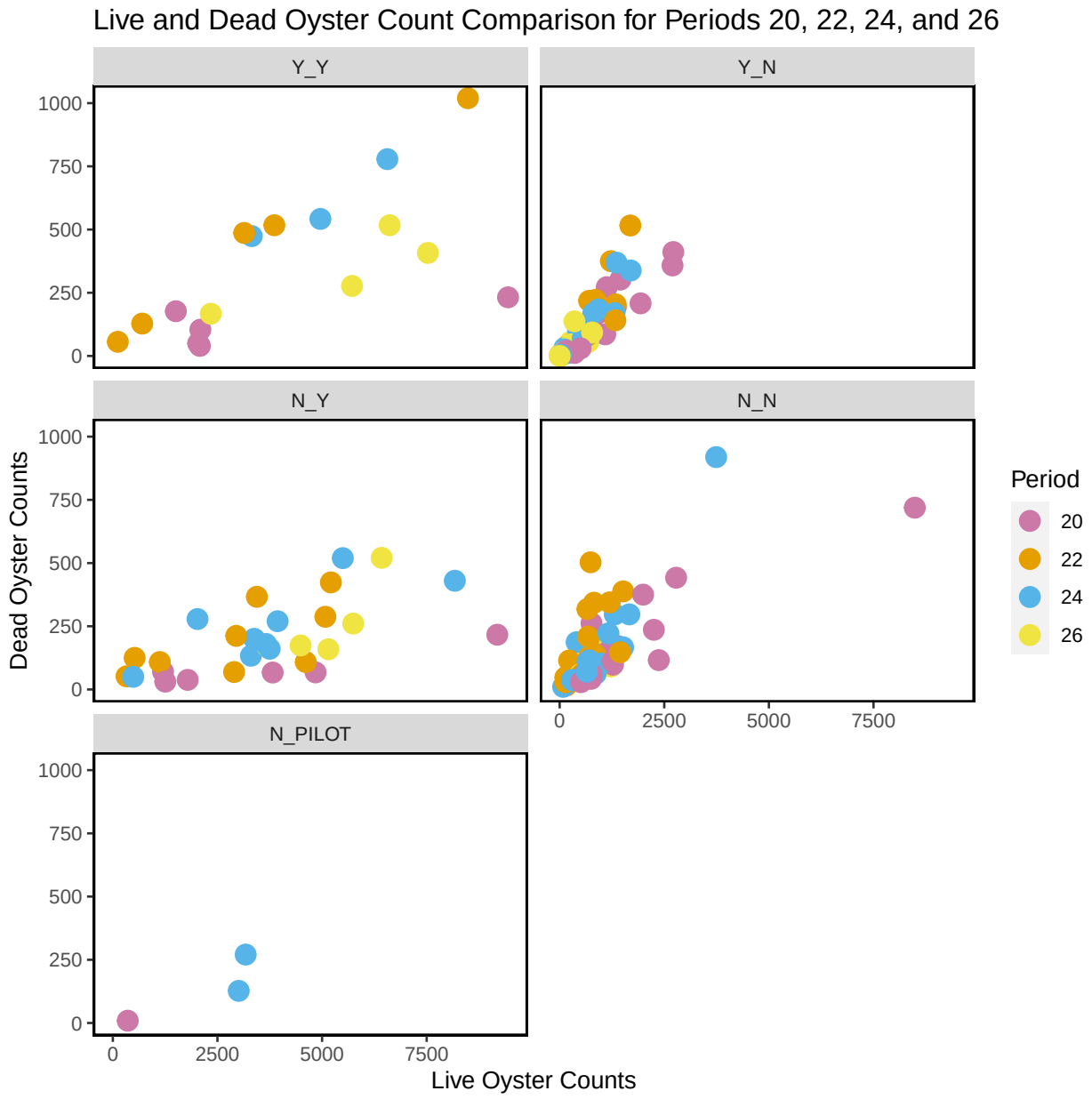


Figure- Live and dead oyster count comparison by periods 20 (Winter 2019-2020), 22 (Winter 2020-2021), 24 (Winter 2021-2022), and 26 (Winter 2022-2023) last sample date of period 26 as 2023-01-24.

Live Counts Double Pass Results

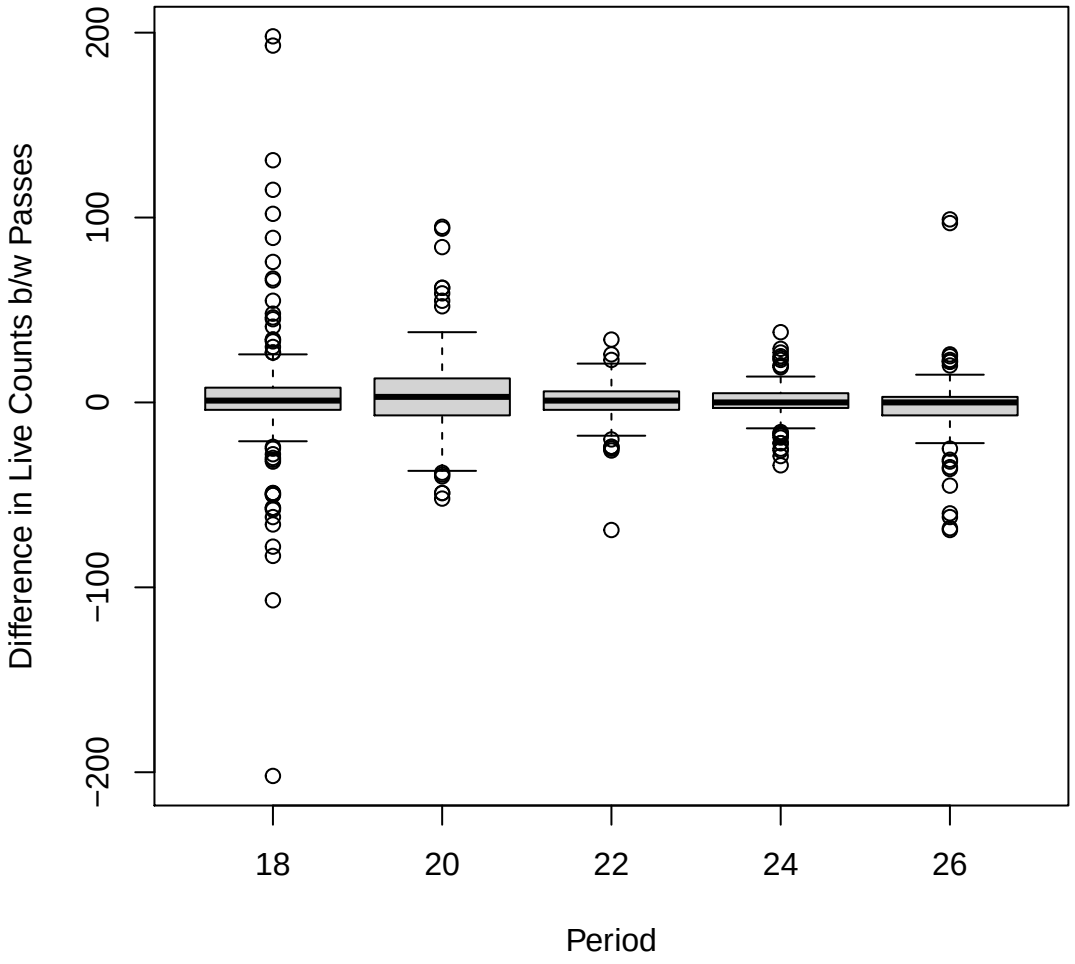


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, 24, and 26

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

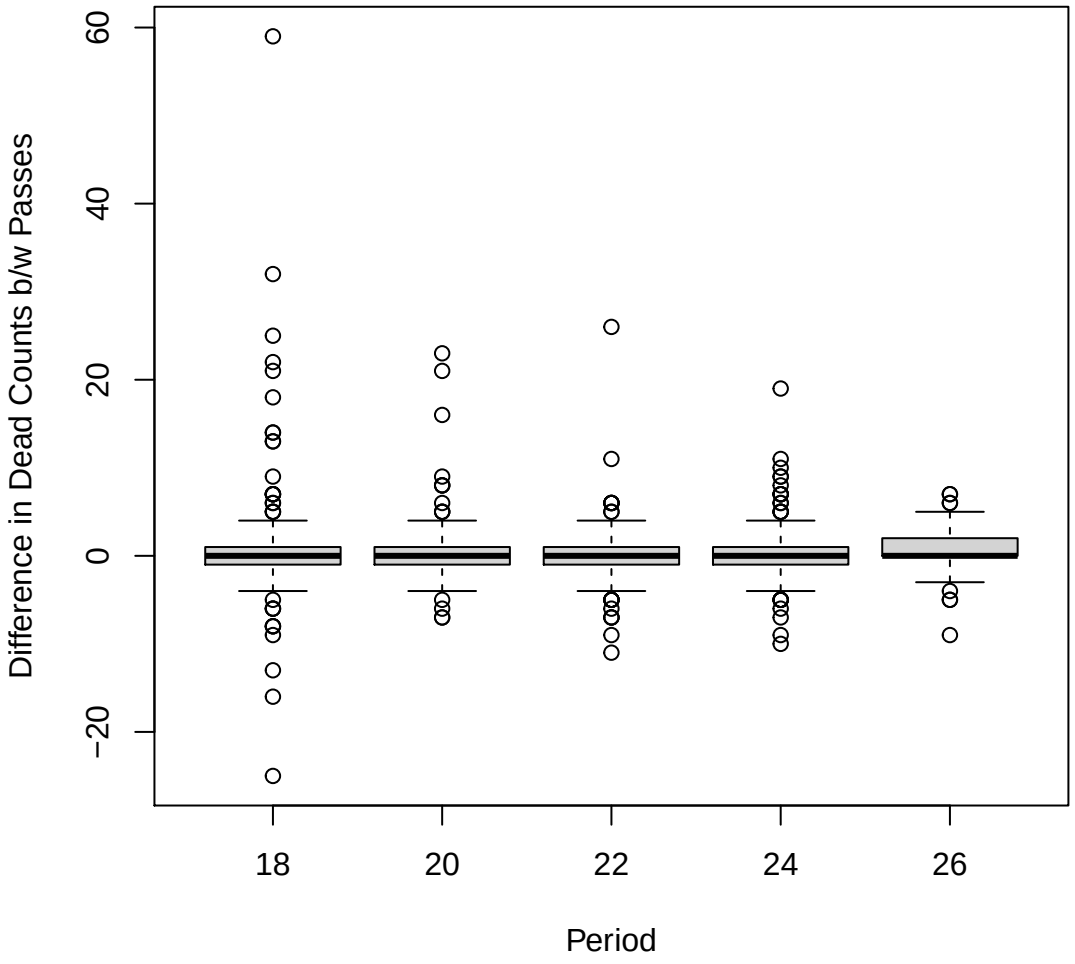


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, 24, and 26

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 2023-01-24. 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	20	661
CK	26	734
CR	46	1375
HB	45	1129
LC	258	15453
LT	21	542
NN	14	357

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	136	4432
N_PILOT	15	1050
N_Y	42	5106
Y_N	216	6216
Y_Y	21	3445

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	28	2011

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	26	1938
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	4	181
26	N_Y	5	729
26	Y_N	15	342
26	Y_Y	4	759
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

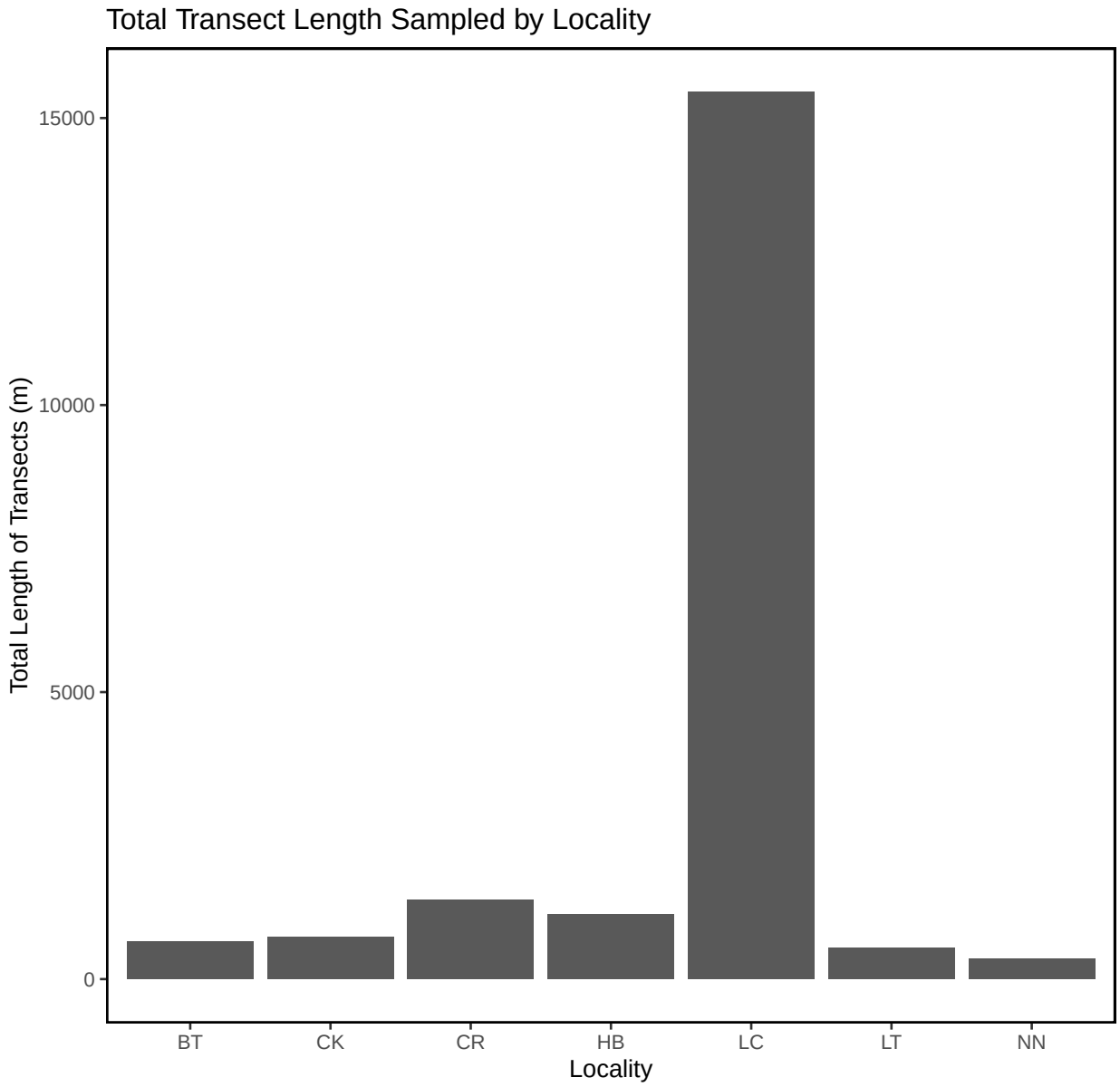


Figure − Bar plot of total transect length in meters sampled by locality for all periods.

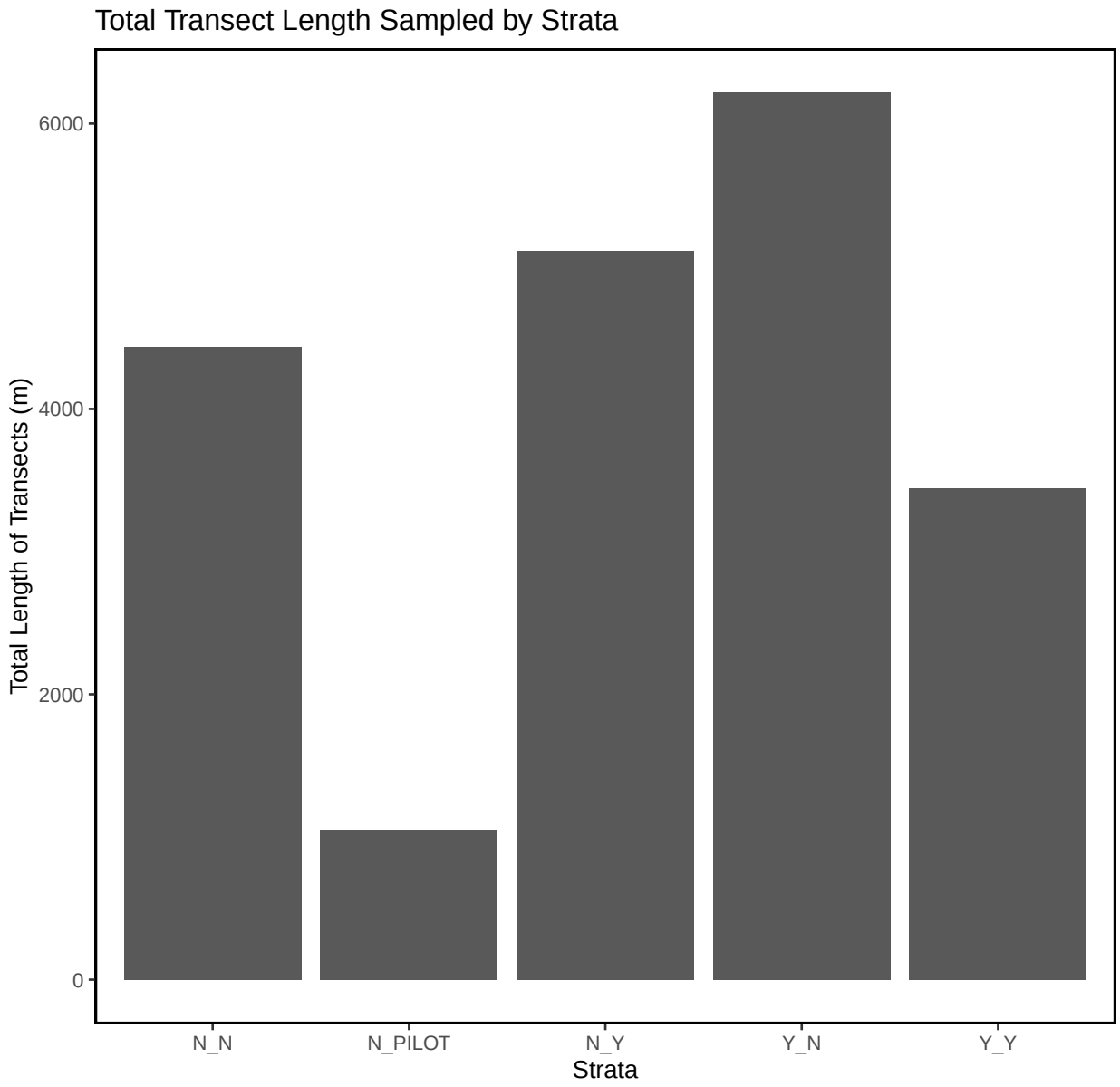
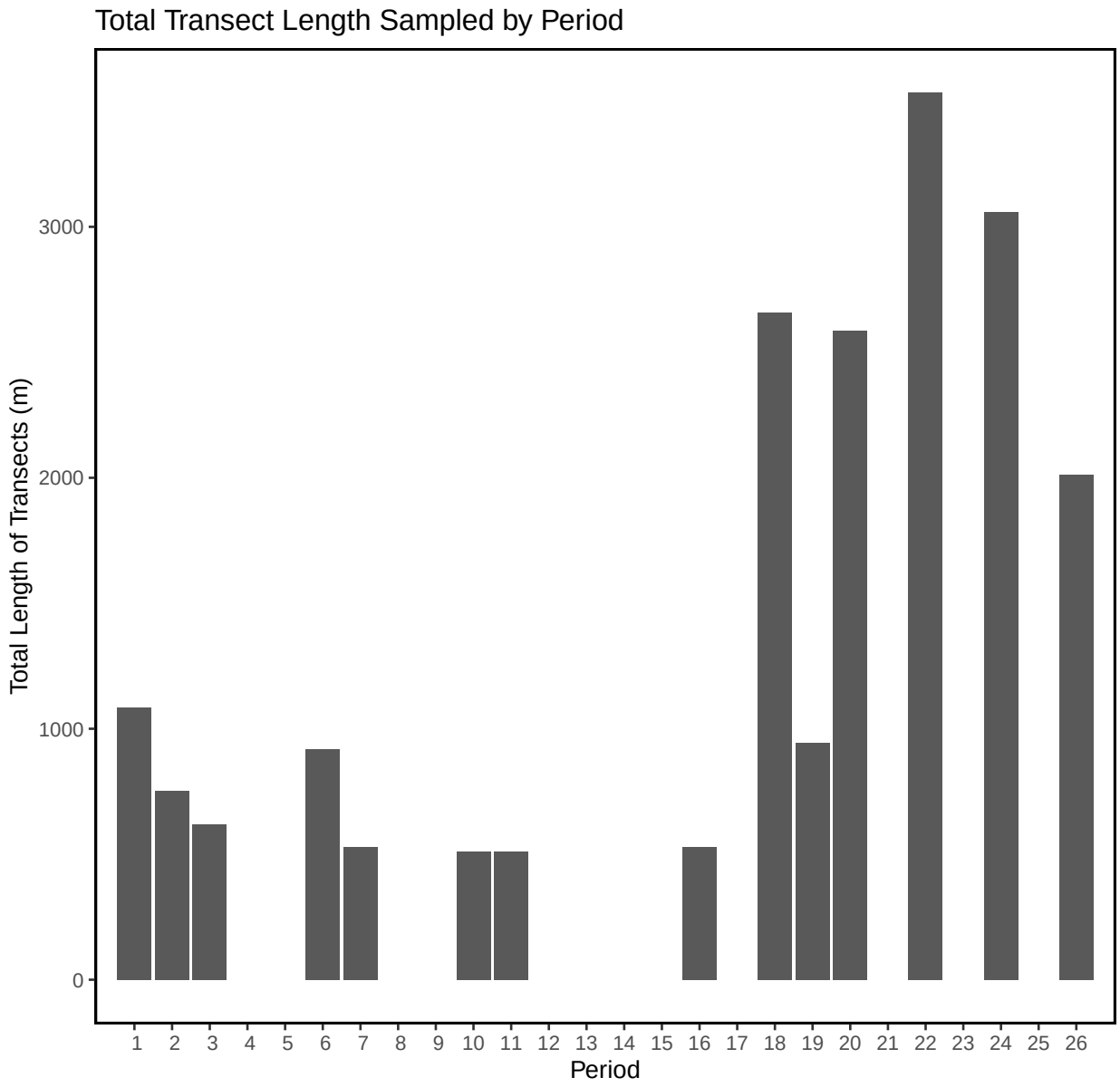


Figure − Bar plot of total transect length in meters sampled by strata for all periods.



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	1370	747	2362
CK	857	444	1091	1190933	1.27	214	438	1277	849	494	1257
CR	1026	716	1035	1072162	1.01	153	727	1325	1026	749	1350
HB	902	364	1047	1095622	1.16	158	592	1211	901	601	1212
LC	1335	700	1730	2994531	1.30	109	1122	1548	1336	1119	1566
LT	1026	877	551	303721	0.54	120	790	1262	1028	826	1293
NN	735	674	584	341295	0.79	156	429	1041	737	481	1057

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	987	766	1006	1011956	1.02	87	817	1157	984	840	1164
N_PILOT	1318	1136	925	856059	0.70	239	850	1787	1317	917	1820
N_Y	2979	3180	2228	4964363	0.75	344	2305	3653	2976	2360	3621
Y_N	737	408	875	766122	1.19	60	619	855	735	621	847
Y_Y	3446	2341	2919	8522510	0.85	637	2198	4695	3424	2250	4685

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	1403	1029	1813
2	890	476	945	893727	1.06	176	546	1234	891	569	1232
3	738	296	817	668064	1.11	167	411	1065	738	428	1067
6	433	176	534	284791	1.23	96	245	621	434	259	620
7	50	29	56	3186	1.12	20	11	90	50	18	93
10	1207	1074	671	449607	0.56	237	743	1672	1205	813	1630
11	886	776	678	459708	0.77	240	416	1356	891	485	1361
16	494	366	467	217855	0.95	165	170	817	487	213	794
18	982	695	935	874733	0.95	120	748	1217	986	765	1223
19	555	329	573	328431	1.03	97	365	745	553	382	739
20	1844	1253	2125	4517189	1.15	310	1236	2451	1851	1315	2505
22	1334	702	1693	2867783	1.27	242	860	1808	1333	900	1870
24	1729	942	1845	3403035	1.07	266	1207	2251	1736	1233	2273
26	2103	654	2556	6535513	1.22	501	1120	3086	2119	1246	3111

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	245	183	326
CK	241	112	321	102927	1.33	62.9	118	364	240	130	376
CR	283	178	294	86605	1.04	43.4	198	368	282	202	369
HB	257	101	303	92052	1.18	45.7	168	347	261	172	353
LC	153	130	137	18769	0.90	8.6	136	170	153	137	169
LT	279	261	132	17460	0.47	28.8	222	335	280	225	337
NN	215	174	202	40919	0.94	54.1	109	321	214	130	332

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	253	190	237	56397	0.94	20	213	293	253	213	294
N_PILOT	118	121	59	3467	0.50	15	88	148	118	91	147
N_Y	165	166	90	8154	0.55	14	137	192	165	138	191
Y_N	177	111	207	42879	1.17	14	149	205	177	150	208
Y_Y	133	133	82	6653	0.61	18	98	168	134	101	169

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
1	393	300.8	362.6	131444	0.92	56	283.8	503.1	393	289.5	503.1
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	258	161.1	370.6
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	233	136.5	343.5
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	121	71.0	178.5
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.7	9.1
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	124	85.7	170.5
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	90	51.6	136.5
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49	20.3	80.4
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	176	146.1	208.9
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	155	100.6	211.0
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	256	208.6	309.8
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	137	111.9	164.8
24	185	180.6	91.6	8385	0.49	13	159.3	211.1	186	158.6	211.9
26	147	155.4	102.9	10594	0.70	20	107.6	186.7	147	108.0	183.6

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	242	144	368
CK	78	32	106	11170	1.36	37	4.3	151	79	17	159
CR	60	47	38	1444	0.63	13	35.2	85	60	40	87
HB	44	21	45	2000	1.02	15	14.8	73	44	18	75
LC	132	71	158	24984	1.19	11	111.2	153	133	113	154
LT	218	141	180	32543	0.83	39	140.5	295	220	154	305
NN	98	72	87	7493	0.88	23	52.5	143	97	59	144

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	155	92	188	35299	1.21	18	119	191	156	122	191
N_PILOT	98	89	65	4243	0.67	17	65	131	98	68	129
N_Y	148	89	140	19622	0.95	22	105	190	147	108	190
Y_N	96	50	110	12013	1.14	10	76	116	97	77	116
Y_Y	287	177	282	79674	0.98	62	167	408	285	171	401

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	79	39	124
11	50	40	25	620	0.49	8.8	33.2	68	51	36	67
16	44	28	41	1708	0.93	14.6	15.6	73	44	19	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	63	42	86
20	148	107	140	19727	0.95	20.5	107.6	188	147	111	189
22	191	128	193	37399	1.01	27.6	137.2	245	191	141	253
24	192	130	194	37816	1.01	28.1	136.8	247	189	143	247
26	133	81	148	22050	1.12	28.6	77.2	189	135	84	196

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	32.4	59
CK	21	11	28	757	1.29	9.7	2.3	40	21	5.5	41
CR	18	11	16	247	0.87	5.2	7.8	28	18	9.9	29
HB	13	8	14	201	1.12	4.7	3.4	22	13	5.2	22
LC	17	11	20	398	1.14	1.4	14.8	20	17	14.9	20
LT	54	47	35	1232	0.64	7.7	39.5	70	54	39.9	69
NN	28	21	22	463	0.78	5.7	16.4	39	28	16.6	40

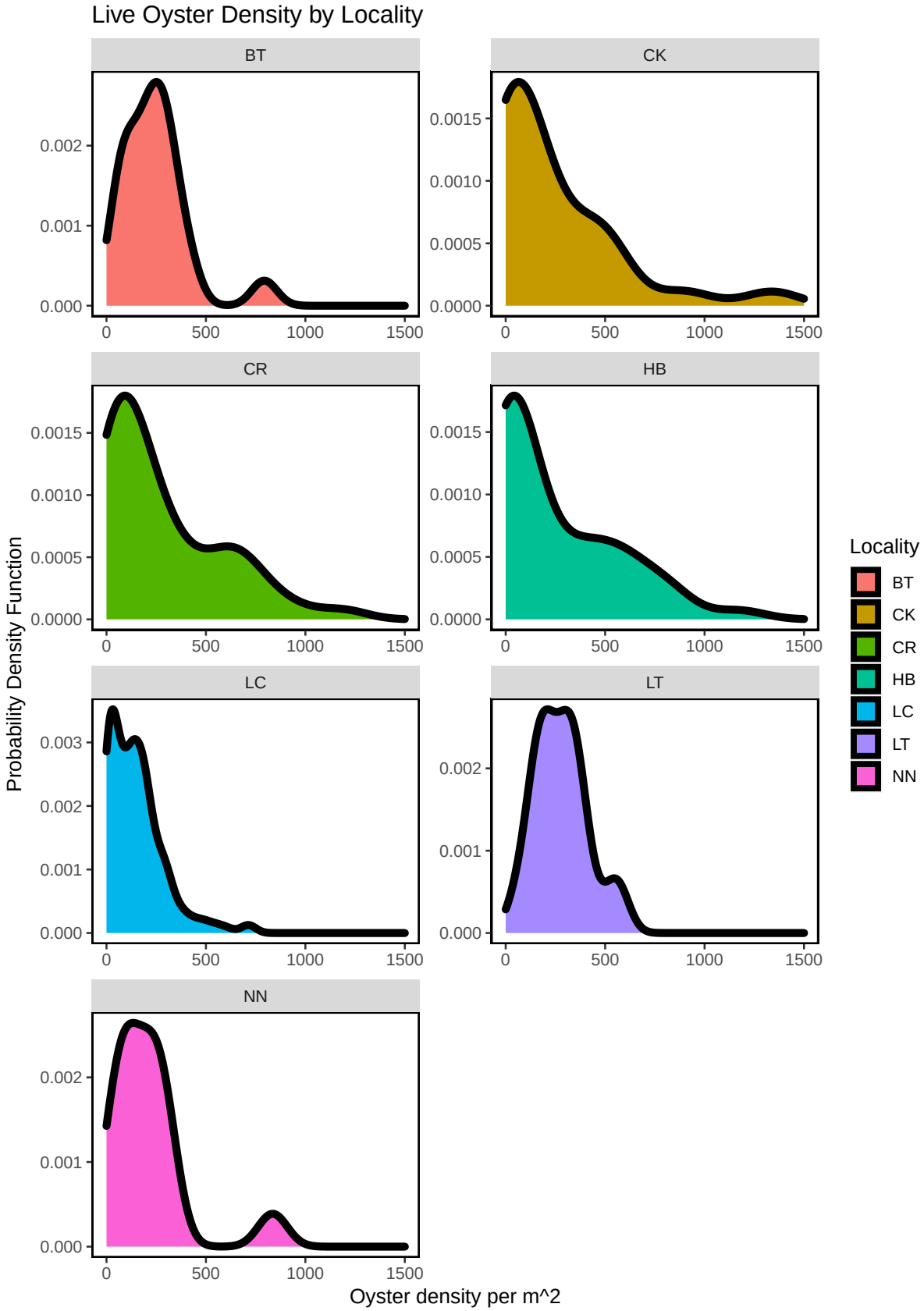
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	32.9	27.5	30.2	914	0.92	2.96	27.1	38.7	32.7	27.5	38.9
N_PILOT	8.7	8.7	4.3	18	0.49	1.11	6.5	10.9	8.7	6.8	10.9
N_Y	8.0	8.1	5.7	32	0.70	0.87	6.3	9.7	8.0	6.4	9.7
Y_N	22.1	13.5	23.1	531	1.04	2.14	17.9	26.3	22.1	18.1	26.4
Y_Y	10.4	10.7	6.3	40	0.61	1.38	7.7	13.1	10.4	7.6	13.1

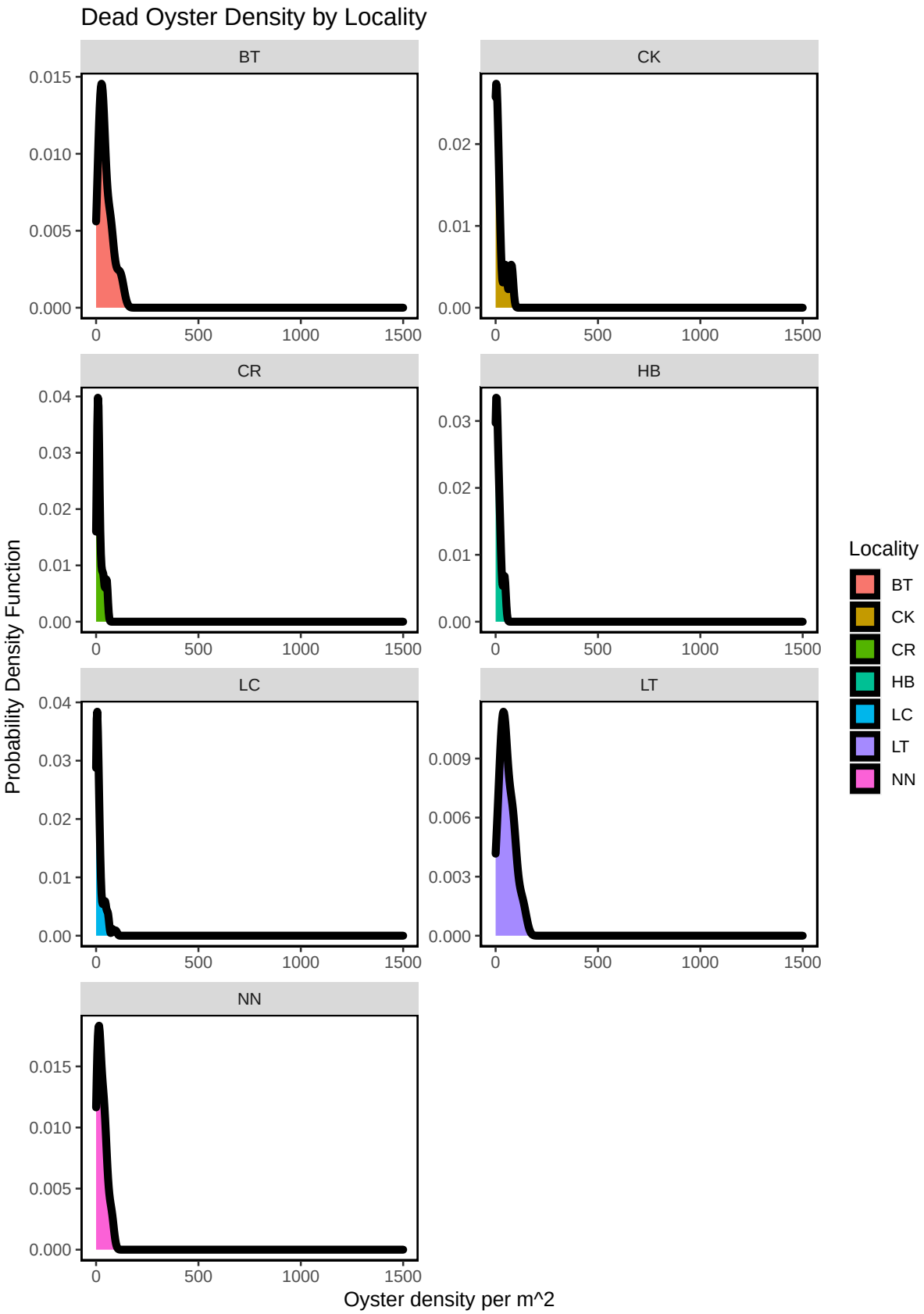
Dead Oyster Density by Period

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	1.1	5.0
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.1	4.2	12.3
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.5	6.9
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.4	1.8	7.2
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.3	19.3	34.4
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.6	11.3	24.2
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.6	20.1	35.1
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.4	21.0	36.3
24	25.7	19.1	20.9	438.3	0.81	3.02	19.83	31.7	25.8	20.0	32.1
26	13.4	10.7	12.5	155.2	0.93	2.40	8.72	18.1	13.4	9.5	18.4

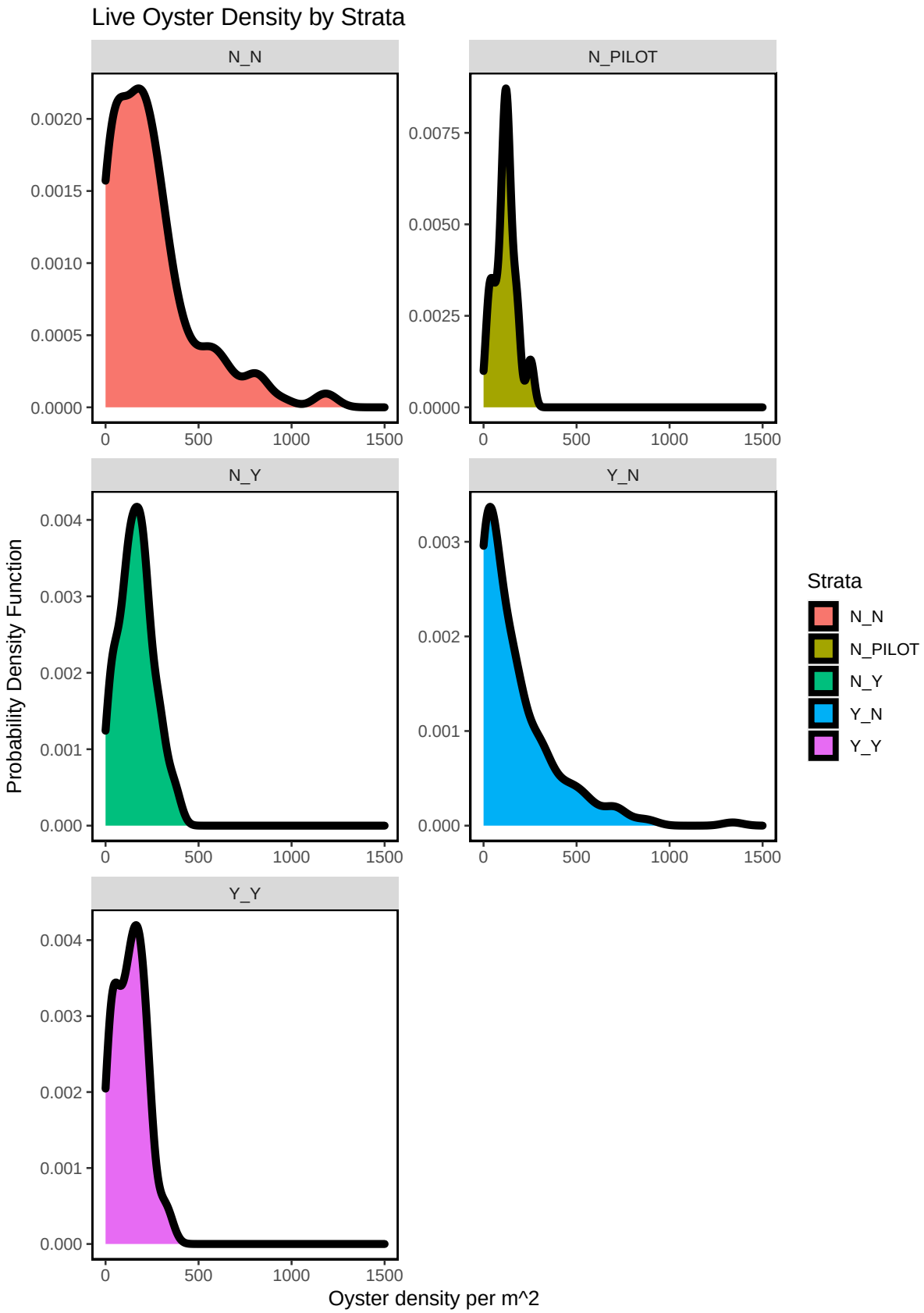
Summary Density Plots for all Periods



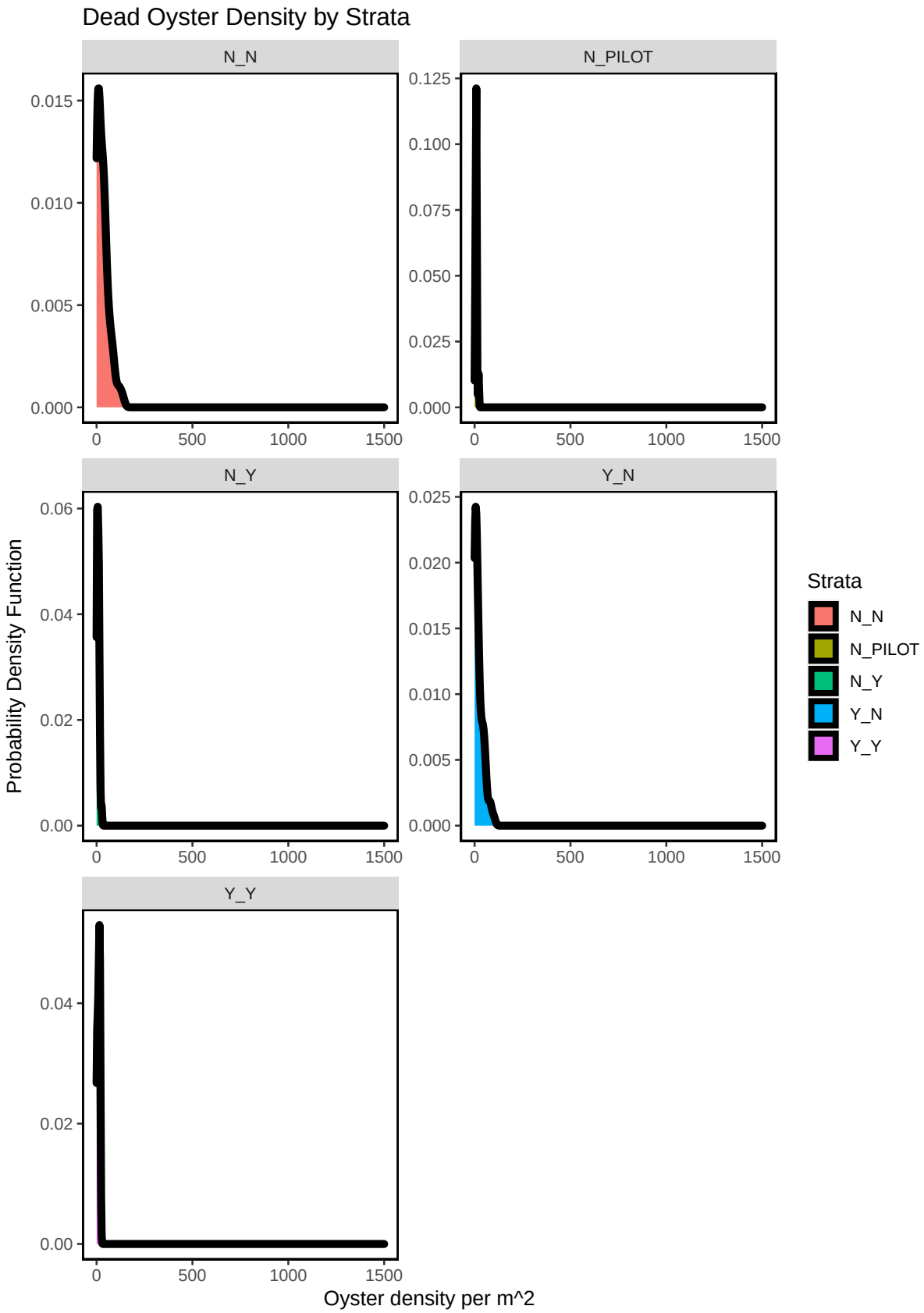
Figure− Calculated live oyster density by locality for all periods including period 22 (current period).



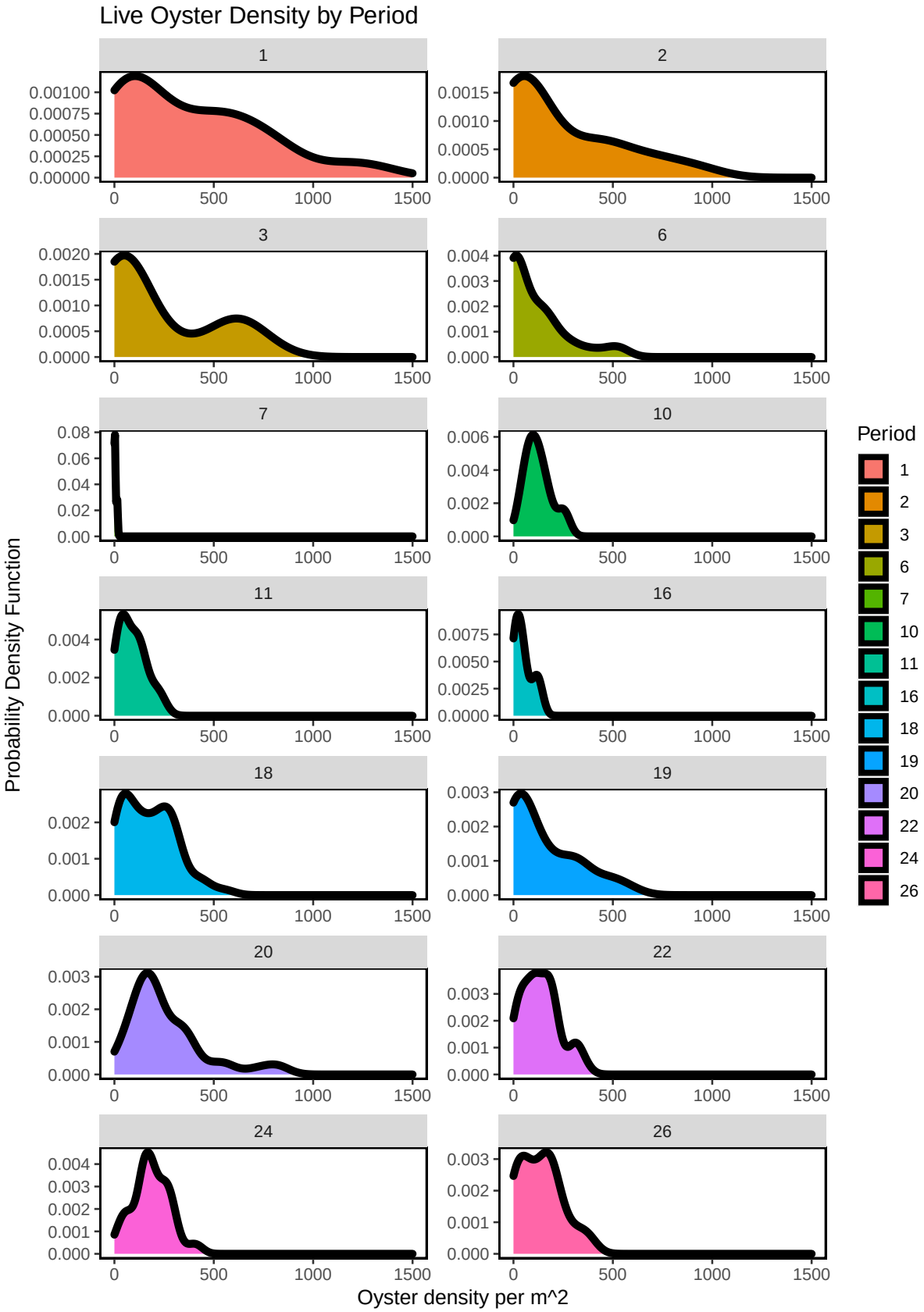
Figure− Calculated dead oyster density by locality for all periods including period 22 (current period).



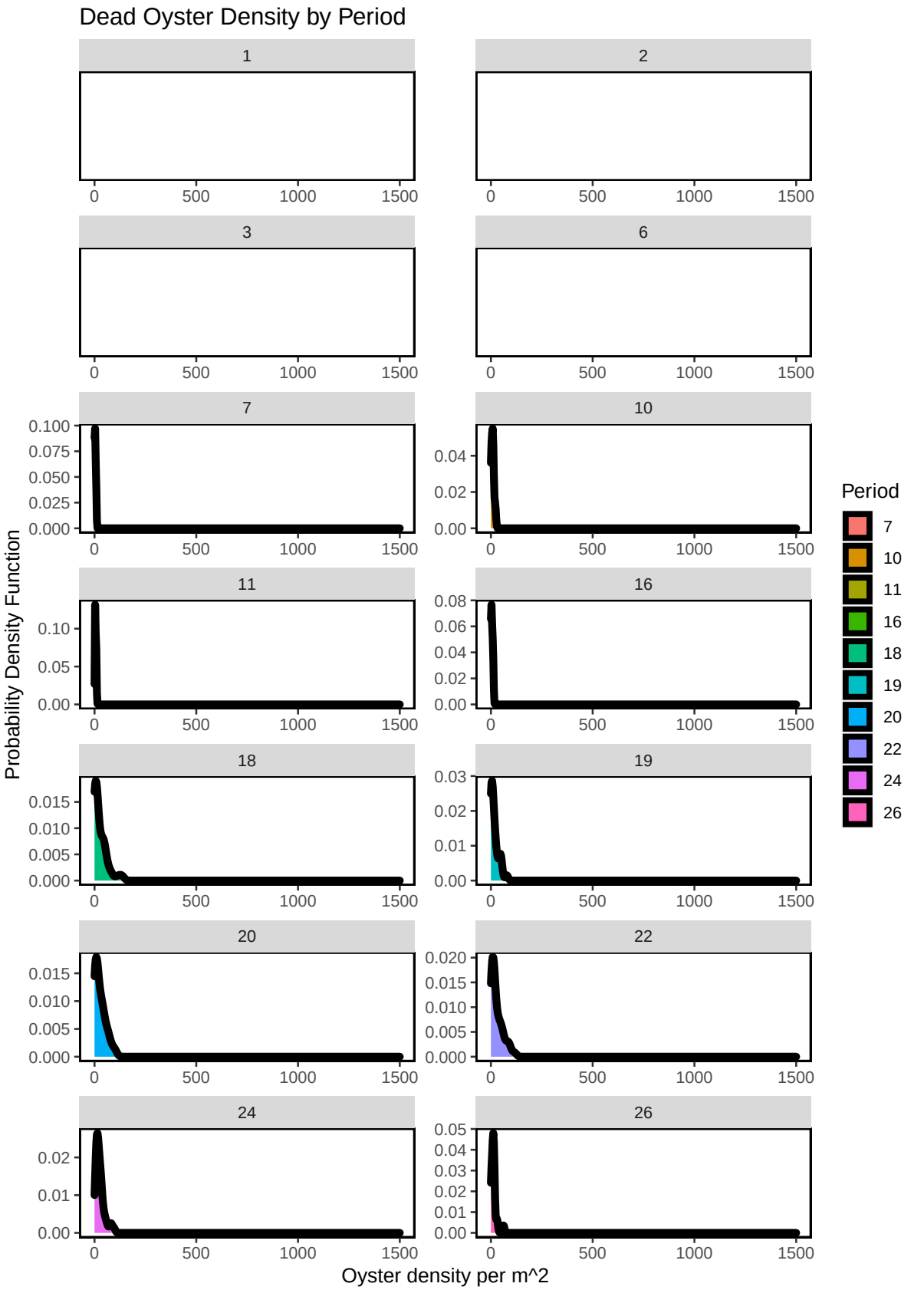
Figure− Calculated live oyster density by strata for all periods including period 22 (current period).



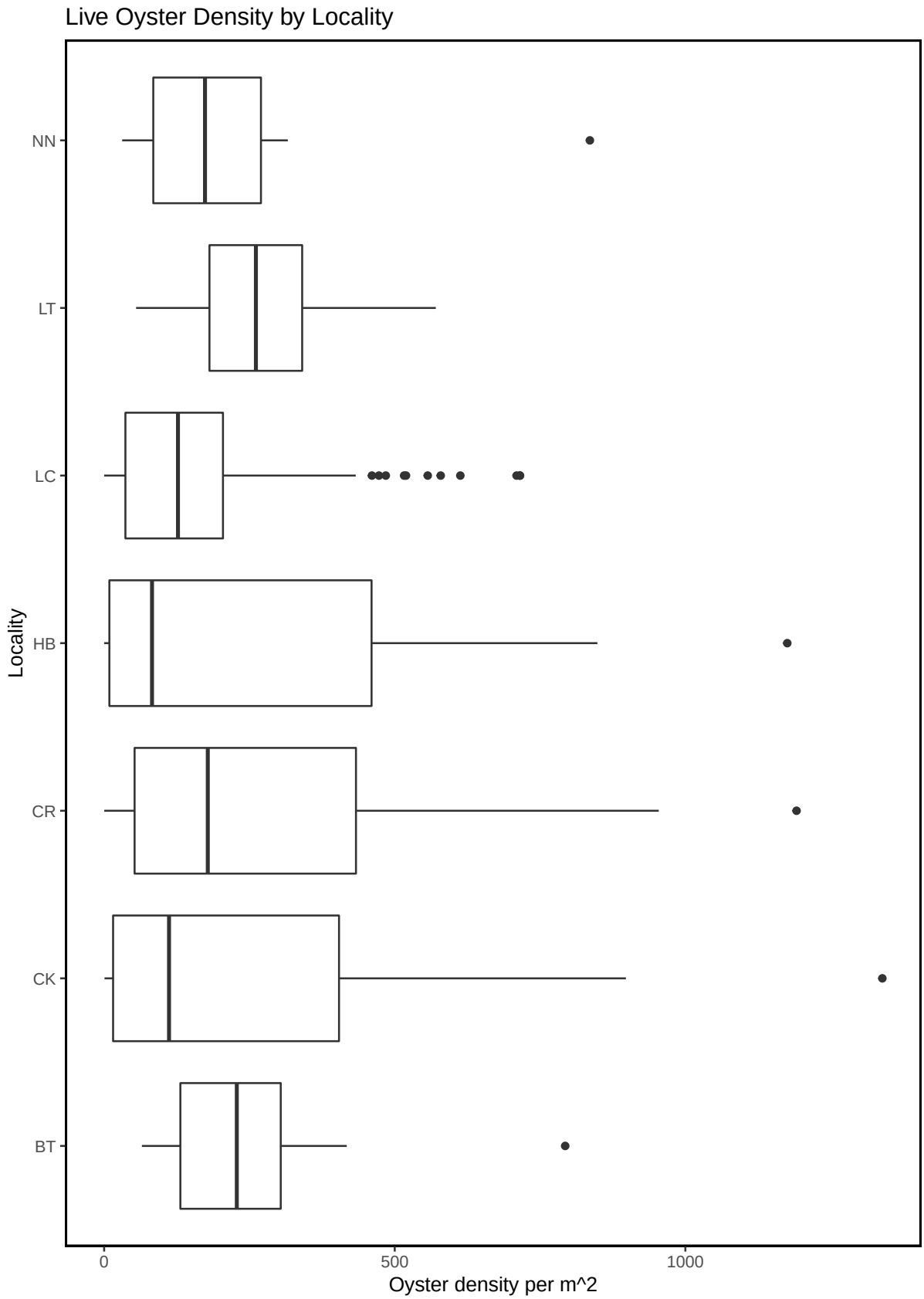
Figure− Calculated dead oyster density by strata for all periods including period 22 (current period).



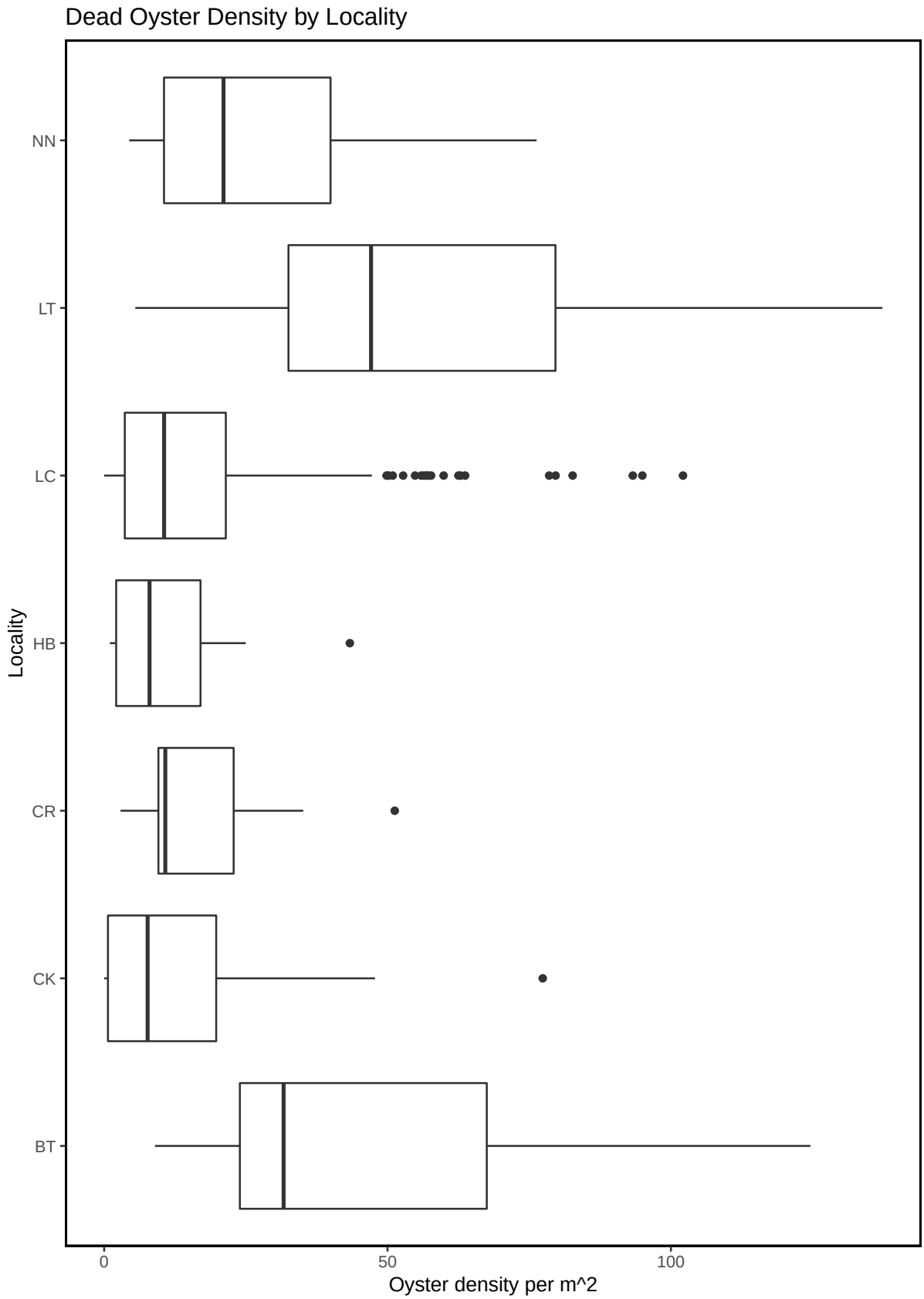
Figure− Calculated live oyster density for all periods including period 24 (current period) using a probability densit



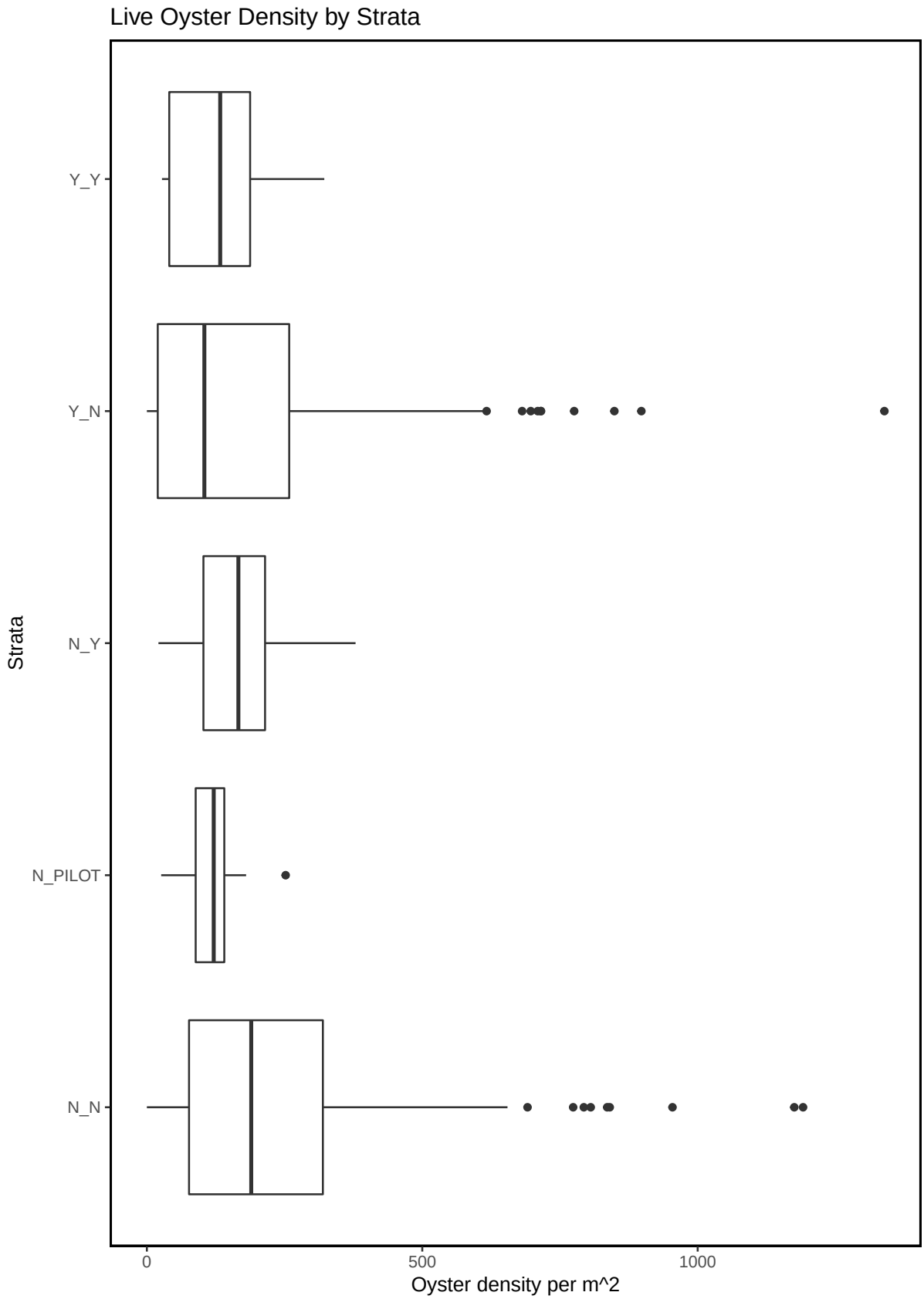
Figure− Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit



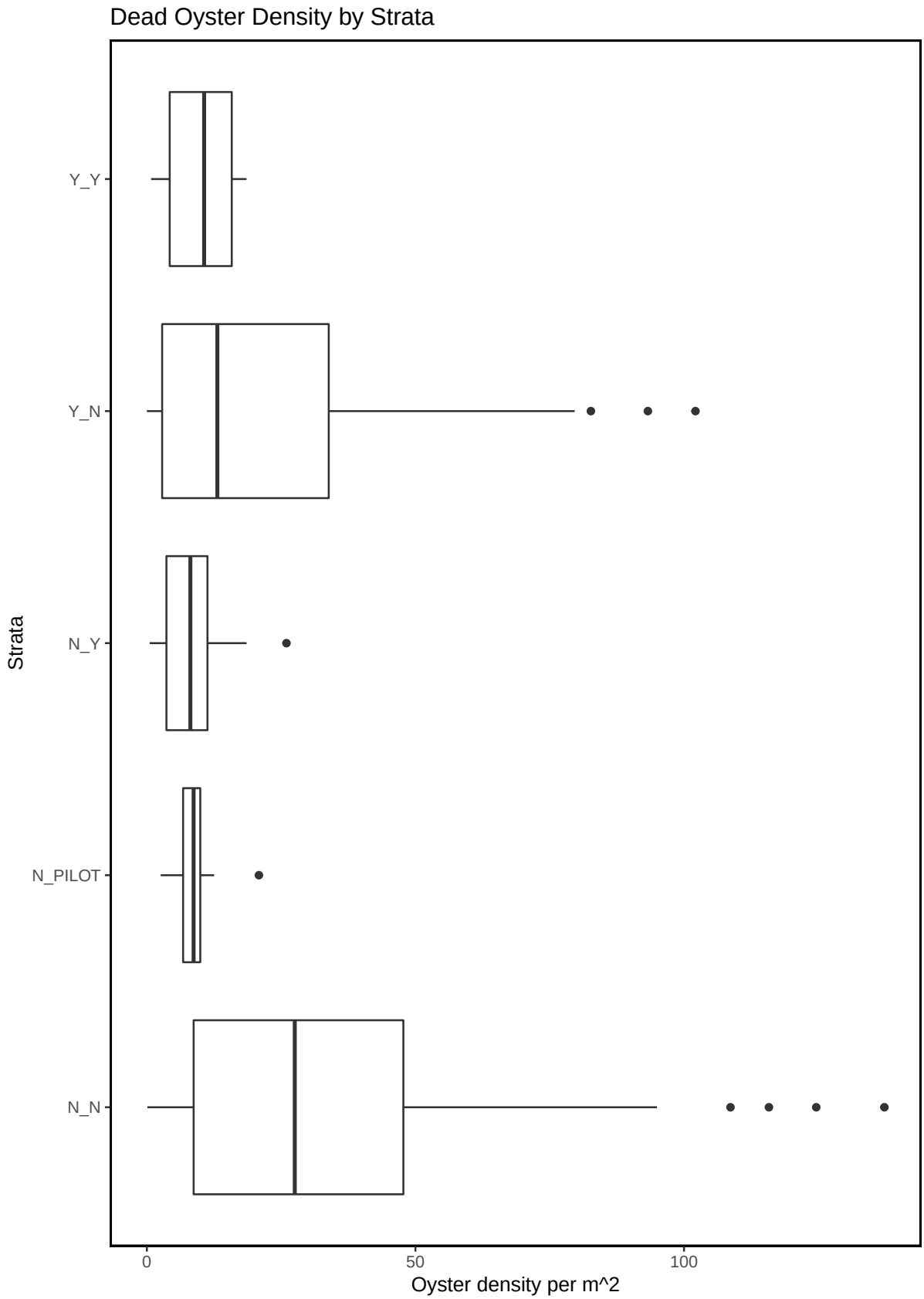
Figure− Box plot depicting live oyster density by locality for all periods including period 22 (current period).



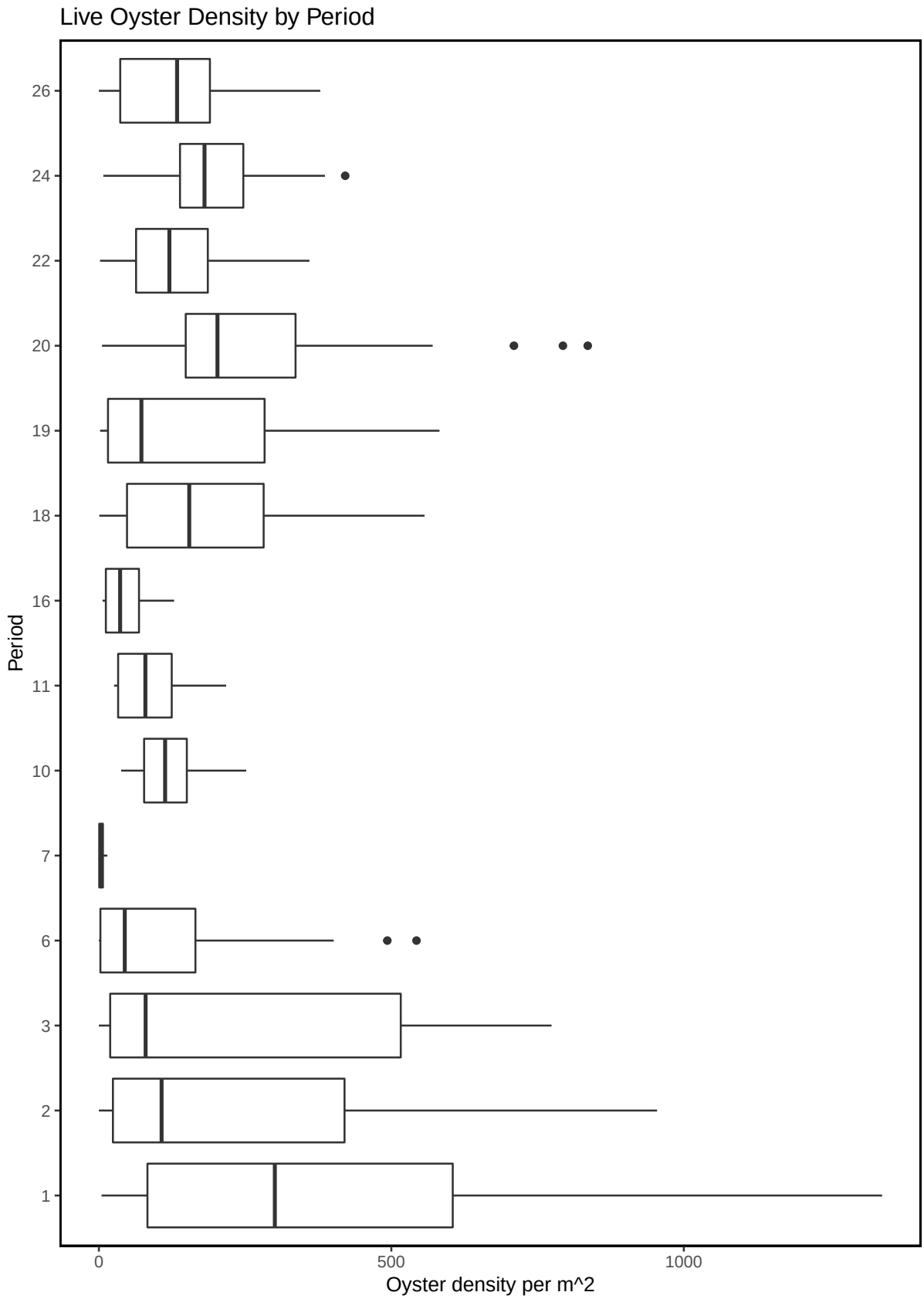
Figure− Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



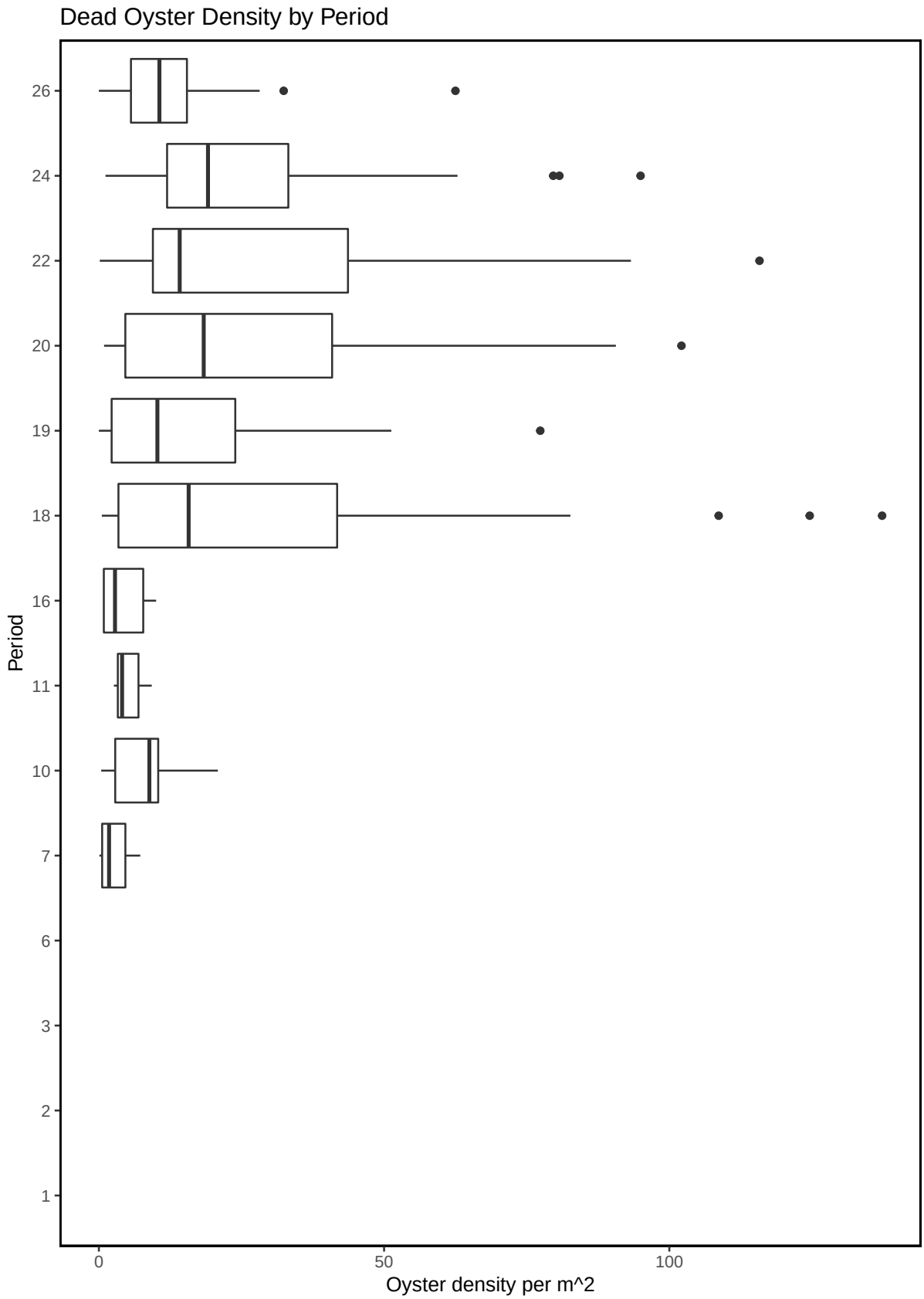
Figure− Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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).

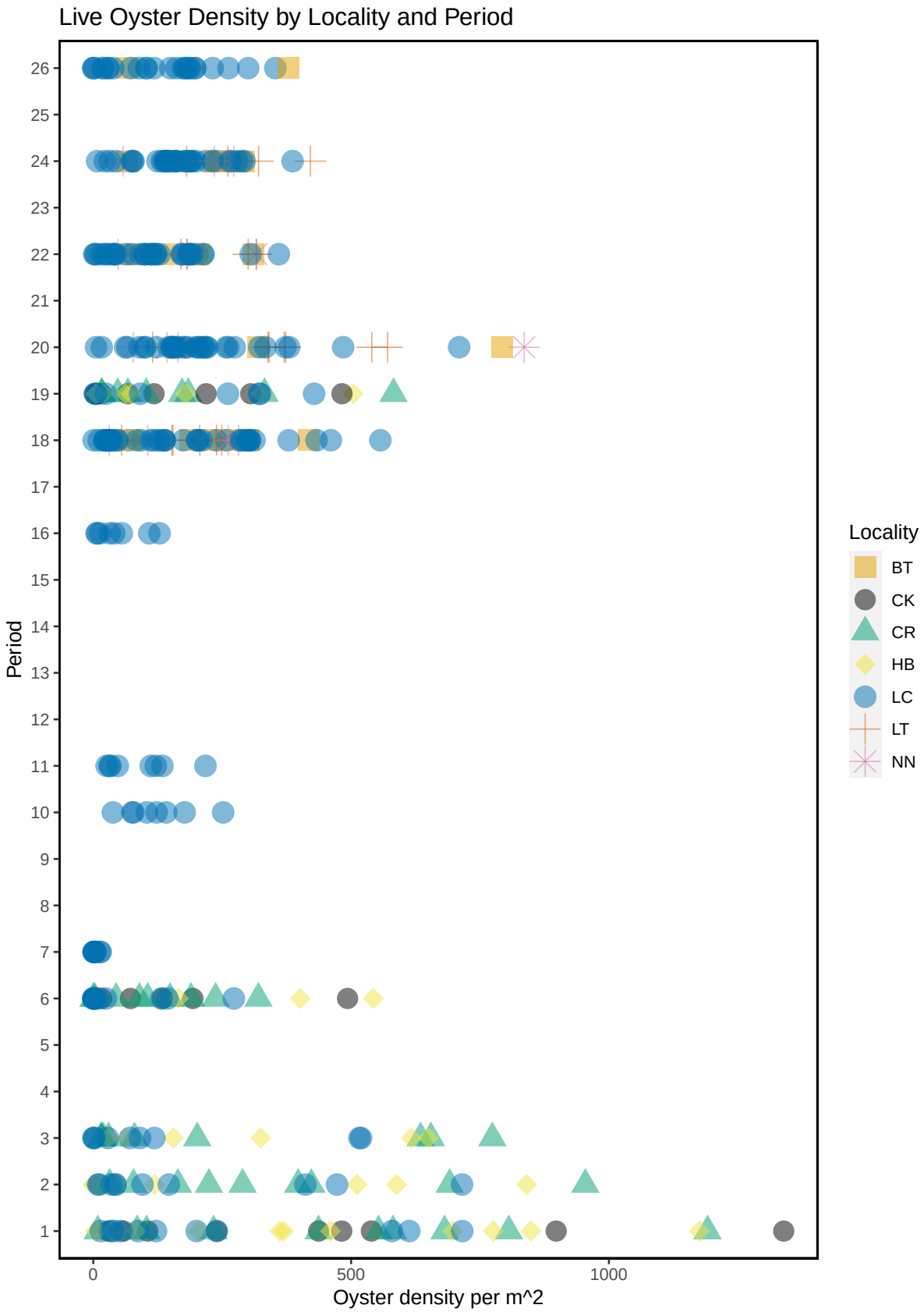


Figure − Live oyster density by locality and period for all periods including period 22 (current period).

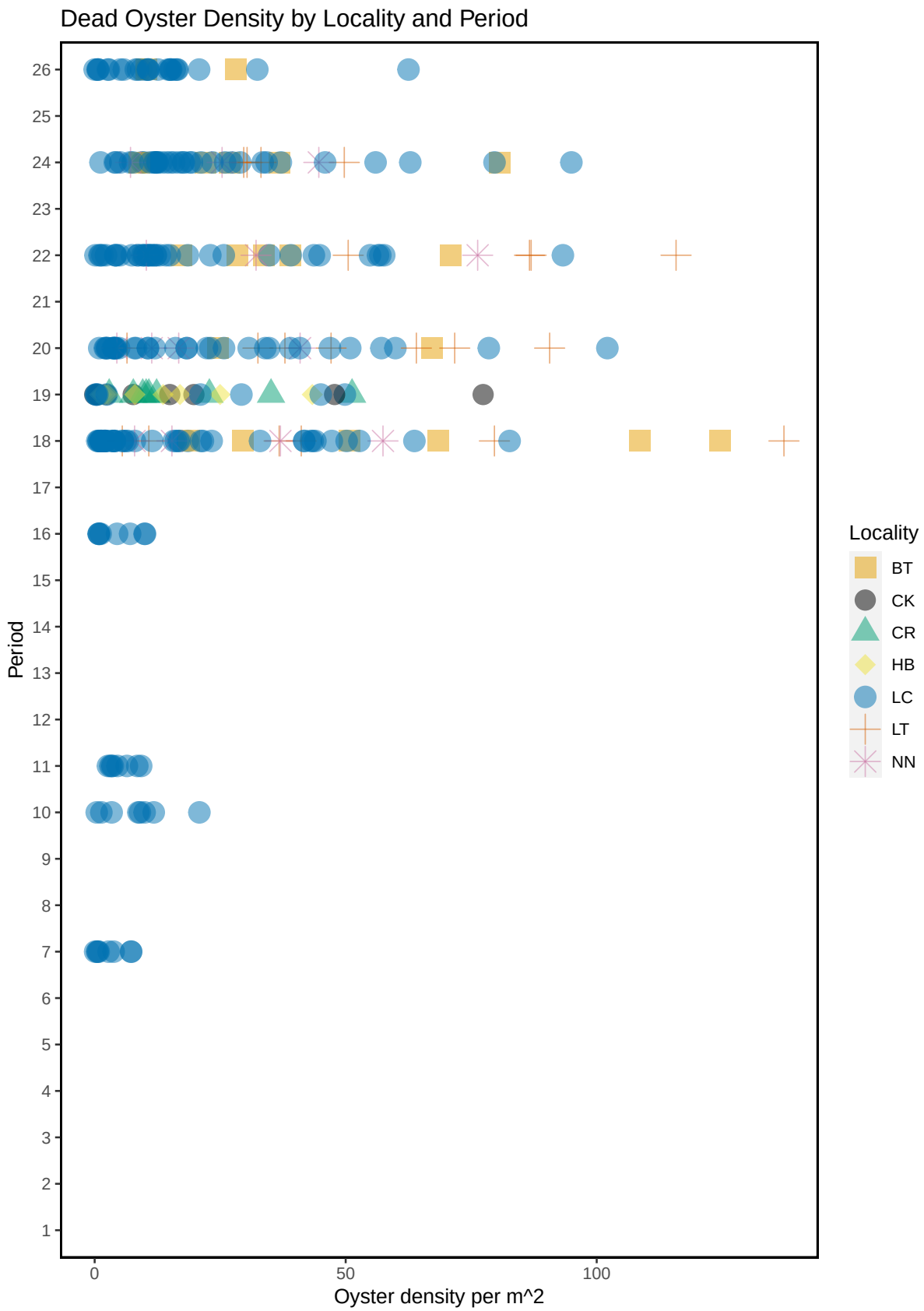


Figure − Dead oyster density by locality and period for all periods including period 22 (current period).

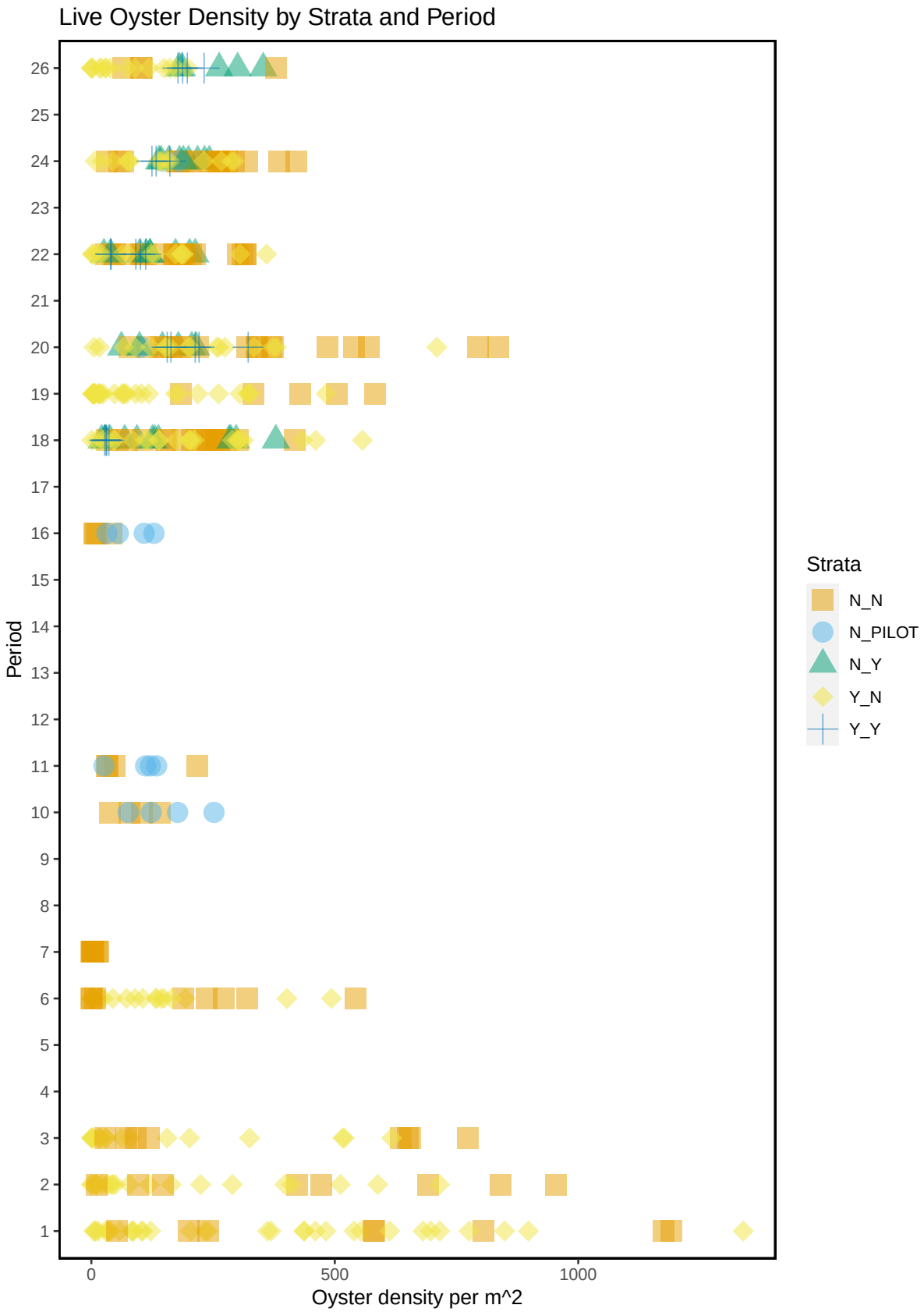


Figure − Live oyster density by strata and period for all periods including period 22 (current period).

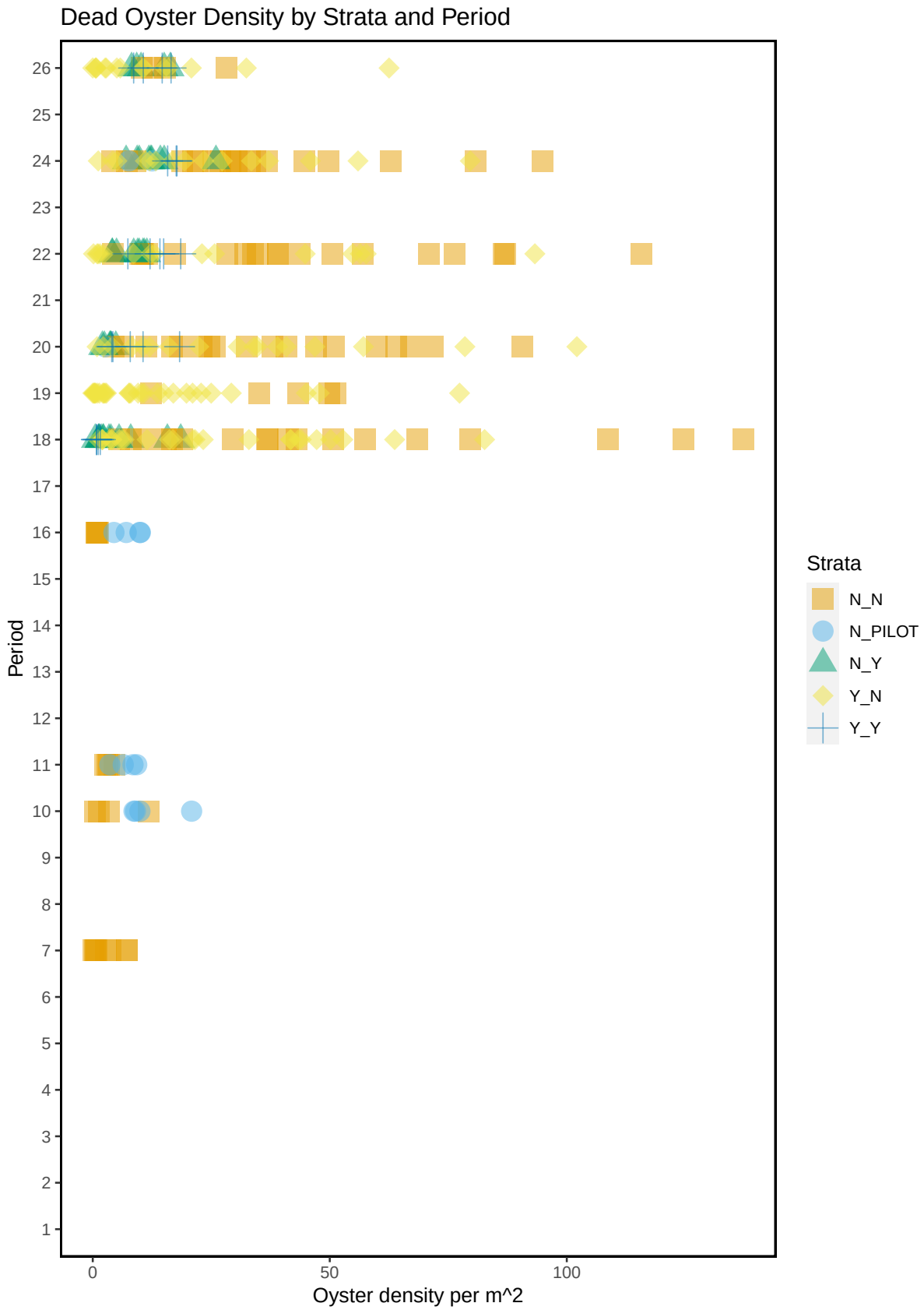


Figure − Dead oyster density by strata and period for all periods including period 22 (current period).

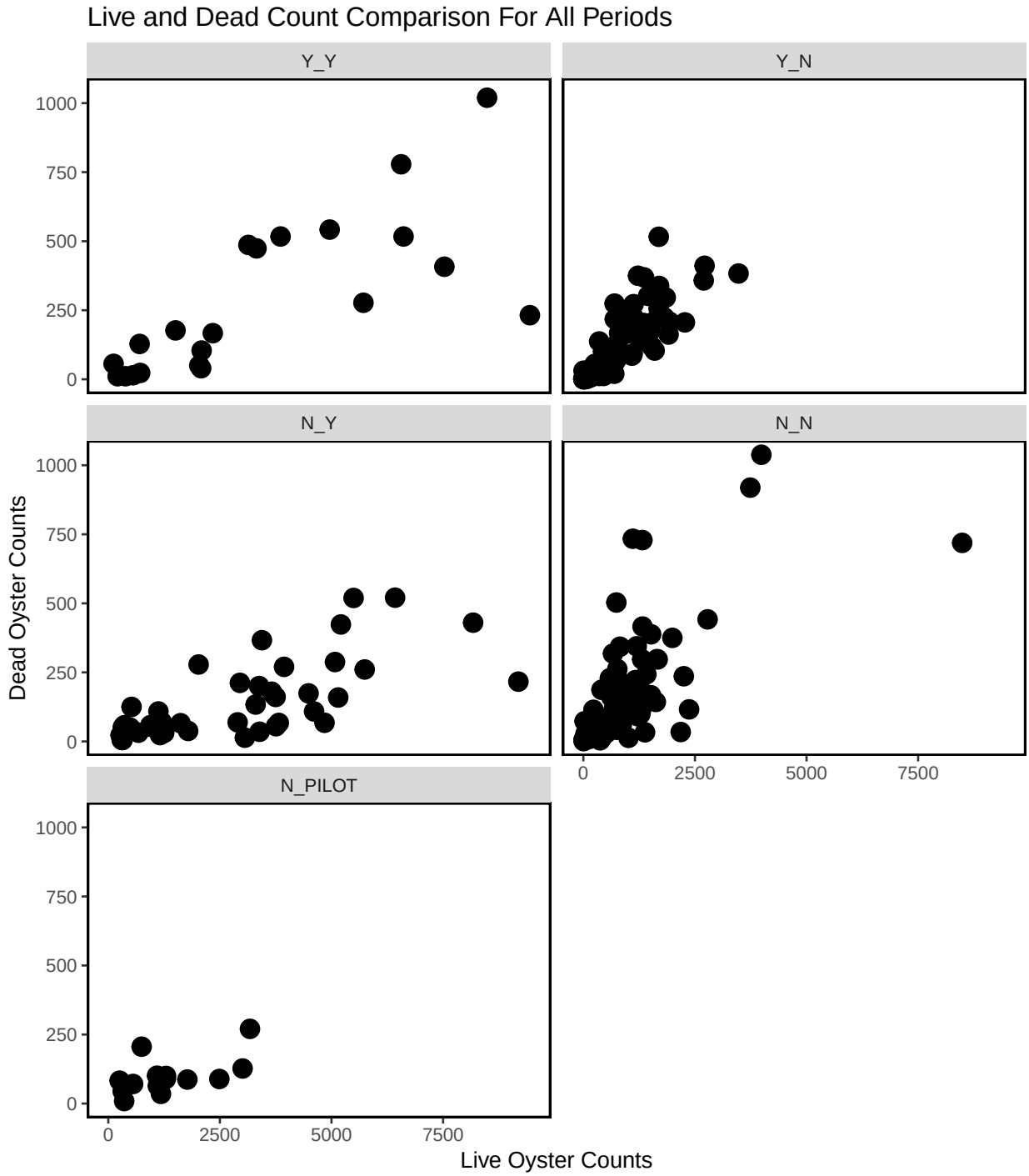


Figure- Live and dead oyster comparison for all periods, last sample date of period 26 is 2023-01-24.

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).

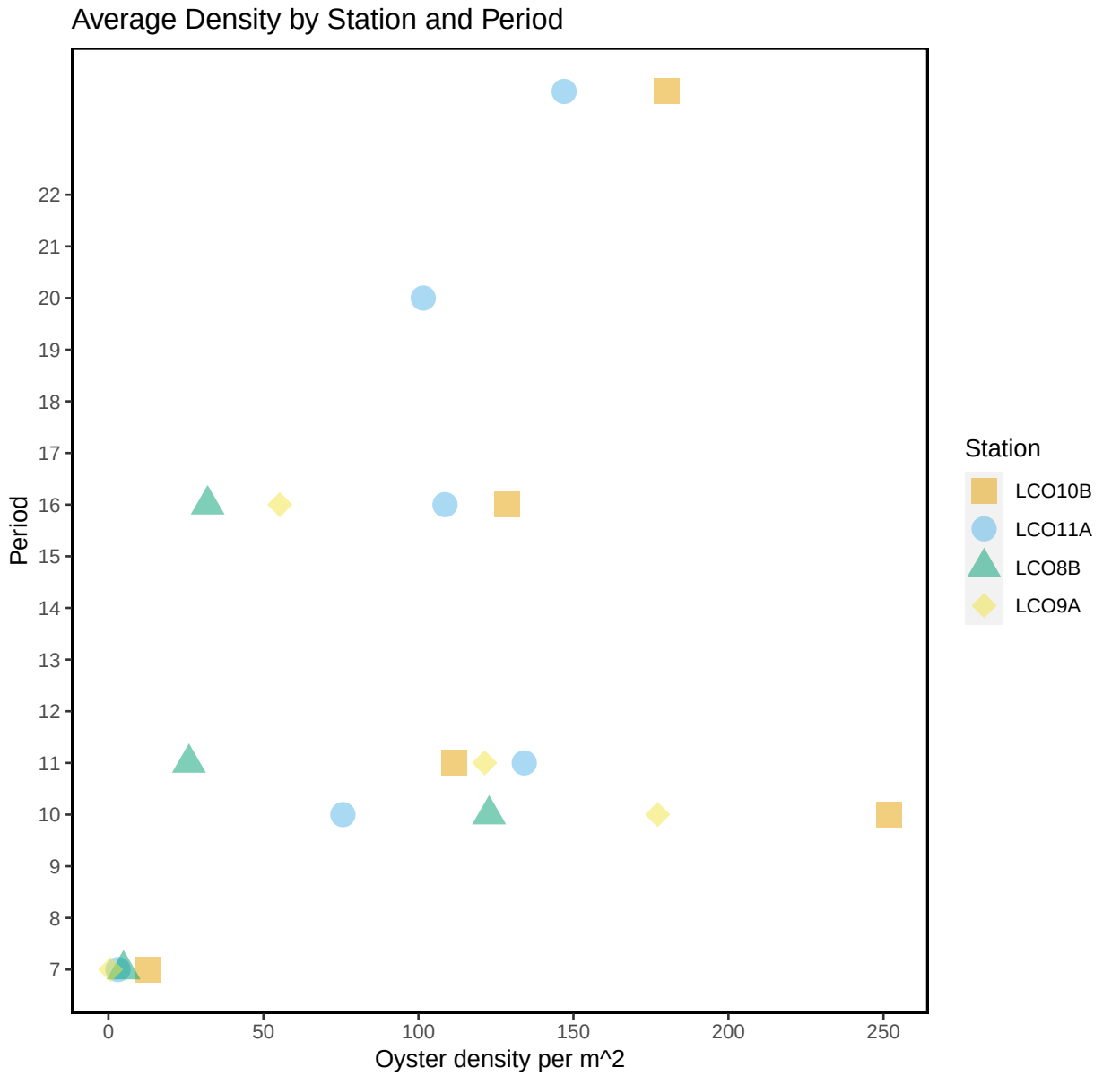


Figure − Average live oyster density comparison by station and period for all stations that were sampled during the pilc

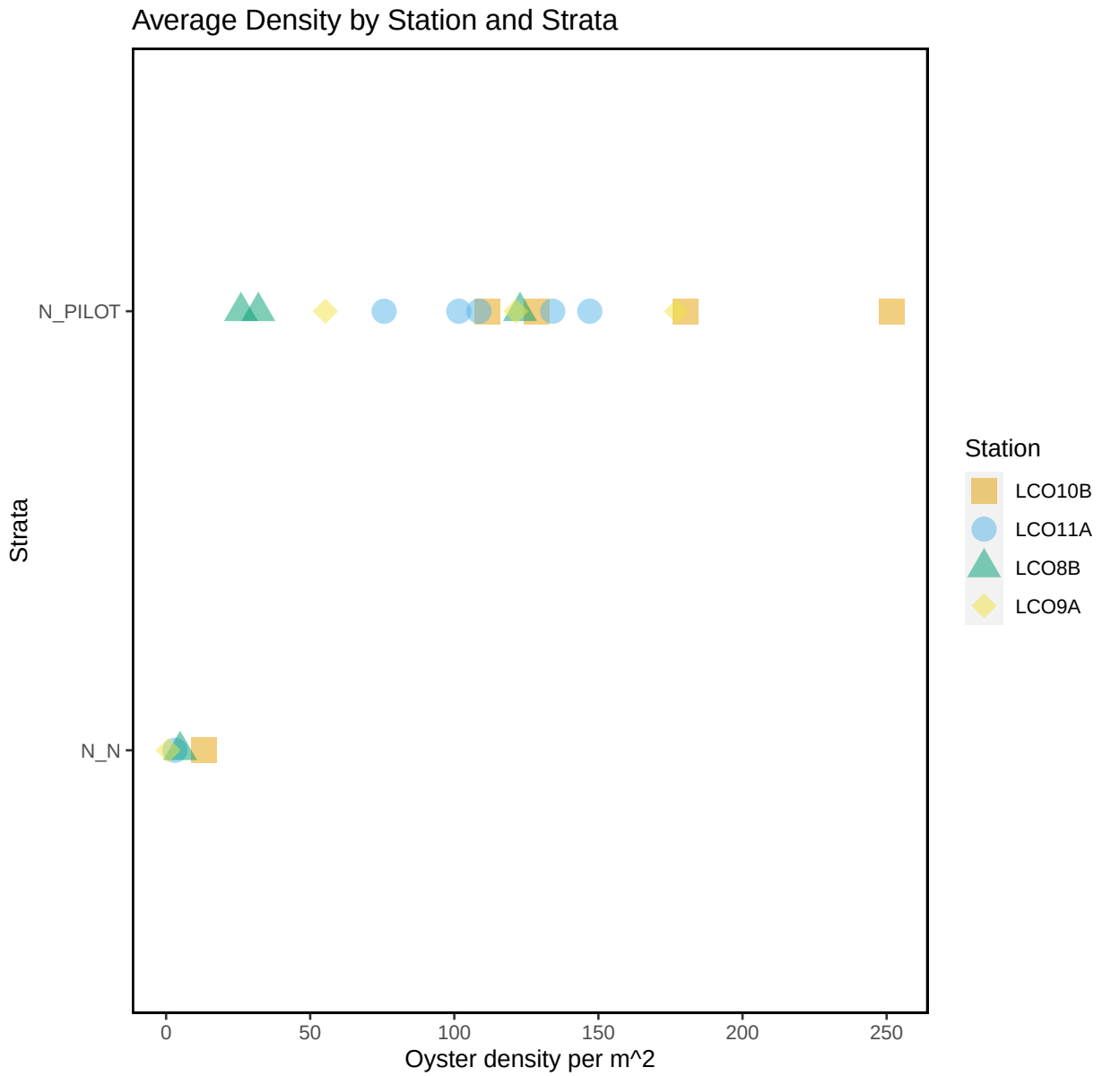


Figure − Average live oyster density comparison by station and strata for all stations that were sampled during th

Latest Data Entered

Displayed are the entries for the last date of sampling (2023-01-24).

date	station	tran_length	count_live	count_dead	treatment	strata
2023-01-24	LCO22	2.5	41	6	rocks	Y_Y
2023-01-24	LCO22	5.0	54	7	rocks	Y_Y
2023-01-24	LCO22	7.5	99	10	rocks	Y_Y
2023-01-24	LCO22	10.0	60	8	rocks	Y_Y
2023-01-24	LCO22	12.5	91	4	rocks	Y_Y
2023-01-24	LCO22	15.0	21	5	rocks	Y_Y
2023-01-24	LCO22	17.5	14	1	rocks	Y_Y
2023-01-24	LCO22	20.0	62	10	rocks	Y_Y
2023-01-24	LCO22	22.0	46	7	rocks	Y_Y
2023-01-24	LCO22	22.1	2	0	rocks	Y_Y
2023-01-24	LCO22	2.5	102	2	rocks	Y_Y
2023-01-24	LCO22	5.0	40	1	rocks	Y_Y
2023-01-24	LCO22	7.5	11	1	rocks	Y_Y
2023-01-24	LCO22	10.0	73	0	rocks	Y_Y
2023-01-24	LCO22	12.5	124	11	rocks	Y_Y
2023-01-24	LCO22	15.0	132	13	rocks	Y_Y
2023-01-24	LCO22	17.5	158	18	rocks	Y_Y
2023-01-24	LCO22	20.0	104	4	rocks	Y_Y
2023-01-24	LCO22	22.0	81	3	rocks	Y_Y
2023-01-24	LCO22	22.8	33	1	rocks	Y_Y
2023-01-24	LCO22	2.5	201	5	rocks	Y_Y
2023-01-24	LCO22	5.0	172	3	rocks	Y_Y
2023-01-24	LCO22	7.5	117	8	rocks	Y_Y
2023-01-24	LCO22	10.0	83	4	rocks	Y_Y
2023-01-24	LCO22	12.5	81	8	rocks	Y_Y
2023-01-24	LCO22	15.0	95	10	rocks	Y_Y
2023-01-24	LCO22	17.5	86	9	rocks	Y_Y
2023-01-24	LCO22	20.0	80	6	rocks	Y_Y
2023-01-24	LCO22	21.4	78	2	rocks	Y_Y
2023-01-24	LCO21	2.5	0	1	rocks	Y_Y
2023-01-24	LCO21	5.0	5	0	rocks	Y_Y
2023-01-24	LCO21	7.5	3	0	rocks	Y_Y
2023-01-24	LCO21	10.0	14	0	rocks	Y_Y
2023-01-24	LCO21	12.5	32	4	rocks	Y_Y
2023-01-24	LCO21	15.0	23	3	rocks	Y_Y
2023-01-24	LCO21	17.5	50	4	rocks	Y_Y
2023-01-24	LCO21	20.0	5	3	rocks	Y_Y
2023-01-24	LCO21	22.0	36	8	rocks	Y_Y
2023-01-24	LCO21	25.0	4	0	rocks	Y_Y
2023-01-24	LCO21	2.5	168	10	rocks	Y_Y
2023-01-24	LCO21	5.0	135	7	rocks	Y_Y
2023-01-24	LCO21	7.5	42	1	rocks	Y_Y
2023-01-24	LCO21	10.0	138	11	rocks	Y_Y
2023-01-24	LCO21	12.5	198	7	rocks	Y_Y
2023-01-24	LCO21	15.0	158	7	rocks	Y_Y
2023-01-24	LCO21	17.5	146	8	rocks	Y_Y
2023-01-24	LCO21	20.0	152	9	rocks	Y_Y
2023-01-24	LCO21	22.0	38	1	rocks	Y_Y
2023-01-24	LCO21	22.5	9	1	rocks	Y_Y

2023-01-24	LCO21	2.5	61	3	rocks	Y_Y
2023-01-24	LCO21	5.0	33	1	rocks	Y_Y
2023-01-24	LCO21	7.5	10	0	rocks	Y_Y
2023-01-24	LCO21	10.0	10	0	rocks	Y_Y
2023-01-24	LCO21	12.5	6	1	rocks	Y_Y
2023-01-24	LCO21	15.0	6	1	rocks	Y_Y
2023-01-24	LCO21	17.5	4	0	rocks	Y_Y
2023-01-24	LCO21	20.0	9	0	rocks	Y_Y
2023-01-24	LCO21	22.0	4	0	rocks	Y_Y
2023-01-24	LCO21	2.5	101	3	rocks	Y_Y
2023-01-24	LCO21	5.0	108	4	rocks	Y_Y
2023-01-24	LCO21	7.5	106	4	rocks	Y_Y
2023-01-24	LCO21	10.0	143	6	rocks	Y_Y
2023-01-24	LCO21	12.5	112	3	rocks	Y_Y
2023-01-24	LCO21	15.0	67	7	rocks	Y_Y
2023-01-24	LCO21	17.5	52	3	rocks	Y_Y
2023-01-24	LCO21	20.0	104	9	rocks	Y_Y
2023-01-24	LCO21	22.0	87	3	rocks	Y_Y
2023-01-24	LCO21	2.5	4	3	rocks	Y_Y
2023-01-24	LCO21	5.0	16	5	rocks	Y_Y
2023-01-24	LCO21	7.5	1	0	rocks	Y_Y
2023-01-24	LCO21	10.0	10	2	rocks	Y_Y
2023-01-24	LCO21	12.5	3	1	rocks	Y_Y
2023-01-24	LCO21	15.0	3	0	rocks	Y_Y
2023-01-24	LCO21	17.5	6	0	rocks	Y_Y
2023-01-24	LCO21	20.0	3	1	rocks	Y_Y
2023-01-24	LCO21	22.0	0	0	rocks	Y_Y
2023-01-24	LCO21	22.7	1	0	rocks	Y_Y
2023-01-24	LCO21	2.5	87	6	rocks	Y_Y
2023-01-24	LCO21	5.0	102	14	rocks	Y_Y
2023-01-24	LCO21	7.5	49	6	rocks	Y_Y
2023-01-24	LCO21	10.0	16	3	rocks	Y_Y
2023-01-24	LCO21	12.5	53	8	rocks	Y_Y
2023-01-24	LCO21	15.0	67	4	rocks	Y_Y
2023-01-24	LCO21	17.5	65	7	rocks	Y_Y
2023-01-24	LCO21	20.0	47	4	rocks	Y_Y
2023-01-24	LCO21	22.0	57	4	rocks	Y_Y
2023-01-24	LCO21	25.0	1	0	rocks	Y_Y
2023-01-24	LCO21	2.5	152	13	rocks	Y_Y
2023-01-24	LCO21	5.0	133	13	rocks	Y_Y
2023-01-24	LCO21	7.5	63	7	rocks	Y_Y
2023-01-24	LCO21	10.0	149	21	rocks	Y_Y
2023-01-24	LCO21	12.5	123	26	rocks	Y_Y
2023-01-24	LCO21	15.0	179	9	rocks	Y_Y
2023-01-24	LCO21	17.5	46	8	rocks	Y_Y
2023-01-24	LCO21	20.0	244	11	rocks	Y_Y
2023-01-24	LCO21	22.0	101	7	rocks	Y_Y
2023-01-24	LCO21	23.2	84	2	rocks	Y_Y
2023-01-24	LCO21	2.5	81	9	rocks	Y_Y
2023-01-24	LCO21	5.0	80	6	rocks	Y_Y
2023-01-24	LCO21	7.5	147	17	rocks	Y_Y
2023-01-24	LCO21	10.0	141	7	rocks	Y_Y
2023-01-24	LCO21	12.5	140	6	rocks	Y_Y
2023-01-24	LCO21	15.0	113	4	rocks	Y_Y

2023-01-24	LCO21	17.5	18	1	rocks	Y_Y
2023-01-24	LCO21	20.0	60	2	rocks	Y_Y
2023-01-24	LCO21	22.0	57	3	rocks	Y_Y
2023-01-24	LCO21	22.8	3	1	rocks	Y_Y
2023-01-24	LCO21	2.5	92	10	rocks	Y_Y
2023-01-24	LCO21	5.0	101	8	rocks	Y_Y
2023-01-24	LCO21	7.5	23	3	rocks	Y_Y
2023-01-24	LCO21	10.0	21	0	rocks	Y_Y
2023-01-24	LCO21	12.5	25	4	rocks	Y_Y
2023-01-24	LCO21	15.0	11	2	rocks	Y_Y
2023-01-24	LCO21	17.5	22	4	rocks	Y_Y
2023-01-24	LCO21	20.0	16	10	rocks	Y_Y
2023-01-24	LCO21	22.0	52	7	rocks	Y_Y
2023-01-24	LCO21	23.2	59	8	rocks	Y_Y
2023-01-24	LCO21	2.5	114	9	rocks	Y_Y
2023-01-24	LCO21	5.0	135	11	rocks	Y_Y
2023-01-24	LCO21	7.5	125	9	rocks	Y_Y
2023-01-24	LCO21	10.0	144	10	rocks	Y_Y
2023-01-24	LCO21	12.5	126	8	rocks	Y_Y
2023-01-24	LCO21	15.0	108	13	rocks	Y_Y
2023-01-24	LCO21	17.5	108	3	rocks	Y_Y
2023-01-24	LCO21	20.0	83	3	rocks	Y_Y
2023-01-24	LCO21	22.0	93	7	rocks	Y_Y
2023-01-24	LCO21	23.1	73	14	rocks	Y_Y
2023-01-24	LCI42	2.5	3	1	control	N_N
2023-01-24	LCI42	5.0	9	1	control	N_N
2023-01-24	LCI42	7.5	88	10	control	N_N
2023-01-24	LCI42	10.0	59	8	control	N_N
2023-01-24	LCI42	12.5	34	1	control	N_N
2023-01-24	LCI42	15.0	67	3	control	N_N
2023-01-24	LCI42	17.5	0	0	control	N_N
2023-01-24	LCI42	20.0	0	0	control	N_N
2023-01-24	LCI42	22.5	2	0	control	N_N
2023-01-24	LCI42	25.0	114	22	control	N_N
2023-01-24	LCI42	27.5	47	5	control	N_N
2023-01-24	LCI42	30.0	62	8	control	N_N
2023-01-24	LCI42	31.2	8	1	control	N_N