

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 2021-2022) and how the collected data compare to last year's sampling (Winter 2020-2021). So far 26 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, 144 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

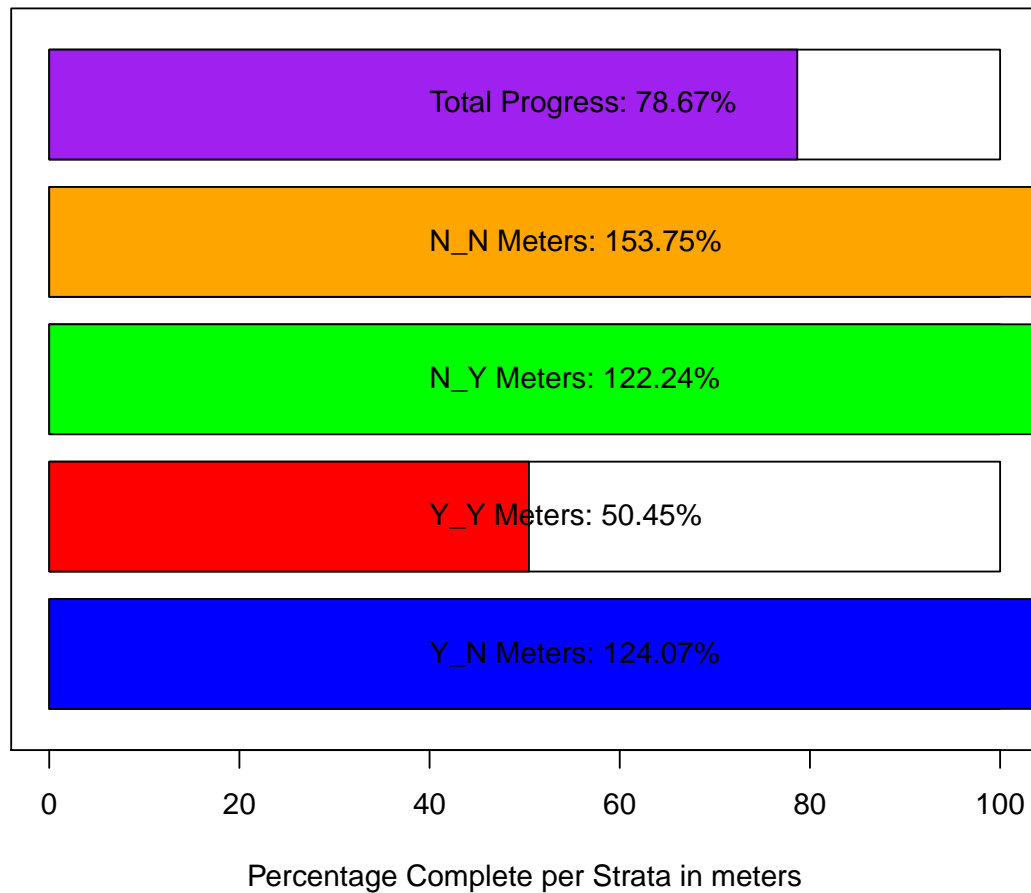
Definition of Strata

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 24, and last year's sampling period is period 22.**

Field Sites– Strata Progress



Summary Tables for Periods 18, 20, 22, and 24

These summary tables provide summary statistics on live counts and oyster densities for just periods **18 (Winter 2018-2019)**, **20 (Winter 2019-2020)**, **22 (Winter 2020-2021)**, and **24 (Winter 2021-2022)**.

Summary statistics include:

- Locality or Strata or Period - Mean
- Median
- Standard Deviation (SD)
- Variance (Var)
- Coefficient of variation (CV)
- Standard Error (SE)
- Lower 95% Confidence Interval assuming normal distribution (L95)
- Upper 95% Confidence Interval assuming normal distribution (U95)
- Bootstrap Mean (Bstrap Mean)
- Lower 95% Confidence Interval from Bootstrap Values (L95 Bstrap)
- Upper 95% Confidence Interval from Bootstrap Values (U95 Bstrap)

Summary of Live Counts for Periods 18, 20, 22, and 24

Live Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	1419	884	1951	3808032	1.38	460	518	2321	1410	733	2461
LC	1563	903	1810	3276540	1.16	147	1275	1851	1567	1279	1860
LT	1026	877	551	303721	0.54	120	790	1262	1021	812	1244
NN	735	674	584	341295	0.79	156	429	1041	734	469	1059

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	1072	821	1124	1263544	1.05	130	818	1327	1071	857	1337
N_PILLOT	2180	3009	1582	2501624	0.73	913	390	3970	2197	356	3174
N_Y	2693	2898	2195	4819184	0.82	361	1985	3400	2717	2054	3506
Y_N	797	638	734	539072	0.92	86	629	966	797	638	958
Y_Y	2951	2080	2885	8324892	0.98	700	1580	4323	2955	1696	4481

Live Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
18	982	695	935	874733	0.95	120	748	1217	980	770	1221
20	1844	1253	2125	4517189	1.15	310	1236	2451	1844	1279	2483
22	1334	702	1693	2867783	1.27	242	860	1808	1338	929	1877
24	1729	942	1845	3403035	1.07	266	1207	2251	1730	1241	2282

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	247	228	168	28203	0.68	39.6	170	325	246	182	328
LC	165	154	118	13930	0.72	9.6	146	184	165	147	184
LT	279	261	132	17460	0.47	28.8	222	335	279	228	336
NN	215	174	202	40919	0.94	54.1	109	321	217	127	327

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	235	207	151	22700	0.64	17	201	269	236	204	270
N_PILLOT	143	147	39	1557	0.28	23	98	188	144	102	180

N_Y	152	143	86	7344	0.56	14	125	180	152	125	180
Y_N	175	153	140	19723	0.80	16	142	207	175	144	209
Y_Y	118	112	83	6898	0.70	20	78	157	118	82	158

Live Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
18	176	155	130	16945	0.74	17	144	209	176	145	208
20	256	203	187	35057	0.73	27	203	310	257	207	315
22	137	121	93	8638	0.68	13	111	163	137	112	164
24	185	181	92	8385	0.49	13	159	211	185	159	211

Summary of Dead Counts for Periods 18, 20, 22, and 24

Dead Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	258	165	283	80030	1.10	67	127	389	260	154	400
LC	152	87	171	29314	1.13	14	125	179	152	127	180
LT	218	141	180	32543	0.83	39	140	295	218	149	296
NN	98	72	87	7493	0.88	23	53	143	99	59	148

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	195	122	206	42395	1.06	24	149	242	196	152	243
N_PILOT	136	127	131	17150	0.97	76	-13	284	136	9	270
N_Y	133	68	134	17869	1.01	22	90	176	133	94	177
Y_N	124	81	122	14978	0.99	14	96	152	124	98	150
Y_Y	274	128	307	94303	1.12	74	128	420	270	135	411

Dead Oyster Counts by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
18	133	55	192	36903	1.44	25	85	182	132	89	183
20	148	107	140	19727	0.95	20	108	188	147	112	193
22	191	128	193	37399	1.01	28	137	245	191	144	244
24	192	130	194	37816	1.01	28	137	247	192	140	248

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	48	35	33	1061	0.68	7.7	33	63	48	34	63
LC	21	12	22	474	1.05	1.8	17	24	21	17	24
LT	54	47	35	1232	0.64	7.7	39	70	54	40	70
NN	28	21	22	463	0.78	5.7	16	39	28	17	38

Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	41.4	34.2	30.3	921	0.73	3.50	34.5	48.2	41.3	34.6	49.0
N_PILOT	7.6	7.6	5.0	25	0.66	2.88	1.9	13.2	7.6	2.6	12.5
N_Y	7.5	5.5	5.7	33	0.76	0.94	5.7	9.4	7.5	5.9	9.3
Y_N	27.0	21.1	24.7	610	0.92	2.89	21.3	32.7	27.1	21.6	32.8
Y_Y	9.9	10.6	6.8	46	0.69	1.65	6.6	13.1	9.8	6.7	12.7

Dead Oyster Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
18	26	16	31	980	1.19	4.0	19	34	26	19	34
20	28	18	26	682	0.94	3.8	20	35	28	21	35
22	28	14	28	807	1.00	4.1	21	36	28	21	37
24	26	19	21	438	0.81	3.0	20	32	26	20	31

Summary Plots for Periods 18, 20, 22, and 24

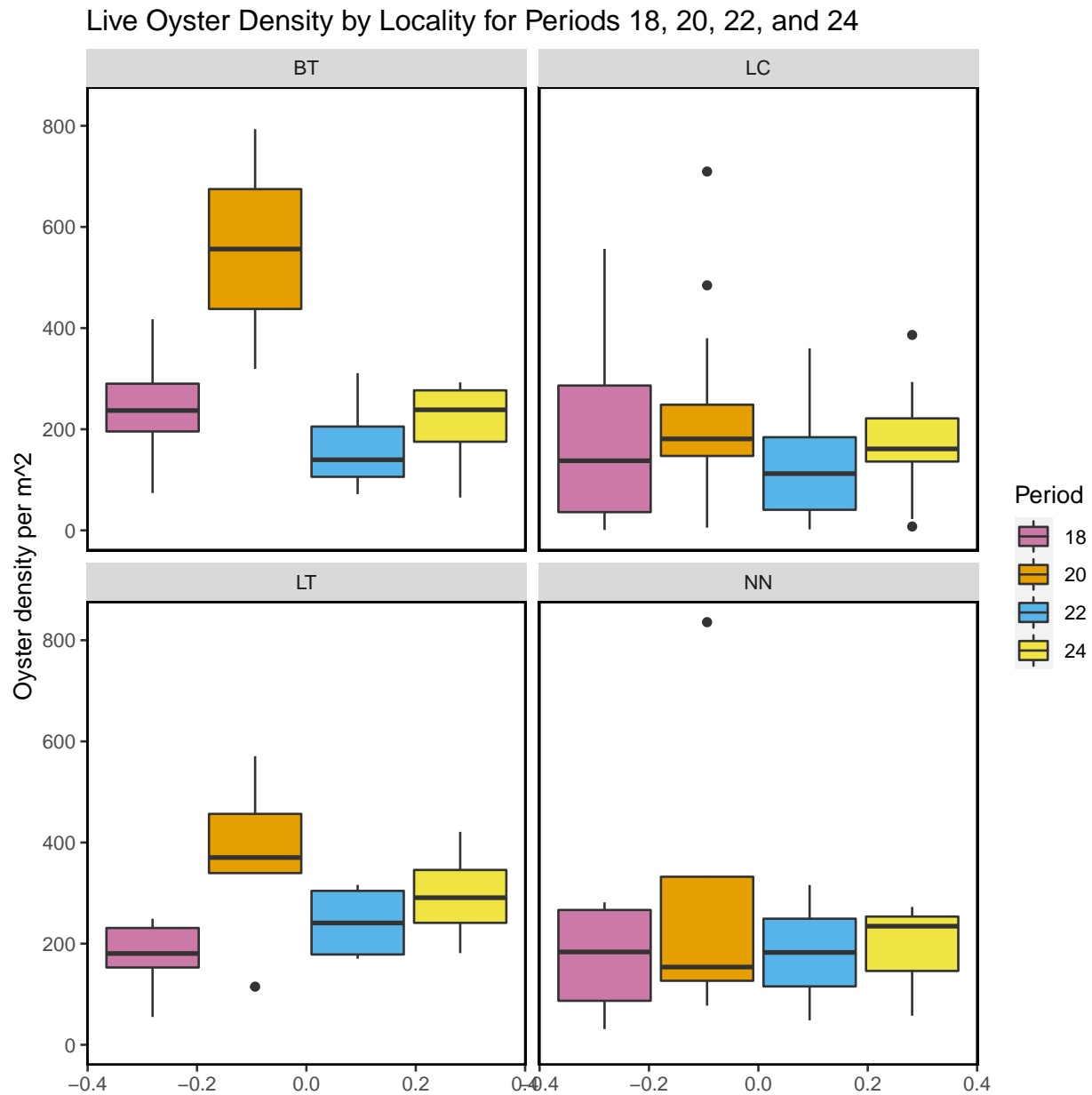


Figure- Calculated live oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2022-02-01.

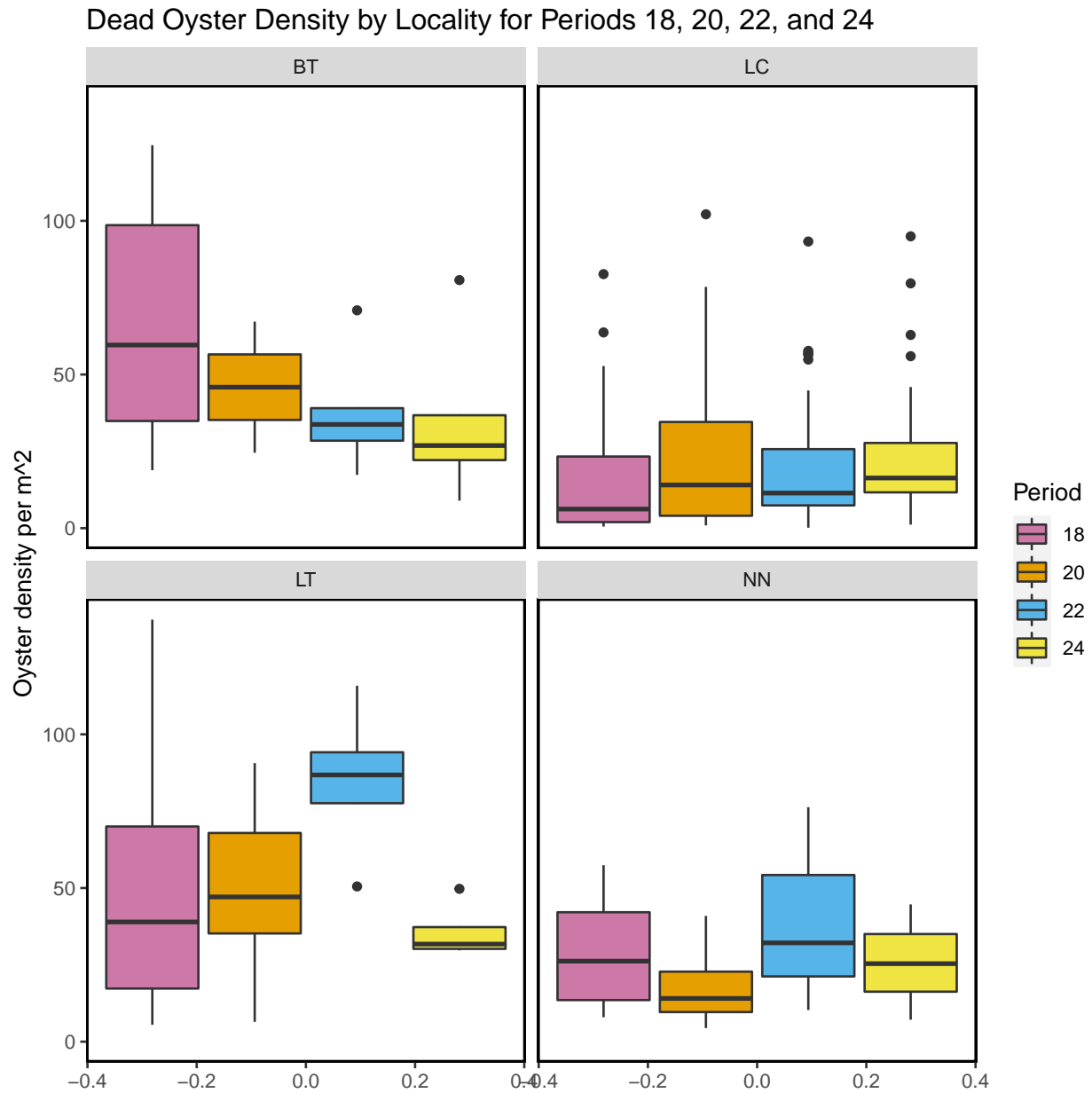


Figure- Calculated dead oyster density by locality for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2022-02-01.

Live Oyster Density by Strata for Periods 18, 20, 22, and 24

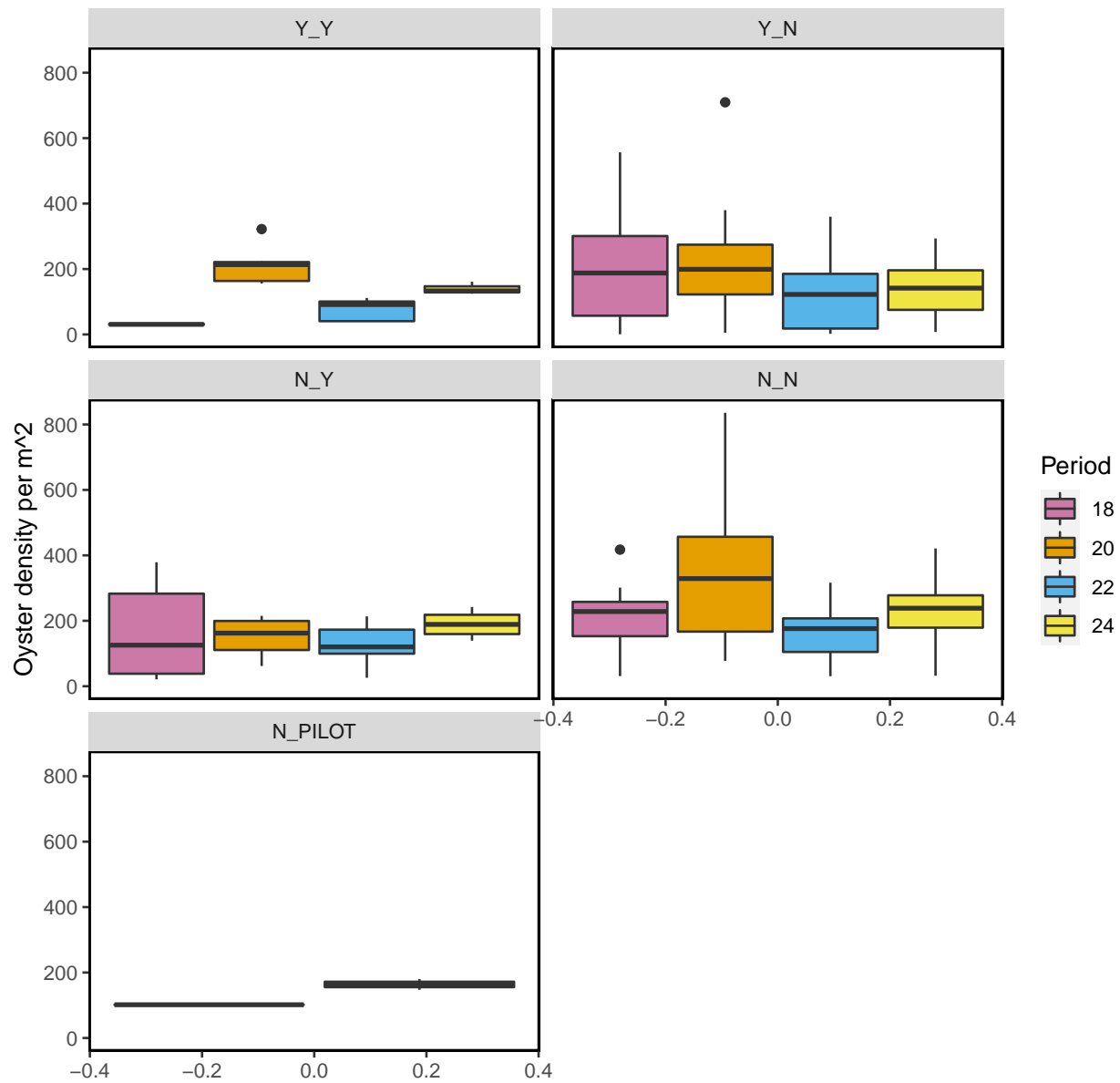


Figure- Calculated live oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2022-02-01.

Dead Oyster Density by Strata for Periods 18, 20, 22, and 24

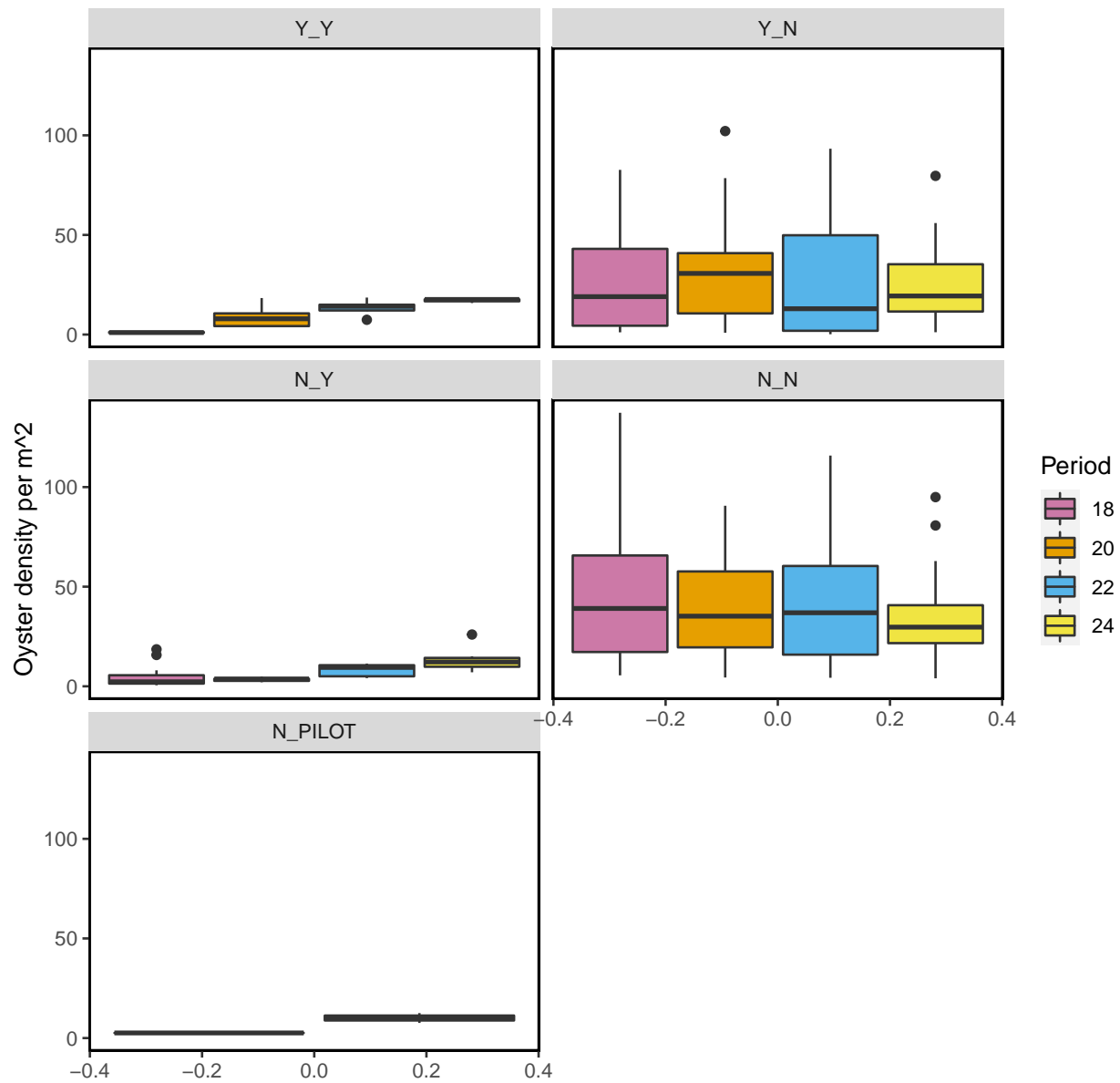


Figure- Calculated dead oyster density by strata for periods 18 (Winter 2018-2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021), and 24 (Winter 2021-2022) with the last sample date of period 24 as 2022-02-01.

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.

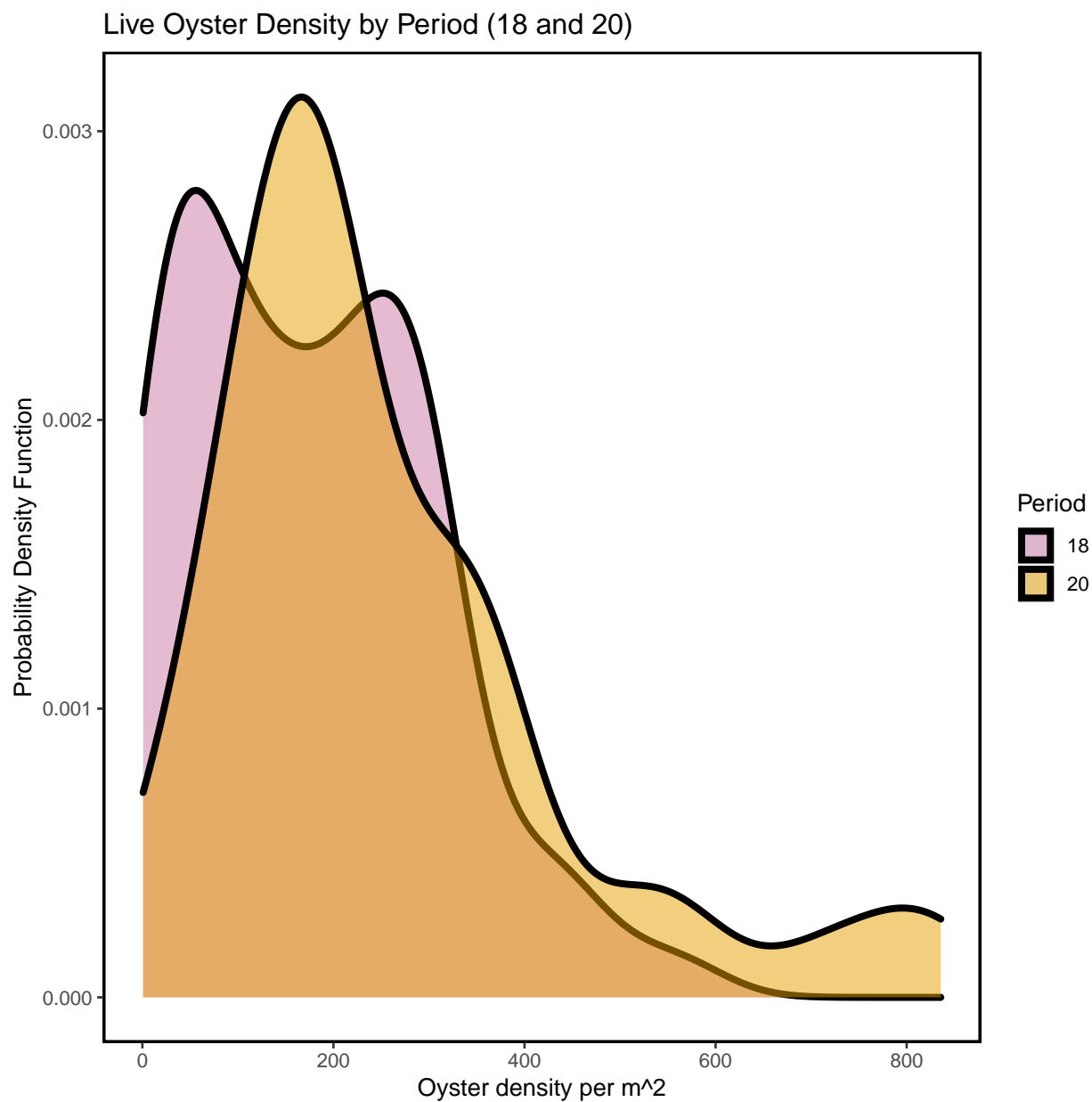


Figure- Calculated live oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2022-02-01.

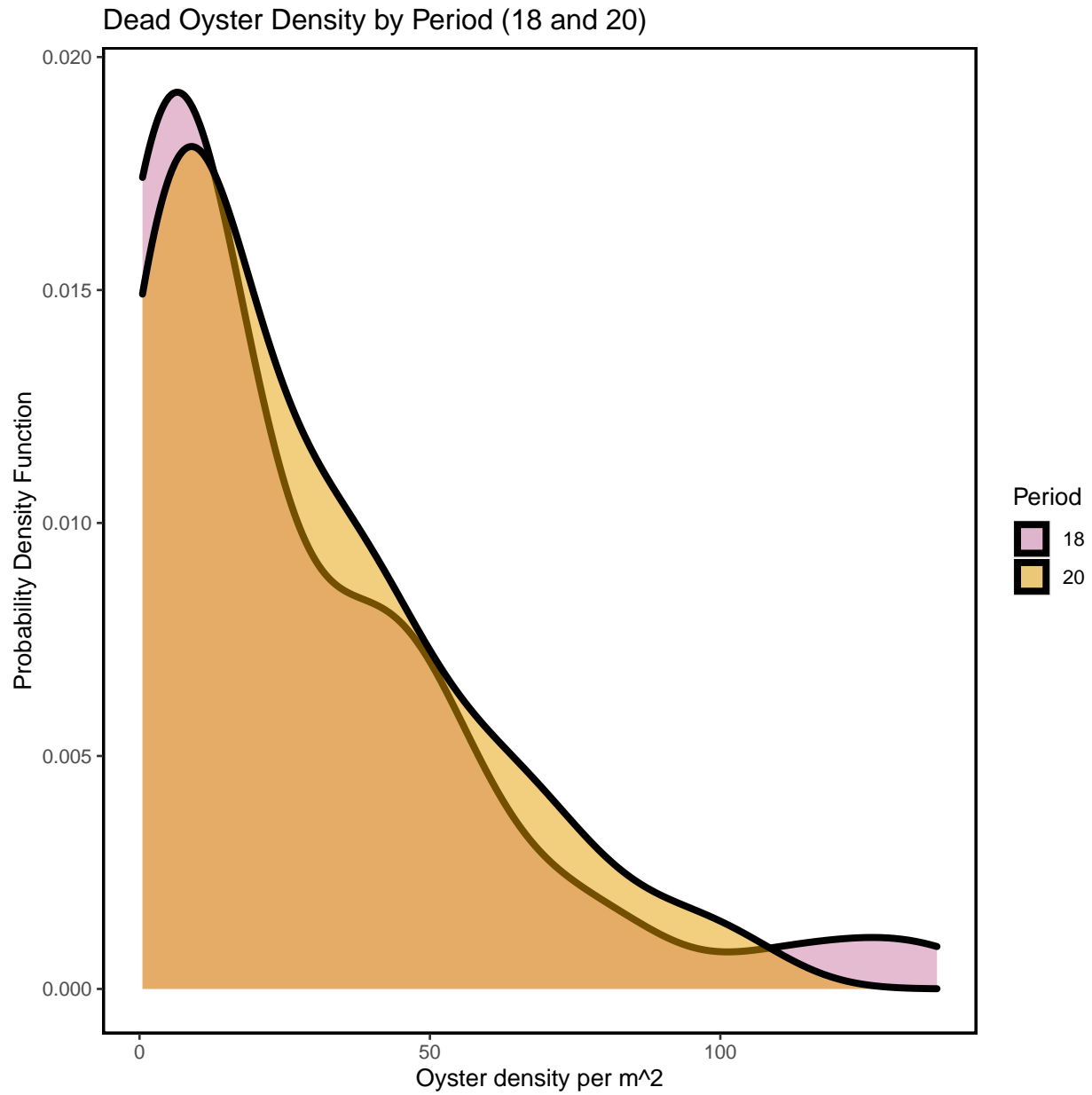


Figure- Calculated dead oyster density by periods 18 (Winter 2018-2019) and 20 (Winter 2019-2020) using a probability density function with the last sample date of period 22 as 2022-02-01.

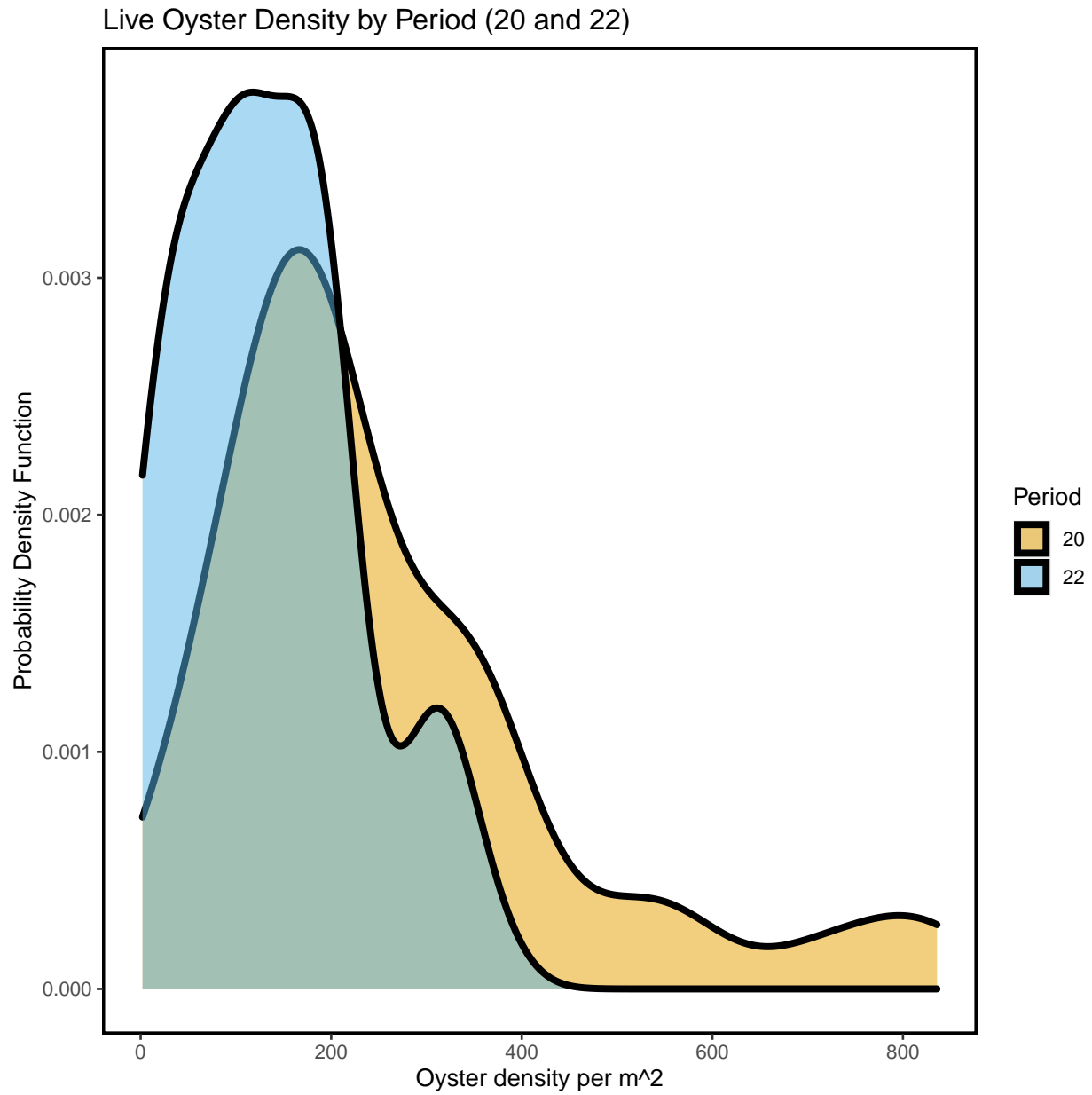


Figure- Calculated live oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2022-02-01.

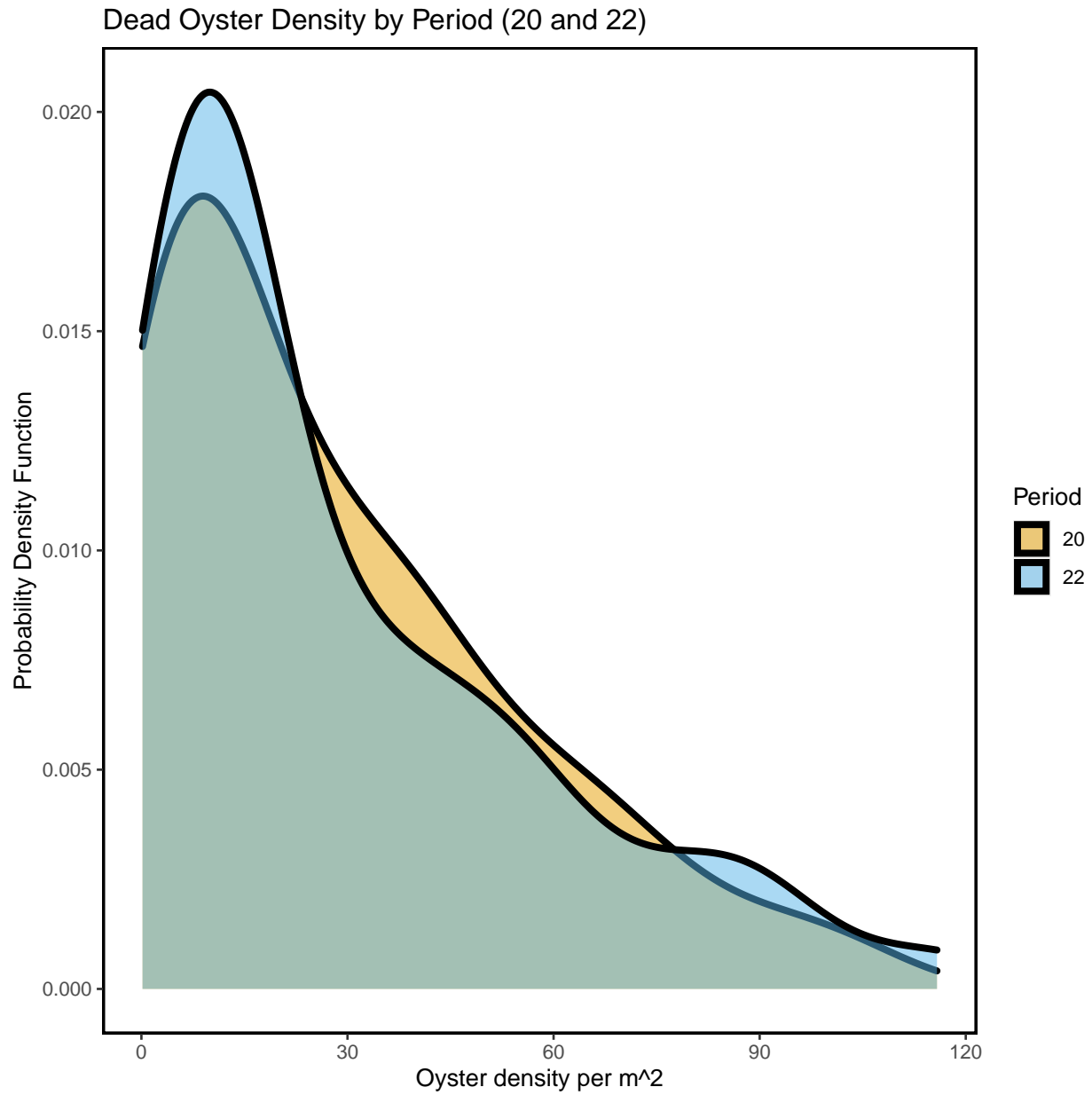


Figure- Calculated dead oyster density by periods 20 (Winter 2019-2020) and 22 (Winter 2020-2021) using a probability density function with the last sample date of period 22 as 2022-02-01.

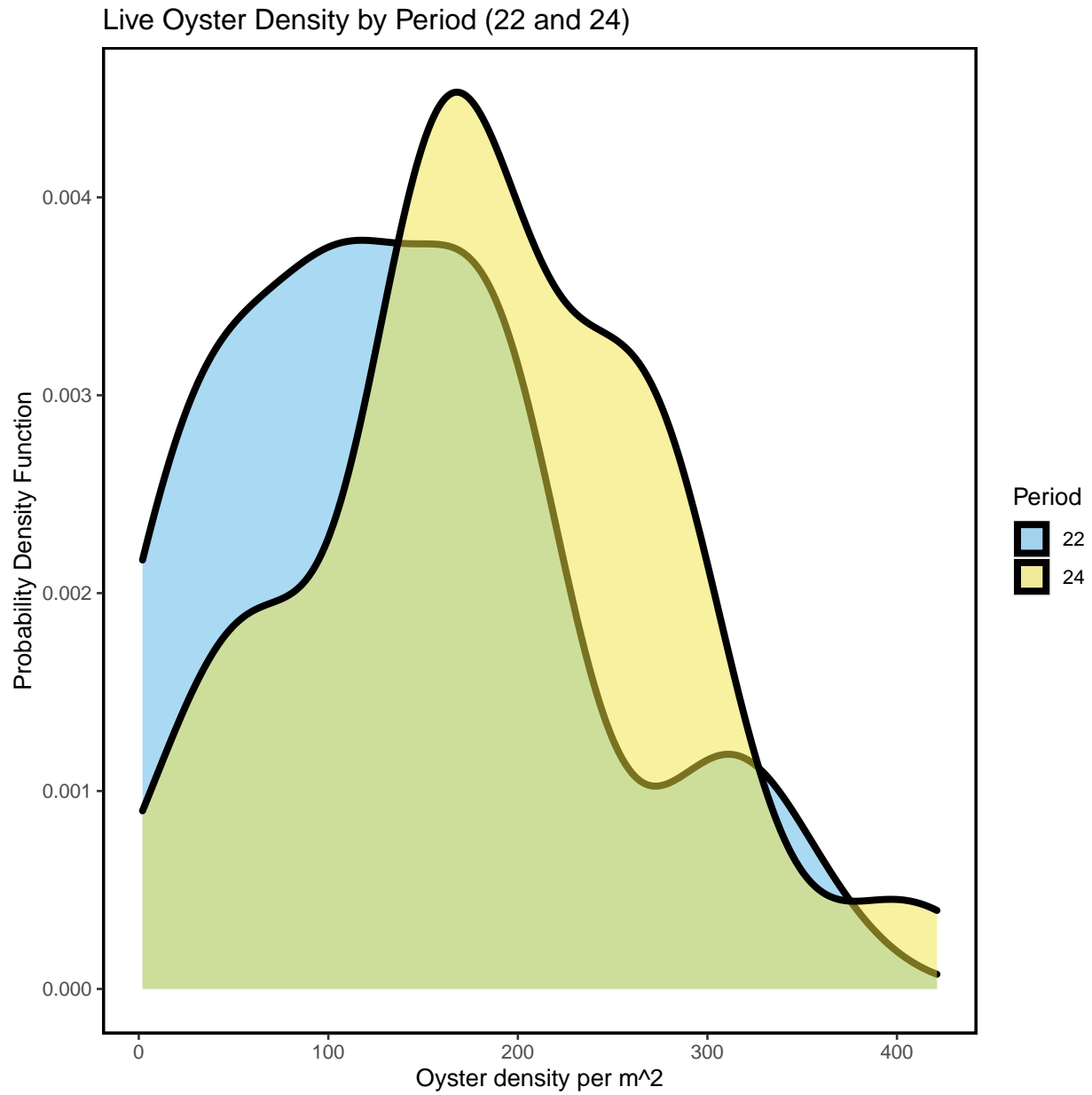


Figure- Calculated live oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2022-02-01.

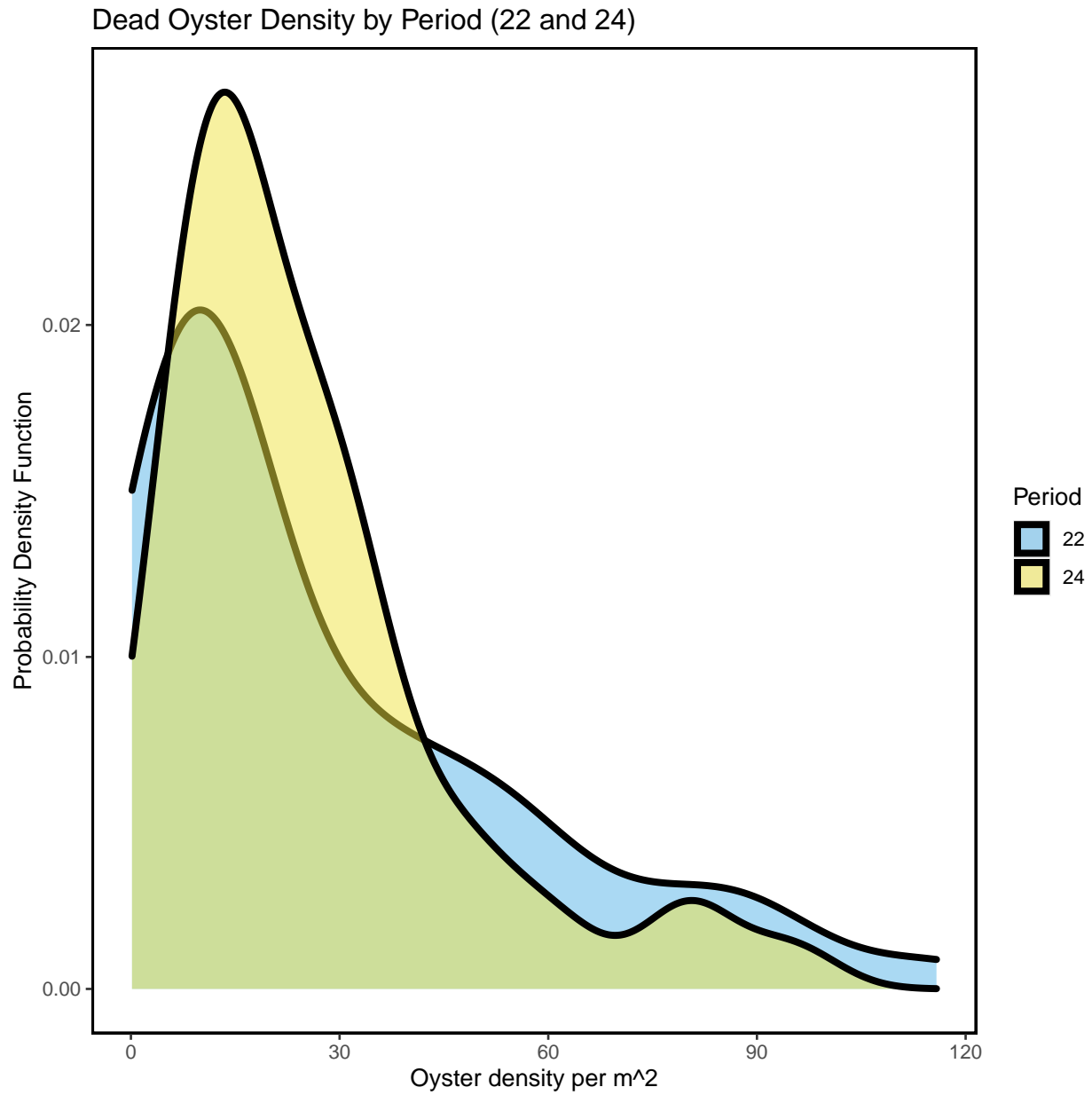


Figure- Calculated dead oyster density by periods 22 (Winter 2020-2021) and 24 (Winter 2021-2022) using a probability density function with the last sample date of period 24 as 2022-02-01.

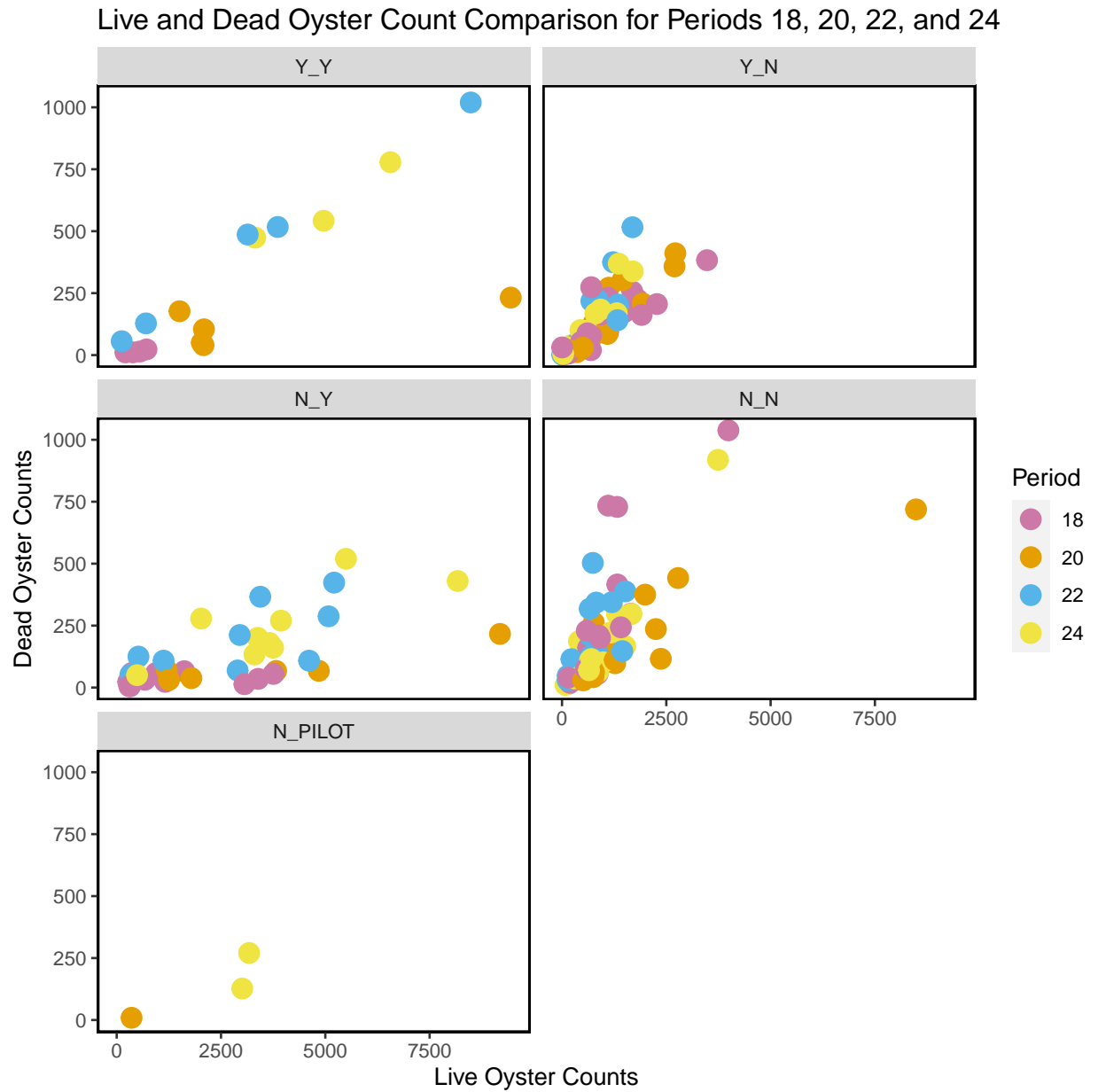


Figure- Live and dead oyster count comparison by periods 18 (Winter 2018- 2019), 20 (Winter 2019-2020), 22 (Winter 2020-2021) and 24 (Winter 2021-2022), last sample date of period 24 as 2022-02-01.

Live Counts Double Pass Results

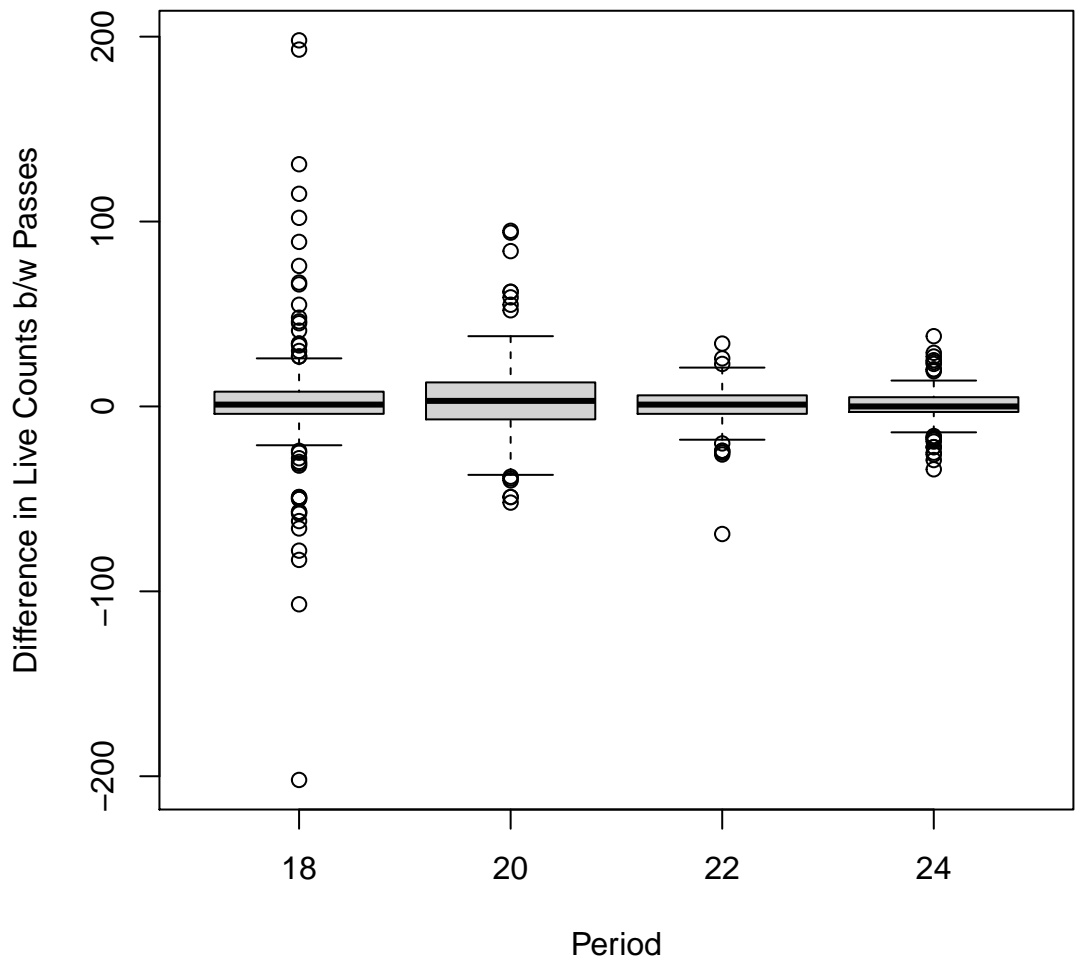


Figure- Boxplot of the difference in live counts between pass 1 and pass 2 (pass 1 live counts - pass 2 live counts) for period 18, 20, 22, and 24

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

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

Dead Counts Double Pass Results

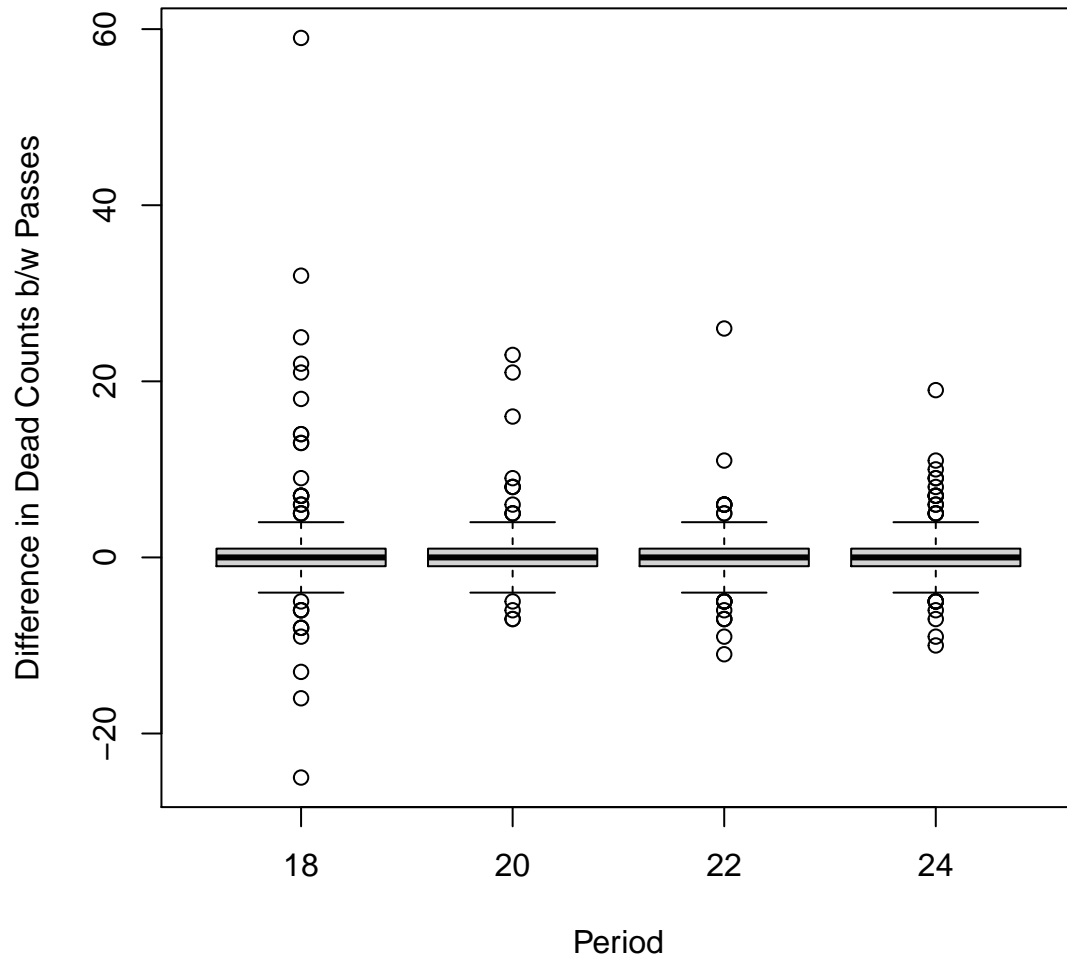


Figure- Boxplot of the difference in dead counts between pass 1 and pass 2 (pass 1 dead counts - pass 2 dead counts) for period 18, 20, 22, and 24

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

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

Sampling for all Periods

Next, we provide summary tables and plots for all transect sampling. These data were collected between 2010-05-27 and 2022-02-01. 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

Summary of Effort for all Periods

These effort summaries show the total number of transects and total number of meters walked per locality, strata, locality per period, and strata per period. **These tables contain all data collected on the transects.**

Effort by Locality

Locality	Number of Transects	Total Length (m)
BT	18	588
CK	26	734
CR	46	1375
HB	45	1129
LC	232	13515
LT	21	542
NN	14	357

Effort by Strata

Strata	Number of Transects	Total Length (m)
N_N	132	4251
N_PILOT	15	1050
N_Y	37	4377
Y_N	201	5874
Y_Y	17	2686

Effort by Period

Period	Number of Transects	Total Length (m)
1	42	1086
2	30	753
3	25	619
6	33	919
7	8	528
10	8	512
11	8	511
16	8	528
18	61	2660
19	35	944
20	47	2586
22	49	3535
24	48	3059

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
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
3	N_N	8	147
3	Y_N	17	472
6	N_N	8	178
6	Y_N	25	740
7	N_N	8	528

Effort Plot Summaries for all Periods

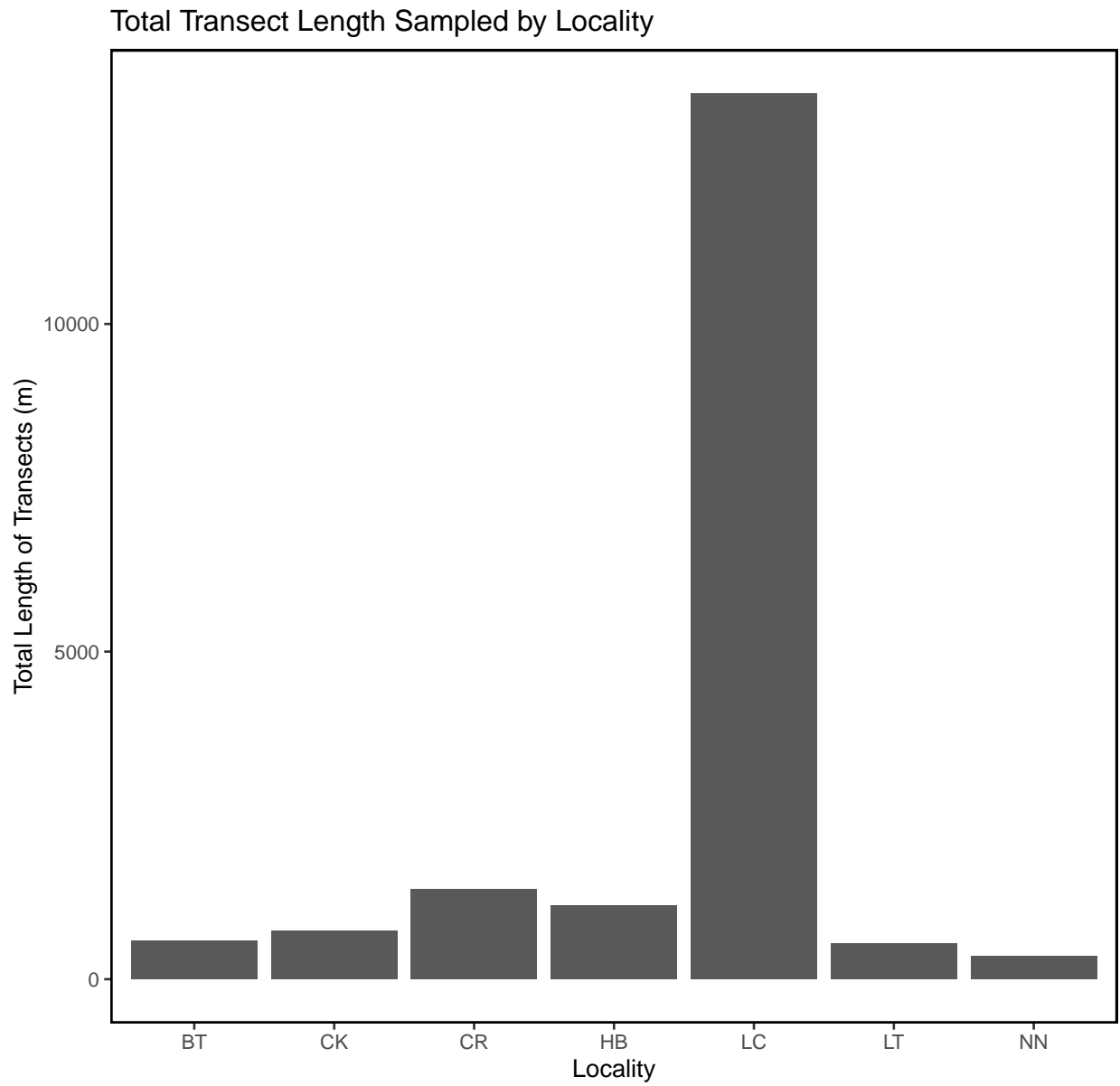


Figure – Bar plot of total transect length in meters sampled by locality for all periods.

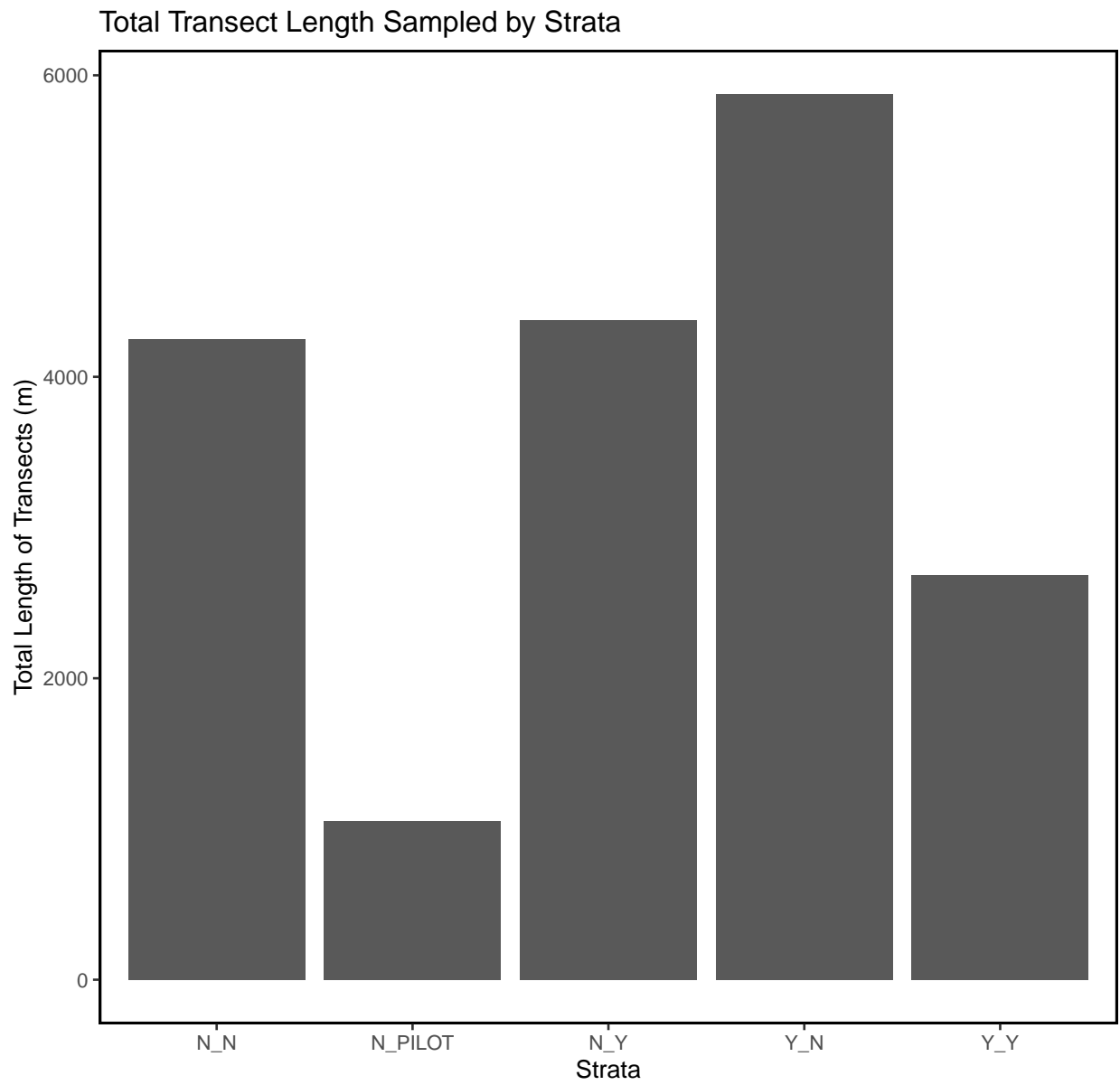
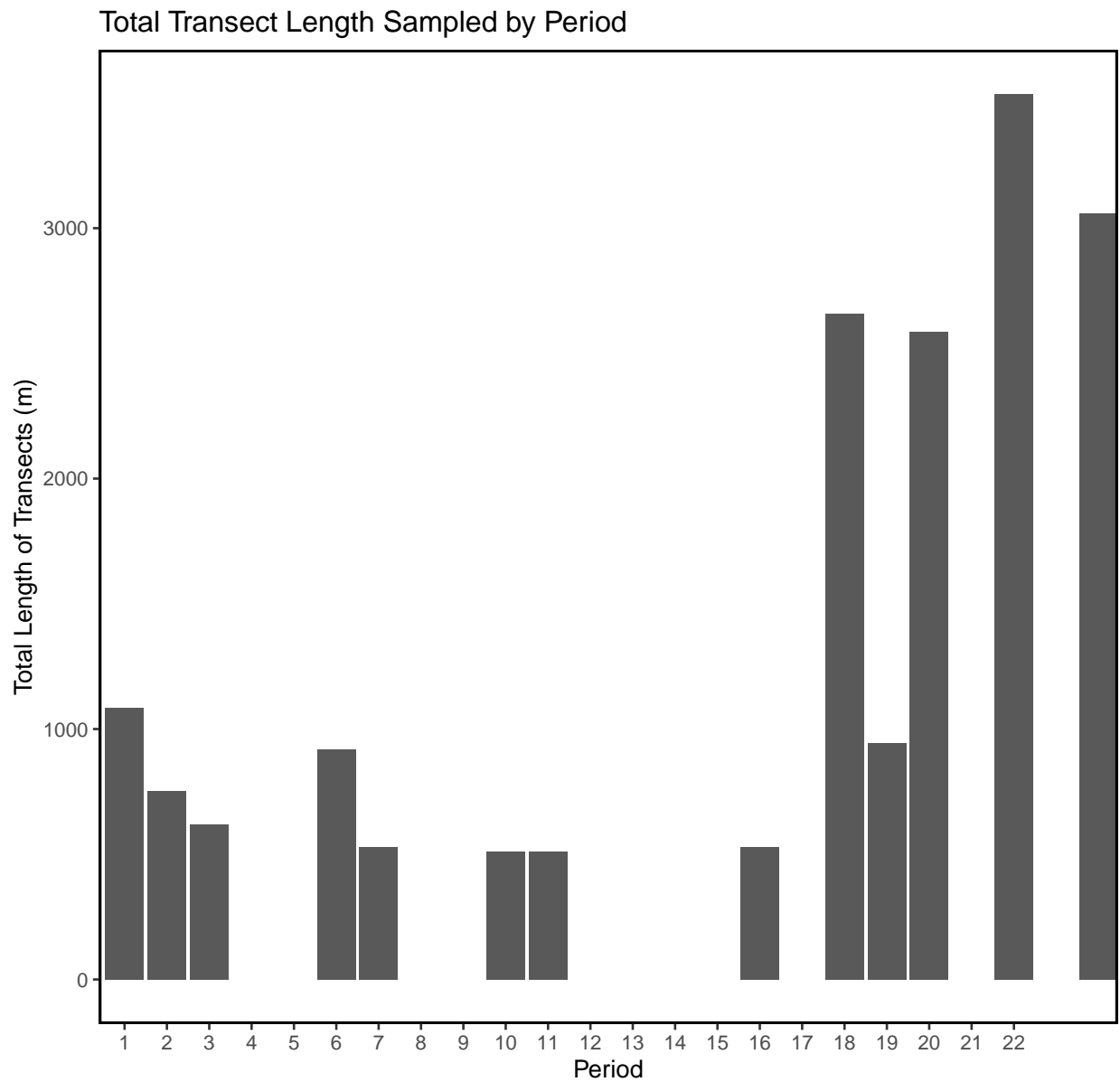


Figure – Bar plot of total transect length in meters sampled by strata for all periods.



Figure– Bar plot of total transect length in meters sampled by period for all periods.

Summary Tables for all Periods

These summaries display summary statistics of live oysters by locality, strata, and period. These contain all data collected on the oyster transects.

The summary statistics include:

- Locality or Strata or Period - Mean
- Median
- Standard Deviation (SD)
- Variance (Var)
- Coefficient of variation (CV)
- Standard Error (SE)
- Lower 95% Confidence Interval assuming normal distribution (L95)
- Upper 95% Confidence Interval assuming normal distribution (U95)
- Bootstrap Mean (Bstrap Mean)
- Lower 95% Confidence Interval from Bootstrap Values (L95 Bstrap)
- Upper 95% Confidence Interval from Bootstrap Values (U95 Bstrap)

Live Count Statistics for all Periods

Live Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	1419	884	1951	3808032	1.38	460	518	2321	1397	738	2437
CK	857	444	1091	1190933	1.27	214	438	1277	857	478	1327
CR	1026	716	1035	1072162	1.01	153	727	1325	1025	743	1331
HB	902	364	1047	1095622	1.16	158	592	1211	906	603	1232
LC	1244	700	1588	2520448	1.28	105	1038	1449	1243	1046	1452
LT	1026	877	551	303721	0.54	120	790	1262	1021	832	1274
NN	735	674	584	341295	0.79	156	429	1041	735	480	1080

Live Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	991	766	1019	1038768	1.03	89	816	1166	991	821	1186
N_PILLOT	1318	1136	925	856059	0.70	239	850	1787	1326	916	1788
N_Y	2693	2898	2195	4819184	0.82	361	1985	3400	2699	1986	3417
Y_N	767	438	893	797378	1.16	63	643	892	765	644	888
Y_Y	2951	2080	2885	8324892	0.98	700	1580	4323	2934	1774	4329

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	1402	1029	1793
2	890	476	945	893727	1.06	176	546	1234	891	559	1225
3	738	296	817	668064	1.11	167	411	1065	733	421	1074
6	433	176	534	284791	1.23	96	245	621	434	264	647
7	50	29	56	3186	1.12	20	11	90	51	18	92
10	1207	1074	671	449607	0.56	237	743	1672	1212	802	1659
11	886	776	678	459708	0.77	240	416	1356	875	497	1343
16	494	366	467	217855	0.95	165	170	817	489	211	803
18	982	695	935	874733	0.95	120	748	1217	985	769	1228
19	555	329	573	328431	1.03	97	365	745	553	374	742
20	1844	1253	2125	4517189	1.15	310	1236	2451	1846	1298	2518
22	1334	702	1693	2867783	1.27	242	860	1808	1334	879	1863
24	1729	942	1845	3403035	1.07	266	1207	2251	1724	1256	2237

Live Density Statistics for all Periods

Live Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	247	228	168	28203	0.68	39.6	170	325	250	183	337
CK	241	112	321	102927	1.33	62.9	118	364	243	135	384
CR	283	178	294	86605	1.04	43.4	198	368	283	203	370
HB	257	101	303	92052	1.18	45.7	168	347	258	177	346
LC	154	129	141	19834	0.91	9.3	136	172	154	137	174
LT	279	261	132	17460	0.47	28.8	222	335	280	224	336
NN	215	174	202	40919	0.94	54.1	109	321	217	127	340

Live Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	256	192	240	57390	0.94	21	215	297	256	216	300
N_PILOT	118	121	59	3467	0.50	15	88	148	118	92	148
N_Y	152	143	86	7344	0.56	14	125	180	153	125	180
Y_N	184	117	212	44818	1.15	15	154	213	184	157	213
Y_Y	118	112	83	6898	0.70	20	78	157	117	80	158

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	297.0	502.1
2	255	119.0	285.2	81348	1.12	53	151.3	358.9	254	155.6	358.7
3	234	85.3	269.3	72523	1.15	55	126.1	341.6	231	128.8	329.1
6	121	72.2	150.9	22767	1.25	27	68.1	174.3	122	74.3	175.1
7	5	2.9	5.6	31	1.12	2	1.1	8.9	5	1.6	8.6
10	124	113.3	67.4	4536	0.54	24	76.9	170.3	123	81.2	167.4
11	90	79.5	67.8	4596	0.75	24	43.4	137.4	92	53.4	136.6
16	49	36.3	46.4	2154	0.95	16	16.9	81.2	49	21.8	80.4
18	176	154.5	130.2	16945	0.74	17	143.7	209.0	176	144.6	208.9
19	154	72.7	168.5	28408	1.10	28	97.9	209.6	153	101.2	208.6
20	256	202.8	187.2	35057	0.73	27	202.6	309.6	257	205.4	310.9
22	137	120.6	92.9	8638	0.68	13	111.2	163.3	138	111.3	162.6
24	185	180.6	91.6	8385	0.49	13	159.3	211.1	185	161.2	210.8

Dead Count Statistics for all Periods

Dead Oyster Counts by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	258	165	283	80030	1.10	67	127.2	389	258	137	395
CK	78	32	106	11170	1.36	37	4.3	151	76	18	149
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	43	18	72
LC	132	72	159	25275	1.21	11	109.2	154	131	111	155
LT	218	141	180	32543	0.83	39	140.5	295	219	152	304
NN	98	72	87	7493	0.88	23	52.5	143	99	61	145

Dead Oyster Counts by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	157	96	191	36527	1.22	19	120	195	157	119	195
N_PILLOT	98	89	65	4243	0.67	17	65	131	98	69	131
N_Y	133	68	134	17869	1.01	22	90	176	132	92	180
Y_N	104	65	114	12940	1.09	11	82	127	105	84	127
Y_Y	274	128	307	94303	1.12	74	128	420	273	140	423

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	50
10	80	88	65	4245	0.82	23.0	34.5	125	80	42	126
11	50	40	25	620	0.49	8.8	33.2	68	50	35	66
16	44	28	41	1708	0.93	14.6	15.6	73	44	18	70
18	133	55	192	36903	1.44	24.6	85.1	182	133	90	187
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	148	109	194
22	191	128	193	37399	1.01	27.6	137.2	245	192	142	245
24	192	130	194	37816	1.01	28.1	136.8	247	192	140	246

Dead Density Statistics for all Periods

Dead Oyster Density by Locality

Locality	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
BT	48	35	33	1061	0.68	7.7	32.6	63	48	34.4	62
CK	21	11	28	757	1.29	9.7	2.3	40	21	5.3	41
CR	18	11	16	247	0.87	5.2	7.8	28	18	9.9	28
HB	13	8	14	201	1.12	4.7	3.4	22	13	5.2	22
LC	18	10	21	427	1.15	1.5	15.1	21	18	15.1	21
LT	54	47	35	1232	0.64	7.7	39.5	70	55	40.6	70
NN	28	21	22	463	0.78	5.7	16.4	39	27	16.8	38

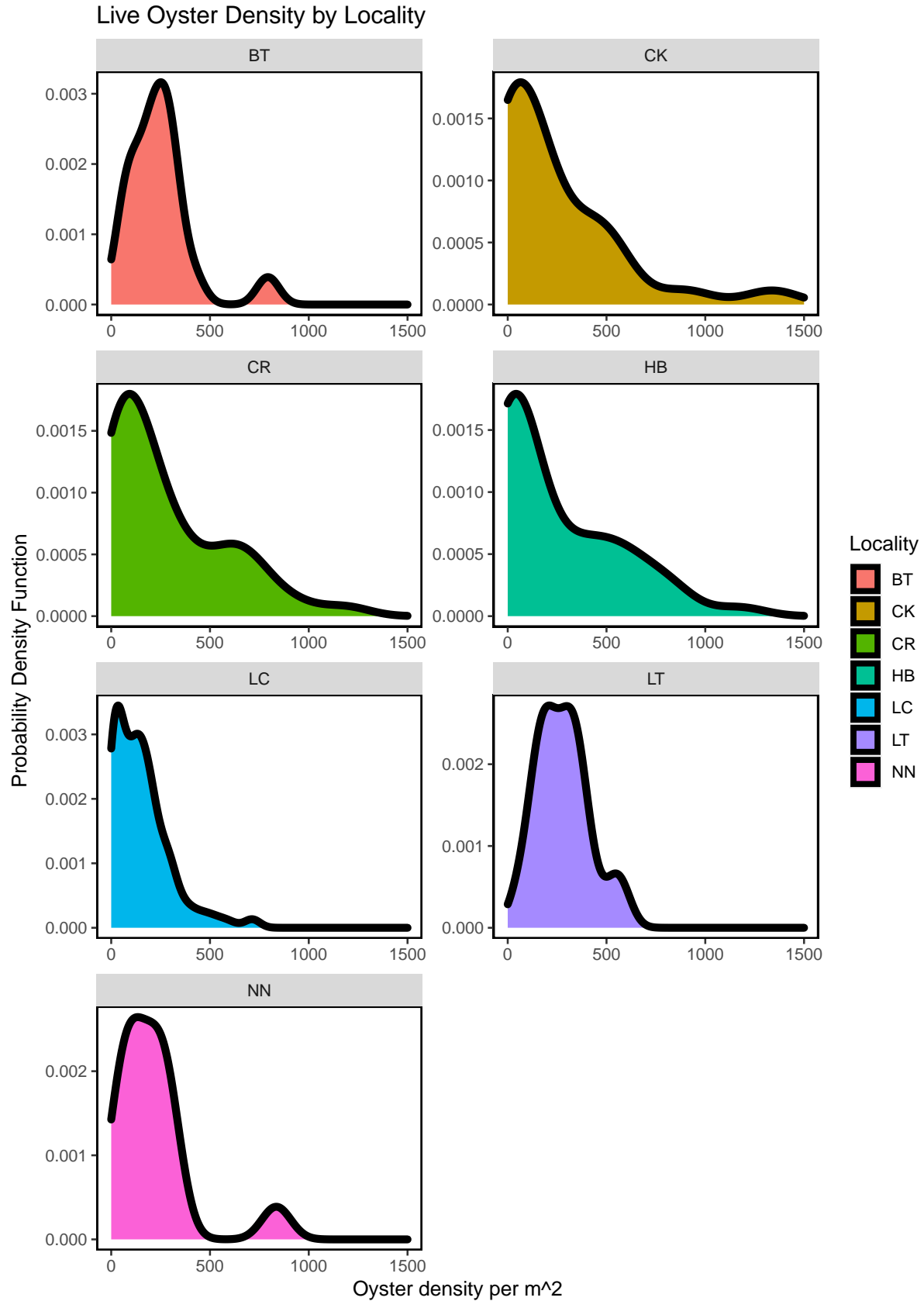
Dead Oyster Density by Strata

Strata	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
N_N	33.5	28.7	30.6	938	0.91	3.06	27.5	39.5	33.5	27.6	39.9
N_PILOT	8.7	8.7	4.3	18	0.49	1.11	6.5	10.9	8.7	6.7	11.0
N_Y	7.5	5.5	5.7	33	0.76	0.94	5.7	9.4	7.5	5.8	9.3
Y_N	23.3	15.5	23.6	556	1.01	2.34	18.7	27.9	23.2	19.0	27.7
Y_Y	9.9	10.6	6.8	46	0.69	1.65	6.6	13.1	9.9	6.9	12.8

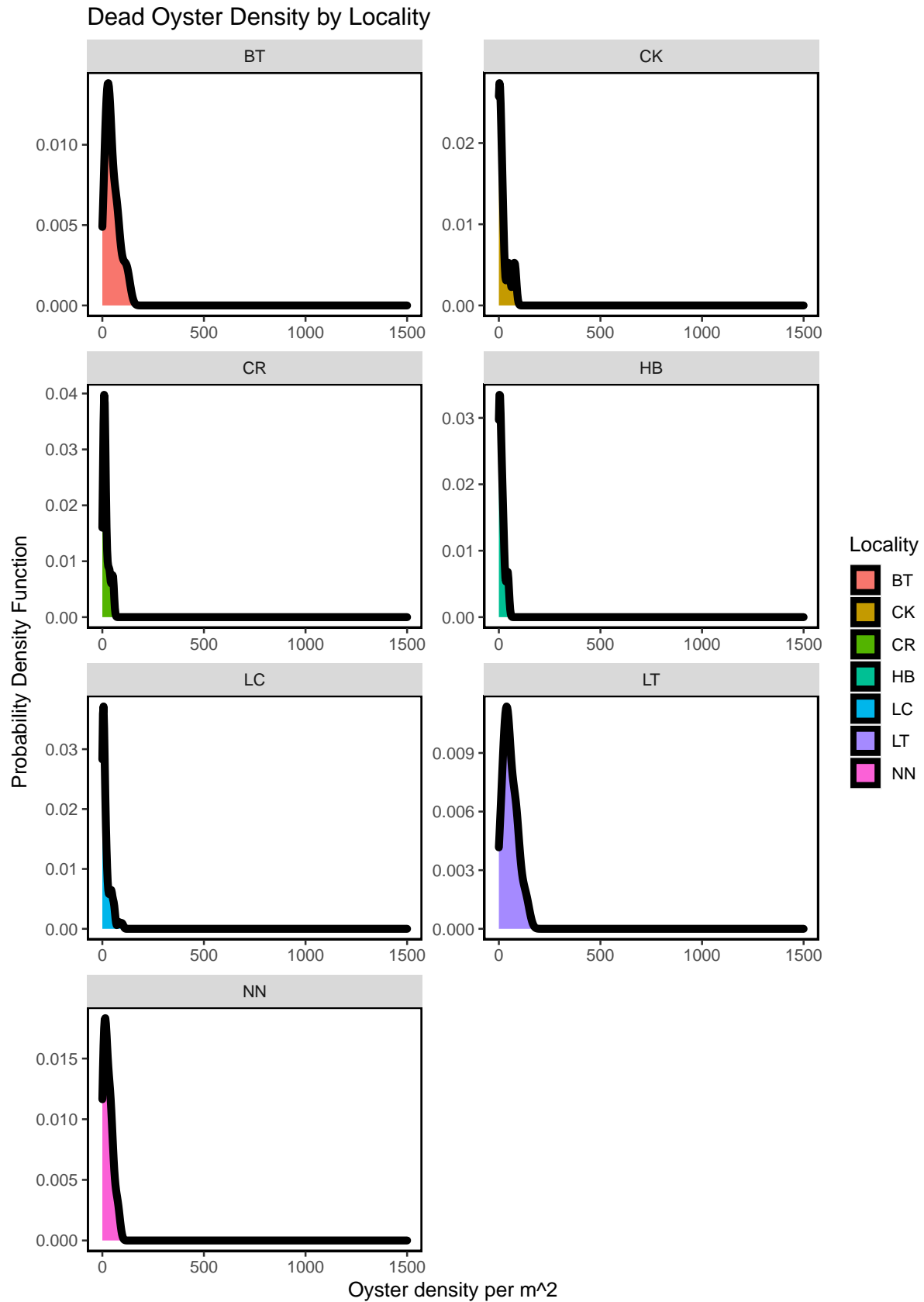
Dead Oyster Density by Period

Period	Mean	Median	SD	Var	CV	SE	L95	U95	Bstrap_Mean	L95_Bstrap	U95_Bstrap
7	2.9	1.8	3.0	8.9	1.03	1.05	0.82	4.9	2.8	1.0	4.8
10	8.2	8.9	6.6	44.0	0.81	2.35	3.58	12.8	8.2	3.9	12.8
11	5.2	4.1	2.6	6.6	0.49	0.91	3.41	7.0	5.2	3.7	7.0
16	4.4	2.8	4.1	16.9	0.93	1.45	1.55	7.2	4.3	2.0	7.4
18	26.4	15.7	31.3	979.8	1.19	4.01	18.50	34.2	26.5	19.0	34.1
19	17.5	10.5	19.3	371.9	1.10	3.31	11.06	24.0	17.5	11.9	24.1
20	27.7	18.4	26.1	681.6	0.94	3.81	20.24	35.2	27.7	20.6	35.1
22	28.5	14.2	28.4	807.0	1.00	4.06	20.53	36.4	28.5	21.7	36.2
24	25.7	19.1	20.9	438.3	0.81	3.02	19.83	31.7	25.9	20.2	32.7

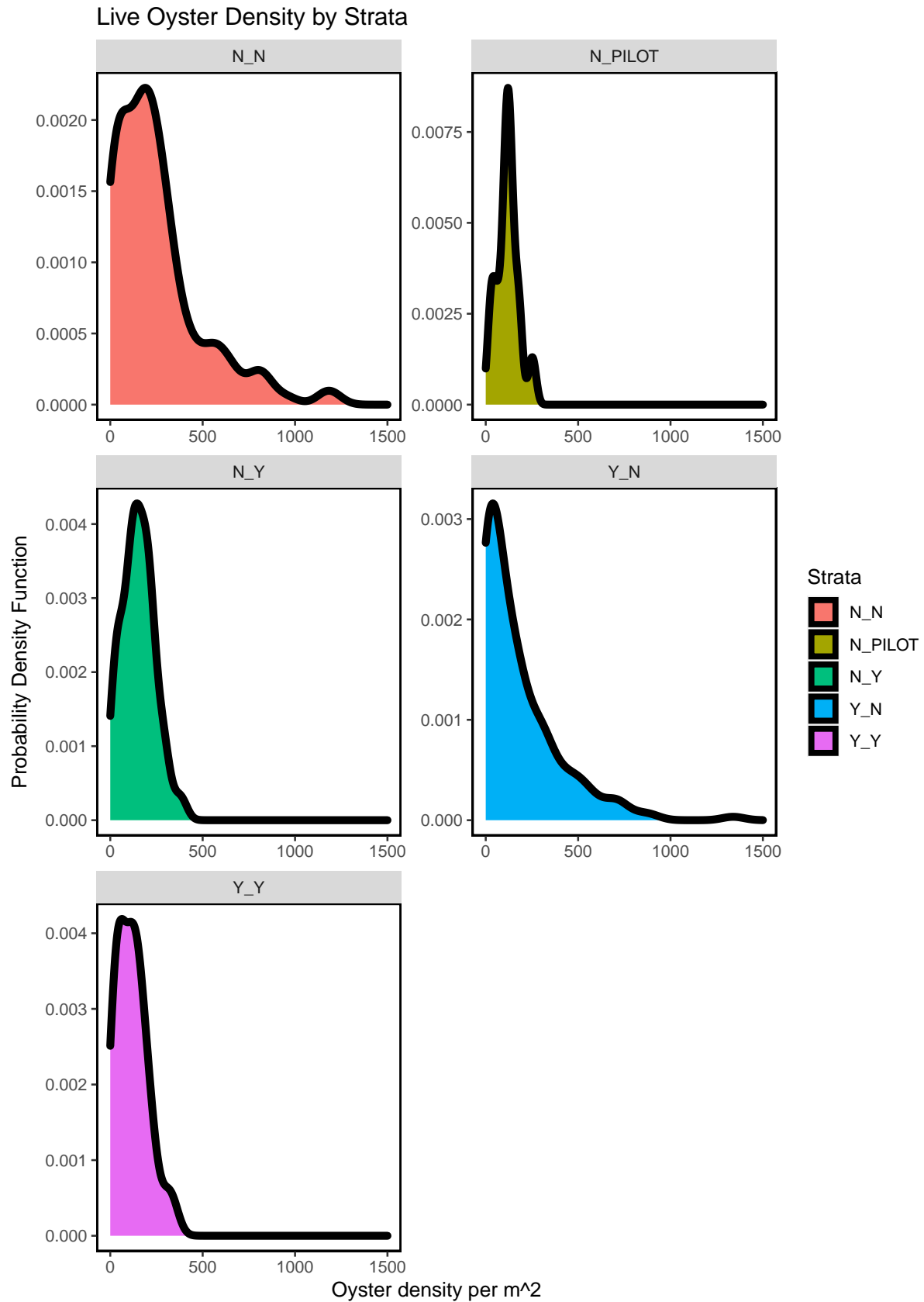
Summary Density Plots for all Periods



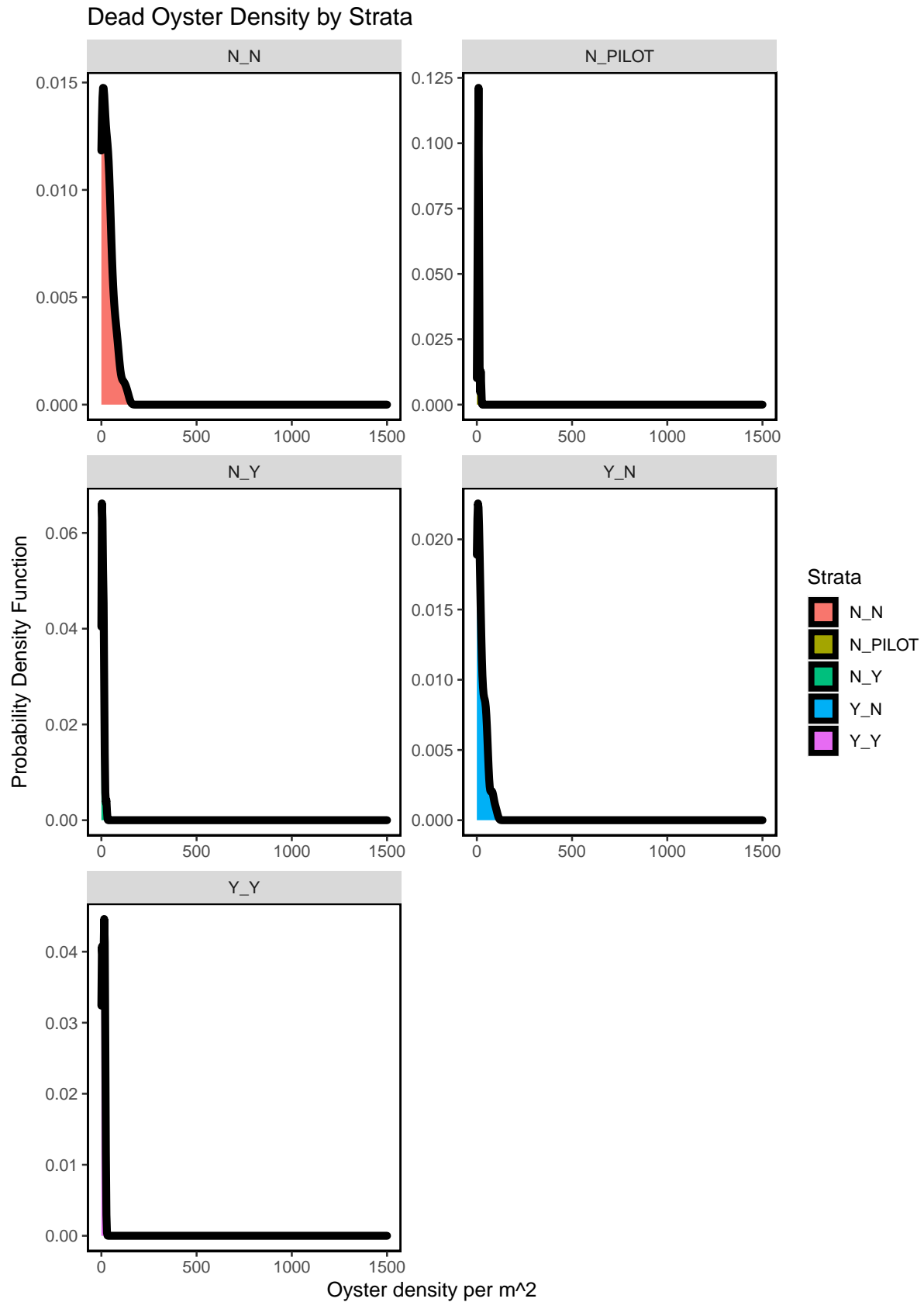
Figure– Calculated live oyster density by locality for all periods including period 22 (current period).



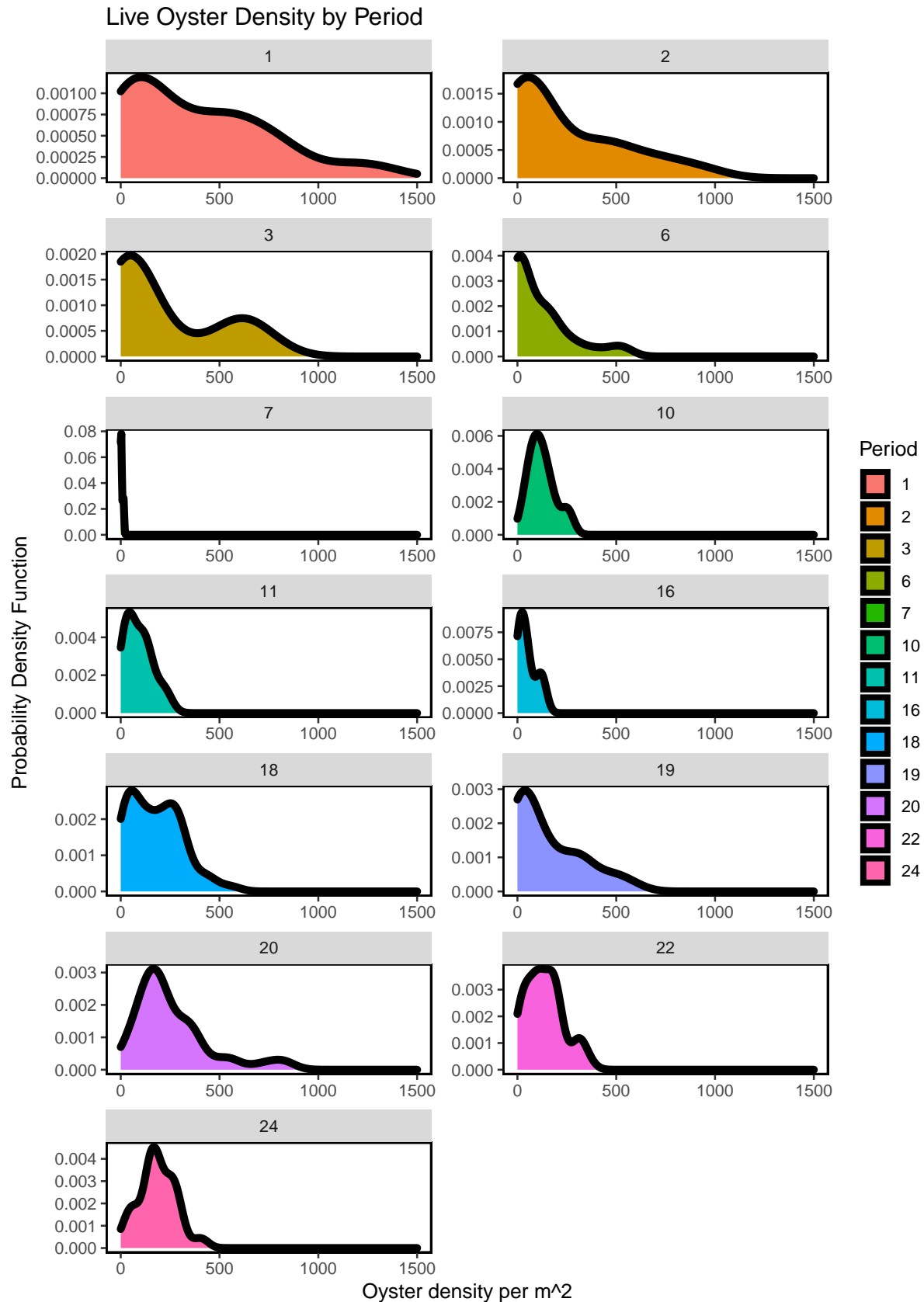
Figure– Calculated dead oyster density by locality for all periods including period 22 (current period).



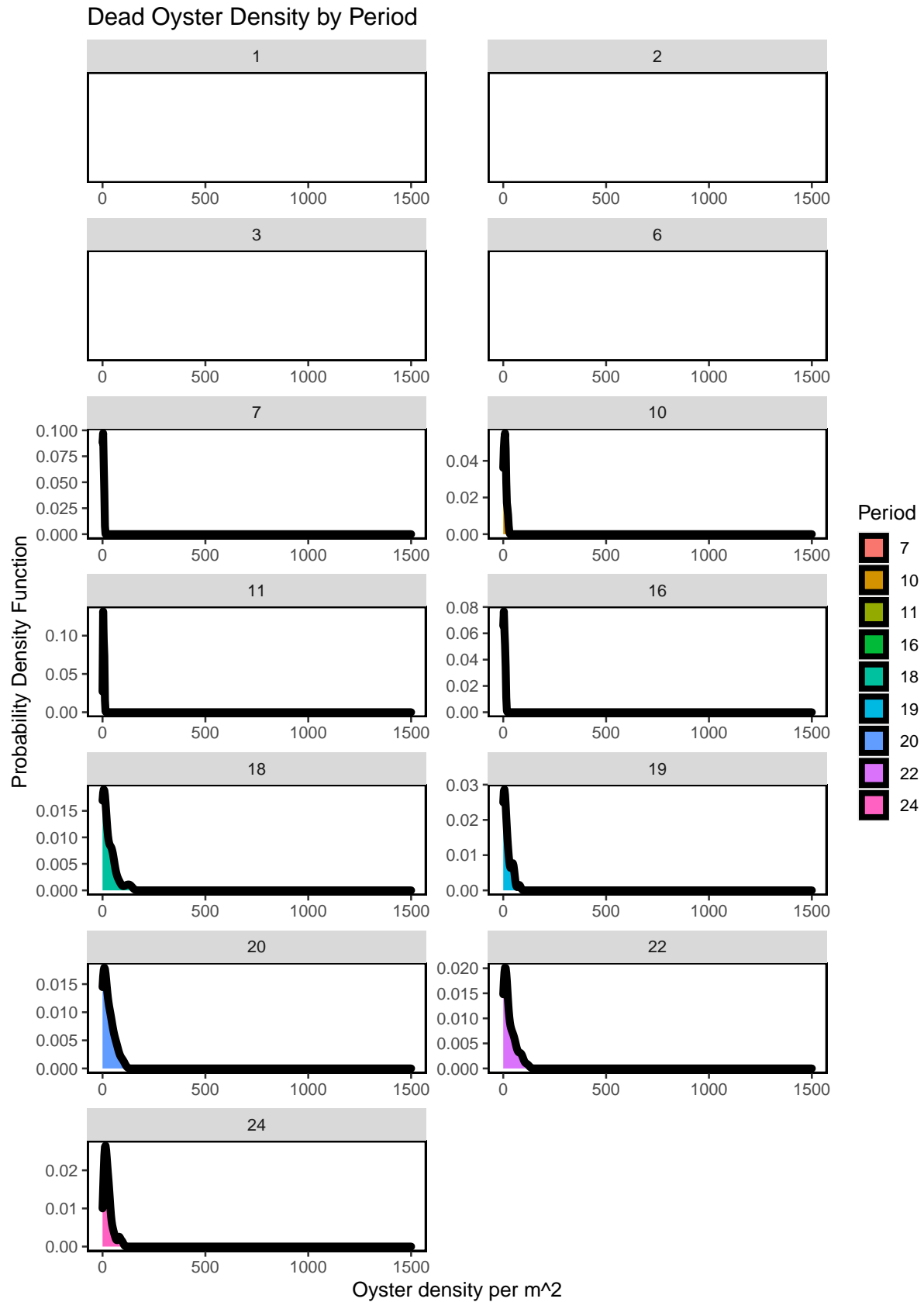
Figure– Calculated live oyster density by strata for all periods including period 22 (current period).



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

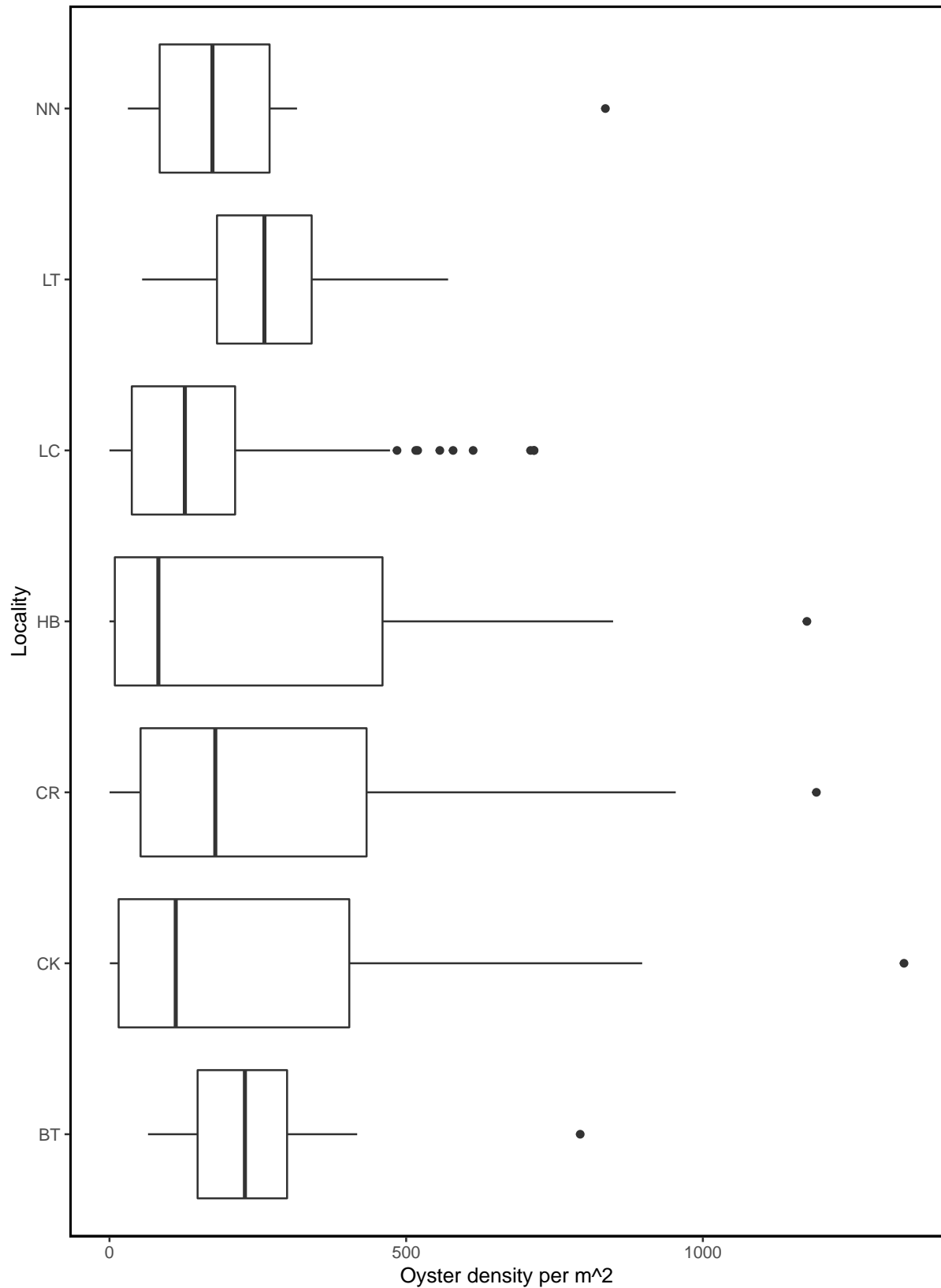


Figure– Calculated live oyster density for all periods including period 22 (current period) using a probability densi



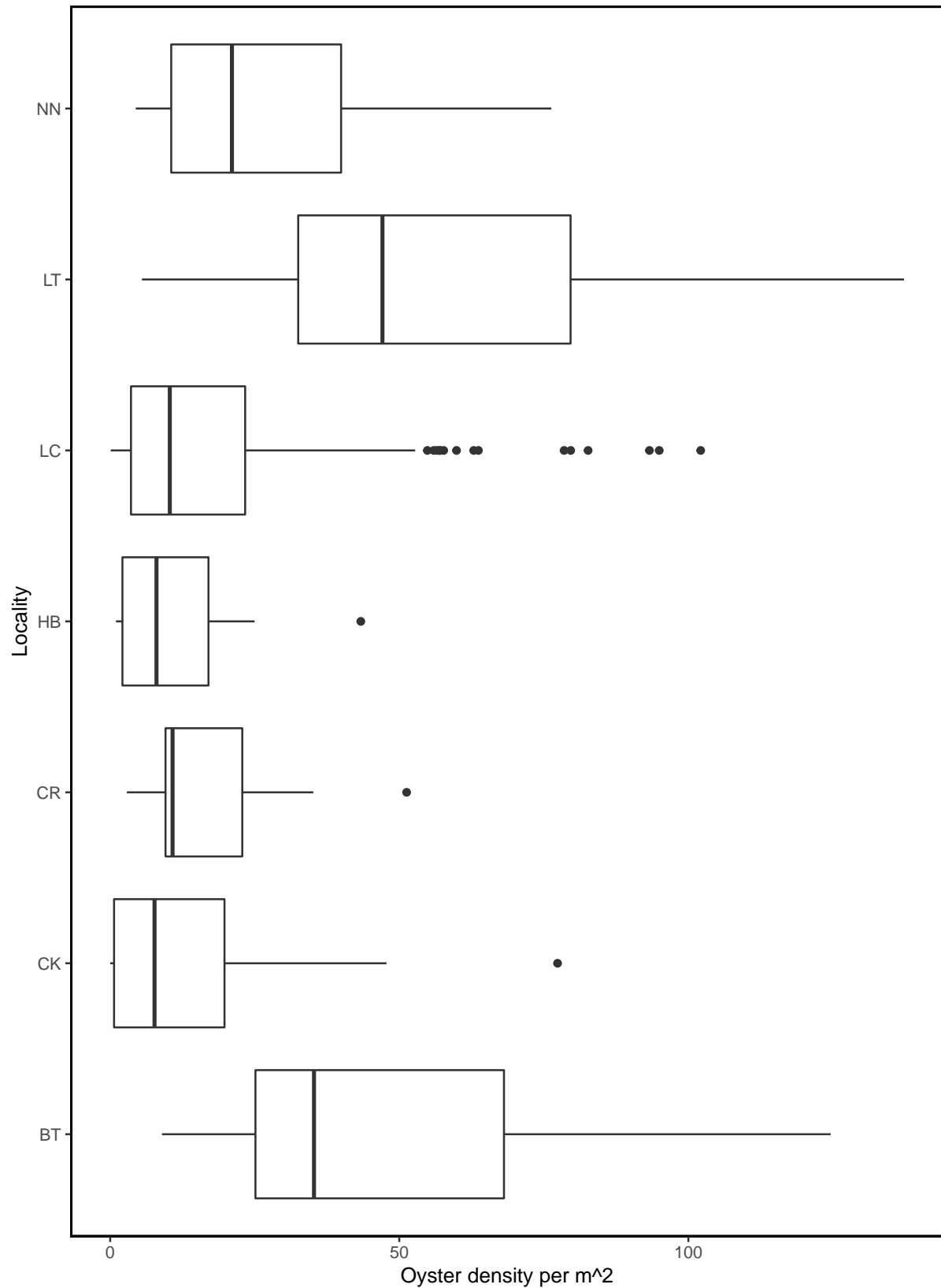
Figure– Calculated Dead oyster density for all periods including period 22 (current period) using a probability densit

Live Oyster Density by Locality

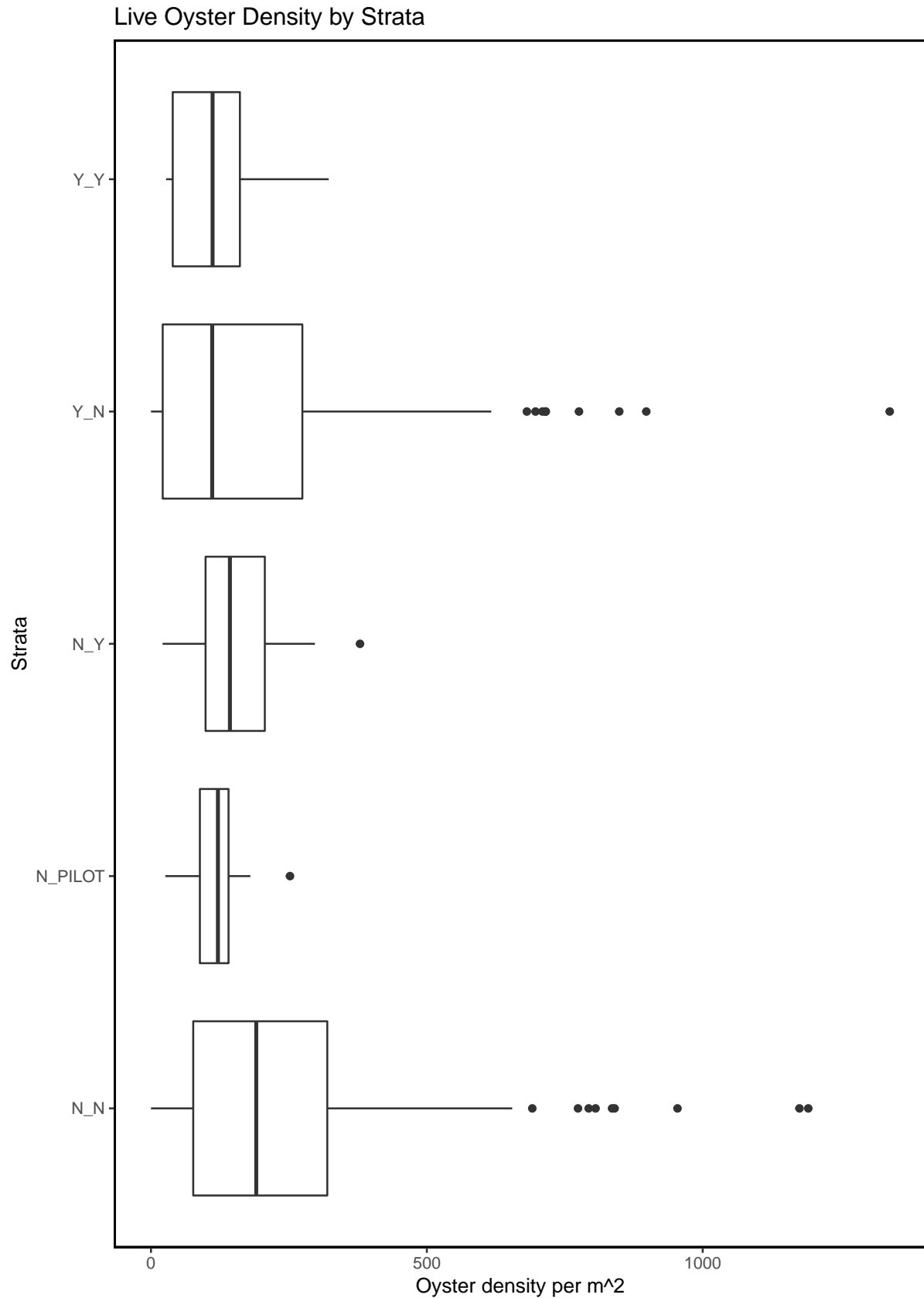


Figure– Box plot depicting live oyster density by locality for all periods including period 22 (current period).

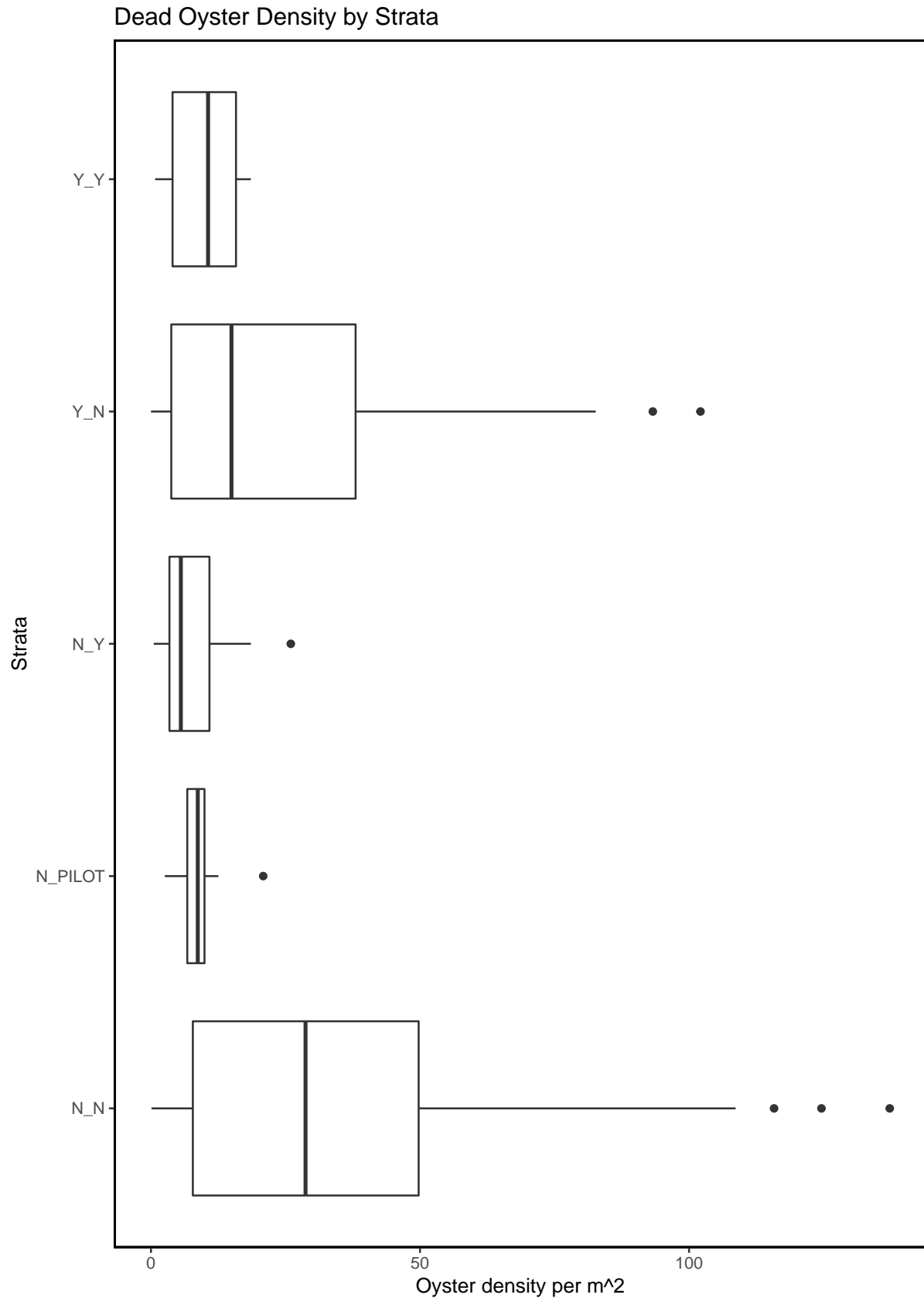
Dead Oyster Density by Locality



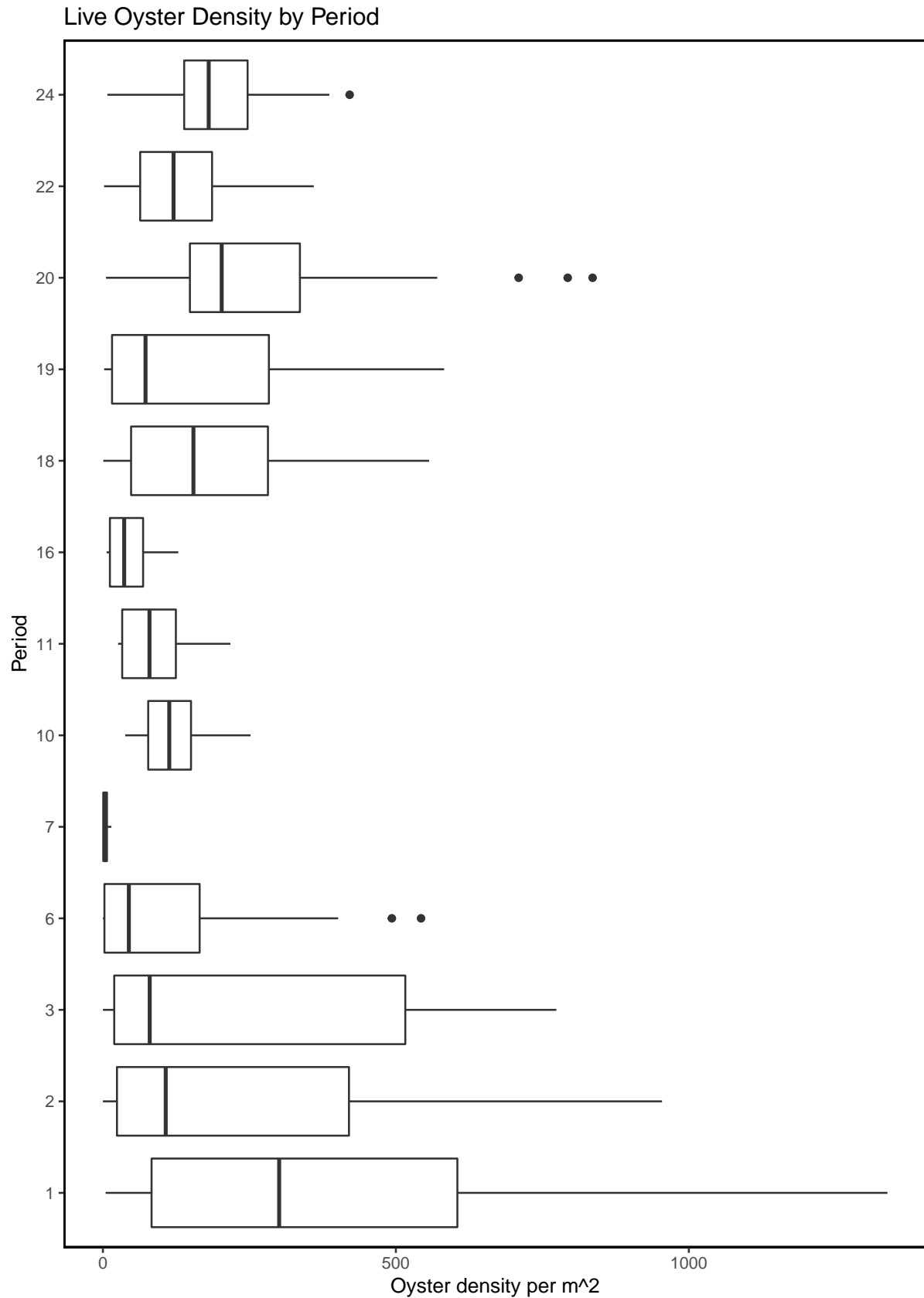
Figure– Box plot depicting dead oyster density by locality for all periods including period 22 (current period).



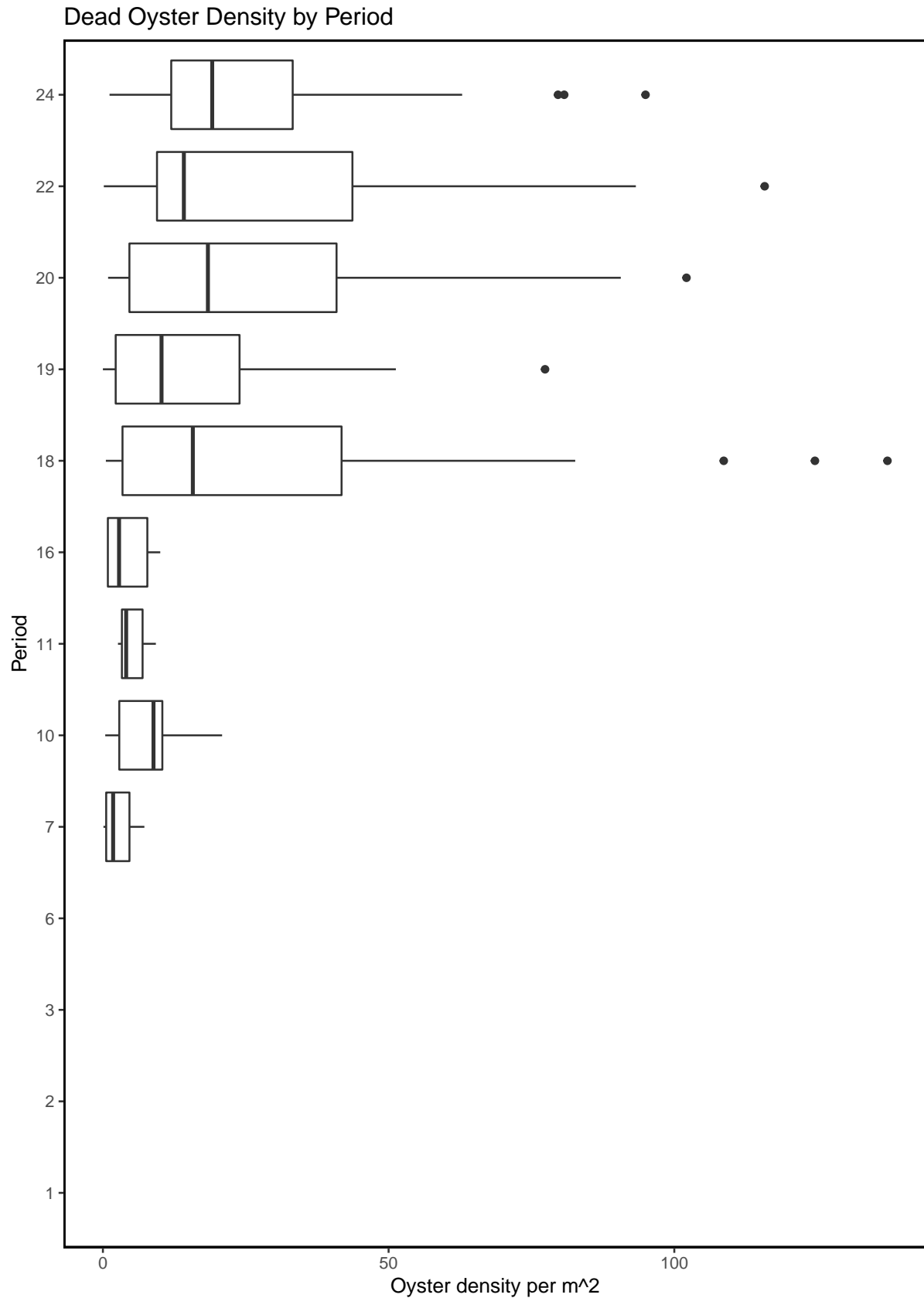
Figure– Box plot depicting live oyster density by strata for all periods including period 22 (current period).



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).

Live Oyster Density by Locality and Period

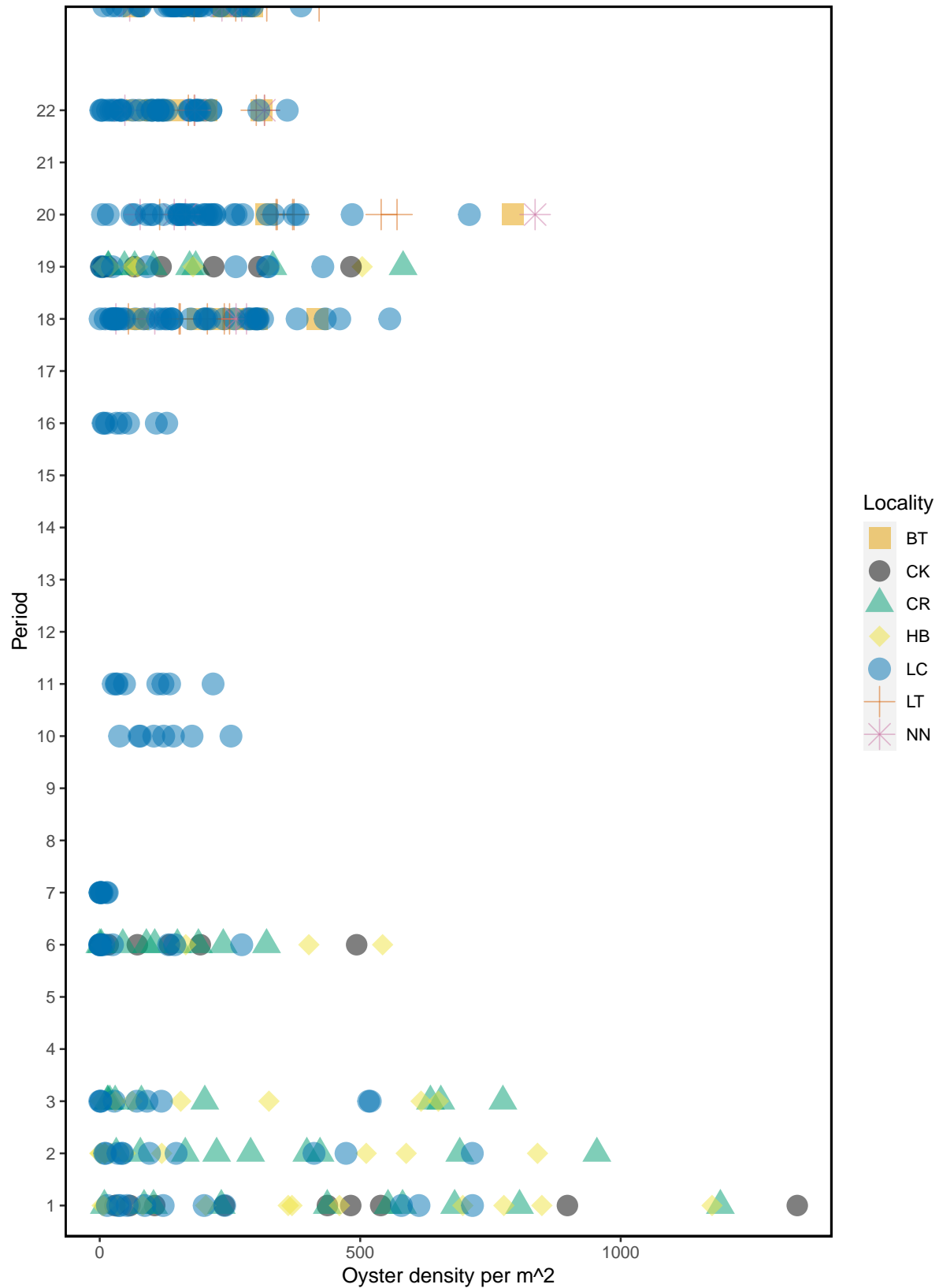


Figure – Live oyster density by locality and period for all periods including period 22 (current period).

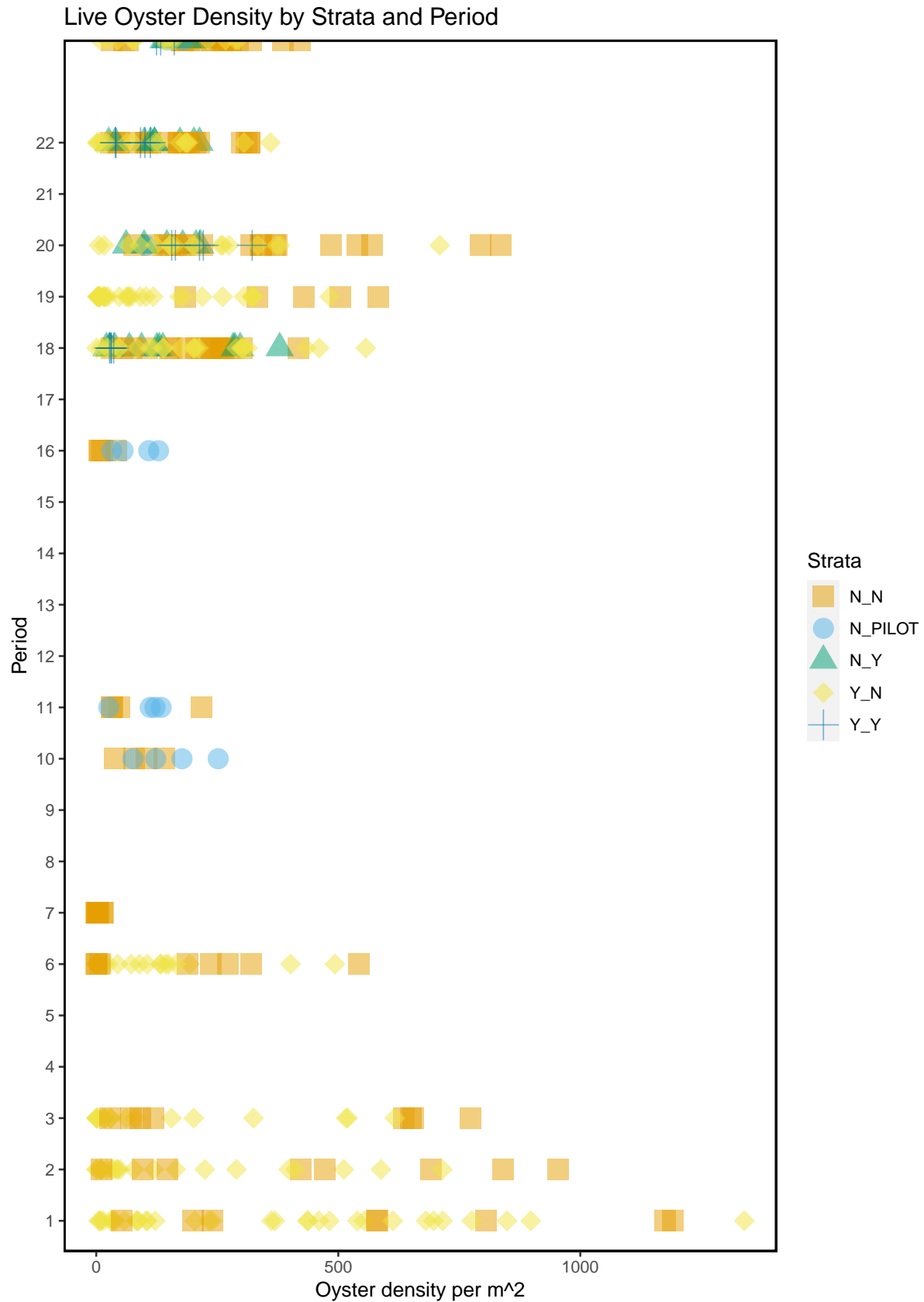


Figure – Live oyster density by strata and period for all periods including period 22 (current period).

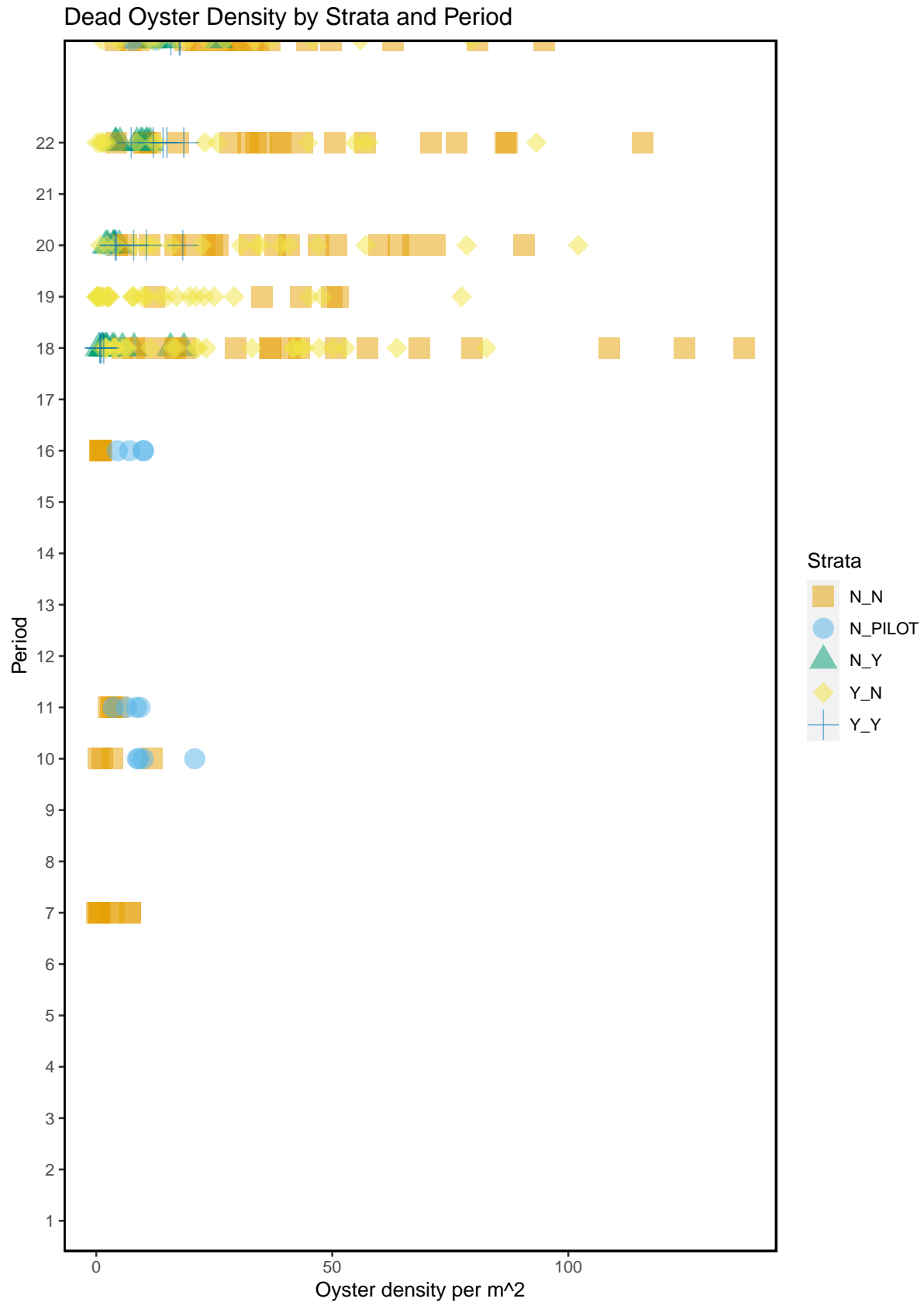


Figure – Dead oyster density by strata and period for all periods including period 22 (current period).

Live and Dead Count Comparison For All Periods

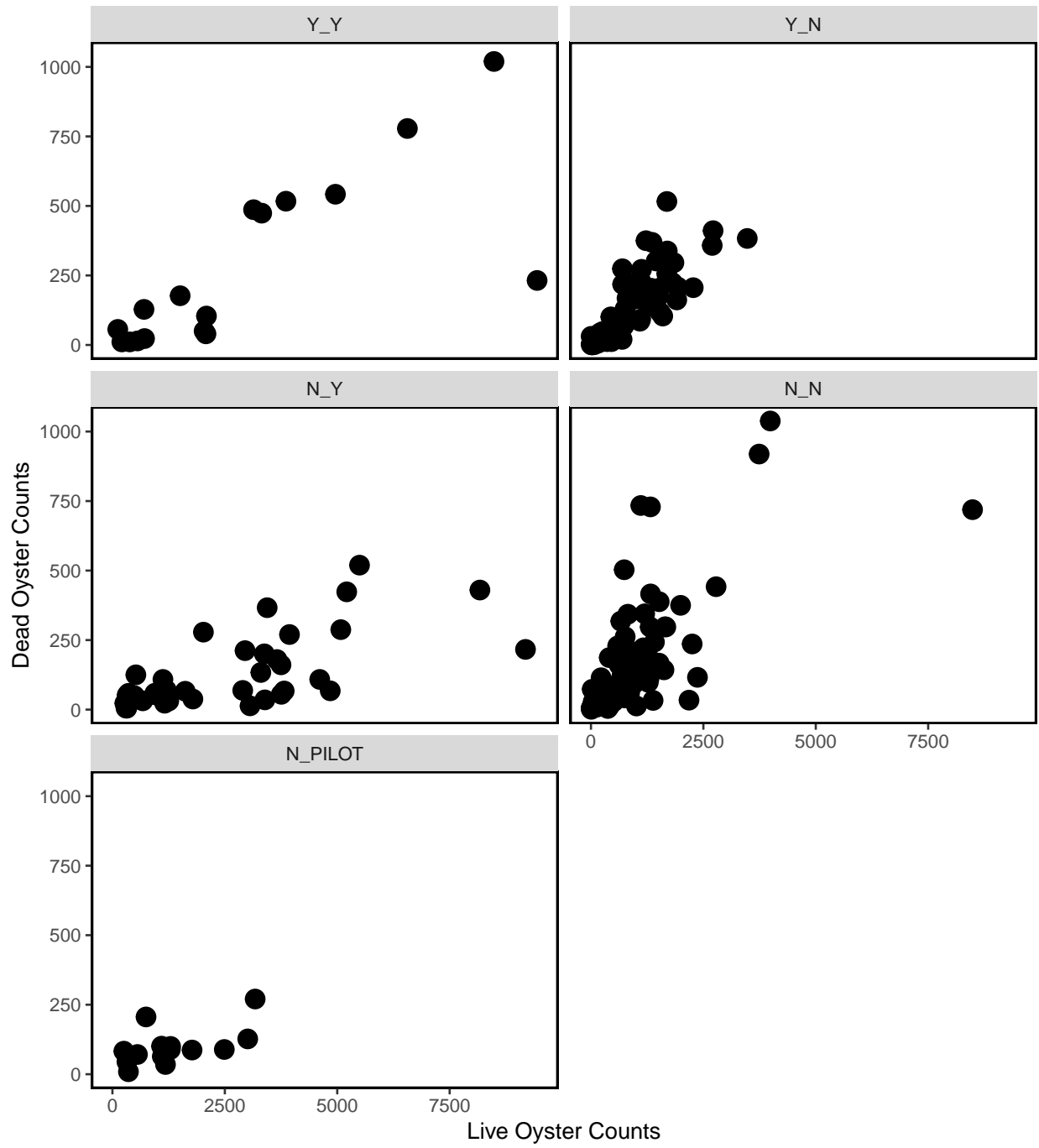


Figure- Live and dead oyster comparison for all periods, last sample date of period 24 is 2022-02-01.

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).

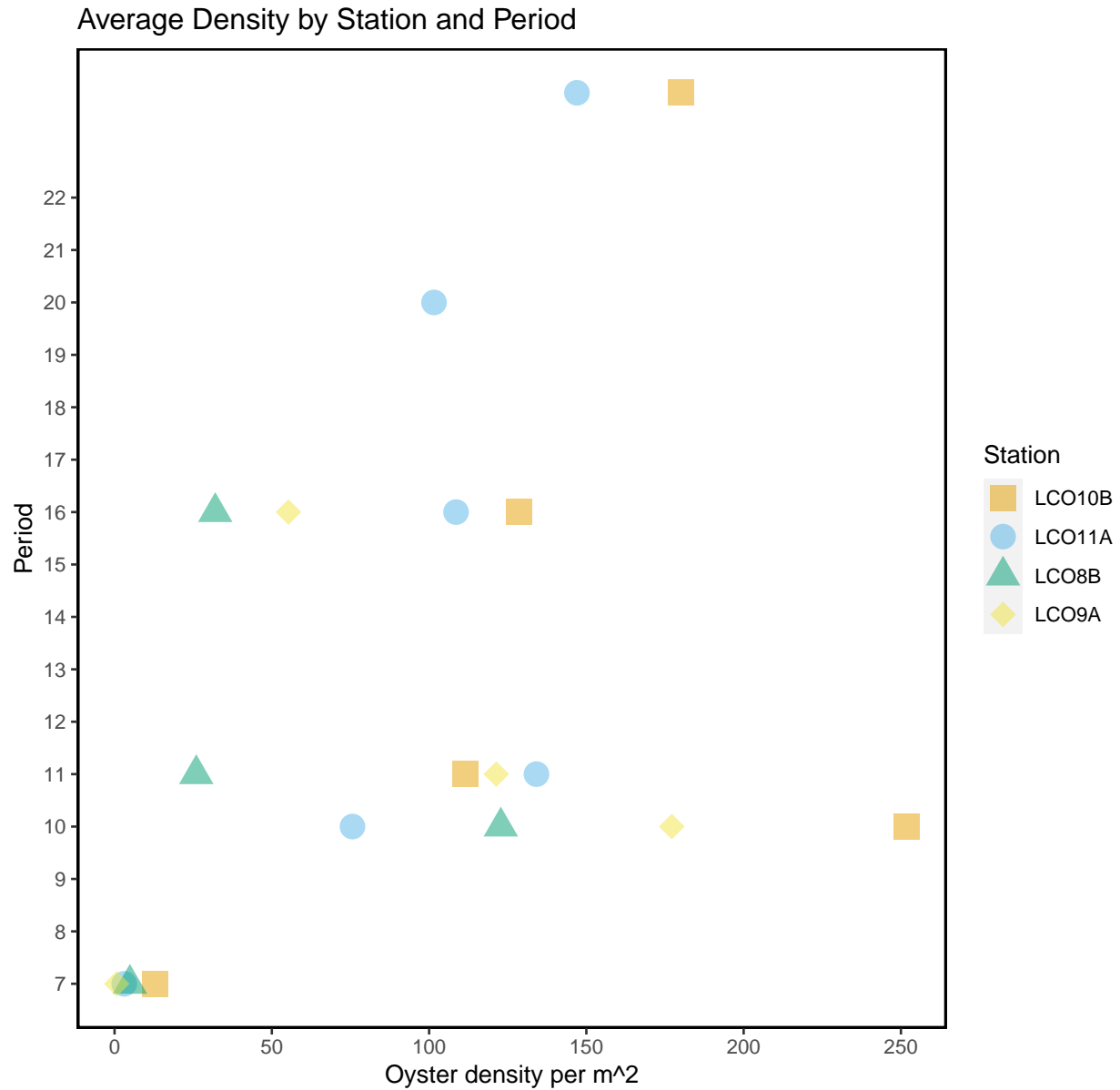


Figure – Average live oyster density comparison by station and period for all stations that were sampled during the pilc

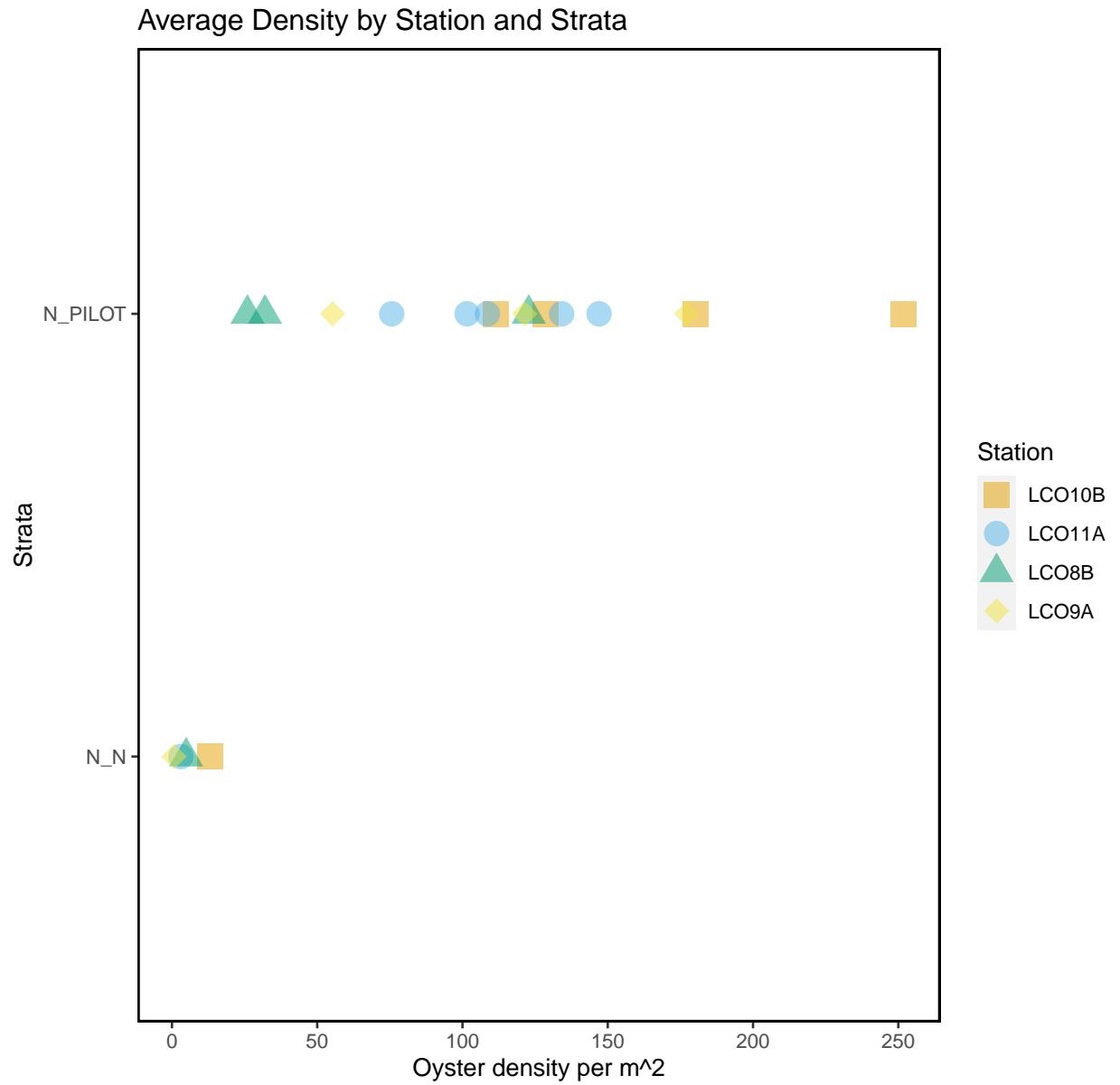


Figure – Average live oyster density comparison by station and strata for all stations that were sampled during the

Latest Data Entered

Displayed are the entries for the last date of sampling (2022-02-01).

date	station	tran_length	count_live	count_dead	treatment	strata
2022-02-01	LC020	2.5	45	2	rocks	Y_Y
2022-02-01	LC020	5.0	52	4	rocks	Y_Y
2022-02-01	LC020	7.5	50	3	rocks	Y_Y
2022-02-01	LC020	10.0	70	11	rocks	Y_Y
2022-02-01	LC020	12.5	28	3	rocks	Y_Y
2022-02-01	LC020	15.0	39	3	rocks	Y_Y
2022-02-01	LC020	17.5	53	6	rocks	Y_Y
2022-02-01	LC020	20.0	7	1	rocks	Y_Y
2022-02-01	LC020	24.4	12	0	rocks	Y_Y
2022-02-01	LC020	2.5	51	2	rocks	Y_Y
2022-02-01	LC020	5.0	80	5	rocks	Y_Y
2022-02-01	LC020	7.5	125	13	rocks	Y_Y
2022-02-01	LC020	10.0	96	10	rocks	Y_Y
2022-02-01	LC020	12.5	57	9	rocks	Y_Y
2022-02-01	LC020	15.0	37	3	rocks	Y_Y
2022-02-01	LC020	17.5	103	10	rocks	Y_Y
2022-02-01	LC020	20.0	31	2	rocks	Y_Y
2022-02-01	LC020	22.1	80	8	rocks	Y_Y
2022-02-01	LC020	2.5	91	12	rocks	Y_Y
2022-02-01	LC020	5.0	58	4	rocks	Y_Y
2022-02-01	LC020	7.5	86	7	rocks	Y_Y
2022-02-01	LC020	10.0	59	9	rocks	Y_Y
2022-02-01	LC020	12.5	78	7	rocks	Y_Y
2022-02-01	LC020	15.0	53	3	rocks	Y_Y
2022-02-01	LC020	17.5	80	4	rocks	Y_Y
2022-02-01	LC020	20.0	77	4	rocks	Y_Y
2022-02-01	LC020	22.5	94	6	rocks	Y_Y
2022-02-01	LC020	22.8	9	0	rocks	Y_Y
2022-02-01	LC020	2.5	39	3	rocks	Y_Y
2022-02-01	LC020	5.0	18	2	rocks	Y_Y
2022-02-01	LC020	7.5	65	4	rocks	Y_Y
2022-02-01	LC020	10.0	5	0	rocks	Y_Y
2022-02-01	LC020	12.5	18	1	rocks	Y_Y
2022-02-01	LC020	15.0	31	5	rocks	Y_Y
2022-02-01	LC020	17.5	35	5	rocks	Y_Y
2022-02-01	LC020	20.0	44	3	rocks	Y_Y
2022-02-01	LC020	22.5	79	9	rocks	Y_Y
2022-02-01	LC020	2.5	50	7	rocks	Y_Y
2022-02-01	LC020	5.0	33	2	rocks	Y_Y
2022-02-01	LC020	7.5	30	2	rocks	Y_Y
2022-02-01	LC020	10.0	93	7	rocks	Y_Y
2022-02-01	LC020	12.5	48	9	rocks	Y_Y
2022-02-01	LC020	15.0	64	9	rocks	Y_Y
2022-02-01	LC020	17.5	76	9	rocks	Y_Y
2022-02-01	LC020	20.0	74	6	rocks	Y_Y
2022-02-01	LC020	22.1	22	1	rocks	Y_Y
2022-02-01	LC020	2.5	110	10	rocks	Y_Y
2022-02-01	LC020	5.0	38	9	rocks	Y_Y
2022-02-01	LC020	7.5	62	8	rocks	Y_Y

2022-02-01	LC020	10.0	61	8	rocks	Y_Y
2022-02-01	LC020	12.5	60	8	rocks	Y_Y
2022-02-01	LC020	15.0	82	7	rocks	Y_Y
2022-02-01	LC020	17.5	53	10	rocks	Y_Y
2022-02-01	LC020	20.0	30	2	rocks	Y_Y
2022-02-01	LC020	22.5	95	9	rocks	Y_Y
2022-02-01	LC020	22.6	3	1	rocks	Y_Y
2022-02-01	LC020	2.5	26	6	rocks	Y_Y
2022-02-01	LC020	5.0	74	12	rocks	Y_Y
2022-02-01	LC020	7.5	46	4	rocks	Y_Y
2022-02-01	LC020	10.0	17	1	rocks	Y_Y
2022-02-01	LC020	12.5	35	2	rocks	Y_Y
2022-02-01	LC020	15.0	52	6	rocks	Y_Y
2022-02-01	LC020	17.5	91	9	rocks	Y_Y
2022-02-01	LC020	20.0	57	9	rocks	Y_Y
2022-02-01	LC020	22.2	46	4	rocks	Y_Y
2022-02-01	LC020	2.5	59	6	rocks	Y_Y
2022-02-01	LC020	5.0	50	7	rocks	Y_Y
2022-02-01	LC020	7.5	88	2	rocks	Y_Y
2022-02-01	LC020	10.0	75	10	rocks	Y_Y
2022-02-01	LC020	12.5	81	10	rocks	Y_Y
2022-02-01	LC020	15.0	59	9	rocks	Y_Y
2022-02-01	LC020	17.5	133	13	rocks	Y_Y
2022-02-01	LC020	20.0	83	11	rocks	Y_Y
2022-02-01	LC020	21.2	59	5	rocks	Y_Y